

Transactions
Volume 27 1976



London & Middlesex Archaeological Society

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Transactions of the
London & Middlesex
Archaeological Society
incorporating the
Middlesex Local History Council

Volume 27

1976

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The Society and Editors are extremely grateful to the Museum of London for help with the publication of several papers in this volume.

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incorporating Middlesex Local History Council

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London & Middlesex Archaeological Society

incorporating Middlesex Local History Council

120TH ANNUAL REPORT OF THE COUNCIL FOR THE YEAR ENDING
30TH SEPTEMBER 1975.

There were eighteen meetings of the Society, which included the following lectures: 18th October: *Medieval Chantry Foundations* by L. S. Snell, M.A., F.S.A., F.R.Hist.S.; 29th November: *London's Industrial Heritage* by D. Smith, M.Sc., D.I.C., C.Eng.; 13th December: *Archaeology in the Enfield District* by G. Gillam; 17th January: *Heralds and Heraldry* by Mrs. I. L. Eades (the George Eades Memorial Lecture); 18th January: *Place-names and Early Social History* by A. Rumble (a joint meeting with the Historical Society of the City Literary Institute); 21st February: Annual General Meeting and Presidential Address *Archaeology in the City of London*; 21st March: *The Parish Clerks of London* by R. H. Adams, T.D., M.A., F.S.A.; 18th April: *Science and Archaeology: the Work of the Ancient Monuments Laboratory, D.o.E.*, by J. W. G. Musty, F.S.A.; 24th September: *The Customs and Custom Houses in the Port of London*, by R. C. Jarvis, I.S.O., F.S.A. Visits were made on 5th October: West Drayton Local History Exhibition; 26th October: the Custom House and its Museum; 8th November: Clothworkers' Hall; 23rd November: Jewel Tower, Westminster, and Chapter House, Westminster Abbey; 1st February: the British Museum, Egyptian Galleries; 26th February: the Corporation of London Records Office; 15th March: the Royal Hospital Chelsea; 26th April: St. Mary's College, Strawberry Hill; 21st June: whole day visit to Bury St. Edmunds.

The two annual conferences were both very well attended. The principal speakers at the Local History Conference on 16th November were Margaret Gelling on *New Approaches to the Study of Place-names* and J. Howgego on *The Map and Print Collections of the Corporation of London*. At the Archaeological Conference on 22nd March reports were given of an archaeological survey of Greater London, the work of the Inner London Archaeological Unit, and excavations in the City and at Woolwich, Staines and Shadwell.

The Stow Commemoration Service was held at St. Andrew Undershaft on 30th April, the address being given by Professor H. R. Trevor-Roper, M.A. The Pepys Commemoration Service was held at St. Olave, Hart Street, on 29th May; the address was given by Richard Ollard.

Volume 25 of Transactions was issued in December 1974; three numbers of the News-letter also appeared.

The work of the Local History Committee and Archaeological Research Committee continued; the Historic Buildings and Conservation Committee was revived with new membership.

At a Special General Meeting on 18th April a change in the Rules of the Society, defining more clearly the area of the Society's interests in the Greater London area, was approved.

Over the year membership rose from 709 at 1st October 1974 to 748 at 30th September 1975; this figure was made up as follows: Life Members 52; Honorary Members 9; Student Members 35; Junior Members 17; Annual Members 635.

We record with regret the death on 13th November 1974 of Miss M. B. Honeybourne, M.A., F.S.A., member of this Council and Chairman of the Local History Committee.

Following the increase in subscription rates, which took effect on 1st October 1974, the Society's income has risen substantially with the result that the Accounts show a surplus of £549. It is anticipated that as printing costs continue to rise, the result for the current year will be less satisfactory unless there is a significant increase in membership.

The Council wishes to record its sincere thanks to the Honorary Officers for their work during the year.

By direction of the Council.

W. J. SMITH, M.A., F.R.Hist.S.,
Chairman of the Council.

E. E. F. SMITH, F.S.A.,
Honorary Secretary.

BALANCE SHEET as at 30th September, 1975

We have examined the above Balance Sheet and attached Income and Expenditure Accounts with the books and vouchers of the Society as submitted by the Honorary Treasurer. We have verified the Bank Balances and Securities with the Society's Bankers. In our opinion and to the best of our knowledge, these Accounts together with the Notes, are correct and in accordance with the books and records of the Society.

(Signed) O. T. ALLEN, F.C.A.
L. J. MAGUIRE, M.B.E.
Honorary Auditors.

21st January 1976

INCOME AND EXPENDITURE ACCOUNT for the year ended 30th September, 1975

[illegible]

LONDON & MIDDLESEX ARCHAEOLOGICAL SOCIETY

ARCHAEOLOGICAL PROJECTS ACCOUNT for the year ended 30th September, 1975

120th Annual Report of the Council

EXPENDITURE		£	£	INCOME		£	£
Excavations and services:				Balance brought forward from last year:			
Acton	-	-	1,981	Acton	-	-	764
Bow	-	-	817	Bow	-	-	817
Brentford	-	-	600	Inner London Unit	-	-	2,823
Environmental service	-	-	1,261	Shadwell	-	-	135
Enfield	-	-	1,652	Staines	-	-	5,704
Inner London Unit	-	-	26,988	Publications	-	-	280
Shadwell	-	-	816				10,523
Staines	-	-	7,683				
				Grants for excavations and services:			
			41,798	Department of the Environment:			
Grants for excavations by local societies:				Acton	-	-	2,000
Elstree	-	-	91	Brentford	-	-	600
Fulham	-	-	39	Environmental service	-	-	2,000
Wembley	-	-	25	Inner London Unit	-	-	15,028
				Shadwell	-	-	1,000
			155	Staines	-	-	2,000
			10	Westminster Hall	-	-	926
Less: Refund—Kempston	-	-					23,554
			145	London Boroughs—Inner London Unit			14,835
Closing balances:				Greater London Council—Shadwell	-	-	1,000
Acton	-	-	783	Spelthorne Borough Council—Staines	-	-	2,000
Environmental service	-	-	739	Enfield Archaeological Society—			
Inner London Unit	-	-	6,624	Enfield	-	-	830
Shadwell	-	-	1,319	Conference surplus	-	-	18
Staines	-	-	2,021	Insurance scheme	-	-	18
Publications	-	-	280	Southwark Unit Interim	-	-	
Southwark Unit Interim	-	-		Management Committee	-	-	4,393
Management Committee	-	-	4,393	Charges in the Society's income and			109
			16,159	expenditure account	-	-	822
				Closing balance—due for work in Enfield—			
			£58,102				£58,102

TWO ROMAN PUBLIC BATHS IN LONDON

by
Peter Marsden

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1. SUMMARY

The two Roman bath buildings found on sites in Cheapside and Huggin Hill (Fig. 1) were probably built during the late first century, their size indicating that they were public buildings. Both seem to have been extensively modified during the second half of the second century and were demolished before the end of that century.

Both baths had been built near the west end of the city as it stood during the second century A.D., and the Cheapside bath may have served the Cripplegate fort. The Huggin Hill baths were located on the waterfront in a district which seems not to have been particularly residential, but where there is some evidence of other 'public' constructions, suggesting that it was an area used for public gatherings and possibly entertainment.

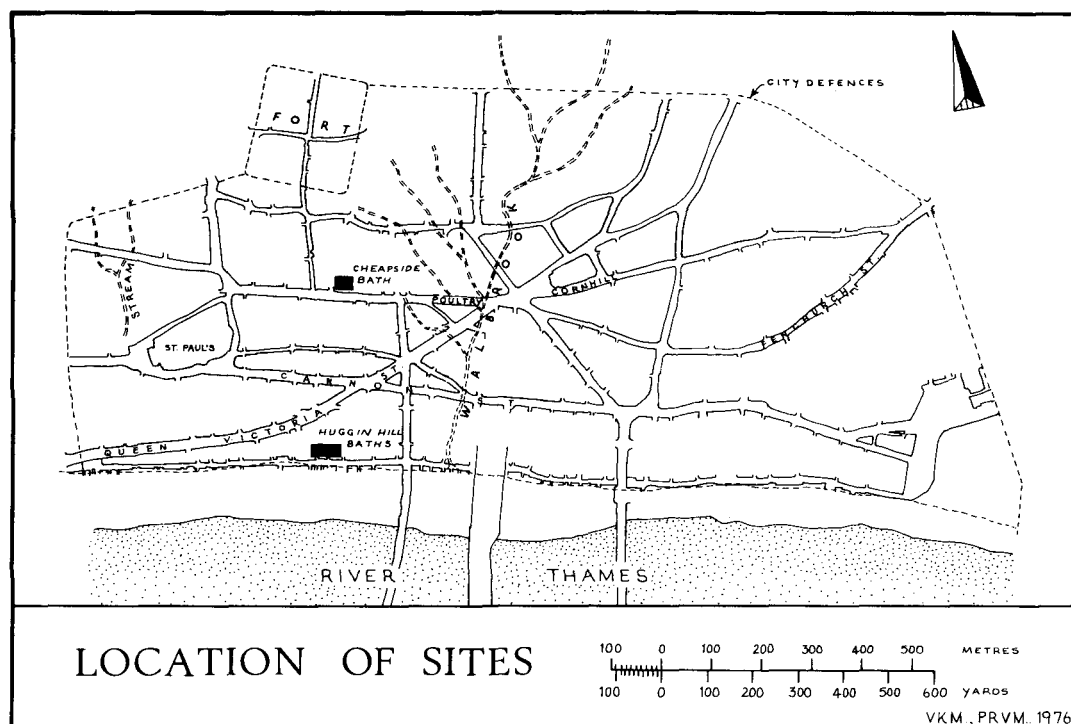


Fig. 1 Location of the Roman bath sites.

The demolition of the baths during the late second century at the earliest was perhaps due to the reorganisation of the city when the defences were built; the short life of each building and their distance from the civic centre of Roman London suggesting that these were not the main baths. The reason for the demolition of the baths was not so that they could be replaced by other public buildings, for no later Roman buildings of substance were noted overlying the Cheapside baths, and only poor quality masonry walls were recorded overlying the Huggin Hill baths. It is possible, however, that the demolition of the latter was connected with the hillside terracing which occurred almost immediately to the west, though the date of the terracing is not established.

2. THE HUGGIN HILL BATHS, UPPER THAMES STREET, 1964-69

(a) Introduction

The Roman public bath building, identified in 1964, was situated on either side of the lower end of Huggin Hill, beside Upper Thames Street. Previous discoveries in the area had given no indication of the former presence of this enormous Roman public building, probably because the walls of the baths had been constructed on terraces cut deeply into the hillside. During the nineteenth century various Roman remains were reported in the neighbourhood of Queenhithe¹ while in 1845 sewer excavations revealed two Roman walls beneath the lower end of Huggin Hill, and two more below Bread Street Hill.² In 1929-30 Dr. G. C. Dunning, an archaeological investigator for the Society of Antiquaries, recorded some well-preserved Roman chambers during the rebuilding of Nos. 10-12 Little Trinity Lane,³ which are now identified as large water storage tanks and heated rooms of the public baths.

No further discoveries were reported until the summer of 1964 when, during site clearance prior to rebuilding immediately west of the south end of Huggin Hill, the apsidal wall of the western *caldarium* (Room 18) was revealed, and the baths were provisionally identified. This, fortunately, occurred immediately prior to a Bank Holiday, and for the next three days an extremely intensive programme of excavation was carried out by volunteers under the direction of the writer for the then Guildhall Museum. Although many volunteers assisted on an individual basis, the main support came from the Wandsworth Historical Society through Nicholas Farrant, and from the West Kent Border Archaeological Group through Brian Philp. This revealed the main hillside retaining wall of the baths, the western *caldarium* (Fig. 3, Room 18), and the cold plunge bath (Room 1), as well as various additional features. Subsequently further Roman structures were revealed and recorded during the rebuilding of the site, while at weekends when building operations had ceased, limited volunteer investigation was undertaken under the supervision of Nicholas Farrant. It was from the volunteers on this site that the City of London Excavation Group, later to become the City of London Archaeological Society, was formed and for the next six years this group of keen amateurs was to continue operating in the City of London under the direction of the writer for the then Guildhall Museum.

During 1969 another modern rebuilding operation was started on the site of the eastern half of the Roman baths to construct the Fur Traders accommodation building. During the pause between demolition and commencement of rebuilding it was possible to carry out further archaeological excavations under the direction of the writer (Fig. 7). Grateful thanks are extended to the many volunteers who assisted on this site, and in particular to the members of the City of London Archaeological Society, who provided the labour.

Arising from these discoveries the Corporation of London, the freehold owner of the Fur Traders' site, preserved as much as possible of the Roman structures on that site, covering some of the walls, particularly of Room 30, with polythene and burying them in sand to protect them beneath the new building. In addition the entire baths site was subsequently scheduled under the Ancient Monuments Acts, thus securing the long-term preservation of the site.

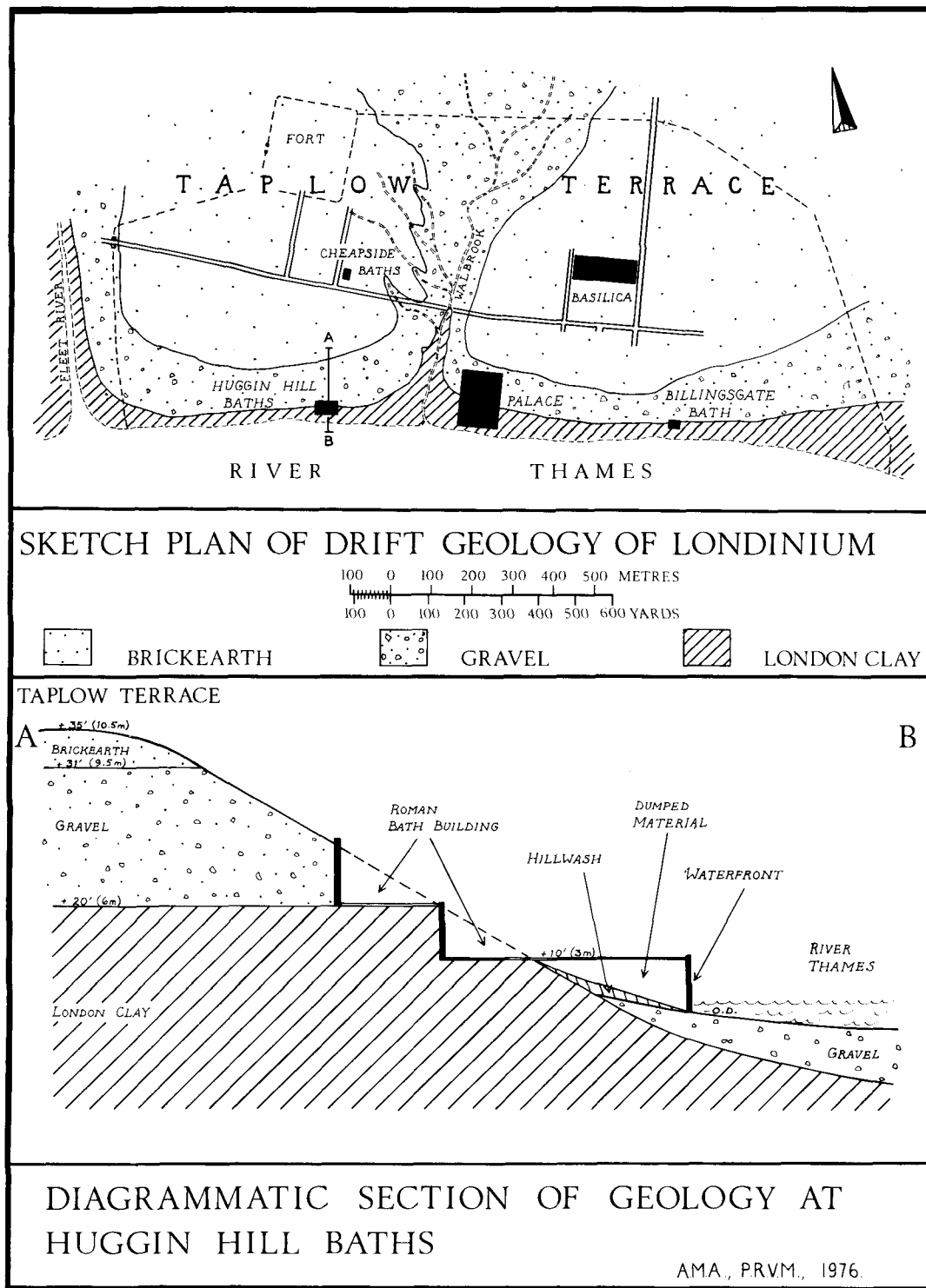


Fig. 2 Geology of the site of London, and the Huggin Hill baths site.

(b) Location and Geology of the Sites (Fig. 2)

The sites to be considered in this report are located to the east and west of the south end of Huggin Hill, immediately north of Upper Thames Street and on the west side of Little Trinity Lane. This lay very close to the Roman waterfront in the south-western quarter of the walled city area.

The Huggin Hill Roman Baths were situated on terraces cut into the steeply sloping hillside between the Flood Plain terrace (at about Ordnance Datum level), where the Thames now lies, and the Taplow Terrace, the natural surface of which lay at about 10.66m above O.D. (Fig. 2).

The succession of geological deposits below the Taplow Terrace is crucial to understanding why the baths were placed here, for the baths were clearly located on a spring line. The upper natural surface of the Terrace is composed of brownish brickearth, below which there lies a thick deposit of river terrace gravel, the bottom of which lay roughly at 6m above O.D. Below the gravel there lies the London Clay, formed during the Eocene period. The actual spring line lay at the junction of the river gravels and the impervious London Clay, and it was at this level that the main heated bathrooms were situated.

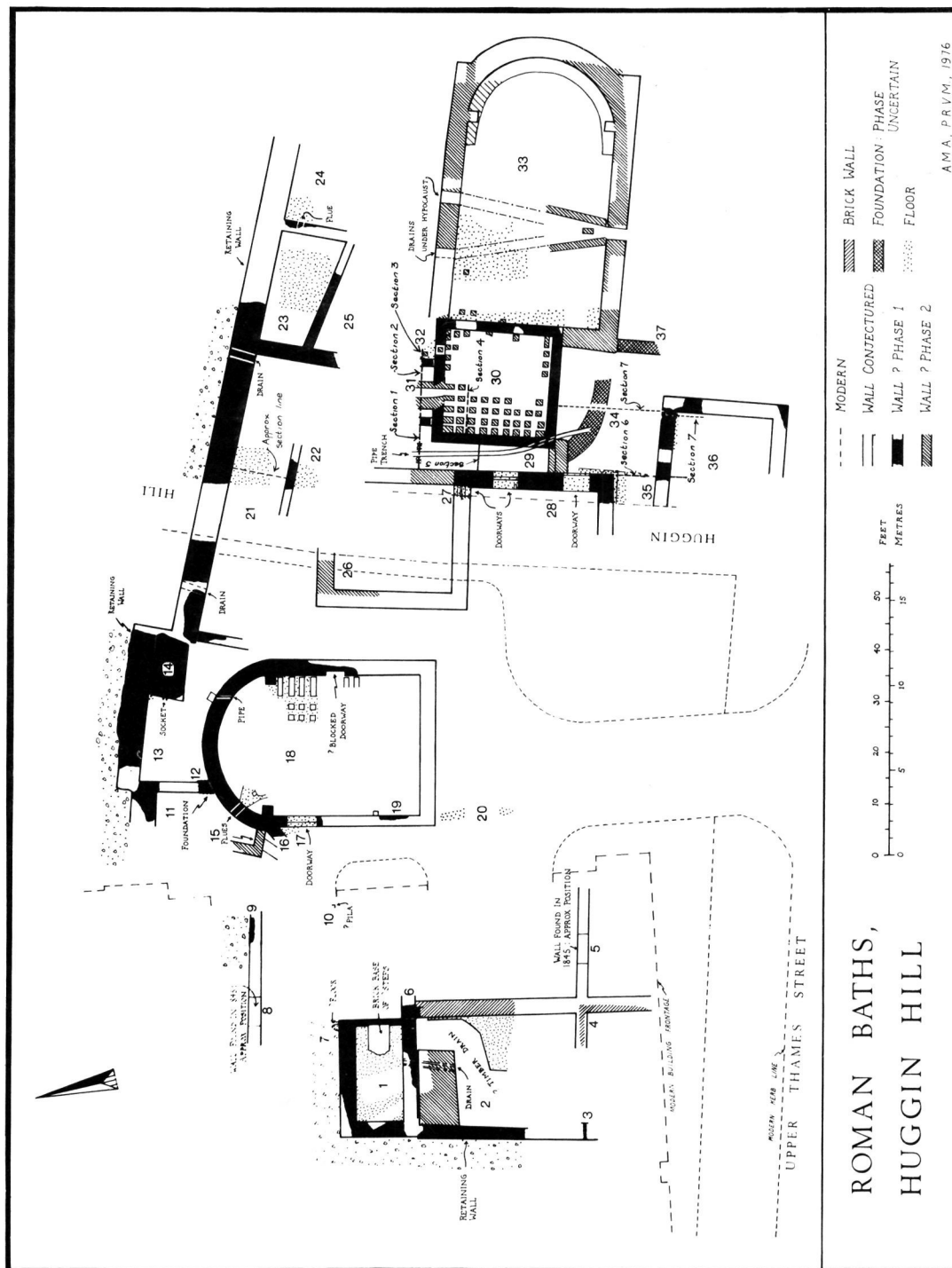
The Huggin Hill bath is not the only Roman building in London built over and utilizing natural spring water. To the east of the Walbrook the floor of the great pool in the Roman palace was situated just below the spring line,⁴ and no doubt was filled by the ground water. Further east the small private bath house at Billingsgate lay a little below the spring line, and during its recent re-excavation the actual spring itself was found still flowing with considerable force, though the rebuilding of the site has now diverted the natural ground water.

(c) Description of the Excavations

The Roman structures on the Huggin Hill sites were incompletely and for the most part hurriedly excavated in advance of redevelopment, to gain the maximum amount of archaeological information. Clear evidence of several building phases was found in different parts of the site, but due to incomplete study the interpretation and understanding of many of the recorded features is uncertain. Under these circumstances it has proved difficult to correlate the various phases, and to avoid possible confusion the remains of the Roman baths have been described feature by feature, following a sequence of numbers applied to individual walls, rooms, etc. The baths were filled mostly with dumped clay at the demolition stage, so any feature in or under the dumped deposits is assumed to be part of the baths phase. The only structures separately described are the walls and foundations overlying or cutting into the dumped deposits for these seem to be the remains of subsequent Roman buildings, and are described as the post-baths phase.

(i) The Bath Building (Fig. 3)

Room 1 This small room, which is identified as a probable cold water bath, measured internally 5.87m by 3m. Since its walls had been destroyed almost to floor level little is known of their construction, but the north and west walls were 0.9m thick, and the south wall 0.7m thick. Only the construction of the north and south walls seemed fairly clear, and they were faced on the inside with bricks laid horizontally, the outer part of the walls being of ragstone with, below the floor level, courses of bonding tiles on the north face of the north wall. The west wall was damaged by later disturbances, and only ragstone was visible at floor level. The east wall was built of bricks at



floor level, the wall being 0.3m thick, but against its east face was a very hard foundation of ragstone and white mortar at least 0.68m thick, the eastern side of which had been destroyed by the sewer excavations under Bread Street Hill in 1845. A straight joint separated the brick built east wall of Room 1 from the ragstone foundation, and it seems that two phases of construction are represented here.

The floor of Room 1 lay at about 6.7m above O.D. and was composed of pink mortar 0.19m thick overlying a layer of tiles 0.04m thick, which in turn overlay an extremely hard foundation of ragstone and white mortar at least 1.98m thick. The floor surface of the room curved up against the faces of the north and west walls of the room, but at the base of the east wall there was an 0.076m quarter-round moulding. In the middle of the east end of the compartment there was a tile base 1.17m wide and 1.8m long, which overlay the floor surface and the quarter-round moulding, and was apparently the base of a series of steps from a higher level to the east.

The narrow width of the east wall of the chamber indicates that this was not a load bearing wall, and indeed its purpose might well have been merely to contain the water of the bath. This, together with the conjectured steps, indicates that the entrance lay to the east, and as the cold water bath was normally located adjacent to the *frigidarium*, it is likely that this was the function of the area immediately to the east of Room 1.

Room 2 This chamber lay on the south side of Room 1, at a considerably lower level, but although some detail was recorded during the rebuilding excavations, not enough was found to enable the purpose of the room to be identified.

Abutting and supporting the south wall of Room 1, but separated from it by a straight joint, was a massive buttress mostly constructed of bricks, but with a small core of ragstone. Its foundation was also built of ragstone.

Passing through the buttress from north to south at about 2.5m below the level of the floor of Room 1 was a drain built of flat tiles, 10.3m wide and 0.35m high. It had an arched roof of horizontally laid flat tiles and a floor of tiles. It would seem most likely that this was used to drain the bath water in Room 1, presumably through an opening in the south wall of that room.

On the south side of the buttress was found what appeared to have been a timber drain constructed in the London Clay a little below the adjoining mortar floor level. Unfortunately, the archaeological record of the area of Room 2, at the baths phase, could only be made while the area was being mechanically excavated. The conjectured drain was dug out by the excavator and all that was seen were broken planks and small wooden posts, as well as some dark silt or clay which presumably filled the construction.

South of this timber construction and at about the same level was a floor of pink cement whose surface lay at about 3.8m above O.D., and this was situated adjacent to a Roman wall on its east side, which had a foundation of ragstone, while the wall above, which stood only about 0.9m high, was constructed of flat tiles. In the north-east corner of the room, however, the eastern wall of the room was built of ragstone (Feature 6), and the internal corner had been rendered with plaster which was painted white. This rendering was observed at about 6.7m above O.D. The west wall of Room 2 was a retaining wall set in the natural gravel, and was constructed of ragstone with courses of bonding tiles.

The purpose of this sunken chamber is not at all clear. The drains were evidently important not only for emptying the cold water bath, but also for relieving the damming effect of the bath-house in the hillside by allowing a constant flow of water through the building in a special channel, similar to other tiled drains in the building. No where else in the baths is a timber-lined drain known, and the interpretation of the function of this timber structure in Room 2 may be incorrect. It may have been an open rather than a closed drain.

The two building styles, of ragstone with courses of bonding tiles, and walls constructed almost entirely of flat tiles, suggest two phases of construction, the earlier probably being the wall of ragstone with bonding tiles. If this is the case then it would seem that the buttress and the east wall of Room 2 will be of the second phase, which, in addition, would explain the existence of the narrow edge of pink mortar floor adjacent to the east wall. The reason for the angular edge of the pink mortar floor on its north and west sides is uncertain, but apart from apparently abutting against a timber drain, it is possible that at an early stage there was another construction, possibly

of masonry, which lay beside the floor, and that its demolition or removal then left the floor with a curious angular shape.

Wall 3 A Roman wall exposed during the mechanical excavation of a trench, and although it was seen in section, its exact location could not be fixed. It was constructed of ragstone 1.07m thick, and, although wider than the west wall of Room 2, there is little doubt that it was a continuation of that wall, and served as a retaining wall on the west side of the baths complex.

Wall 4 In another mechanically excavated trench the cores of two other Roman walls were revealed, the walls presumably lying at right angles to each other. The north-south wall was on the line of the eastern wall of Room 2, and was probably a continuation of that wall. Like the east wall of Room 2 it was built of horizontal flat tiles, four courses only surviving, and it seemed to be resting on a foundation of ragstone and mortar.

It is unlikely that the east-west wall continued as far west as Wall 3, indicating that there was probably an opening giving access to Room 2.

Wall 5 A wall, probably of Roman date and presumably part of the bath building, was recorded in 1845 on City Sewers Plan 373 crossing Bread Street Hill in about this position.

Wall 6 In a somewhat complex area of Roman constructions the earliest phase, presumably that of the baths, was represented by a wall of ragstone, which was mostly seen in plan only, no courses of bonding tiles being observable. The wall evidently formed the north-west corner of a room located south-east of the cold plunge bath (Room 1).

The west and south sides of this room were probably formed by the east wall of Room 2 and, possibly, Wall 5. Unfortunately, the area between Wall 6 and the large western *caldarium* (Room 18) could not be investigated to establish if the wall extended continuously from Wall 6 to the *caldarium*.

Floor 7 A small portion of white mortar 'flooring' was found attached to the north side of the north wall of Room 1, its surface level being 0.12m below the floor level of the cold water bath—i.e., at about 6.7m above O.D. It is just possible that this mortar deposit was part of the Roman wall construction, though as the properly faced work of the foundation of the north wall of Room 1 extended far below 6.7m above O.D., it is difficult to see how this mortar layer could have occurred.

It is likely that this was a small remnant of a room which existed on the north side of the cold bath, though little trace of it remained as the natural gravel had not been deeply terraced here by the Romans. Its north wall was probably formed by Walls 8 and 9.

Wall 8 A wall, probably of Roman date, was found approximately in this position in 1845 during the construction of the sewer under Bread Street Hill.⁵

Wall 9 The north face of a Roman wall was uncovered during the builders' excavations. It was overlaid by rubble and yellow clay and its surviving top lay at about 5.5m below O.D. The southwards slope of the hillside was observed on its north side, and filling the area between the wall and the slope was a Roman dump of yellow clay and rubble, indicating that it acted as a northern retaining wall for the baths. The surviving construction of the wall comprised at the top two courses of tiles, and, below, three courses of ragstone, all set in buff-yellow mortar. The north face of the Roman wall was not rendered, and its base was not found. It is likely that this wall was an eastward continuation of Feature 8.

? Pila 10 A deep, small excavation revealed the corner of a structure comprising four courses of Roman bricks. It was not possible to decide whether they had been mortared together, or whether this was the corner of a wall or of a hypocaust *pila*, but the latter interpretation seemed more likely.

Wall 11 A Roman retaining wall was found, the topmost level of which was built of ragstone, though its construction is presumed to have included courses of bonding tiles as did the nearby wall, Wall 12. The wall had been dug into the hillside gravel deposits, and consequently while its north side was only roughly laid, the south side was properly faced with squared blocks of ragstone. The wall construction on its south face was mostly invisible as the wall had a rendering of plaster which had been painted white. The level base of the plaster was indicative of the level of a floor, at about 6.7m above O.D., which had been destroyed, probably during the Roman period.

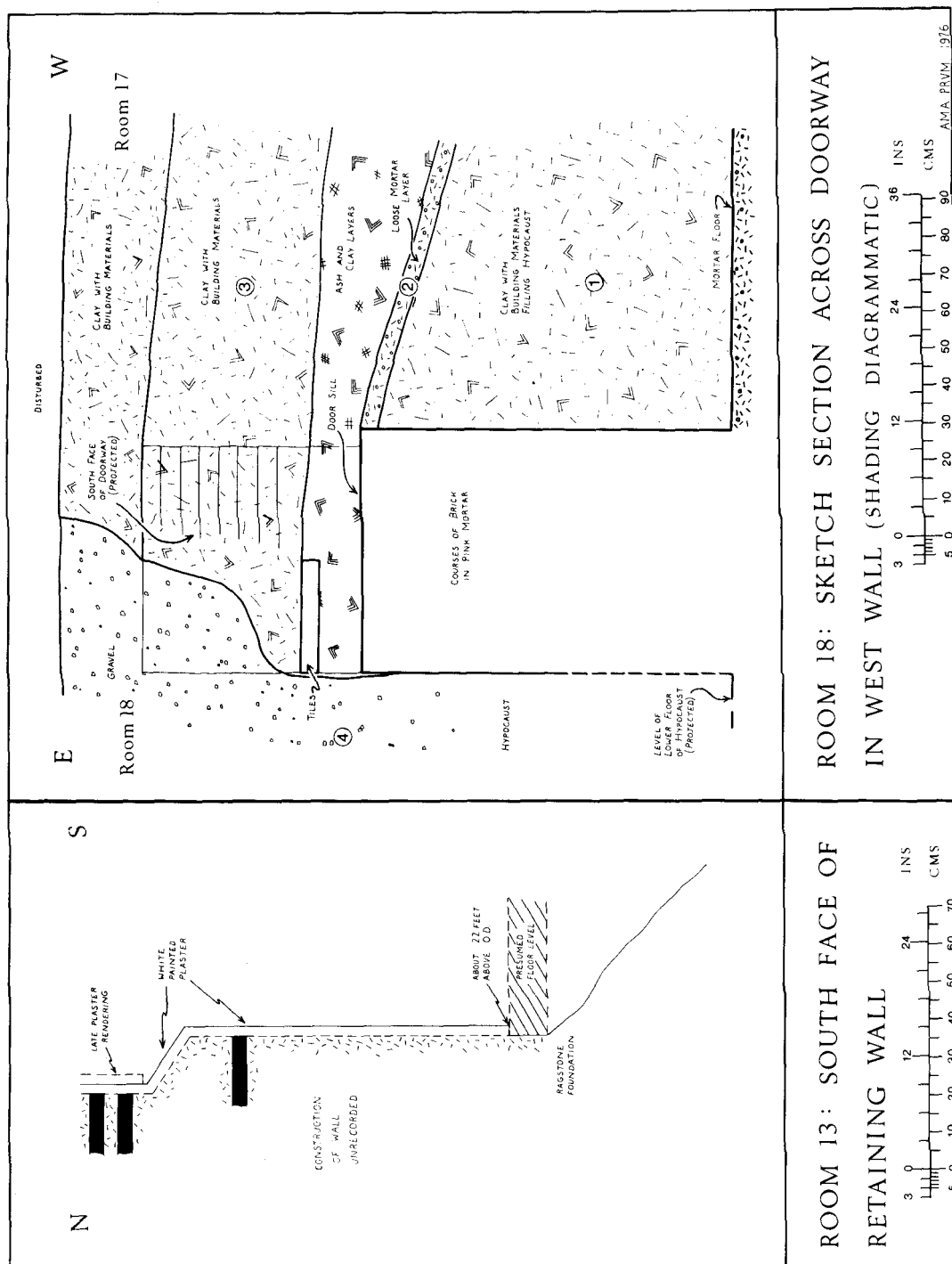


Fig. 4 Huggin Hill baths: sections in Rooms 13 and 18.

Wall 12 The stump of a ragstone wall, 0.45m wide, and part of its foundation were found separating the rooms bounded on their north sides by Walls 11 and 13. The separating wall was bonded into Wall 11, and both foundations were level, indicating that the floor of the room bounded by Walls 11 and 12 extended horizontally to the *caldarium* (Room 18).

Wall 13 (Fig. 4) This was a continuation of the Roman retaining Wall 11, the actual junction of the two lengths of walling being destroyed by the intrusion of a chalk-lined well of medieval or later date.

The retaining wall had been cut into the natural gravel of the hillside, and had been built of ragstone set in a hard, pale yellow mortar with courses of red bonding tiles at intervals. Once again the construction of the wall was unclear in detail as it was mostly obscured by a plaster rendering on its south side. The plaster surface was in a poor state of preservation, and although areas of white painted surface had survived no trace could be found of any decorative lines or colours.

The base of the plaster rendering was horizontal and lay at about 6.7m above O.D. and it seems that this was the general level of a destroyed floor. This floor level was also indicated by the existence of the wall foundation a few centimetres below this level, and by a small portion of *opus signinum* flooring which had survived at the junction of Wall 13 and Buttress 14.

The lower part of the wall stood vertically above the floor level, but at a height of 0.86m there was a chamfered offset 0.15m deep which had also been painted white. The plaster rendering above this offset had been renewed at some later stage, but no painted surface remained.

The east end of Wall 13 had been incorporated into a later wall of ragstone and thin red tiles which was probably built during the middle ages or in the sixteenth century.

Buttress 14 A massive buttress construction of ragstone and a scatter of Roman tile fragments set in pale yellow mortar, lay on the south side of the retaining Wall 13, and was separated from it by a straight joint. The original form of this buttress is only known in its ground plan which may not reflect its plan above that level. Indeed, it is even possible that it supported a staircase giving access to the hillside north of the baths. The southern edge of the buttress had been largely destroyed, though where it abutted the retaining Wall 13, the white painted plaster rendering of the wall was found to continue on to the west face of the buttress. In the corner of the junction of Wall 13 and Buttress 14 there lay at the base of the wall plaster a small portion of *opus signinum*, the only surviving fragment of the floor of this room, at about 6.7m above O.D.

About midway along the west face of the buttress and at a point where it had been destroyed to the Roman floor level, a 'socket', carved in Purbeck marble, was found set into the mortar of the buttress wall (Fig. 23, No. 36). It is difficult to judge the purpose of this unless it was for the door post of an entrance to the baths which had been built into the buttress and gave access to the hillside area to the north.

Room 15 A trench dug outside the west side of the *caldarium* apse (Room 18) revealed a small chamber which is interpreted as the furnace, since two flues extended from it, one clearly taking heat to the *caldarium*. The east side of Room 15 was bounded by the apse wall of the *caldarium* in which there was an egg-shaped niche of unknown purpose (0.73m wide, 0.76m high, and 0.4m deep) which was lined with mortar, and the bottom of which lay 0.78m above the floor of the furnace. The south and west walls of the room were of ragstone, but straight joints between these and the *caldarium* wall showed that they were a later addition. The composition of the floor of Room 15 was not revealed, though it was found to be at the same level as the lower hypocaust floor of the *caldarium* (about 4.36m above O.D.), for an arched flue passed through the *caldarium* wall linking the two rooms.

A second arched flue, its base also level with the *caldarium* floor, was found passing through the south wall of Room 15 perhaps to link up with the *tepidarium*. This second flue was traced underground for a length of 1.5m at which point excavation had to cease. It is interesting to note that the length of the flue was much greater than the thickness of the south wall of Room 15, possibly indicating a complex underfloor heating system.

The excavation of this room had to be carried out very quickly and it was not possible to recover much detailed information about the various structures. Nevertheless a period of change of use was clearly indicated by the discovery of a square timber-lined drain which crossed the floor of Room 15, and passed down the centre of the flue in the south wall. The drain was 0.7m wide at its

base, and its vertical sides were built of boards 0.04m thick which had been nailed to the base board. The wooden drain gently sloped down southwards.

The internal faces of the walls of this room were not rendered in plaster, though the external faces of the west and south walls, which formed an L-shaped corner, were rendered in plaster. However, it was not possible to establish any trace of a painted design.

Wall 16 A Roman wall 0.68m thick extended obliquely south-west from immediately north of the doorway in the west side of the *caldarium*. This wall evidently belonged to an early phase in the Roman baths for it was bonded into the west wall of the *caldarium*, but had been demolished down to the level of the sill of the doorway into that room, the rough core of the wall above being plastered over and painted white.

Room 17 (Fig. 4) Deep excavation immediately west of the west wall of the *caldarium* revealed a mortar floor at the same level as the lower hypocaust floor of the *caldarium*—between 0.9m–1.2m below the sill of the doorway in the *caldarium* wall. It was clear that a hypocaust lay here, and that its upper floor, which was presumably level with the door sill, had been destroyed. The brick structure, *Pila* 10, was probably a *pila* in this room, and the room is best interpreted as the *tepidarium*.

Room 18 (Fig. 4) This heated room was undoubtedly a *caldarium*, the destroyed upper floor of which was originally situated at about 5.48m above O.D.—about 0.9m below the rooms immediately north of the apse. The room, 8.2m wide and more than 10.97m long internally, had an apsidal north end acting as a retaining wall, and a doorway in its west side possibly giving access to the *tepidarium* (Room 17).

The walls were generally constructed by alternating three courses of ragstone and three courses of flat tiles, but in areas of complex construction such as the internal buttresses and the jambs of the doorway, bricks alone were used.

The upper floor of the hypocaust had been destroyed, and only the lower floor of white mortar remained, on which were *pilae* and low walls of bricks which originally supported the upper floor. The lower hypocaust floor surface lay at about 4.36m above O.D., but the level of the upper floor was indicated by an internal offset of about 0.08m at 1.15m above the lower floor, and by the level of the doorway sill.

The doorway in the west wall of the room was about 1.67m wide, the sill apparently being built of courses of bricks set in pink mortar. The purpose of the recess in the east wall of the *caldarium* south of the apse is uncertain as it could not be fully investigated, but it is likely that this was a blocked doorway.

The western end of the apse wall immediately above the lower hypocaust floor was pierced by an arched brick flue (Plate 1) by which heat was originally introduced into the *caldarium* from the furnace chamber, Room 15. The arch, 0.5m wide by 0.55m high, was roughly built into the neat wall construction around it, and was apparently a later insertion. Immediately inside the apse were found flue channels built of bricks, whereas the *pilae* were found in a deep excavation beside the east side of the room. It is possible that the apse contained a hot water bath and that this was supported on flue channels rather than *pilae*.

The suggestion of a hot water bath is supported by the level of the water supply which was introduced by a circular terracotta pipe 0.1m in diameter, inserted through the apse wall at about 0.76m above the lower hypocaust floor (i.e. about 5.13m above O.D.). Because this was about 0.35m below the probable upper floor level of the *caldarium* it seems likely that a sunken pool lay within the apse, the floor level of which must have lain below the water pipe.

The water supply to this room was itself ingeniously and simply arranged. The *caldarium* apse wall, built as a partial retaining wall in the hillside, evidently acted as a dam for the ground water in the natural gravel behind, and this constant clean source was tapped by the terracotta water pipe. The back-fill of the Roman excavation into the hillside on the north side of the apse was generally of yellow-brown brickearth which, no doubt, helped to seal off the *caldarium* hypocaust from ground water seepage through the apse wall. The back-fill adjacent to the terracotta pipe was of gravel, through which the ground water could percolate to reach the pipe. In order to prevent sand and silt from washing into the bath, a small box formed of unmortared bricks and a flat stone was built around the pipe entrance as a filter.

On the inner face of the upper part of the apse wall were found many iron nails or clamps, the heads of which had been corroded. These had been driven into the wall in horizontal and vertical rows, spaced at intervals of 0.2m apart. It seems likely that they once held box-flue tiles to the wall face. A broken box-flue was found to fit exactly the spacing of the nails.

The southern limit of the *caldarium* was not found, though its approximate position can be conjectured.

Wall 19 A small excavation revealed a portion of the west wall of the *caldarium* near its south end, standing only about 0.4m high and composed of four courses of flat tiles above courses of ragstone. A brick *pila* was revealed against the wall, and immediately south of this was found a brick structure, roughly stepped down to the south, the purpose of which is uncertain, though it seems to have been part of the heating system. It is clear that the south wall of the *caldarium* was located somewhere between this point and Floor 20, where no southward continuation of the west wall of the *caldarium* was found.

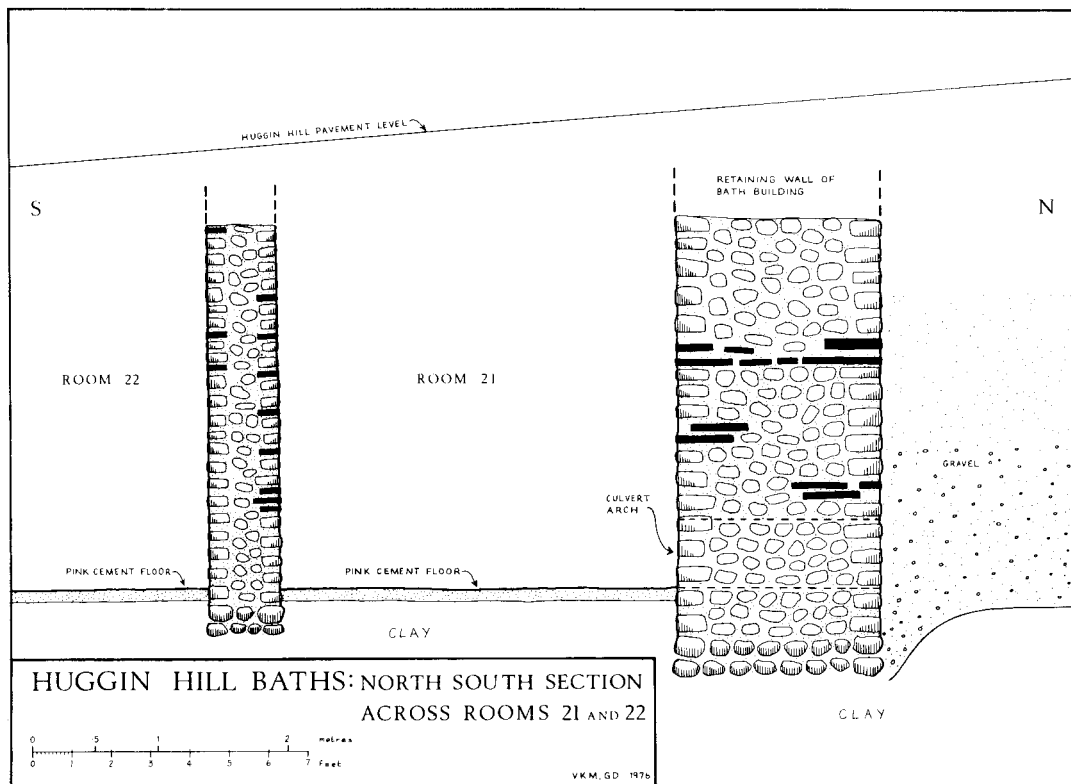


Fig. 5 Huggin Hill baths: section across Rooms 21 and 22.

Floor 20 Two small trenches were dug in an unsuccessful attempt to find the south wall of the *caldarium*. It seems likely that these excavations were to the south of that room, for they both revealed a pink mortar floor. In the northernmost trench a loose fragment of red tessellated pavement was found lying on the floor.

Room 21 (Fig. 5) This large chamber, probably 16m long and 3.2m wide, is perhaps to be identified as either a very large storage tank of cold water or a swimming pool. Its north wall was a retaining wall built of ragstone with courses of tiles, which was set into the hillside, and pierced by at least two culverts to admit ground water into the chamber.

The main part of the chamber east of Huggin Hill on the site of Nos. 10–12 Little Trinity Lane

was recorded by Dr. G. C. Dunning for the Society of Antiquaries in the autumn of 1929. With regard to Room 21, Dr. Dunning reported:

"The north wall of this room passed under Huggin Lane (now Hill), and was traced eastwards for a length of 36ft. (10.97m). The greater part of the wall had been destroyed previously down to 6ft. (1.8m) from the foundations, but remained to a height of 11ft. (3.35m) under Huggin Lane. The wall, 5ft. 3in. (1.6m) wide, was built of rag set in yellow mortar and faced with squared stones. The foundations were laid in the brickearth (at this level it was probably London Clay) at a depth of 14ft. (4.26m) below Huggin Lane. A bonding course of red bricks, measuring about 17in. (0.43m) by 11in. (0.28m) by 2in. (0.05m), was carried through the wall at 8ft. (2.43m) above the base, and 2-3ft. (0.6-0.9m) below it were lacing courses of bricks on both sides of the wall. A similar rag wall, 2ft. (0.6m) wide, with facing bricks at various heights, was partially uncovered to 10ft. (3m) south of the main wall, but could only be traced to a length of 6ft. (1.8m). The east wall of the chamber, 26ft. (7.92m) from the Huggin Lane frontage, was built up against the face of the

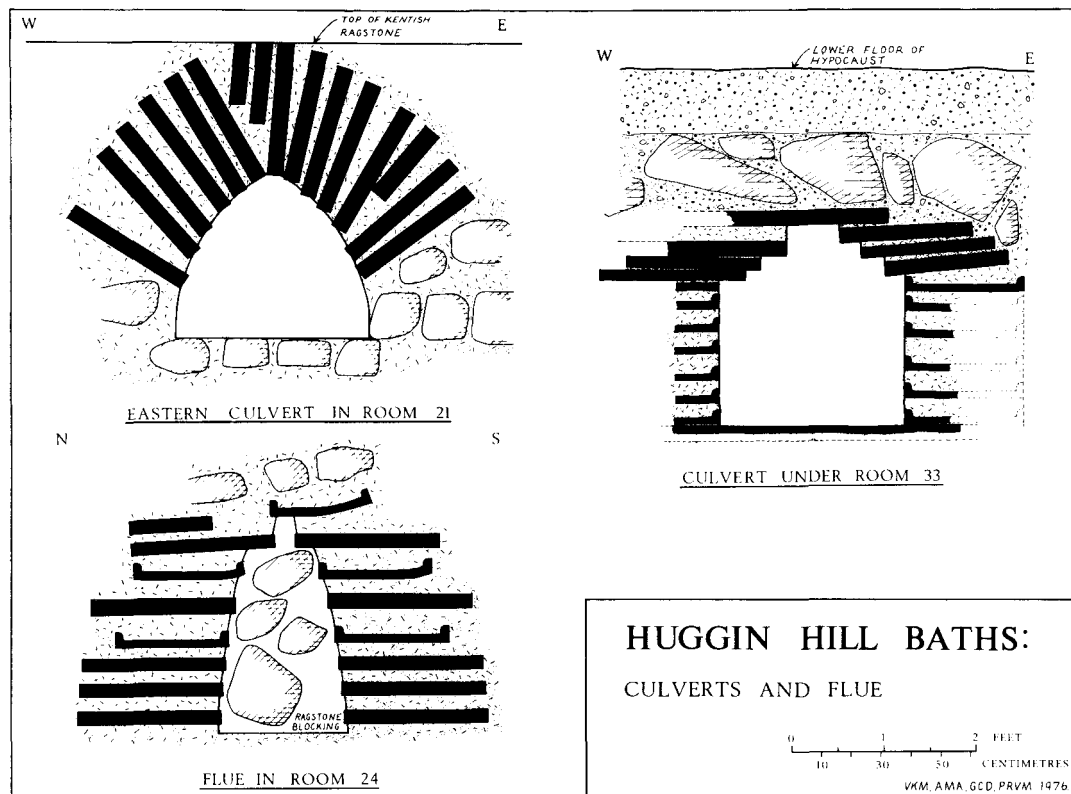


Fig. 6 Huggin Hill baths: elevations of culverts and flue.

north wall. It was 3ft. (0.9m) wide with a rag core, and faced with triple courses of large bricks alternating with two layers of dressed stones. The floor of this chamber was a layer of pink cement 3in. (0.08m) thick at a depth of about 12ft. (3.65m) below the level of Huggin Lane. In the north-eastern corner of the chamber the north wall was pierced above the floor by an arched culvert 21in. (0.53m) high by 24in. (0.6m) wide, built of voussoirs, 17in. (0.43m) by 6½in. (0.16m) above large rectangular bricks" (Fig. 6).

The walls forming the north-west corner of Room 21 were uncovered in a small excavation in 1964 and, although the excavation did not reach the floor of Room 21, the character of the walls

was found to be similar to the structures recorded in 1929. In this case the west wall was found to be separated from the north wall by a straight joint, and close to the corner the west side of an arched culvert similar to that found in 1929 was revealed at a low level in the north wall. The excavation also revealed that the floor of this room lay considerably below 6.7m above O.D., and was sunken in relation to the area immediately to the west.

Room 22 (Fig. 5) A room on the south side of Room 21 was partly recorded in 1929 by Dr. Dunning who noted that immediately south of its north wall there was a floor, 3in. (0.08m) thick, of pink cement at the same level as the floor of Room 21. The south face of the wall was not rendered in any way, and in view of the narrowness of the wall, which may not have been sufficient to support the pressure of water inside Room 21, it is possible that Room 22 may also have been part of the pool.

Room 23 This chamber was recorded in 1929 by Dr. Dunning who reported that it lay on the east side of Room 21, and was limited on the north side by the retaining wall, and on the west side by the thick wall between it and Room 22.

"Only one face of the east wall was exposed in a modern trench along the south side of the building site. The wall was of similar character to the others and was pierced by a narrow culvert or flue (Fig. 6), 27in. (0.68m) high by 16in. (0.4m) wide, built of flanged roofing tiles 14in. (0.35m) wide, above the ordinary larger bricks. The opening was blocked by rough pieces of ragstone, piled loosely on top of one another. The south wall of the room was examined for a length of 16ft. (4.87m). Its west end was built against the north-south wall, and was faced with pink plaster continuous with that on the west wall. The south wall made an obtuse angle with the west wall, so that the room (23) was quadrilateral in shape, measuring about 21ft. (6.4m) long by 9ft. (2.74m) and about 12ft. 6in. (3.8m) wide at its sides. This room was paved with large red bricks, measuring 17in. (0.43m) by 11in. (0.28m), bedded in a 3in. (0.08m) thick layer of coarse yellow cement mixed with gravel and crushed brick. The level of the floor was 18in. (0.46m) below the floor level of the rooms to the west" (Rooms 21 and 22).

The arched opening in the wall between Rooms 23 and 24 suggested that they were both heated, the hypocaust *pilae* and the upper floor of both rooms having previously been destroyed.

Room 24 Only the west end of this room was found and recorded by Dr. Dunning in 1929, and the wall separating this chamber from Room 23 has been described above. It was noted that the floor of Room 24 was composed of yellow cement only.

Room 25 This lay immediately south of Room 23, but no details were recovered to indicate the nature and level of its floor.

Wall 26 This was the north-west corner of a room, the floor of which lay below 6.7m above O.D., and was not uncovered. It is likely that Wall 27 formed the south-east corner of the room. Only the upper part of the walls were exposed, constructed of courses of Kentish ragstone set in pale yellowish mortar. The internal faces had been rendered with plaster and painted white, in contrast to the north face of the north wall which was not plastered. This suggested that either the floor level north of the room lay above the floor level of the room itself, or that the north wall of Room 26 formed the southern edge of the deeply sunken Room 22, the wall faces of which were not rendered. The size of Room 26 is uncertain, but it is likely that Wall 27 may form its south-east corner, thereby giving an almost square room. No wall flues were found either in Wall 26 or 27, suggesting that the chamber was unheated.

Wall 27 (Fig. 7; Plate 3) This formed the south-east corner of a room, the north-east corner of which was perhaps formed by Wall 26. The east wall was constructed of ragstone and pale yellow mortar with a double course of bonding tiles, and its west face was rendered with plaster and painted white. The floor of the room had been destroyed but the lower edges of the painted plaster seemed to indicate that the destroyed floor probably lay at about 5.36m above O.D.

This room had been built up against the north side of Room 28, access to which was through a doorway in the wall dividing the two rooms (see below, Room 28).

Room 28 (Fig. 7; Plate 3) Only the eastern side of this room was excavated, and although little of its interior could be uncovered, it is clear that it was an unheated chamber measuring 7.46m from north to south internally. Its walls were constructed of ragstone set in pale yellow mortar, with, at about floor level, a double course of bonding tiles. At its south-east and north-east corners, the

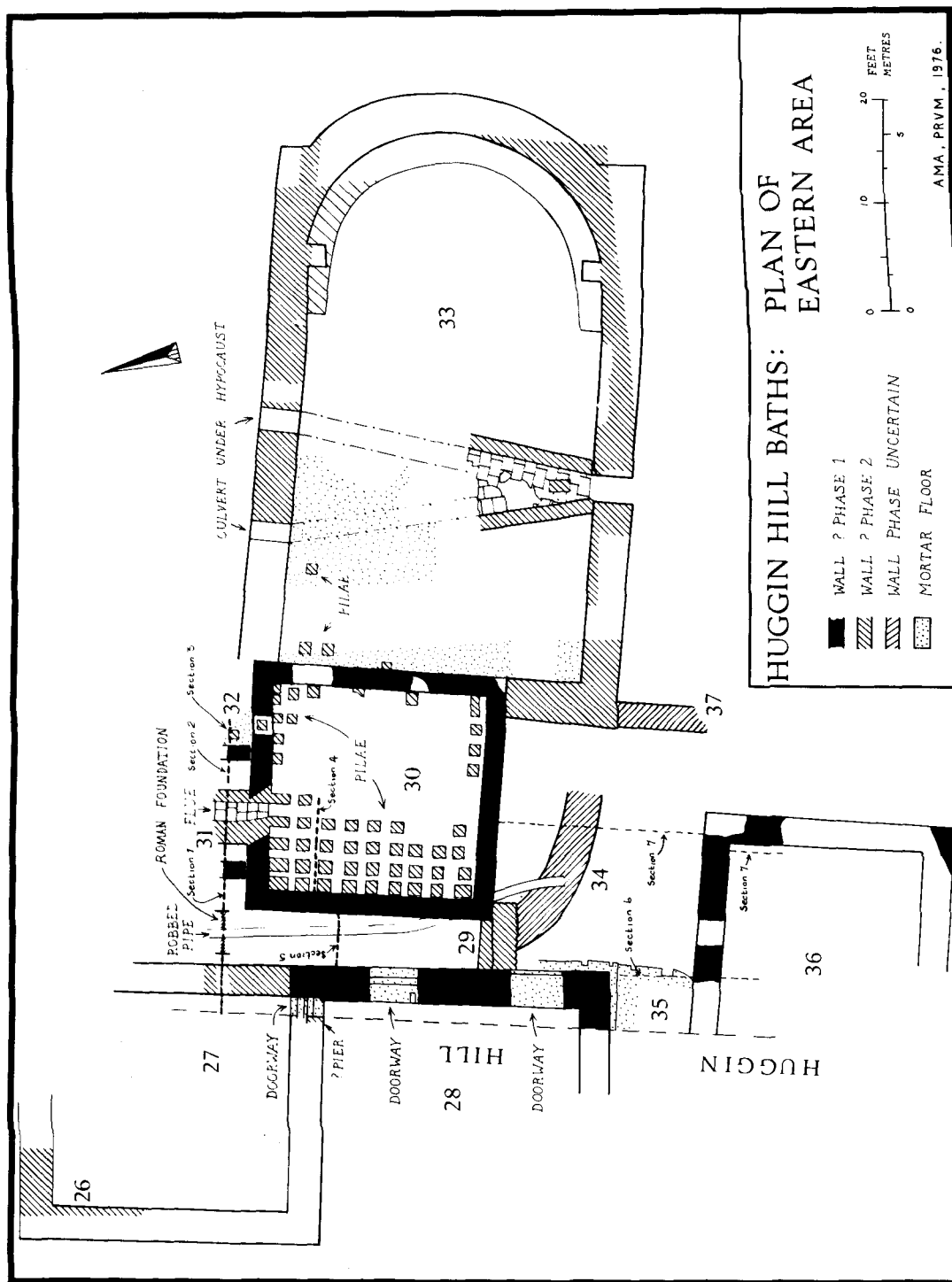


Fig. 7 Huggin Hill baths: Plan of eastern area.

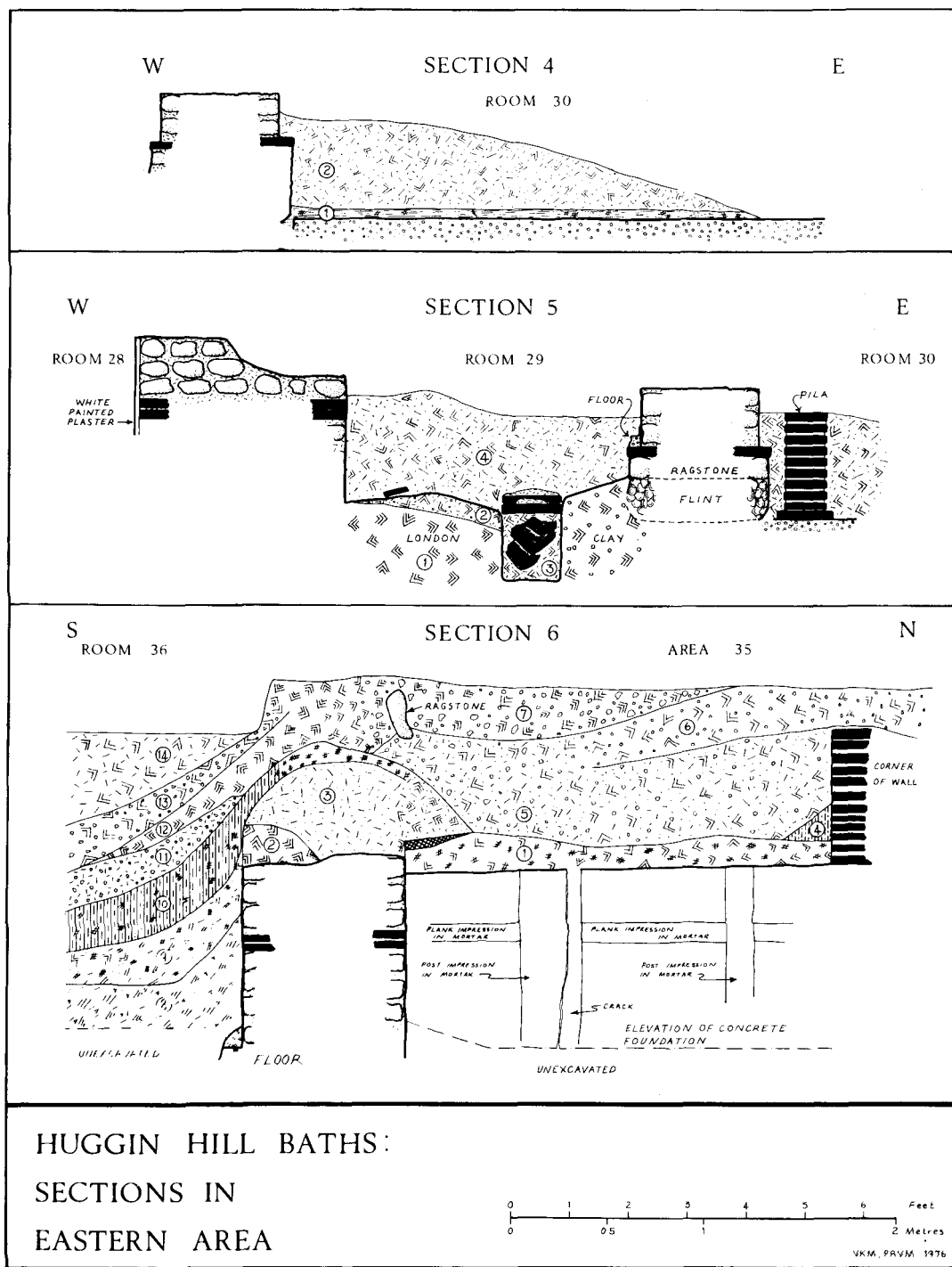
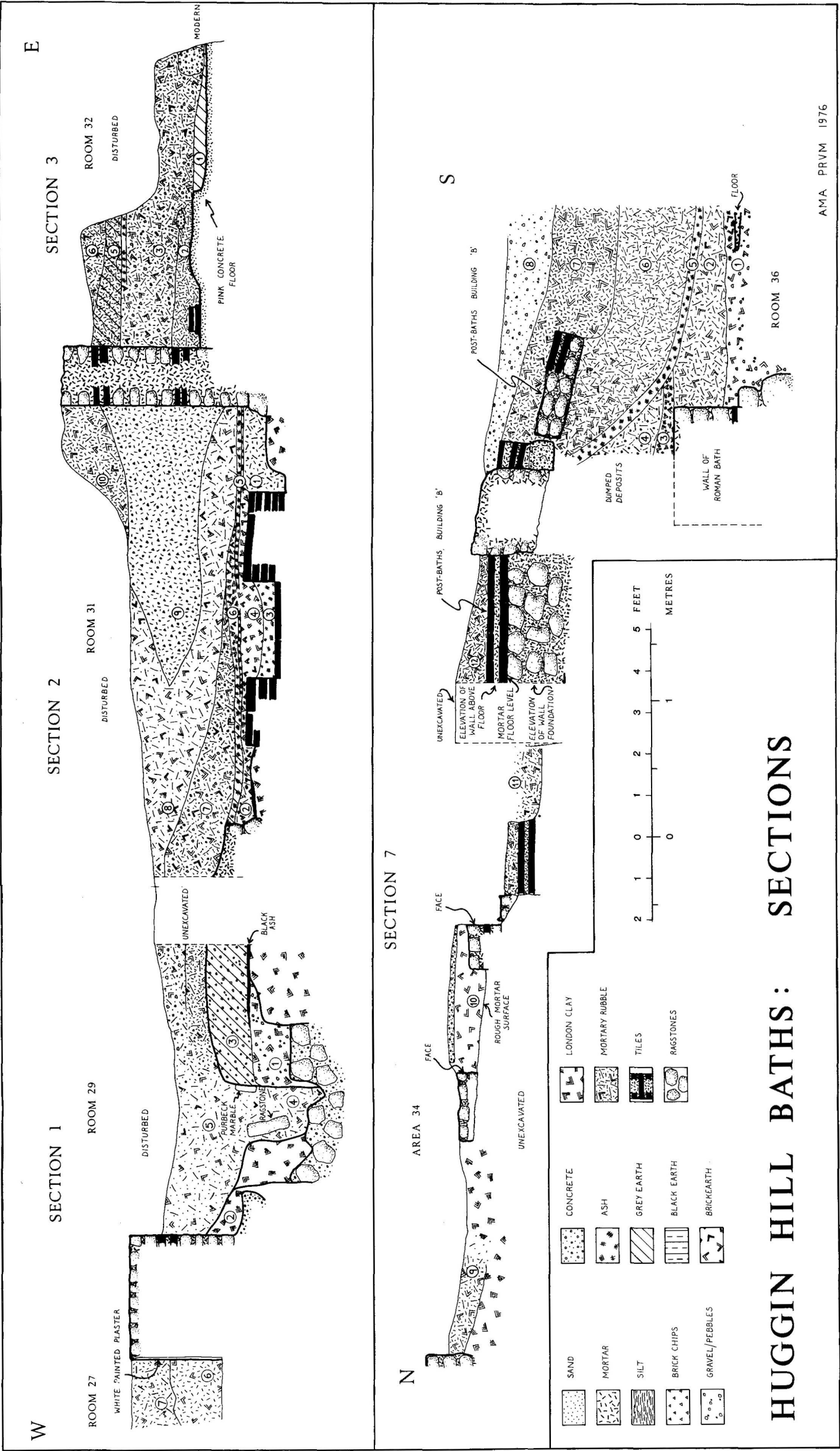


Fig. 8 Huggin Hill baths: sections 4, 5 and 6. Key as in Fig. 9.



latter where it abutted the neighbouring room (Wall 27), the wall was constructed entirely of flat tiles set in mortar. The internal faces of the room were rendered in plaster and painted white.

Three doorways were found in this room. That in the north wall, in the north-east corner of the room, gave access to the neighbouring room partly formed by Wall 27. In each of the three doorways there seems originally to have been a wooden door frame and sill which had been set into the wet mortar, for the impression of the decayed timber had clearly survived. In the northern doorway the mortar of the door sill retained the impression of two doorway sill beams. At some later stage in the Roman period this doorway had been partly blocked by a pier of mortared tiles which had been rendered in plaster on its north, east and south sides. The remaining opening on the east side of the doorway was only about 0.53m wide, suggesting a changed purpose in the use of the doorway, which perhaps occurred when the room (Walls 26 and 27) was added to the north side of Room 28.

The northern doorway (1.5m wide) in the east wall gave access to the corridor, Room 29. Once again, the mortar of the sill contained the impressions of timber sill beams, and also of a timber door post.

The southern doorway in the east wall was 1.6m wide, and most of the sill was sunken as if to take a timber sill, though the outer or eastern edge was at a higher level.

A Roman wall is recorded as being found under Huggin Hill about 1845⁷ in approximately the position of the south wall of Room 28. No further details are known.

Room 29 (Fig. 7; Fig. 8, section 5; Fig. 9, section 1; Plates 2–3) This was a corridor 1.5m wide separating the cold room (Walls 26 and 27) and Room 28, from the heated Room 30. At its south end the corridor was blocked by a foundation which presumably contained a door giving access to Area 34. The floor of the corridor had been almost completely destroyed when the baths were demolished; but at about 5.38m above O.D., immediately above an offset in the wall forming the east side of the corridor, there was a portion of possible flooring of buff coloured concrete. It is evident that the reason for the removal of the floor was to facilitate the salvage of a pipe, perhaps made of lead, which ran down the centre of this corridor, except at the south end where it swung eastwards under the corner of Room 30 (Plate 3). It is probable that this pipe drained water from the cold water pool or tank (Rooms 21 and 22). The foundation closing the south end of the corridor was roughly faced on its north side as if to suggest that the corridor floor lay below the ground level of Area 34. It is not certain if the walls had been plastered, but this seems unlikely. Instead, the mortar pointing around the rough ragstone facing stones of the western wall had been cut with incised lines to simulate ashlar blocks.

Room 30 (Fig. 7; Fig. 8, section 4; Plates 3, 4–5) This room had been extensively modified during the Roman period, and it seems likely that initially it was not a heated chamber. This is suggested by the absence of any flues set into or attached to the surfaces of the walls, and by what seems to have been a doorway built in the north wall at an oblique angle. If this is the case then the probable floor level of this primary phase lay at the base of the carefully faced part of the wall, about 5.36m above O.D. This would have meant that the floor of this room was at the same level as the floors in the corridor (Room 29) and the two cold rooms to the west (Room 28 and Walls 26 and 27).

The walls of the room were constructed on a foundation of flints in buff mortar above which, at the probable floor level, there was a single course of flat tiles. The wall was reduced to 0.6m in thickness above this, and was constructed of courses of ragstone in buff mortar with double courses of bonding tiles. The walls survived to their greatest height in the north-east corner, and both the faces of the north and east walls were particularly well preserved (Plate 4). No evidence could be found to suggest that the walls had ever been rendered with plaster and painted. Instead the mortar pointing between the irregular ragstone blocks had incised lines cut into them, in a similar fashion to the walls of the corridor (Room 29), to simulate ashlar blocks (Plate 6). This form of wall rendering is unusual in Roman London, and the fact that the same technique was used in Rooms 28, 29 and 30 does suggest that their building was contemporary.

The only variation in the wall construction was at the sides of the doorway opening in the north wall for these were built entirely of flat, red bricks set in buff mortar. East of this the inner face of the wall contained what may have been a small opening, blocked with bricks (Plate 6) immediately above the floor level of the early phase.

The room was changed in its final phase from a cold to a heated room, perhaps to become a *tepidarium* adjacent to the eastern *caldarium* (Room 33). To achieve this a hypocaust had to be inserted. The original floor was completely removed, and the interior of the room excavated. A new floor of buff, pebbly concrete was laid at a lower level (4.92m above O.D.), 0.4m below the earlier floor level and at the level of the base of the wall foundations. Brick *pilae* were built upon this floor, their greatest surviving height being about 0.55m. At the eastern end of the north wall a flue channel had been roughly cut through the wall so that the heat in Room 30 could pass into Room 32, and since this flue lay not more than 0.6m above the lowest hypocaust floor of Room 30, it is unlikely that the upper floor of Room 30 was less than 0.91m above the lower floor. Fragments of *opus signinum* found in the hypocaust debris of the room indicated the probable nature of the upper floor.

The final alteration was the construction of a furnace in Room 31 to heat Room 30 by a flue built in the former doorway (Plate 5).

Room 31 (Fig. 7; Fig. 9, section 2; Plate 5) This seems to have been a small chamber located between the two walls (3.04m apart) which extended northwards from Room 30. Both of the north-south walls appeared to have been built against the north wall of Room 30 and, as they did not relate in plan to the oblique doorway of that room, it is possible that they did not form part of the original construction. The flue channel was built in the final phase and the actual furnace position, to judge from the amount of burning and ash in the flue, lay just north of the limits of the excavation where later intrusions had destroyed the Roman features.

The flue itself (Plate 5) was built of flat red bricks set in yellow clay, both of which had been considerably burnt. It widened to the north, no doubt to accommodate the fire, and on its tiled floor was found a layer of white ash (Fig. 9, section 2, layer 3). It is possible that when the flue was built the west wall of Room 31 was demolished to its foundation, perhaps to allow access to the furnaces from the corridor (Room 29).

Room 32 (Fig. 7; Fig. 9, section 3; Plate 6) Only a very small portion of the south-west corner of this room had survived. It lay adjacent to Rooms 30 and 31 and its floor was located 0.55m above the lower hypocaust floor of Room 30. The floor of pink concrete was somewhat uneven, and on this there was found a brick-built *pila*. It is probable that this hypocaust belonged to a phase of rebuilding in the baths because a hole forming a flue had been roughly broken through the north wall of Room 30 to allow heat from the hypocaust of that room to pass into the hypocaust of Room 32. In order to strengthen the opening a brick *pila* had been built in the flue opening.

Room 33 (Fig. 7) This room, to judge from its form (Plate 7), was another *caldarium*, of even larger size than the western *caldarium* (Room 18). It measured 15.95m long and 8.81m wide and was, like the western *caldarium*, rectangular in plan with a large apse at one end, which perhaps originally contained a hot water bath. Only the foundations of this room had survived, but these clearly showed that the room had been added to the east side of Room 30, the foundations of the rooms having been separated by straight joints. The *caldarium*, especially its south side and the apse, had been largely destroyed by deep modern cellars, but enough had survived to make its plan clear. Its foundations had been constructed of ragstone and buff concrete, though, as the room lay east-west along the hillside it is clear that the architect of the baths was concerned about the dam-like effect that the *caldarium* would have on the natural flow of ground water, and the consequent effect on the building. To keep the water table north of the room as low as possible two underground culverts (Plate 8) were constructed leading through the foundations of the room and beneath the lower floor of the hypocaust. The culverts had been built of flat bricks, and as under the hypocaust floor the western culvert had been roofed with flat tiles (Fig. 6; Plate 8), it may be presumed that the eastern culvert, the roof of which had been destroyed, had been similarly roofed. The culvert openings in the foundations themselves were incomplete but, judging from what had remained, it seems that they had been arched over with tiles. The incline of the floor of the western culvert was very gradual, but it is clear that it was intended to take water from north to south, the incline being a drop of 0.1m over a distance of 7.62m (Plate 9). The eastern culvert opened at its north end into the gravel subsoil, some of which had been disturbed during the construction of the baths, but the opening of the western culvert had been destroyed by a post-medieval cess pit.

The lower floor surface of the hypocaust lay at 5.56m above O.D., and the floor was built of

buff, pebbly concrete of unknown thickness. Upon this in the north-west corner of the room were found the lower tiles of just four *pilae* which were spaced about 0.3m apart from each other. The level of the completely destroyed upper floor is uncertain, but presumably lay about 0.91m above the lower floor (i.e., at about 6.47m).

The apsidal east end of the *caldarium* had been largely destroyed except for the bottom of the main portion of the wall. The north end of the apse was rather better preserved, and here the foundation of a buttress, similar to that in the apse of Room 18, was recorded. A second buttress at the south end of the apse may be inferred.

Area 34 (Fig. 7; Fig. 9, section 7) Due to its irregular boundary it seems unlikely that this was an enclosed chamber, but an open area giving access to various bath rooms at a level of about 5.18m above O.D. The area was not excavated deeply and it is likely that some structures were not located. Nevertheless, a southern extension of the pipe trench, found in Room 29, was seen to continue in a disturbed state south-eastwards across the Area, and to incline to the south. In addition a curving foundation of ragstone and buff mortar was found just south of Rooms 29 and 30, and it seems that this was the remains of a Roman structure which had been demolished prior to the general destruction of the baths. Not only had the foundation been overlaid by dumped clay, but also its level lay below that of the south sides of Rooms 28 and 33. It is just possible that some steps found overlying the curving wall in this area belonged to the baths phase, though in view of their poor construction, which included re-used tiles, it is more likely that they belonged to the post-baths phase (p. 23).

Area 35 (Fig. 7) On the south side of Room 28 was a massive foundation of concrete, which probably also contained ragstone, though none was visible on its surface. This provided a buttress between Rooms 28 and 36 which were on two terrace levels. The buttress had been built in a timber lined trench for the cement bore the impression of the square posts and the horizontal boards which had retained the sides. Only a small area at the east end of this buttress could be uncovered, but as there was no evidence of any walls having been built on it, it is unlikely that it was intended to support any constructions other than the south end of Room 28. In fact, an extension of the buttress with traces of the timber posts and shuttering continued northwards under the south-east corner of Room 28. Immediately on top of the buttress south of Room 23 were found deposits of black ash and stiff ashy clay (Fig. 8, section 6, layer 1) suggesting that this surface may have been associated with the heating system of the baths despite the fact that the immediately adjacent Rooms 28 and 36 were apparently unheated.

Room 36 (Fig. 7) This chamber was sunk below the general level of the baths, its *opus signinum* floor being constructed at 3.2m above O.D. The walls of the room had been built of ragstone and buff mortar, and in the north wall, which had survived to the greatest height, there remained a double course of bonding tiles. The floor of the room had been almost completely destroyed, though a little of the *opus signinum* had survived at the edge where it overlay the ragstone foundation.

The purpose of the room is uncertain, but located on a lower level than the rest of the bath rooms, it is unlikely to have been one of the main bath chambers.

Area 37 (Fig. 7) A wall, not bonded into the south wall of the *caldarium*, was found extending southwards from the south-west corner of the chamber. Unfortunately, the area was so disturbed that no indication could be found of its purpose, whether boundary wall or room. The wall, however, was built of ragstone and buff mortar and seemed to be of Roman date, though this is not fully certain.

(ii) Dating Evidence

Very little dating evidence could be recovered from deposits contemporary with the construction of the baths. The finds are catalogued in detail below, p. 53.

Room 13 Three sherds (ER. 949) were found in the gravel and rubble back-fill of the construction trench on the north side of the apse of the *caldarium* (Room 18). These sherds (Fig. 21, Nos. 1 and 2) are difficult to parallel on other sites, though they are probably of Flavian date.

Room 13 A few Roman sherds (not illustrated) of first century date were recovered from the earthy cement in the ragstone foundation of the retaining wall on the north side of Room 13 (ER. 911).

Room 33 Finally, several sherds (Fig. 21, Nos. 3–5) of late first century date (see also the samian ware report, p. 55–57) were recovered from the gravel back-fill of the arched north end of the eastern culvert under the *caldarium* (Room 33), these sherds, no doubt, having been introduced during the construction stage (ER. 1420).

Conclusion:

This is clearly insufficient evidence upon which to date the construction of the baths. Nevertheless, it does suggest that the probable primary phase of the baths is not earlier than the Flavian period, and that the addition of a second group of bath rooms to the east, including the *caldarium* (Room 33) could not have occurred before about the end of the first century.

Occupation of the Baths

Due to the systematic form of the subsequent demolition of the baths little remained of archaeological deposits representing the actual occupation and use of the building.

Room 30 A few sherds (not illustrated) were recovered from a clayey silt layer about 0.025m thick overlying the lower floor of the hypocaust in the western half of Room 30 (Fig. 8, section 4, layer 1). None could be closely dated, but they are probably of the first century A.D. (ER. 1419). In addition there was a corroded bronze coin possibly of Vespasian (ER. 1433). The silt had evidently accumulated gradually during the occupation of the baths, though the sherds and coin presumably arrived there at the time the hypocaust was being constructed. Overlying this silt deposit was a thick layer of demolition rubble.

Area 35 A deposit of dark grey ashy soil, overlay this mortar foundation (Fig. 8, section 6, layer 1), and was itself overlaid by the dumping following the demolition of the baths. In it were found a few coarse ware sherds (ER. 1388) dateable to the first half of the second century A.D., and also a samian ware sherd (Dr. 37) dated to c. A.D. 150–180 (see p. 55). The cause of the ashy nature of the deposit is not known, but it seemed that it was likely to have accumulated before the demolition of the bath building.

Room 31 A layer of ash and building rubble (tiles and concrete) lay between the inserted furnace in this room and the east wall (Fig. 9, section 2, layer 1), and in the deposit were several coarse ware sherds (ER. 1377) of the first or second century A.D. The deposit, which was overlaid by a thick layer of burnt clay associated with the use of the furnace, evidently pre-dated the insertion of the furnace.

(iii) Destruction of the Baths

At a date possibly in the latter half of the second century the baths were systematically demolished and the hillside was restored to its former sloping profile. Although only limited parts of the site were investigated some indications were found of the sequence and method of destruction.

The first step seems to have been to destroy the upper floors of hypocausts and to smash the box flues on the walls, all, no doubt, to remove the possibility of underground voids which might have caused subsidence. Evidence of this was particularly clear in Room 17 where, once the hypocaust floor had been removed, the hypocaust was filled by dumping clay and rubble to the level of the door sill between Rooms 17 and 18 (Fig. 4, layer 1, ER. 914). In Room 18 the apse once held box flues fastened to the wall by iron fittings, but in all excavated areas of the apse it was found that the flues had been broken off, together with any painted plaster rendering that may have existed. A considerable quantity of broken flue tiles and of red and white painted wall plaster which may have come from the walls was found in the dumped filling of this room (ER. 921, 922, 925).

Excavation at the south-east corner of Room 27 (Fig. 7) showed that the floor had been removed, its level indicated by the horizontal base of the wall plaster adhering to the east wall of the room. The floor at the east side of Room 28 was also absent, and had evidently been broken up and possibly removed. The removal of broken flooring was clearly indicated in Room 30 where, although much post-Roman grave digging had destroyed a considerable part of the archaeological deposits, enough remained, particularly in the north-west part of the room, to show that the destruction deposits contained few large pieces of the upper floor of the hypocaust.

It seems likely, therefore, that the floor, once broken up, had been carted away, possibly to be dumped down onto the lower terrace level.

The mortar floor of the corridor, Room 29, had been completely broken up and removed, except at one point where a small piece remained adhering to an offset on the east wall of the room (Fig. 8, section 5). Not only was the floor itself removed, but also the soil below had been excavated to a depth of about 0.3m, probably to search for underfloor services which were worth salvaging prior to the demolition of the building. It seems that a pipe, perhaps of lead, was robbed, for a trench 0.3m wide, filled with destruction debris, was found during the recent excavation (Fig. 8, section 5, layer 3; Fig. 9, section 1, layer 4; Plate 2). It is likely that the pipe led from the large water-tank or pool in Room 21.

Evidence of partial demolition and removal of rubble was also found in Room 31, for no trace was found of the upper part of the brick flue in the opening leading to Room 30, while in Room 36 most of the mortar floor had been removed (Fig. 8, section 6).

The second stage of the destruction was either the demolition or the dumping to make up the hillside slope, though it is not too clear which occurred first, for had the demolition occurred before the dumping then a definite layer of building debris would be expected. Instead there was much building debris but this was thickly scattered amongst the dumped clay and gravel deposits, and its source may not have been the bath building but demolished buildings elsewhere in the Roman City. Nevertheless, in spite of a general absence of a layer of building debris, some of the walls had clearly been demolished before the dumping occurred (e.g., the west wall of Room 18 (Fig. 4, section) and the north wall of Room 36 (Fig. 8, section 6)).

The dumped deposits generally comprised gravel and yellow brickearth which is foreign to the site, though the nearest natural deposits occur at the top of the hill (Fig. 2). The deposits contained a large amount of pottery and building debris, the source of which, like the clays and gravels, need not all have been from the bath building. With this in mind *caution* is required in associating all objects from the dumping with the demolition of the baths itself, and in view of the early date of the finds it is possible that the objects in the dumping only provide a date after which the demolition occurred. Nevertheless, the great concentration, large size and quality of much of the building debris in the dumping does suggest that most was probably derived from the bath building, and that demolition and dumping occurred at about the same time.

Following the demolition of the upper hypocaust floor in Room 17 the area formerly occupied by the hypocaust was filled with rubble and a great quantity of broken box flue tiles in a clayey deposit (Fig. 4, layer 1, ER. 914). The upper surface of this dump was level with the door sill, and it is clear that by filling the hypocaust access was possible across the rooms while demolition continued during which phase a loose mortary layer and an ash and clay deposit (Fig. 4, layer 2, ER. 919) were evidently deposited. Possibly at this time the constant passage of people through the doorway rendered the clay there soft and unsuitable, and was the reason for laying a layer of flat tiles above the yellow clay in the doorway.

Eventually, however, further demolition occurred while a dump of clayey material containing flanged roof tiles, and lumps of mortar, was deposited in the room (Layer 3; ER. 915 [bottom], ER. 920 [middle], ER. 923 [top]). Stratigraphically later than this, though occurring almost simultaneously, a quantity of gravel was dumped into the *caldarium* (Level 4).

Dumped deposits were found in other rooms: in Room 18 there was clay and gravel (ER. 921, 922, 925). Dumped brickearth was found overlying a pink mortar floor at Floor 20 (ER. 939). In Room 27 a layer of broken roof and flue tiles in building rubble (Fig. 9, section 1, layer 7) was overlaid by a dump of brickearth and broken wall plaster (Fig. 9, section 1, layer 6) indicating that the roof had been demolished before the dumping occurred. In Room 28 (Fig. 8, section 5) similar dumped deposits were found, and brickearth deposits filled the three doorways. In Room 29 the pipe trench was first filled with demolition debris (Fig. 8, section 5, layer 3; Fig. 9, section 1, layer 4; Plate 2), over which there was a dump of yellow-brown brickearth containing broken flanged roof tiles, bricks, some of which had mortar adhering to them, and broken pieces of mortar (Fig. 8, section 5, layer 4; Fig. 9, section 1, layer 5).

Small pieces of marble veneers and mouldings from the dumped deposits in this area suggest that re-usable architectural elements had been stripped out for re-use at an early stage in the

demolition. In Room 30 a dump of yellowish clay contained much Roman building debris (Fig. 8, section 4, layer 2) which included broken flue tiles, flanged roof tiles, broken *pilae* tiles, lumps of Kentish ragstone and much broken mortar (ER. 1422).

In Room 31 a pause between the demolition of the flue and the dumping of clay and building debris is suggested by two thin ashy layers which were deposited over the stumps of the flue walls (Fig. 9, section 2, layer 2). Above this were major dumps of debris which had clearly been deposited in quick succession, the different loads of dumped material evidently having been brought from several different sources. The lowest dump was of gravelly earth which contained building rubble and much broken mortar (Fig. 9, section 2, layer 7). Over this was a dump of brickearth which contained more building rubble (Fig. 9, section 2, layer 8). A dump almost exclusively of building rubble (flat bricks, flanged roof tiles, wall plaster, ragstone, and broken mortar) overlay this (Fig. 9, section 2, layer 9); while above that was further dumping of brickearth containing building rubble (Fig. 9, section 2, layer 10).

The single *pila* found in the south-west corner of Room 32 had clearly been removed, presumably in the demolition stage prior to the final dumping to fill in the bath building. Above this were the deposits of dumped material, with, at the bottom, a layer of broken building debris of tiles and stone (Fig. 9, section 3, layer 2). More broken building debris occurred in the overlying dump of gravelly brickearth (Fig. 9, section 3, layer 3). Above that was a dump of grey earth containing building rubble (Fig. 9, section 3, layer 5), and above that again a deposit of dumped brickearth containing more broken building material (Fig. 9, section 3, layer 6).

Evidence that debris was tipped from the higher to the lower terraces was found in Area 35 and Room 36 (Fig. 8, section 6), where layers 8–14 had been so dumped. At the east end of Room 36 further evidence of dumping in this way was found (Fig. 9, layers 1–6), following the partial demolition of the north retaining wall of Room 36.

At some stage the walls themselves had been graded to the hillside slope so that the northernmost walls on each terrace, which were those set deepest into the hillside, were left standing to the greatest height (e.g. the north walls of Rooms 18, 23 and 2); while those near the outer edge of each terrace (e.g. Wall 19, and the south sides of Rooms 29 and 30) stood to very little height at all.

(iv) Destruction of the Baths: Dating Evidence

• The dating evidence for the destruction of the baths is contained only within the dumped clays, gravels and building debris used to fill the terraces and return the hillside to its normal slope. Only a selection of the pottery is given as it cannot be too closely dated (Figs. 21–22, Nos. 7–34). The Excavation Register groups from these deposits of dumping may be consulted at the Museum of London. No coins of any dating significance were found in the dumped deposits; but the samian ware was particularly valuable. The dating range of the pottery as a whole extends from before the Flavian period to the middle of the second century A.D., the latest samian ware occurring in ER. 940 (mid-second century), and clearly the dumping occurred not earlier than that date.

The location of the dumped deposits from which dating evidence was recovered was as follows:

ER. 914 and 917: Pottery from the lowest dump of building debris in Room 17 below the level of the door sill (Fig. 4, section, layer 1). Coarse pottery illustrated (Fig. 21, Nos. 7,8), and samian described p. 57.

ER. 915: From the bottom of the clayey rubble dump above ER. 914 filling the doorway to Room 18 (Fig. 4, section, layer 3). Coarse pottery illustrated (Figs. 21, Nos. 9–11).

ER. 916: From the black silt above the timber drain in Room 15.

ER. 918: From the clayey dump in the arched flue in the apse wall of Room 18. Pottery illustrated (Fig. 22, Nos. 17, 18).

ER. 919: From the black ashy deposits in Room 17 (Fig. 4, deposit between layers 2 and 3).

ER. 920: From the middle of the dumped clayey rubble deposit in Room 17 (Fig. 4, section, layer 3), above ER. 915. Pottery illustrated (Fig. 21, Nos. 12, 16).

ER. 923: From the top of the dumped clayey rubble deposit in Room 17 (Fig. 4, section, layer 3), above ER. 920.

ER. 924: From the lower part of the dumped clay in Room 15, at the level of the timber drain.

ER. 925: From the surviving upper part of the dumped brickearth inside the apse of Room 18, about 2m above the lower floor of the hypocaust.

ER. 932: From a dump of grey, clayey soil adjoining and higher than the west wall of the *caldarium*, Room 18, at Wall 19. Lamp illustrated (Fig. 22, No. 19).

- ER. 940: From the dump of clay immediately above the lower hypocaust floor of the *caldarium*, Room 18, at Wall 19.
- ER. 1372: From the dumped rubble in Room 31 (Fig. 9, section 2, layer 9).
- ER. 1373: From a clayey dump in Room 31 (Fig. 9, section 2, layer 8), underlying ER. 1373.
- ER. 1374: From a dumped deposit in Room 31 (Fig. 9, section 2, layer 7), which underlay ER. 1373.
- ER. 1375: From the grey, ashy soil in Room 31 (Fig. 9, section 2, layer 6), underlying ER. 1374.
- ER. 1376: From an ashy deposit in Room 31 (Fig. 9, section 2, layer 5), underlying ER. 1375.
- ER. 1385: From a dump of clay overlying the south wall of Room 28 (Fig. 8, section 6, layer 6). Samian ware described p. 57.
- ER. 1386: From the demolition rubble above the north wall of Room 36 (Fig. 8, section 6, layer 3). Samian ware described p. 57.
- ER. 1387: From a dump of rubbly earth in Room 32 (Fig. 9, section 3, layer 5). Samian ware described p. 57.
- ER. 1398: From a dump of brickearth below ER. 1397 in Room 32 (Fig. 9, section 3, layer 3).
- ER. 1407: From a layer of ash in the dumps of clay in Room 36 (Fig. 9, section 7, layer 5).
- ER. 1408: From a dump of clay (Fig. 9, section 7, layer 6) overlying ER. 1407 in Room 36.
- ER. 1409: From one of the lowest dumps of rubble and clay in Room 36 (Fig. 9, section 7, layer 2). Samian ware described p. 57.
- ER. 1418: From rubble filling in Room 29 (Fig. 8, section 5, layer 4). Coarse pottery illustrated (Fig. 22, Nos. 20–22).
- ER. 1422: From rubble filling in Room 30 (Fig. 8, section 4, layer 2). Coarse pottery illustrated (Fig. 21, No. 15). Samian ware described p. 57.
- ER. 1424: From rubble and clay filling of the robbed pipe trench in Room 29 (Fig. 9, section 1, layer 4; Fig. 8, section 5, layer 3).
- ER. 1425: From a rubble layer in Room 27 (Fig. 9, section 1, layer 7). Coarse pottery illustrated (Fig. 22, No. 34).
- ER. 1427: From a dump of gravel and clay in Area 35 (Fig. 8, section 6, layer 5). Samian ware described p. 57.

(v) Destruction of the Baths and later Roman use of the Site

With so much expense lavished on the building, it is difficult to understand why the Huggin Hill baths were demolished as early as the second half of the second century. Although it is possible that most of the dateable content of the dumps filling the bath is residual and does not really reflect the date of demolition, it is unlikely that the demolition occurred significantly later, as in that case a few later sherds might have been expected in the dumps. A serious difficulty in establishing the date of destruction has been the absence of deposits contemporary with the occupation and use of the baths due to the systematic methods of demolition used by the Romans.

The destruction of the baths was clearly not undertaken for the purpose of replacing it with another public building, since the fragmentary traces of later Roman stone buildings on the site were clearly of an insubstantial nature, with comparatively narrow walls and much re-use of building materials from the baths. Nevertheless, it seems likely that some parts of the public baths may not have been demolished, though there is no architectural evidence for this, and continued to be visible as late as the late ninth century when an ancient stone building on this site was known as *Hwaetmundes stan* p. 26.

(d) Later Roman Buildings

After the Huggin Hill baths had been demolished and the hillside apparently restored to its former slope, at least two new Roman buildings were constructed on the site. Only small portions of the buildings had survived and no satisfactory dating evidence for them could be recovered.

Building 'A'

This building is merely represented by three sides of a room situated over Room 2 of the former baths, the foundations of Building 'A' being fairly deeply buried below the contemporary land surface which had been destroyed. Clear evidence of a rebuilding of the room was recorded (Fig. 10).

Phase 1 The room had been built on the south side of the cold bath of the former public baths, and it is likely that the south wall of the cold plunge bath had been used as a foundation for the north side of building 'A'. Assuming that this was the case the room would have measured 5.3m from north to south, and 4.4m from east to west.

Only the foundations of the walls of the room had survived, and these were built of ragstone set in a soft brown mortar. The lower part of the foundations included reused material,

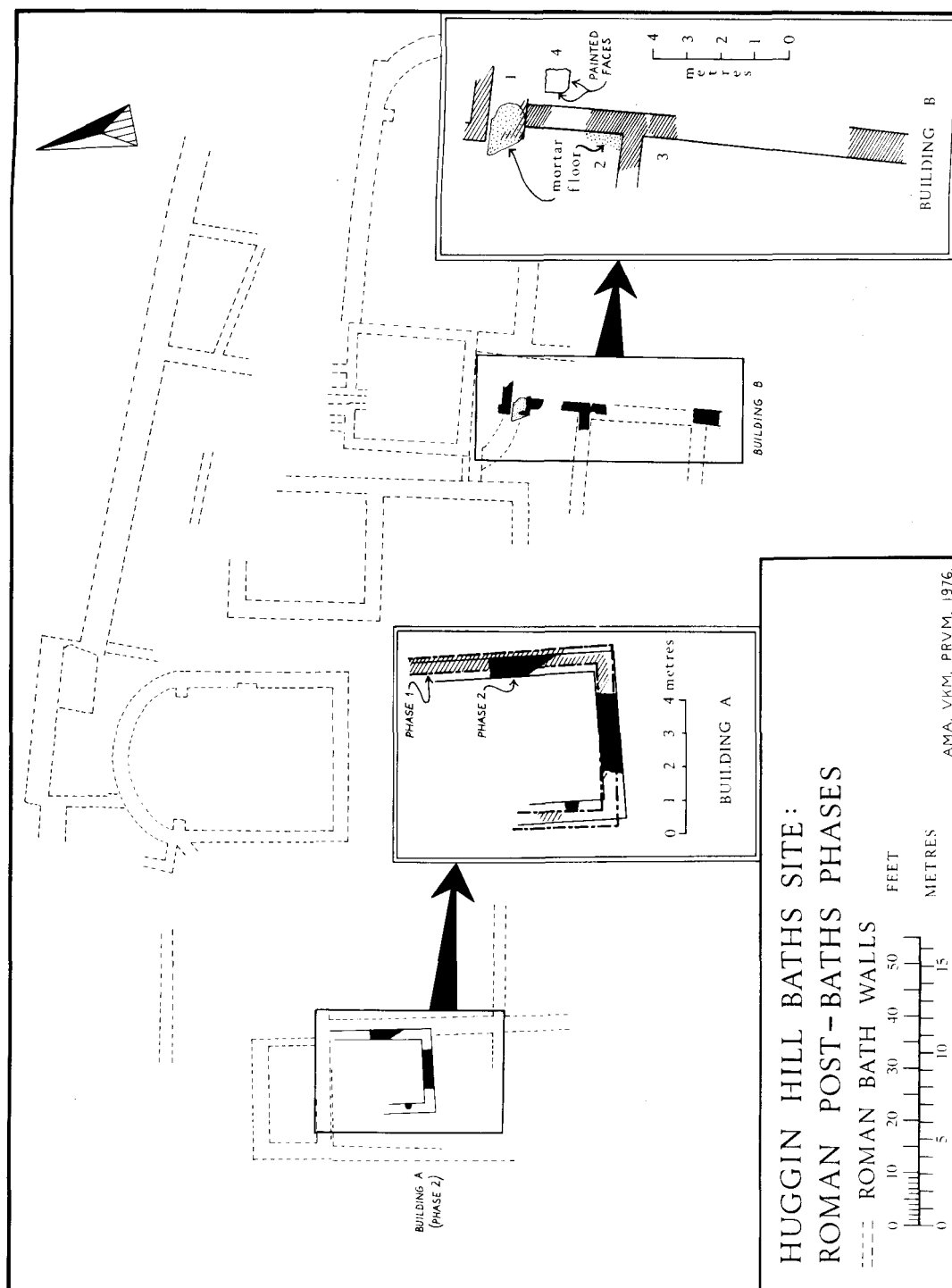


Fig. 10 Huggin Hill baths site: post-baths Roman buildings.

presumably from the bath building, in which were fragments of painted wall plaster and a fragment of mortar floor with small white tesserae (ER. 938).

Phase 2 The room was rebuilt during this period on a slightly smaller scale, and measured about 5.3m from north to south, and 3.6m from east to west.

The new wall foundations mostly overlay the Phase 1 foundations, and were well built with ragstone set in a hard yellowish buff cement. At the surviving top of the wall, at about 6.4m above O.D. there was a single course of bonding tiles. The faces of the walls of this room were extremely smooth due to the hollows between the facing stones and tiles being completely filled with mortar.

Building 'B'

A later Roman building was constructed in the region of the site formerly occupied by Area 34 and Room 36 of the bath buildings (Fig. 10). Its construction was extremely fragmentary and not too easy to interpret since its walls had broken through hillside subsidence (Fig. 9, section 7).

Step 1 At the surviving north end of the building were what seemed to be two roughly made steps with some paving of white concrete forming the surface of the lower step. Each step was built of ragstone and broken *opus signinum*, bricks and tiles evidently reused from an earlier Roman building. The mortar in the northernmost step was pinkish, but buff coloured in the lower one. The west end of each step returned northwards to enclose a deposit of brickearth fill in the step (Fig. 9, section 7, layer 10). The east end of the steps had been destroyed by later disturbances. The white concrete slab overlay the lower step and the northward return at its west end. It was clearly somewhat out of place, and could have been merely a loose piece of building rubble dumped on top of the step. Nevertheless, its northern edge lay so close to the face of the upper step that it seems more likely that it was the actual step surface, moved out of place, presumably by hillside subsidence.

Room 2 The hillside and the Roman building had subsided immediately south of Step 1, with the result that the original relationship of Room 2 to Step 1 was lost (Fig. 9, section 7). The east wall of this room, 0.45m thick, was built on a foundation of ragstone and buff mortar, above which the bottom of the wall was constructed of two or three layers of broken reused tiles. In fact, the wall also contained a fragment of reused Purbeck marble and reused portions of broken flue tiles; and like Step 1, was clearly not well-built.

At the south-east corner of Room 2 a little of the flooring remained at the level of the lowest course of tiles. Parts of two superimposed buff mortar floors remained, each one 0.025m thick.

Room 3 Only the north-east corner of this room had survived, the room having been badly damaged due to subsidence. Nevertheless, the wall construction was similar to that in Room 2, though none of the floor of Room 3 had survived.

Feature 4 This may have been a large loose piece of demolished wall of the bath building, though it occurred at the level of the wall forming the north end of Room 2 in dumped clay and gravel. Possibly it comprised the remains of a ragstone and mortar pier, the south face of which had been rendered and painted red, while the west face had been painted white.

Dating Evidence

No dating evidence of any apparent significance was found associated with Building 'B'. As the building overlay the dumped deposits filling the Roman bath it was clearly not earlier than the middle of the second century in date. But Building 'B' itself was covered by dumped gravel and clay following its own demolition, the composition and dateable pottery from which is indistinguishable from the dumped deposits that pre-date Building 'B'. The pottery itself was recovered from the following dumped deposits overlying Building 'B'.

Section 7, layer 17 — a dump of clay containing much broken mortar, and some sherds (not illustrated) of the first and second centuries A.D. (ER. 1403, 1405, 1406, 1432).

Section 7, layer 11 — a deposit of brickearth containing large pieces of mortar, which overlay the broken east wall of Room 2. The few sherds (not illustrated) of first to second century date included a reeded rim of the early second century, and a Flavian sherd of samian ware (see p. 57) (ER. 1389).

Conclusion

There is little to be said about Building 'B' except that it was built after the middle of the second century, and its narrow walls and poor construction, which includes so much reused building material, presumably from the public bath building, all suggest that it was not any form of public construction. Indeed, it has all the appearance of being a poor quality private building.

Historical Note on the Bath Site in the Saxon Period by Tony Dyson

Some small light on the uncertain nature of the final building phase at the Huggin Hill baths is provided by a rare and unexpected source, a late ninth century Saxon land grant. The charter, which comes from an early eleventh century copy in the reliable Worcester cartulary, records a grant made in 889 by King Alfred to Bishop Waerferth and the church of Worcester of a courtyard (*curtis*) for use as a market.⁸ The courtyard was here defined as an ancient stone building known to the citizens as *Hwaetmundes stan*, and was bounded at opposite ends by a public street and the city wall, respectively. Measurements in perches are also provided. This document lends substantial authority to a second charter, in itself apparently far less trustworthy, which records a grant made in 898–9 by Alfred to Waerferth and Archbishop Plegmund of Canterbury.⁹ This grant awarded to each of them adjoining properties at Queenhithe which abutted on a wall beyond which flowed the Thames. Elsewhere the properties were bounded by roads or 'lanes' (*semitae*), one of which ran between the two areas from north to south. It seems quite likely not that these two charters both relate to the same area, but that the Worcester grant of 889 was concerned with half the area of the Worcester–Canterbury grant of 898–9. What is important for the present purposes is that the proportions of the grant of 889, which is provided with measurements, exactly coincide with the proportions of an area, immediately north of Queenhithe, on modern maps. This is the area bounded by Thames Street to the south, Little Trinity Lane to the north, Bread Street to the west and Great Trinity Lane to the east.¹⁰

The fact that this area is divided north to south by Huggin Hill which the Roman Bath straddles, and that the charter of 889 describes it as a courtyard, and as an ancient stone building, is of great interest. As Ekwall commented of this charter; "since profane stone houses built by Anglo-Saxons were probably rare in this early period, the stone house may well have been the ruin of an old Roman house".¹¹ We know that, at least in isolated cases, evidence of Roman building survived in London. In 839, only fifty years before the charter, Bishop Helmstan of Winchester referred to "the illustrious place, built by the skill of the ancient Romans, called throughout the world the great city of London".¹² The O.E. '*stan*' in *Hwaetmundes stan* almost certainly records the pre-existing stone structures and could be compared with the name *Lundenestane* by which London Stone in Cannon Street, recently identified as possibly forming part of the principal gateway of the Roman Palace, was known in the twelfth century,¹³ or with Staines in Middlesex (O.E. *Stana*) the site of the Roman posting station of *Pontes*.

Thus it seems likely that the Saxon *curtis* of 889 represents the final stage of the Huggin Hill baths and that the positions of the numerous thoroughfares which are stated to have determined the area in 898–9, including Huggin Hill itself, were fixed by the nature of the surviving buildings. In particular the strange change of direction in Bread Street is explicable only in terms of some comparable obstruction which existed in the late ninth century just north of the Baths site, and which impeded the regular street grid discerned in this western area of the City,¹⁴ and whose attribution to the reign of Alfred is supported by this identification of the contemporary Saxon charters.

(e) General Discussion

An analysis of the structure of the baths indicates that there were at least three phases of construction though it is, of course, not possible to state with certainty that the three phases found in one part of the baths are necessarily of the same period as three phases found elsewhere. In spite of this, it is somewhat easier to suggest which walls belonged to the original phase of construction and which were added, though it must be remembered that the excavation of the baths is incomplete and that considerably more evidence will be available when further excavation becomes possible.

Bearing this in mind, however, it seems that the western part of the baths comprised the first phase of construction as a unified bath suite, and that at a later date a second series of bath rooms was added on the eastern side, which included not only the building of a large new *caldarium*, but also involved modification of some of the existing rooms to accommodate a hypocaust heating system. At some stage there appears to have been some reconstruction and modification of walls at the west end of the baths using only bricks, but this has not been dated.

Although the limited dating evidence is fully described later it seems likely that the original construction of the baths dates from the late first century, and that the addition of a second suite of baths occurred during the early second century A.D.

Phase 1 The baths were built during this phase on three terrace levels dug into the hillside. The lowest lay between 3.2m and 3.81m above O.D. and probably contained the entrance and exercise chambers and yards. The next terrace lay about 5.33m above O.D., and on this were located the main bath rooms, including the heated chambers; while above this the topmost terrace lay at about 6.7m above O.D. These rooms perhaps provided accommodation for the maintenance and administration of the baths.

Little is known about the rooms on the lowest terrace, though Rooms 2, 4, 5 and 36 were all situated there, and in each case the floors appear to have been of *opus signinum*. At only two points has the retaining wall been found between this lowest terrace and the higher terraces (the north sides of Rooms 2 and 36) and in both cases these walls were heavily buttressed. There is no certainty that the entrance would have been located on the lowest terrace, but as that terrace was probably of considerable width and extended to the quayside about 30.48m to the south, it is likely that here was the only space available for a portico entrance and for a *palaestra* for exercises. It is unlikely that the massive Roman wall found by Charles Roach Smith under Upper Thames Street in 1841,¹⁵ formed the southern precinct of the baths and of other official constructions to the west, since his discovery of many reused sculptured stones in the wall suggests that it is unlikely to be as early as the baths. The wall found by Roach Smith may have been a rebuilding of an earlier precinct wall of the baths, however, and it is perhaps significant that the wall was not found extending further east than Queenhithe—the eastern limit of the baths. The western limit occurred at Lambeth Hill where evidence of massive Roman constructions, presumably of a ‘public works’ nature, has been found from time to time.¹⁶

The main bath rooms were clearly situated on a terrace in the hillside at about 5.33m above O.D., a level no doubt dictated by the fact that the junction of the spring line of the Taplow Terrace gravels and the impervious underlying London Clay occurred at this point. As the excavations have shown, the baths did not apparently need a central source or aquaduct to supply water. Instead, the retaining walls built into the hillside provided dams for the spring water which it was possible to pipe to any part of the baths.

Since the sequence of bath rooms to be visited by the bather must have comprised the *frigidarium* (cold room), the *tepidarium* (warm room), and possibly a *laconicum* (hot dry room), it is possible tentatively to interpret the surviving plan of the baths. Room 18 has the typical apsidal end of a *caldarium*, and with doorways in its west and east walls there is little doubt that the *tepidarium* lay on one or other side. That the *tepidarium* was located on the west side of Room 18 is suggested not only by the great drop from the door sill in the west wall of the *caldarium* to the floor of Room 17, indicating that Room 17 contained a hypocaust, a view supported not only by the discovery of a flue pointing in

that direction from the furnace, Room 15, and by the finding of a possible *pila* (Feature 10), but also by the existence to the west of the cold plunge bath, Room 1, which was, no doubt, an adjunct of the *frigidarium*.

There are difficulties presented by this interpretation, not only because it is difficult to explain the curious wall (16) alignment on the west side of the *caldarium*; but also as access to the cold bath was clearly from the east and the *frigidarium* must have been situated in that direction, there is no room for both a *frigidarium* and a *tepidarium* between Rooms 1 and 18. The question, therefore, is where was the *frigidarium* situated? Clearly, only further excavation can resolve this matter with any degree of certainty, but the evidence suggests that it was possibly located as an upper floor, at, or above the floor level 6.7m above O.D., over Rooms 2, 3, 4, 5 and the area to the east. It is perhaps in this region that a staircase is still to be found linking the bath rooms with the lowest terrace.

During the first phase there were evidently several rooms, the purpose of which is uncertain, situated east of the heated bath rooms. Rooms 28, 29, 30, 31 and 32 all probably existed during this phase as unheated chambers. The simulated ashlar blocks forming the wall surfaces of the corridor, Rooms 29 and 30, suggest that they had a particular purpose which precluded them from having the usual painted plaster rendering. The need for an oblique opening between Rooms 30 and 31 is puzzling and suggests that the form of Room 31 in the early phase was not as it now appears. Similar diagonal openings were found in baths at Wroxeter, linking an *apodyterium* with the *tepidarium* and with the outside of the building.¹⁷ Equally puzzling is the significance of the curved foundation in Area 34. It is not certain if it dates from an earlier phase than Rooms 29 and 30 or if it was an appendage built on to Room 30.

The deep Rooms 21 and 22 are identified as parts of a large pool since the presence of culverts in the north retaining wall of Room 21 could only have drained water into the chamber. There is, however, no certainty regarding the period in which these were built. The pool could have been used either for swimming or as a storage tank source of water for the various bath rooms and toilets, though on the available evidence it seems more likely that it was a swimming pool because the prime bath rooms requiring water could not have been fed from it. Firstly, the cold plunge bath, Room 1, lay at a higher level than the pool at the west end of the baths complex. It is unlikely that it could have been supplied from the pool as the water would have had to be pumped both uphill and around the *caldarium* (Room 18). Also, as has been seen, the *caldarium* itself had its own source of water from a pipe set in its apse wall which tapped the hillside ground water. The southern extent of the pool is uncertain, for the wall separating Rooms 21 and 22 was so narrow that it is unlikely to have supported much water pressure on its north side, and was possibly part of a structure within the pool. Because the pool was sunk below the level of Room 13 there was no need for the wall at its west end to be of any great thickness. The wall at the east end was different, however, for some heated rooms (Rooms 23 and 25) lay at a low level just beyond, and it was necessary for the east wall to be somewhat thicker. Because there must have been a constant flow of fresh ground water into the pool it was clearly necessary to have a constant overflow of excess water, and this was presumably the purpose of the pipe which underlay Room 29 and Area 34. The fact that the pipe had been robbed out when the baths were demolished implies that it was probably of lead and salvaged for the value of the metal. There were no signs of robbing of any of the other building materials with the exception of the decorative marbles.

The rooms on the highest terrace have no distinctive form which enables them to be identified with any certainty, but it is perhaps significant that the extent of the rooms was limited, suggesting that they were not in general public use, and that access to the main furnace (Room 15) heating both the *caldarium* and the *tepidarium* was probably from here. A minor service entrance to the baths may have existed in the retaining wall (Feature 14).

Phase 2 The baths were considerably enlarged at the east end during this phase with the addition of a separate and very large series of bath rooms. The main identified chamber is an enormous *caldarium* (Room 33), one of the largest yet discovered in Roman Britain. Adjoining it were at least two other heated rooms—Rooms 30 and 32, one of which was presumably the *tepidarium*. The original floor of Room 30 was removed during the construction of Phase 2 and a hypocaust was built in its place, while a new furnace chamber to heat the room was built in Room 31. It is difficult to judge whether or not Room 32 originally contained a hypocaust, though it certainly did in Phase 2, for the heat was drawn from Room 30 through a flue roughly cut into the wall separating the two rooms. Thus it seems that Room 30 was hotter than Room 32, though the size of the former must have dissipated the heat. The furnace supplying heat to the *caldarium* has not been found, and neither was the furnace heating Rooms 23 and 24.

Judging from the arrangement of the rooms it seems likely that Room 28 was the *frigidarium*, Room 30 the *tepidarium*, and Room 33 the *caldarium*. The purpose of the heated rooms to the north of the *caldarium* is uncertain, though as they must have been heated by their own furnace it is likely that one or more may have been *laconica* (hot, dry rooms). No cold plunge bath was found, and presumably this lies beneath or west of Huggin Hill adjacent to the *frigidarium*; and no definite evidence of a hot water bath in the apsidal end of the new *caldarium* was located. Almost all but the lowest courses of stones of the wall foundations of that room had been destroyed in recent times by office development on the site. Nevertheless, at the north end of the apse the stump of a small square buttress, such as occurred in the earlier western *caldarium* (Room 18), was found, suggesting the probable limit of the conjectured pool.

Although much remains to be excavated, it is clear that the baths, when viewed from the river, must have had a somewhat jumbled appearance with the roofs, both tiled and presumably vaulted (though no voussoir box tiles for roof vaulting were found), being arranged in no apparent order. Its plan contrasts with the generally ordered layout of rooms in other public baths found in Britain, as, for example, at Leicester,¹⁸ Silchester,¹⁹ and Wroxeter.²⁰ The reason for this haphazard layout is largely due both to the need to accommodate the baths on the terraced hillside, and to the fact that the building was not of a single phase.

Double public baths are unusual, others in Britain having been found at Leicester and Wroxeter,²¹ though as few town baths in Britain have been completely excavated the rarity of double baths may simply be more apparent than real. In each case it seems that there were separate baths for men and women, though to judge from Leicester and Wroxeter it seems that the two sexes probably shared the *palaestra* or exercise court and the *frigidarium*. The introduction of separate baths may have been an innovation of Hadrian who, disturbed by scandals resulting from mixed bathing, decreed sometime between 117 and 138 that mixed bathing was to discontinue.²² In effect this meant that either a separate series of bath rooms had to be built, as occurred in the Huggin Hill

baths, or that bathing for men and women occurred at different times of the day.

Hadrian himself visited Britain in A.D. 122 when he instituted many reforms.²³ In Londinium there seems to have been activity occasioned by the visit which perhaps resulted in the setting up of a fine, larger than life, bronze statue to the emperor, probably in the eastern part of the city. The head of the statue was found in the Thames at London Bridge in 1834.²⁴ Amongst the public works may have been the completion of the forum,²⁵ and it would seem possibly also the construction of the second group of bath rooms in the Huggin Hill baths.

There is no evidence to show which group of rooms was used by men, and which by women; but in this connection it is interesting to note that amongst the demolition rubble found in the western *caldarium* (Room 18) were several fragments of wall plaster with parts of scratched graffiti, one of which on a piece of red painted plaster included the man's name QUINTUS (Fig. 24, No. 60).

3. THE CHEAPSIDE BATHS, 1955–56 (*with Ivor Noë -Hume*)

(a) Introduction

The site of the Sun Life Assurance Society in Cheapside between Milk Street and King Street was developed during 1955–56, and observations of the archaeological features were made by Ivor Noël Hume for the then Guildhall Museum. The new office building occupied the sites of several buildings, some of which had been bombed during the war (Fig. 11).

That there were once substantial Roman buildings in this area was indicated by discoveries recorded as early as about 1615, when a Roman pavement was found at a depth of 4.57m opposite the church of St. Mary le Bow.²⁶ In 1861 part of a Roman pavement of red and white tesserae was found at a depth of about 5.18m, and about 9.1m to the north was found a thick wall, apparently of Roman date.²⁷ As these two discoveries were made so close together it seems likely that they were parts of the same Roman building. Finally, north-east of these, a Roman pavement of red and yellow tesserae was found in 1836 on the site of All Hallows Church, later occupied by the City of London School, in Honey Lane Market,²⁸ but it is probable that this belonged to another Roman building.

In 1954–55, just prior to redevelopment, Professor W. F. Grimes excavated three trenches in the southern part of the site and, unfortunately, missed discovering the public baths by a few metres. One trench proved abortive and was abandoned, though the other two, situated just beyond the east and west sides of the bath house, revealed Roman masonry walls.²⁹

The redevelopment of the site started in 1955, and was initiated by the mechanical clearance of all archaeological strata down to the natural gravel. This process, carried out by drag line, was watched for the then Guildhall Museum, by Ivor Noël Hume, who recorded some of the main archaeological features, mostly during lunch breaks when there was a pause in the site excavation. As a result not only were there difficulties of investigation and interpretation of the archaeological features, but also it was not possible to plot exactly the location of many of the features.

(b) Location and Geology

The site lies on the north side of Cheapside, between Milk Street to the west, Honey

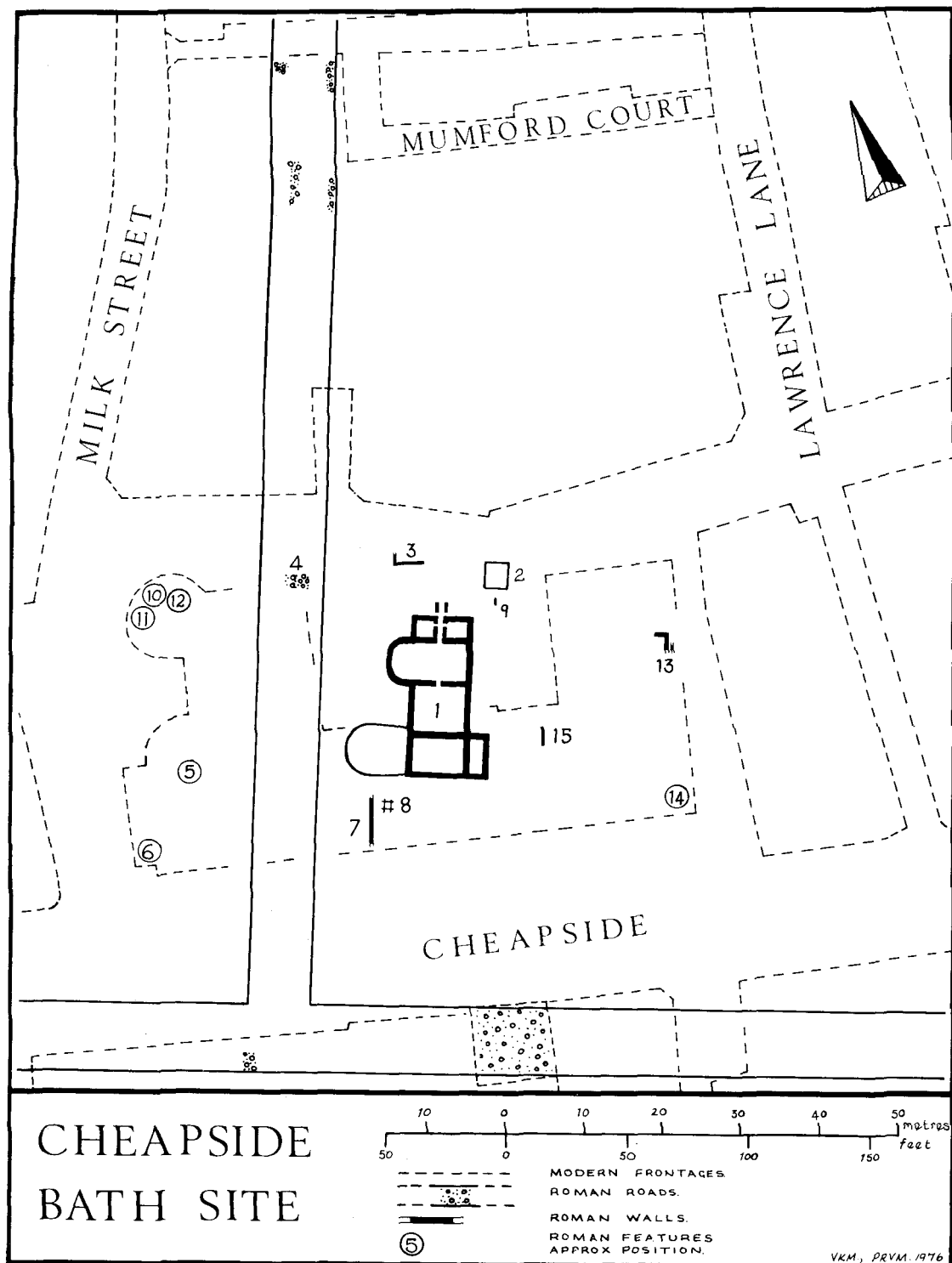


Fig. 11 Cheapside baths site.

Lane to the east, and Russia Row to the north. The area forms part of the plateau of the Taplow Terrace, and judging from nearby sites the natural surface must have lain at about 10.7m above O.D.

To the east of the site the plateau on which the Roman bath was built had been dissected by the Walbrook stream and its tributaries, while some distance to the west it had been eroded by the Fleet River; and the final result was that the baths were situated on the almost flat top of what would have been a low hill, the western slope of which now forms Ludgate Hill.

The bath building was situated close to one of the Walbrook tributaries to the east, and perhaps for that reason the water table was sufficiently close to the natural land surface in Roman times for the builders of the bath building to be able to use the natural water supply. To the east of the baths site the level of the natural surface dropped down to the main stream of the Walbrook where the Bank intersection now lies, the level of the stream bed being at about Ordnance Datum.³⁰

To the west of the baths the land gently rose by about 2.1m to reach one of the highest points on the plateau where the west end of Cheapside now lies. Even beyond this the land surface rose a little higher in one or two places to 13.4m above O.D., particularly between the branches of a stream located at the north-west corner of modern Warwick Lane. But this was exceptional and the natural surface soon sloped down west of this to form the valley of the Fleet river.

(c) Description of the Excavations

(i) The Bath Building (Fig. 11, No. 1)

The plan of the Roman bath building recorded by Ivor Noël Hume during the rebuilding operations on the site during 1956 is necessarily incomplete, but sufficient was recorded to show that it had a fairly simple layout, and had been the subject of at least one major rebuilding.

Phase 1 (Fig. 12) The overall size of the bath building during its primary phase was about 21.6m long by 13.7m wide, and it seems to have comprised a *frigidarium* (Room 1), a cold plunge bath (Room 2), a *tepidarium* (Room 3), a *caldarium* (Room 4), and probably a hot water bath (Room 6).

The construction of the building as a whole was very solid. The walls had foundations of flint and mortar; and at one point the foundation of the east wall of the building, at the junction of Rooms 3, 4 and 5, was found to be supported on a cluster of oak piles. Since timber piles did not generally underlie the foundations of the building, their location at this junction of rooms indicates that they were placed here to help support an area of particularly heavy wall construction. The walls above the foundations were about 0.6m thick and were built entirely of horizontal layers of flat tiles set in mortar. Evidence was found that Rooms 3 and 4 were heated, and it is likely that Rooms 5 and 6 were also heated from the beginning. This is suggested not only by the relationship of the rooms to those known to be heated, but also because when they were rebuilt in Phase 2 the replacement rooms, which followed the same basic plan, were heated. That they were heated is also suggested by their being built on a solid raft of flint and mortar concrete, as were the heated Rooms 3 and 4. This raft did not underlie either the *frigidarium* (Room 1) or the cold plunge bath (Room 2), and it is therefore likely that its purpose was to help support a hypocaust. Its extent is indicative of the area covered by the heated rooms. Where the raft was found, especially under Rooms 3 and 4, its upper surface was formed of two layers of flat tiles set in hard mortar.

Room 1 This was an unheated room (4.4m by 6.2m), which was evidently the *frigidarium*. Its floor was only recorded at the east end, as a brick or tile pavement laid in a herring-bone pattern. At the south-west corner, however, although the floor was missing, there was a dump of gravel at least 0.6–0.9m thick on which the floor was probably originally constructed. The walls of this



Plate 1. Huggin Hill baths: Flue from the furnace, Room 15, in the north-west corner of Room 18, viewed from the south. Scale of feet.



Plate 2. Huggin Hill baths: The corridor, Room 29, looking north showing robbed pipe, and dumped demolition debris. Scale in half metre divisions.

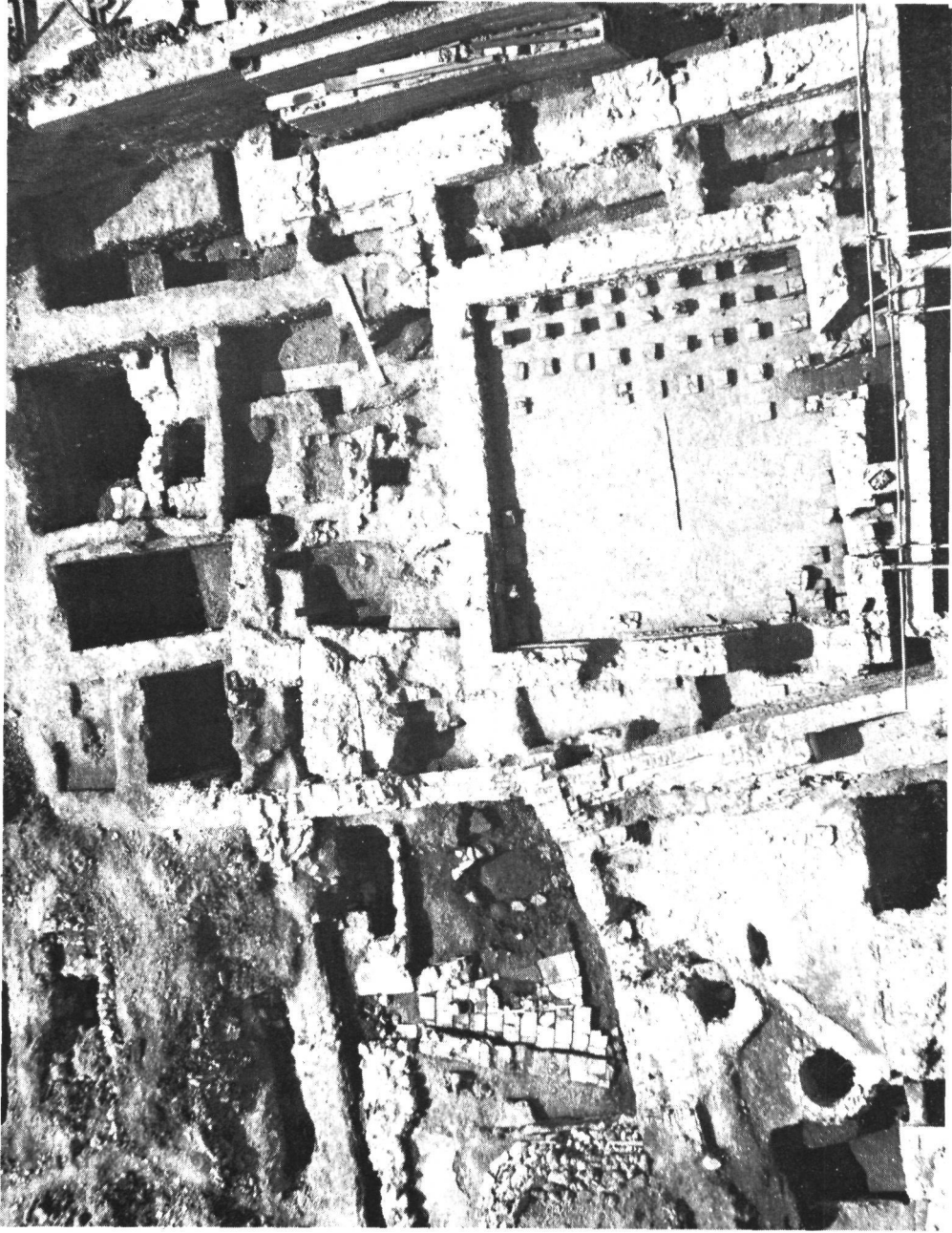


Plate 3. Huggin Hill baths: The eastern part of the baths viewed from the north, showing the square Room 30, and on its right the corridor 29. The *caldarium*, Room 33, is on the left. Scale of feet.



Plate 4. Hugin Hill baths: Room 30 viewed from the north-west.
Scale of feet.



Plate 5. Huggin Hill baths: North-west corner of Room 30 seen from the east showing hypocaust floor level with the flint foundation, and the flue inserted into the diagonal opening between Rooms 30 and 31.



Plate 6. Huggin Hill baths: North-east corner of Room 30 viewed from the south showing the 'mock ashlar' wall to the right of the flue containing a *pila* opening into Room 32. Scale of feet.

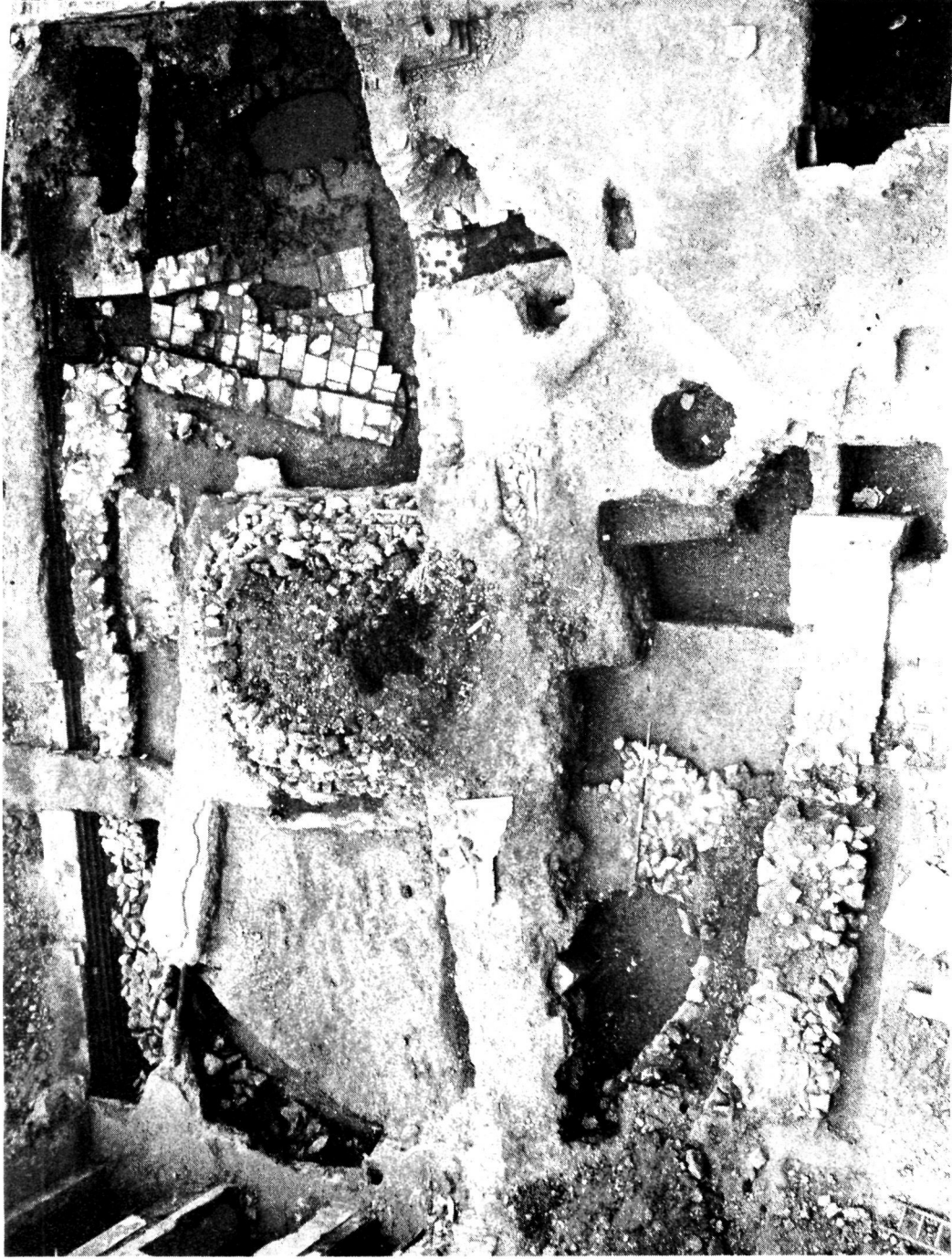


Plate 7. Huggin Hill baths: Foundations of the *caldarium*, Room 33, viewed from the north.
Scale of feet.



Plate 8. Huggin Hill baths: The west drain beneath the lower hypocaust floor of Room 33.
View looking north. Scale of half metres.



Plate 9. Huggin Hill baths: Junction of east and west drains below *caldarium*, Room 33.
View looking south. Scale of feet.

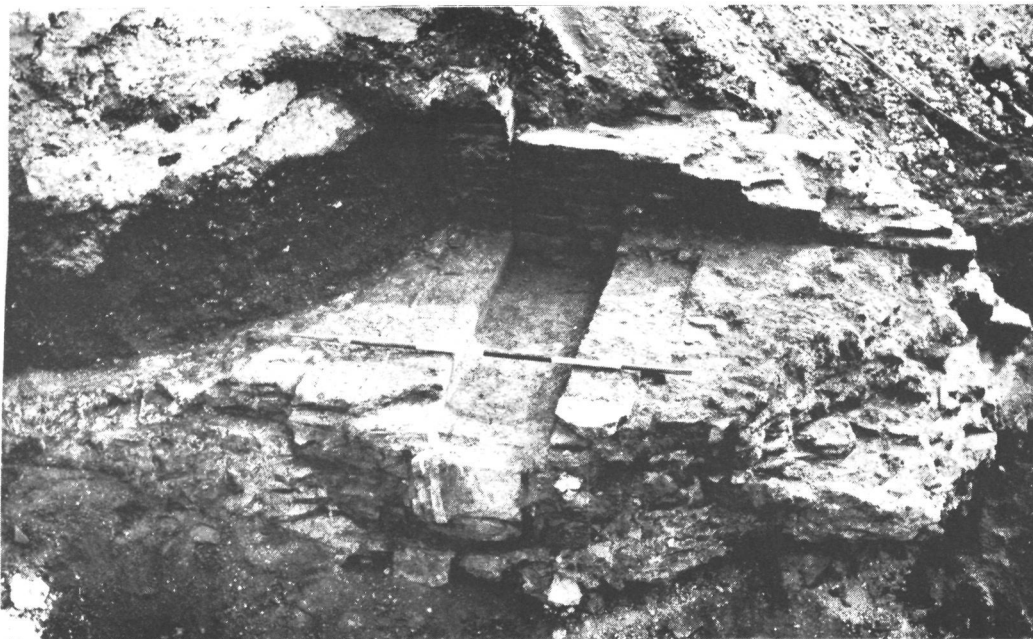


Plate 10. Cheapside baths: Junction of the north end of *caldarium* apse (foreground), Room 5; with (right) stump of phase 1 cross-wall between Rooms 4 and 5; and (left) west wall of Room 6 of phase 2. View to east. Scale of feet.

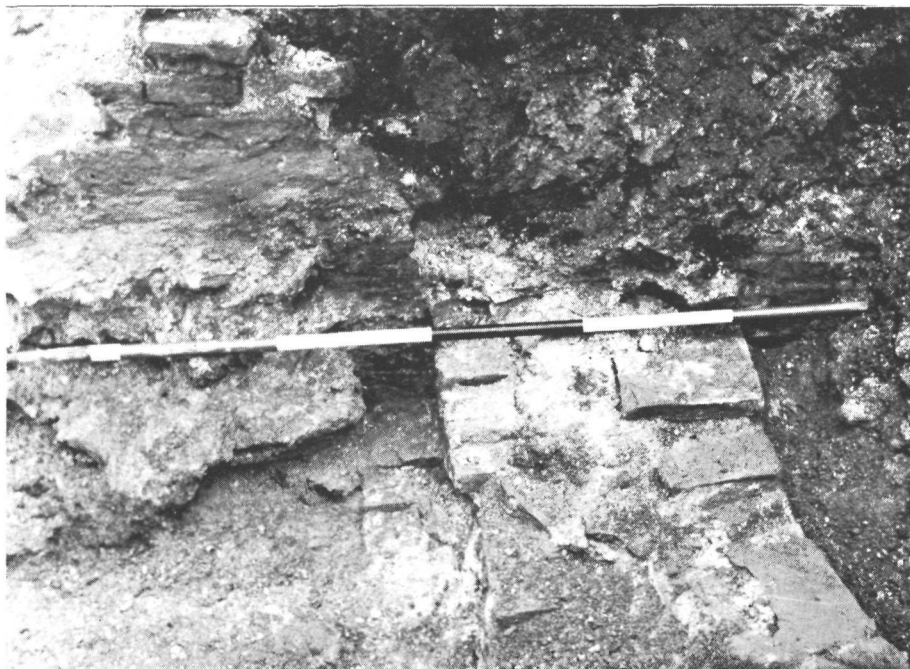


Plate 11. Cheapside baths: The blocked flue 8 between the platforms 9 (right) and 10 for a hot water tank. View from the north. Scale of feet.



Plate 12. Cheapside baths: North-east corner of the timber-lined water-tank, Feature 2.

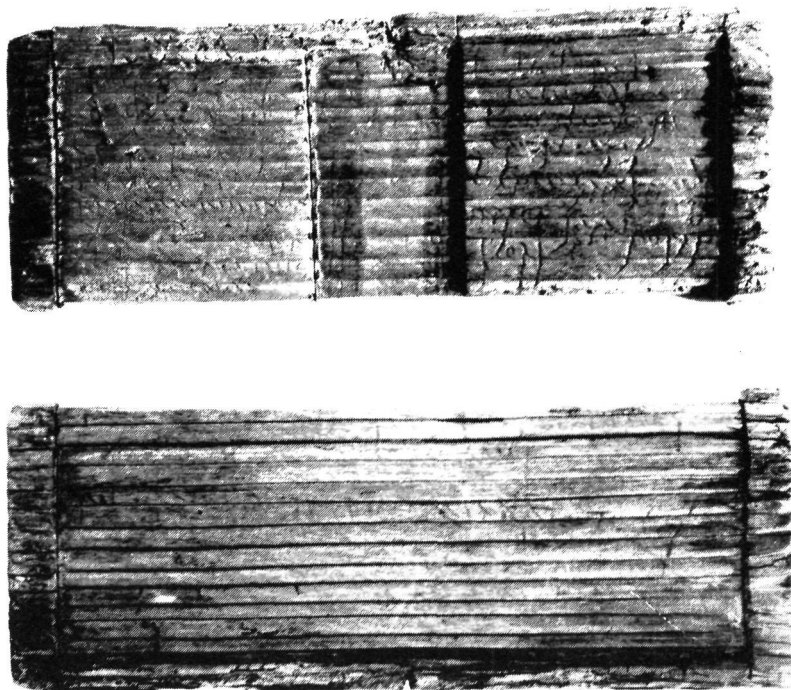


Plate 13. Cheapside baths site: Writing tablet No. 112, front (upper), back (lower).
See text, p. 66 for dimensions.

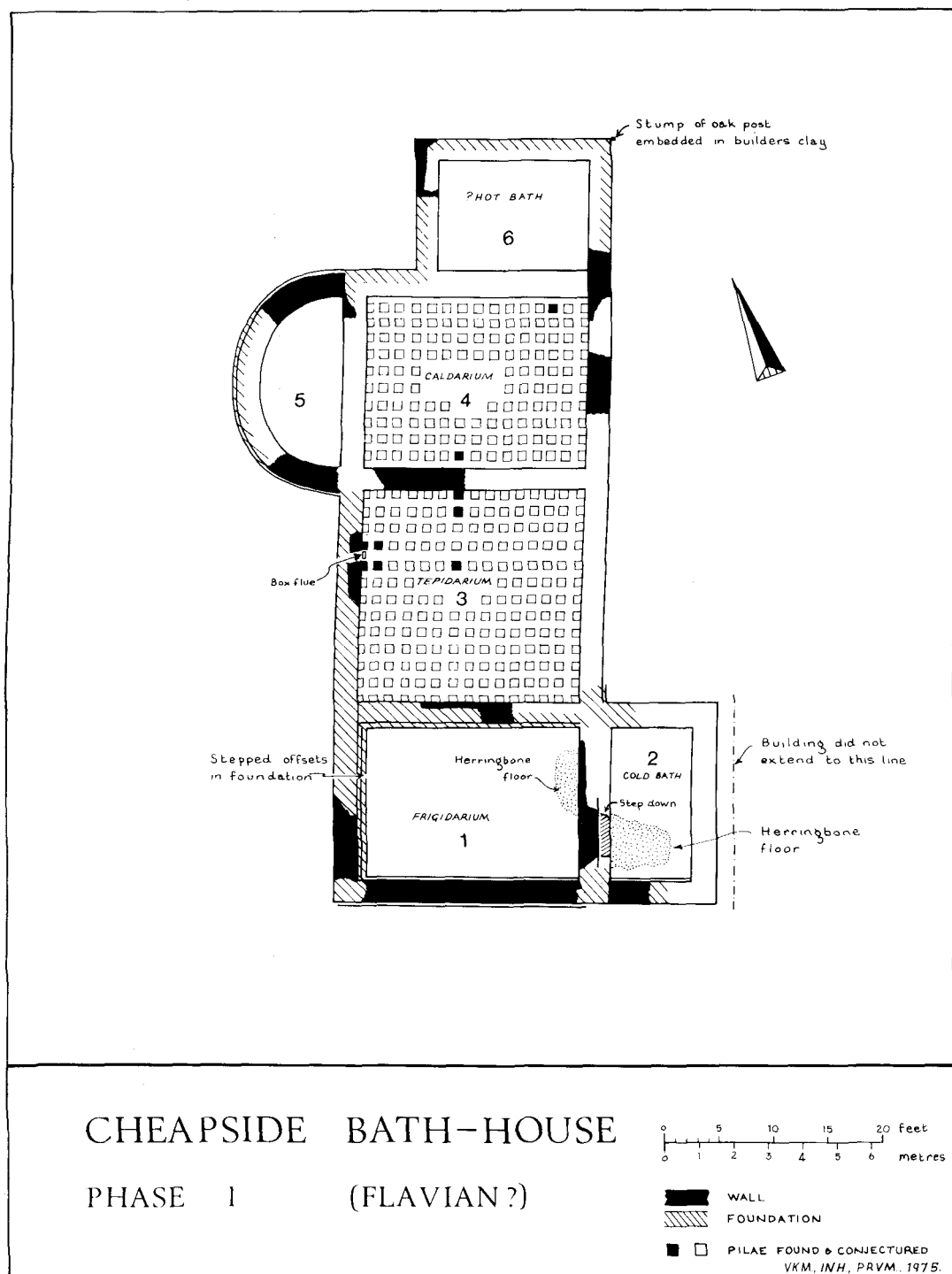


Fig. 12 Cheapside baths: phase 1.

room were well preserved, the south wall standing to a height of at least 1.2m above its foundation. There were traces of rich cherry red paint on the walls of the room.

Room 2 This small room (4.3m by about 2.3m), was unheated and the level of its floor was sunk below the general floor level of the bath building. As it was approached through an entrance from the *frigidarium* (Room 1) it must have been a cold water bath. The east wall of Room 2 was not found but its approximate position is established with a fair degree of certainty because it did not extend beyond the limit of the modern excavation. The entrance from the *frigidarium* was partly uncovered and was found to be a stepped arrangement. The floor of the cold water bath was a herringbone pavement which lay about 0.45m below the *frigidarium* floor and probably about 0.76m below the top of the sill of the entrance. It is clear from this that there was insufficient water for the bather to be immersed and that he must have cooled himself by being splashed with cold water.

Room 3 A heated room, identified as the *tepidarium*, and measuring about 6m square. Only the lower floor of the hypocaust remained, this being the raft of flint and mortar mentioned above, the upper surface of which was overlaid by two layers of flat tiles. The walls of the room above this level were constructed of flat tiles set in mortar, and as there seemed to be no flue channels set into the walls it is probable that box flue tiles were originally attached to the wall surfaces. At one point a hollow box flue tile had been mortared to the hypocaust floor at the junction of the floor and east wall, perhaps to help support the bottom of a vertical flue.

Room 4 This heated room was presumably the *caldarium*, and it measured about 4.9m by 6m. Its walls were of brick, and the lower floor of the hypocaust comprised two layers of flat tiles set into the upper surface of the flint and mortar raft which also underlay Room 3. Two brick *pilae* were recorded on the tile floor at the same level as the lower hypocaust floor of Room 3.

Room 5 An apse lay on the west side of Room 4. At its northern end was found a short length of brick wall or buttress (Plate 10), which suggests that there might have been a cross-wall separating the apse from the rest of the *caldarium*. If this is correct, then perhaps the apse contained a small bath of hot water. Unfortunately, the interior of Room 5 could not be investigated and it was not possible even to show that it was heated, though in view of its apparently standard *caldarium* form there can be little doubt that this was the case.

Room 6 This chamber could not be examined though its floor was supported on the flint concrete raft which also underlay Rooms 3 and 4, in turn suggesting that it too was heated. It seems to have measured about 3m by 4.3m internally, and it is possible that this room contained a hot bath.

Dating Evidence

No objects were found to date the construction of the first phase of the bath building.

Phase 2 (Fig. 13) Extensive modifications took place to the bath building during Phase 2 which involved the insertion of new floors and hypocausts within the existing rooms, except at the north end where Room 6 was completely rebuilt and a new furnace, perhaps on the site of an earlier furnace, was added. Possibly during this major rebuilding an additional structure was added to the west side of the building next to the *frigidarium*. Only its foundation remained and it is suggested that this may have supported a *laconicum*, or even an outside pool.

In spite of these extensive modifications the basic arrangement of rooms in the baths remained unchanged from the first phase. The rebuilding required new lower hypocaust floors to be constructed at about 0.9m above the level of the earlier, lower hypocaust floors, and much use seems to have been made of the debris to build up the level, especially broken flue tiles, from the first phase of the building. In general terms the new floors were of *opus signinum*.

Room 1 A new floor of *opus signinum* was constructed in this room above the herringbone floor of Phase 1, and as the chamber was unheated it is probable that this remained the *frigidarium*.

Approximately 4m east of the west wall of the room a step was recorded running north-south, and it is possible that this was the side of a drain channel, the rest of which had been destroyed by the mechanical excavator. It was assumed to be at or below the floor level of Phase 1, but no sign had then been found either of the herringbone floor or of the Phase 2 floor.

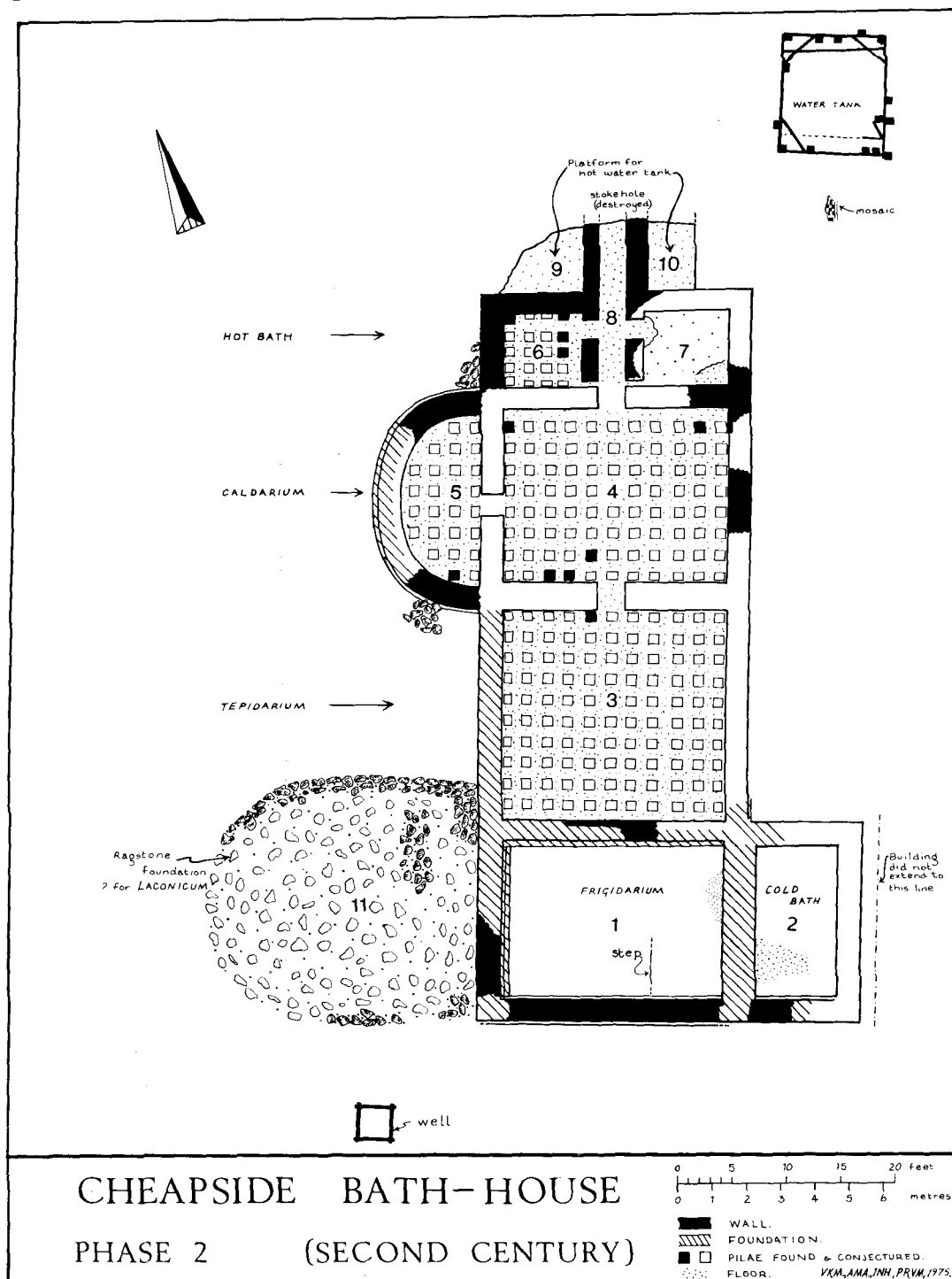


Fig. 13 Cheapside baths: phase 2.

Room 2 The cold plunge bath was modified by having a floor of hard mortar 0.15–0.2m thick laid above the earlier herringbone floor. The Phase 1 step in the west wall was filled by tiles set in mortar, no doubt to raise the step to the new floor level of the *frigidarium*, and the inside faces of the bath walls were rendered with a thick layer of mortar.

Room 3 The Phase 1 hypocaust of the *tepidarium* was filled with building debris, which included many broken box flue tiles which had probably been broken off the walls of the primary phase of the building, and over this rubble was laid a new floor of *opus signinum* which was to support the *pilae* of a new hypocaust. This new lower hypocaust floor lay about 0.9m above the lower floor of the Phase 1 hypocaust, and on it was recorded a single *pila* of square flat tiles.

Room 4 The wall separating the *tepidarium* from the *caldarium* during Phase 2 was not found, but it presumably lay on the Phase 1 wall. The hypocaust of the primary phase of the *caldarium* was filled with rubble, as was Room 3, and over this was laid a floor probably of *opus signinum* about 0.2m thick. At the north-east corner of the room, the east wall above the lower hypocaust floor of Phase 2 still retained part of its mortar rendering which presumably covered the inner surface of the walls of this room inside the hypocaust.

Room 5 The apsidal recess at the west end of the *caldarium* was definitely heated during Phase 2, for a brick *pila* was found resting on its *opus signinum* floor. It is possible that the recess may have contained a hot water bath, but no further details could be recovered.

Chambers 6 and 7 These two small heated 'chambers' and the flue from the main furnace between them were constructed after Room 6 of Phase 1 had been demolished. Although comprising three separate sub-floor chambers there is little doubt that they underlay a single room, probably the successor to Room 6 of Phase 1 and lying between the furnace and the *caldarium*. The identification as a hot water bath is fairly certain. The new walls of these hypocaust chambers, including the flue (8) were all constructed of flat tiles set in mortar, the walls on either side of the flue (8) being necessary to support the floor of the hot water bath.

The lower hypocaust floors of Chambers 6 and 7, and Flue 8, were all at the same level as the lower hypocaust floor of the *caldarium* (Room 4). The lower floor of Chamber 6 was fairly thick and comprised a layer of mortar overlying a foundation of mortared flat tiles laid in several layers. The *pilae* which overlay this were constructed of square bricks, and although none was recorded in Chamber 7, it too must have been heated as there were openings in the side of the main flue (8) for hot air to circulate beneath the floor of Chamber 7. It was in the north-west corner of Chamber 6 that the only surviving portion of the upper floor of the bath building was found still *in situ*. The upper floor was of *opus signinum* and was supported on large flat tiles used to bridge the gaps between the *pilae*. That the floor might have been tessellated is suggested by a number of loose white tesserae amongst the finds in the destruction debris of the hypocaust of Chamber 6, though it is more likely that these had been derived from elsewhere in the building. In addition, the debris in the hypocaust included a fragment of *opus signinum* with thirteen white tesserae still in position (ER. 337, not illustrated). The wall decoration, possibly of the hot bath, is perhaps suggested by a fragment of plaster with a red stripe on a white background (ER. 336, not illustrated).

Flue 8 The main flue channel linking the furnace with the *caldarium* (Room 4) passed beneath the middle of the hot bath (Chambers 6 and 7). Its side walls were 0.6m thick and were constructed of flat tiles mortared together. There was a straight joint between the flue walls outside the bath building and the north wall of the building, presumably due to the different function and construction of the flue. At some stage the inner face of the east wall of the flue had been repaired with square flat tiles set on edge (Plate 11).

Structures 9 and 10 Both east and west of the main flue and north of the hot bath, was situated a massive platform, about 0.9m thick, built of flat tiles horizontally laid in hard mortar (Plate 11); and although extensively damaged during mechanical clearance, enough survived to suggest that it may have formed the base of a hot water tank which presumably fed the hot water bath.

Structure 11 The lowest course of stone of a foundation of ragstone with some mortar bonding was found situated immediately to the west of the *frigidarium*. It appeared to have been added to the bath building, but as no trace of the walls that it supported was found its significance must remain uncertain. Nevertheless, the curving western side of the foundation indicates that the structure it supported was probably rounded, and although it is possible that it supported an outside pool this elaboration is unlikely in view of the small size and apparent simplicity of the

bath building. It is much more likely that it supported a circular *laconicum*, which, if its walls were 0.6m thick, as were the other walls of the bath building, would have been about 6m in diameter, and its entrance possibly from the west end of the *frigidarium*. The solid raft of ragstone concrete would, if this interpretation is correct, have supported a hypocaust, rather as a concrete raft was used to support the hypocausts of the Phase 1 bath building.

Dating Evidence

The date of the reconstruction is not closely established, and is based on one sherd of mica dusted ware dish (Fig. 25, No. 65) of the late first or early second century (ER. 346). This was found in the Phase 1 filling of the hypocaust in the *caldarium* apse (Room 5). The sherd is coated with mortar on its exterior and on one broken edge, suggesting that construction was being carried out in the bath building at the time of its loss. The loss could have been during the construction of either Phase 1 or Phase 2, but as much of the tile and ragstone which comprised the rubble fill of this hypocaust presumably belonged to Phase 1, and this also had mortar

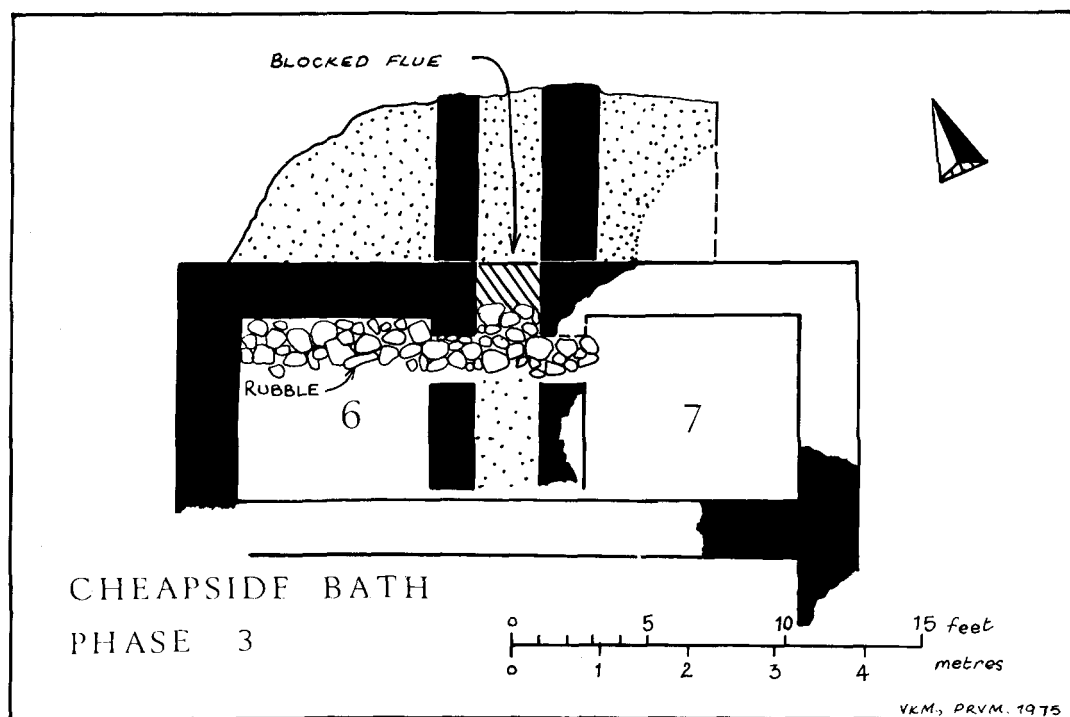


Fig. 14 Cheapside baths: phase 3.

adhering to it, so this sherd might have been coated with mortar during that construction phase. Whichever was the case, this single sherd suggests that the second phase of the bath building could not have been constructed before the late first century A.D., and indeed the rebuilding could have taken place considerably later.

Phase 3 (Fig. 14)

Flue 8 During the final phase of the use of the building the main flue channel between the furnace and the flue channel was blocked with mortared tiles (Plate 11).

Chambers 6 and 7 At the same time or later the upper floor of the hot water bath was at least partly removed, and a packing of tile fragments and ragstone was laid against the north wall of the hypocaust of the hot bath.

Discussion

It is clear that when the flue was blocked and the hypocaust was filled, the heating of the baths could not have continued in use, and thus the building must have ceased to function as a bath house.

Dating Evidence

Five small Roman sherds (Fig. 25, No. 66; p. 62) were recovered from the black soil between the ragstone lumps used in the packing in Chambers 6 and 7 (ER. 344). Only one of these, the rim of a grey ware jar of the type which is usually decorated with a lattice pattern on its body, is more closely datable and is probably of second or third century date, though the samian ware primarily dates from the latter half of the second century A.D.

Phase 4 The date and nature of the destruction of the baths is indicated by deposits which occurred in two completely different contexts. The first was the filling of the hypocausts which evidently occurred after the upper floors of the hypocausts had been removed; and the second being the deposits which had overlain the demolished walls of the bath building.

Deposits filling the hypocausts were found in the following chambers:

Room 4 Various broken flue tiles were recovered from the hypocaust at the north-west corner of this room. One of these flue tiles was decorated with a chevron pattern and the letters XTXA (ER. 342, not illustrated).

In the south-west corner of the *caldarium*, east of the apse, the rubble fill of the hypocaust contained several sherds (Fig. 25, Nos. 67 and 68; p. 62) including the rim of a coarse ware jar and the base of a Nene Valley ware jar, all of which probably date from the late second or third century (ER. 340).

Room 5 Fragments of flue tiles were found on the lower floor of the hypocaust within the apse (ER. 347). One of them had a chevron pattern and an inscription XP (?) (Fig. 26, No. 109). There were also two fragments of wall plaster of buff coloured mortar on a pink mortar base, one of which was painted red and had been over-painted with white, while the other was painted white.

Room 6 Fragments of tiles, a piece of window glass, a single white tessera, a block of *opus signinum* with thirteen white tesserae *in situ*, and some pottery dated to the third century A.D. were found in the hypocaust of this room (ER. 337, not illustrated). Additional objects (ER. 345) were later recovered from the rubble and burnt mortar filling of the hypocaust where it abutted against the ragstone packing of Phase 3 in this room. Finds include three white tesserae bearing traces of the pink mortar in which they had once been set, a fragment of flue tile, and two sherds of first century date (ER. 345, not illustrated).

Flue 8 From the flue channel below the hot water bath were recovered several sherds of second century date (not illustrated), a piece of white painted wall plaster with a red stripe, several white tesserae, and two box flue tile fragments (ER. 336, not illustrated).

Dating:

The hypocausts appear to have been filled in probably during the late second or the third century A.D.

Deposits overlying the Roman walls include the following:

Flue 8, and Structures 9 and 10 A light burnt deposit was found both in the flue (8) and overlying the concrete platform (Structures 9 and 10), and in this was a variety of objects including fragments of flue tiles, and pottery which included some early Nene Valley ware which has been dated to the second half of the second century A.D. (ER. 335, not illustrated).

Above the light burnt deposit was a black stratum (ER. 334) which overlay the main flue (8) from the stokehole, the tank platform (Structures 9 and 10), and also the north wall of the hot bath (Chambers 6 and 7) which had evidently been demolished before the stratum was formed. From this layer was recovered enough pottery to indicate a late second or third century date (Fig. 25, Nos. 69–79; p. 62). Broken flue tiles with a variety of key patterns were also found in this deposit (Fig. 26, Nos. 110 and 111).

Dating:

It would seem that the bath building had been demolished during the late second or third century A.D.

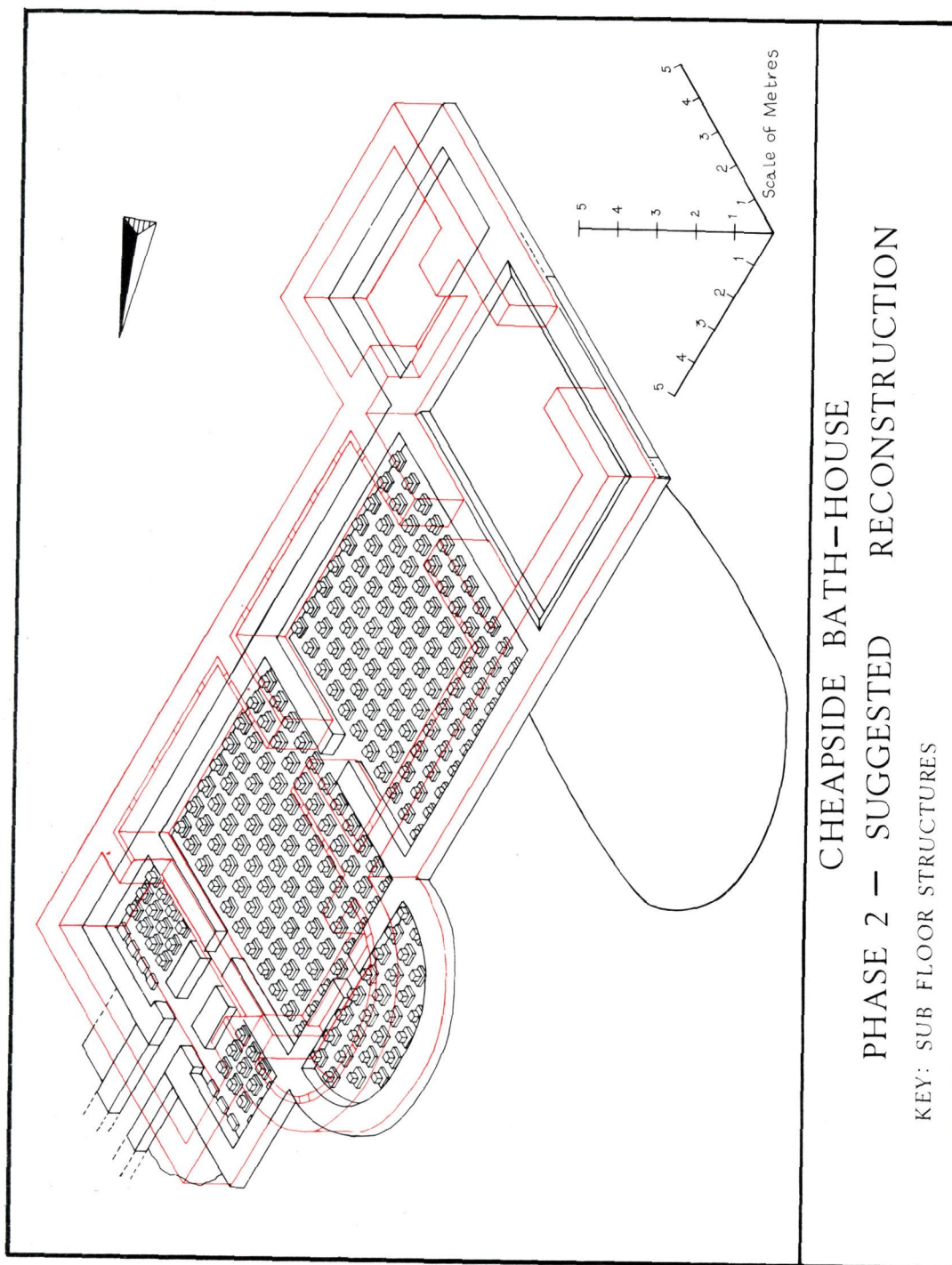


Fig. 15 Cheapside baths: suggested reconstruction.

(ii) Reconstruction of the Bath Building (Fig. 15)

Reconstructing the bath building is difficult as so little detailed information exists other than its basic plan, but on the basis of this and of other, more complete, bath buildings, a partial reconstruction is suggested in Fig. 15 (red). No trace of its main entrance was found, but this presumably lay in the south wall of the *frigidarium* where not only was it close to the main east-west street of *Londinium*, now partly beneath modern Cheapside, but also because the north, east and west walls of this chamber adjoined other rooms.

Traces of red painted wall decoration in the *frigidarium* suggest that this unheated room at least had a warm colour scheme. It is likely that it was also used as an exercise yard and a changing room, though its size indicates that not many people could have used the baths at any one time. No trace of a *palaestra* (exercise court) or of a separate *apodyterium* or changing room was found, and it is possible that these occupied the area between the bath building and the main east-west street. On the other hand the building was small and simple and it is unlikely that it would have included such pretensions. Its plan is fairly characteristic and is very similar to the small bath building of later Roman date which was found at Richborough.³¹ If the bath had no *palaestra* or separate *apodyterium* then it is more likely that the building was set back from the roadway simply because other buildings already occupied the street frontage.

In the circumstances of the rapid mechanical site clearance it was not possible to relate the floor level of the *frigidarium* with that of the *tepidarium* to establish if the floors were at one level or if there were steps up from the *frigidarium* to the *tepidarium*. The evidence of gravel dumping beneath the floor of the *frigidarium*, however, suggests that the floor was raised to the same level as the floors of the heated rooms. If this is correct it is likely that there were steps up to the bath entrance.

The nature of the floors of the bath building is extremely uncertain, except that in Phase 1 the *frigidarium* floor was a herringbone pavement, while later in Phase 2 the floor was of *opus signinum*. Although traces of *opus signinum* flooring were found elsewhere in the Phase 2 building, the discovery of a loose fragment of this flooring set with white tesserae does suggest that a more ornate flooring might have existed.

No evidence was found indicating the nature of the roof, and a study of finds from the site suggests that no box voussoirs for a vaulted roof were found. The absence of voussoirs in such a small collection is not significant, and reflects the conditions under which the investigation was conducted.

(iii) Other Roman Features

Timber-lined Tank (Fig. 11, No. 2; Fig. 16; Plate 12)

About 4.57m north-east of the baths was found a wood-lined tank measuring about 2.5m by 3.3m at its upper level, but near the bottom its north-south dimension was reduced so that the tank measured about 2.4m square. The total recorded height of timbering was a little more than 1.8m, but no doubt it was originally higher than this as it lay at the bottom of a broad excavation dug into the earliest Roman strata on the site, and even into the underlying natural brickearth and gravel.

The tank was made of oak, and the planks forming its sides were on average about 0.08m thick. At its upper level it was strongly supported inside by many upright posts each about 0.15m square, and also by horizontal cross-beams in the corners of the tank (Plate 12). Around the outside of the tank the timbers were firmly packed with clay, no doubt to help make the structure watertight.

The great size of the tank, together with the clay packing indicates that it was probably the main source of water for the public bath-house; and it is no doubt significant that the narrower lower part of the tank penetrated into the natural gravel, presumably to find a constant supply of fresh, clear water. No indications were found to suggest how the water was transferred from the tank to the baths, though amongst the finds was what might have been the roller of a winch, and two complex box-like wooden constructions of uncertain use (ER. 356B) (Fig. 26, No. 108).

Deposits within the tank

The tank contained two main deposits; the lower layers, probably of silt which had probably

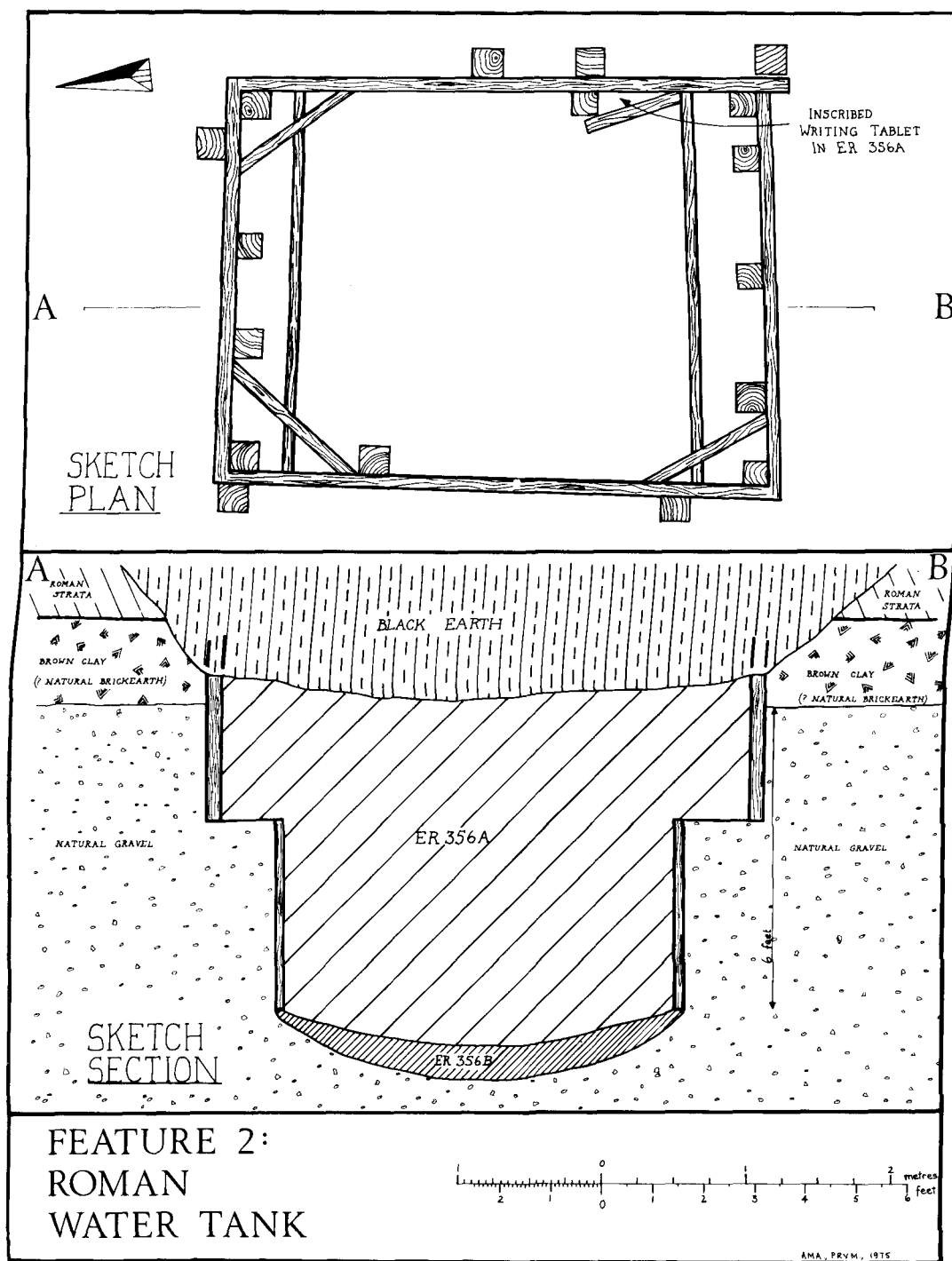


Fig. 16 Cheapside baths site: Roman water tank.

formed at the bottom of the tank during its use (ER. 356B) contained a complete early second century flagon (Fig. 25, No. 80); and above this were thick deposits of gravel and sandy silt, which presumably filled the tank after it had ceased to be used (ER. 356A). Amongst the finds in the upper filling were several objects (Fig. 26, Nos. 101 and 104) including some poorly preserved shoe soles (Fig. 26, Nos. 106 and 107), and one writing tablet (see p. 66; Plate 13). The pottery from the dump seems to date not later than the mid-second century A.D. (Fig. 25, Nos. 81–93; samian report, p. 64).

Feature 3: Roman Building (Fig. 11, No. 3)

Phase 1 The south-east corner of a room was found north of the bath building, its walls being built of ragstone with occasional tiles, and a single course of bonding tiles. Three flat tiles had been mortared onto the face of the wall for some uncertain purpose. Immediately to the west of the north-south wall was found a burnt mortar floor on a foundation of ragstone.

Subsequent Phases

Traces of later constructions were found which may not all be contemporary. To the west of the north-south wall a ragstone construction, probably a wall, was found built up against the north-south wall and above the burnt mortar floor; while just west of this later construction was a deposit of burnt daub and building rubble.

Rebuilding was suggested, for the east-west wall of Phase 1 was found to be overlaid by a mortar floor which was associated with a wall of tiles with a clay (? daub) facing.

To the east of this a later depression 6.7m wide from rim to rim was found to have removed evidence of Roman building and was instead filled with black soil. It is presumed that this depression was a pond or stream.

Dating Evidence

Two sherds recovered from a Roman rubbish pit cut into natural brickearth, and sealed by the debris of the large building, Feature 3 (ER. 314, not illustrated), have been dated to the first century.

Roman Road (Fig. 11, No. 4)

An area of Roman gravel metalling was exposed in the north and south faces of a modern construction trench in the western part of the site, and seemed to be a Roman road aligned north-south. The feature overlay the natural brickearth, thus suggesting a first century date of construction, and also the filling of a small rubbish pit which had been dug into the natural subsoil. The gravel was much disturbed by rubbish pits at its east and west extremities, but nevertheless the width of the gravel spread seemed to be about 4m. A continuation of this road was more recently located in Mumford Court, Milk Street, by Nicholas Farrant and confirms the provisional interpretation of the discovery in Cheapside in 1955.³²

Roman Mosaic (Fig. 11, No. 5)

A small part of a mosaic pavement with a guilloche ornament was exposed by the mechanical grab at the west end of the site against Milk Street. Its location was only roughly recorded.

Roman Pits (Fig. 11, No. 6)

Excavations to underpin Milk Street at the south-west corner of the site revealed a layer of burnt daub in which was found part of a poppy-head beaker. Directly above this was a sandy deposit containing pottery of the second century A.D. (ER. 309, not illustrated).

Roman Buildings (Fig. 11, No. 7)

A trench dug by Professor W. F. Grimes revealed a well built stone foundation aligned north-south, and associated with it were traces of a possibly dismantled tessellated floor. Below this was a deposit of burnt clay, the burning clearly having taken place *in situ*, and below the clay were traces of a timber floor. Beneath the burnt layer was found a portion of a plaster faced 'clay' wall.³³

Roman Well (Fig. 11, No. 8)

A timber-lined well, measuring about 0.8m square internally, was found to the south-west of the bath building. Only its upper layers of filling could be examined, and these revealed fragments of roofing tile, animal bones in profusion, and some pottery of the fourth century A.D. (ER. 354; Fig. 25, Nos. 94 and 95). Clearly this was a filling made after the well had passed out of use, and the date of its construction could have been considerably earlier, though it is unlikely to have been contemporary with the bath building.

Roman Mosaic (Fig. 11, No. 9; Fig. 17)

A small portion of a patterned mosaic pavement of poor quality was revealed by the mechanical excavator just east of the bath building. The decoration of the fragment included alternating black and white squares each about 13mm square. Immediately east of the mosaic was a border of smooth *opus signinum*. A deposit of burnt daub overlay the pavement, and above this was a

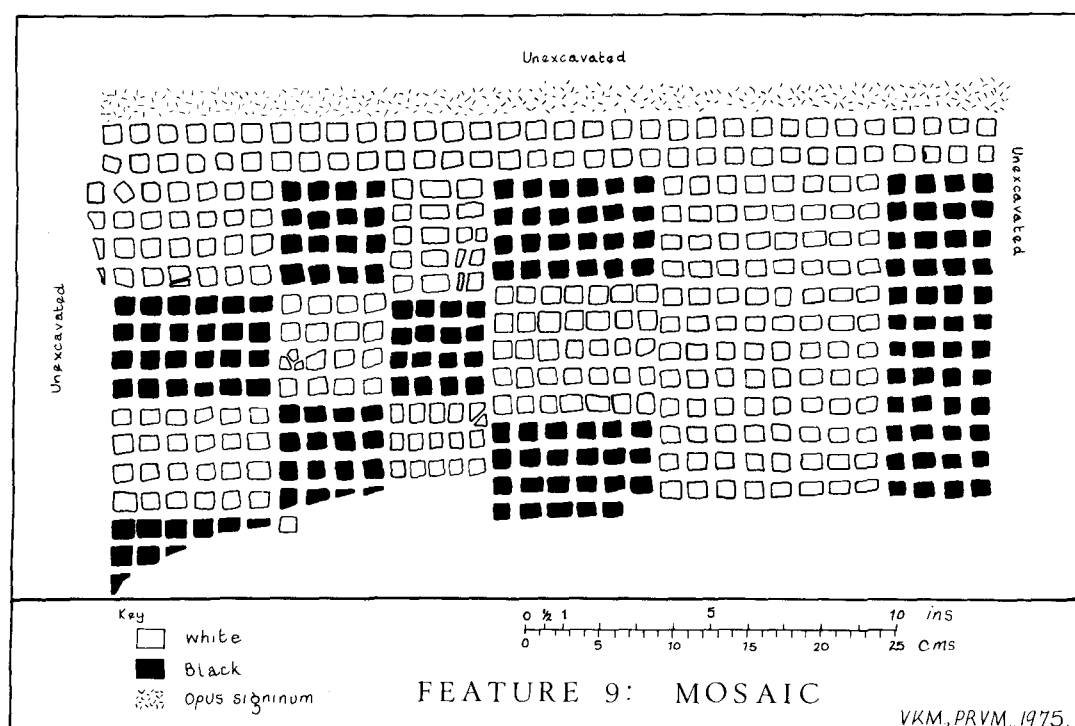


Fig. 17 Cheapside baths site: Roman mosaic.

stratum of black earth in which were found a few sherds not later in date than the second half of the second century A.D. (ER. 355, not illustrated). In view of the small size of the group the black deposit could be considerably later in date than that indicated by the pottery, and thus does not provide certain indication of the date of the mosaic fragment.

Pit (Fig. 11, No. 10)

A rubbish pit situated 0.91m north of Feature 12 in the north-west corner of the site was found to have been dug into the natural gravel, and in a stratum 0.15m above its bottom were recovered some sherds of the first quarter of the second century A.D. (ER. 329, not illustrated).

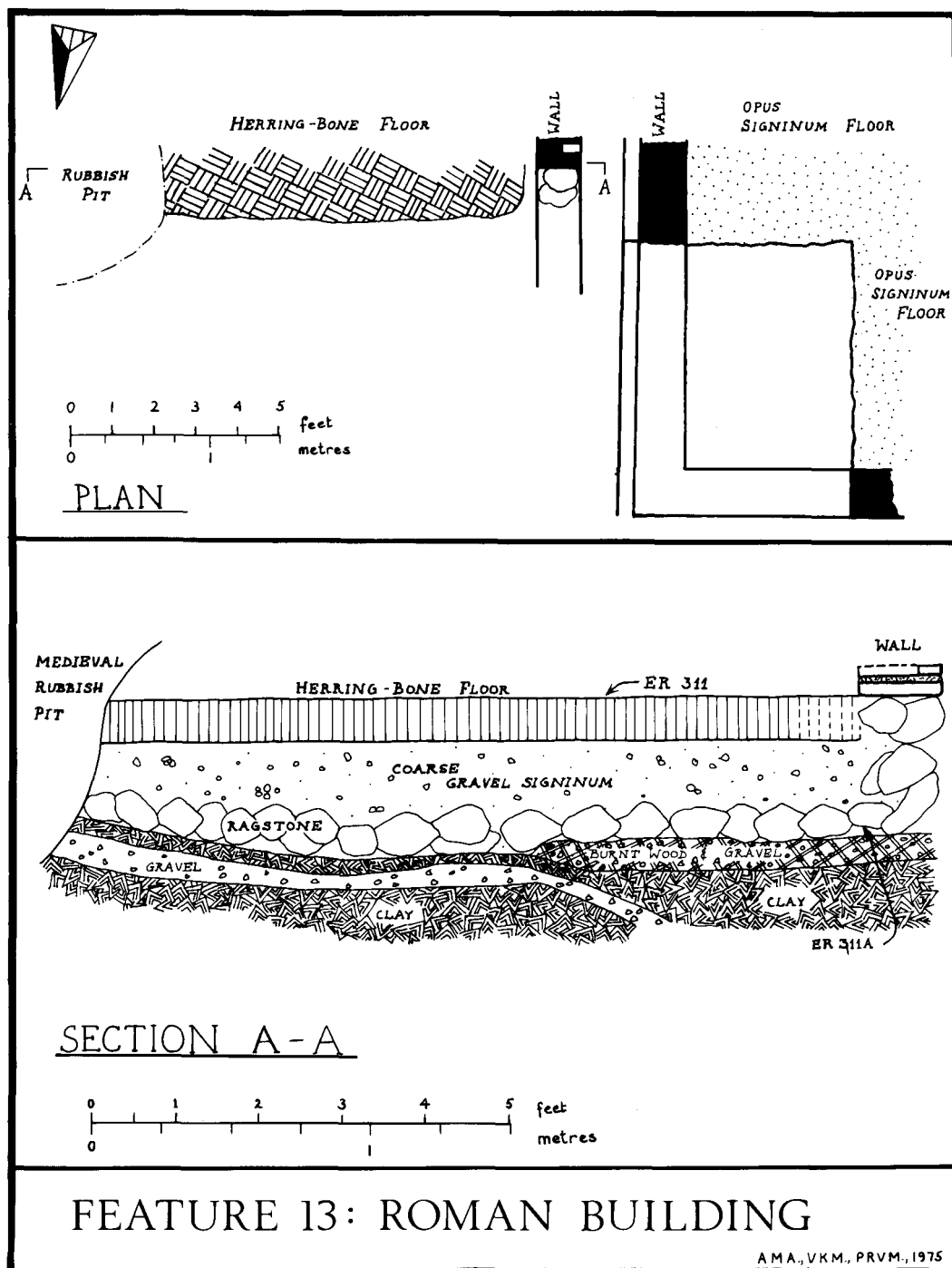


Fig. 18 Cheapside baths site: Roman building, Feature 13.

Well ? (Fig. 11, No. 11)

A Roman timber-lined structure probably measuring approximately 1.4m by 0.9m was revealed just inside the north-west corner of the site, but was badly damaged by the mechanical excavator.

A small quantity of first century pottery was recovered together with lumps of vitrified industrial slag scattered through the moist organic filling (ER. 328, Fig. 25, Nos. 98 and 99). It is possible that this structure was a well.

Well ? (Fig. 11, No. 12)

A large timber structure, possibly a well, was partly revealed by the mechanical excavator about 1.2m south-east of Feature 12. The edges of the structure were maintained by the use of heavy, vertical posts which held the boards in place. Fragments of three coarse ware jars (ER. 330, Fig. 25, Nos. 96 and 97) suggest a date in the first century.

Roman Building (Fig. 11, No. 13; Fig. 18)

A well laid herringbone tiled floor was found associated with a Roman wall on its west side. The wall was 0.30m thick and was aligned approximately north-south. At its base just above the floor level were two courses of tiles which overlay a foundation of loose ragstone extending as a ragstone rubble layer beneath the pavement. A few sherds recovered from a greenish pebbly soil overlying the herringbone pavement are dated to the second century A.D. (ER. 311, not illustrated), while the rim of a small amphora possibly of Flavian date (ER. 311A, not illustrated) was recovered from a black burnt deposit below the ragstone rubble.

At 0.30m to the west of the wall described above was found another Roman wall built of tiles which formed the east side of a further room with an *opus signinum* floor. The mortar of the floor surface extended up the wall face to form a smooth rendering. Unfortunately, the wall could not be traced to a sufficient height to determine if this rendering was merely a skirting, perhaps in the form of a quarter-round moulding.

Roman Building? (Fig. 11, No. 14)

Sections through the Roman strata at the south end of the site, opposite the church of St. Mary le Bow, revealed much burnt building debris, and from the stratum below some pottery of the late first to early second century A.D. (ER. 322, not illustrated). A subsequent observation noted a stratum of wet clay containing sherds of the early second century A.D. (ER. 326, not illustrated) which overlay black discoloured gravel, and above which was a deposit of burnt daub 0.3m thick which contained small fragments of Roman wall plaster.

Wall (Fig. 11, No. 15)

A trench excavated by Professor W. F. Grimes in 1954-55 revealed a Roman wall approximately on a north-south alignment. The west face was rendered in whitish mortar. A succession of floor surfaces were also recorded, separated from each other by layers of 'make up' of a variety of materials, mostly clay. Some of the surfaces included traces of hearths as well as post holes.³⁴

(d) General Discussion

The fragmentary archaeological evidence indicating the changing forms of occupation on the Sun Life Assurance Society site severely restrict any interpretation of the history and use of the site during the Roman period. Nevertheless, a few tentative conclusions are possible. The relationship of the Cheapside baths to what is known of Roman London generally and of the location of other public baths and public buildings is discussed below (p. 46).

As is to be expected, no evidence was found of any major occupation prior to the Flavian period, for the site lay in the western half of what, in a later period of

development, was to be the walled city. Nevertheless, the site lay only 30m from the *decumanus maximus*, the main east–west street of the city, which passed through the later Newgate to link *Londinium* with western Britain.

By the Flavian period the site had evidently become part of the city area, and at an early date, a north–south street was built. During the late first century there was evidently some industrial activity in the area, and it was to serve this that the Cheapside baths may originally have been built. Such activity is suggested not only by the slag, probably of iron working, in the well (11), but also by the discovery by the writer of a quantity of blue frit, indicating enamelling or glass making associated with layers of burnt debris and pottery of the late first century at the north end of New Change House, and by the presence of a pottery industry in the region of St. Paul's Cathedral.³⁵ There is no evidence of the date of construction of the baths, but it is unlikely to have been before the Flavian period for it was then that the basilica was built on Cornhill, following the grant to the Roman city of the right to elect a town council and to administer its own affairs. This would have included the construction of public baths.

Just as the date of the construction of the baths is uncertain so is its rebuilding. The reason for the rebuilding, which perhaps included a *laconicum*, is uncertain, but it is possible that the building was being adapted for military use connected with the nearby Cripplegate fort. Indeed, it is possible that the bath building was originally constructed for military use, and that access for the troops was via the north–south Roman road (Fig. 11, No. 4) which probably linked up with the east gate of the fort. This military connection is not altogether certain, however, for it is not easy to understand why it was built beside the main street of Roman London, and at a distance from the fort. An alternative possibility is that the bath was associated with an inn or *mansio* which lay between the bath building and the main Roman street beneath Cheapside.

The date of the destruction of the baths is also uncertain, though such evidence as there is does point to a date not earlier than the end of the second century, when, incidentally, the fort defences were included in the Roman town defences and the fort itself may have been abandoned.³⁶

The site plan (Fig. 11) shows that several major Roman buildings existed on this site on both sides of the north–south Roman road and in close proximity to the baths. But in the absence of dating evidence it cannot be assumed that they were all contemporary with each other, and it is to be hoped that the trenches cut by Professor Grimes in 1955 may shed some light on the forms of occupation.

It is unfortunate that the bath building was totally destroyed by mechanical excavators in 1956 and that it will not be possible to check the many issues raised by this rescue investigation undertaken during building activity. Nevertheless, it does still represent one of the few reasonably complete known plans of a Roman building in the City of London.

4. DISCUSSION: THE PUBLIC BATHS OF ROMAN LONDON

It has already been established that the main phase of civic public building in Roman London occurred during the period c. A.D. 60–125, and that this, no doubt, reflected the period during which a city council was established in *Londinium*, and also during which the vigorous programme of public building was apparently actively encouraged by the provincial administration.³⁷ The Huggin Hill, and possibly the Cheapside baths,

therefore, must reflect the general policy of public building at that time which was also responsible for the reconstruction and extension of such works as the formal road system in the city, and the building of the huge basilica and forum which became the main focus of civic life.

The Huggin Hill and Cheapside baths form two very different types of building: the former a very large and complex establishment prominently sited on a terraced hillside overlooking the Thames; the latter a comparatively small and simple building inconspicuously located on flat ground and set back from the main street, perhaps hidden behind existing buildings. Thus the status of the two buildings must have been distinctly different even though the former lay well away from the arterial routes in the city, and the latter lay close to the main street.

It is difficult to find parallels for the Huggin Hill baths as its plan has been adapted to its hillside situation, and much more excavation is required to elucidate the layout of the entrance area and rooms, located on the lowest terrace. Nevertheless, its size and complexity clearly show that it was a major municipal bath building.

The Cheapside bath, by contrast, is small and has a distinctly military appearance, and may well have been the bath house for the Cripplegate fort. It lies some distance from the fort, perhaps because there was no suitable water supply any nearer to the high ground upon which the fort was built. The natural subsoil on the bath house site lay at about 10.7m above O.D., while the natural surface at the south end of the fort lay between 11.6m and 12.6m above O.D.—about the highest ground in Roman London. The suggestion that it was a military bath is based not only on its distinct similarity to other known examples, but also to the absence of evidence of any alternative candidate in London. Military baths were built for the benefit of troops in forts in Britain and these buildings tended to have a fairly uncomplicated layout of a progression of heated rooms. Even though they are small by town baths standards they do sometimes have circular, hot, dry *laconica* as in the baths at Gelligaer in Glamorgan,³⁸ and at Red House near Corbridge,³⁹ and this has been suggested for the Cheapside baths. The possibility that there was an exercise yard or *palaestra* between the *frigidarium* and the main street to the south in the Cheapside baths would not involve a degree of pretension that is entirely absent from military baths, for such enclosed yards have been found in baths at Castell Collen in Wales⁴⁰ and again at Red House near Corbridge.⁴¹

Notwithstanding this comparison with military baths, Roman towns, admittedly mostly in the Mediterranean region, sometimes had a scatter of minor baths or *balnea* tucked away amongst existing buildings in addition to the major baths or *thermae* which dominated the block in which they stood. At Ostia there were three *thermae* and fourteen *balnea* of varying dates and it has been suggested that the latter are probably the result of private enterprise—a possibility that cannot be entirely discounted in connection with the Cheapside baths.⁴² The likely sites of other baths in London are shown in Fig. 19, but there is little indication of how many were public and how many were private, the only certain private bath being that found at Billingsgate (Fig. 19, No. 6).

The location of the Cheapside and Huggin Hill baths in *Londinium* during the second century is of interest to the location of the cemeteries⁴³ (Fig. 19), which, under Roman law, had to be outside the city boundary. Thus it would seem that both baths were situated close to the edge of the contemporary city. The exact location and nature of the western limit of the city during the second century is not known, but its location is

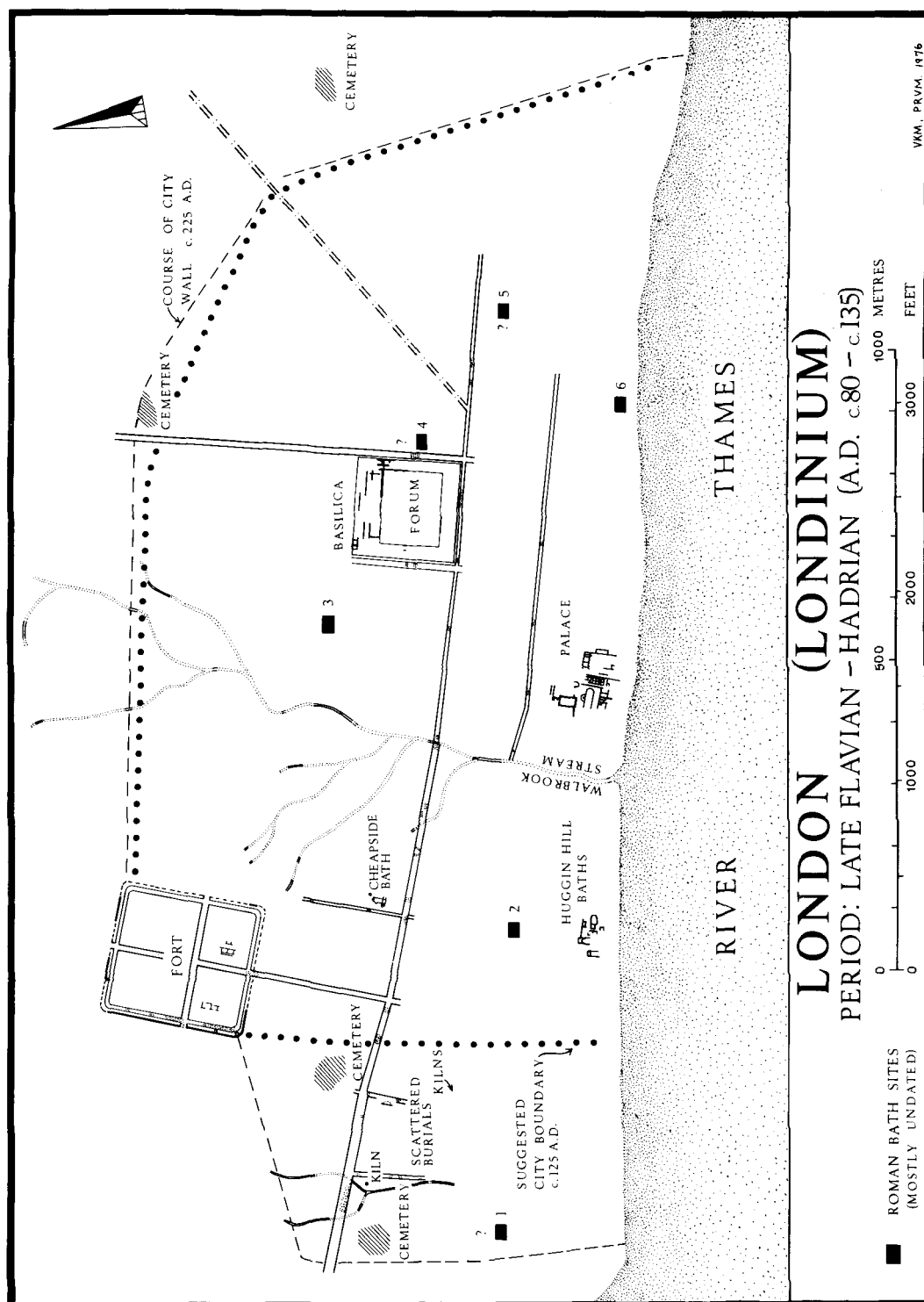


Fig. 19 London in the late first-early second centuries.

perhaps suggested by a slight change in the course of the Roman road where the west end of Cheapside now lies—a change which is still preserved in the modern street plan at the junction of Cheapside and Newgate Street.

Thus it is clear that when the Cripplegate fort was constructed during the early second century, it lay at the edge of the city, and that nearly a century later, when the defensive wall was built to encircle the city, the high ground around St. Paul's Cathedral where the cemetery lay was included, thus forming the deep re-entrant on the west side of the fort.

During the second century the basilica-forum building was fairly centrally placed within the city limits, and the Cheapside bath lay near the western edge of *Londinium* either serving the troops in the fort, or those travellers entering the city from the west. It is thus possible that the bath building was attached to an inn of some kind which, apart from the possible existence of an exercise yard, may account for its being set so far back from the main street.

The reason for the existence of the Huggin Hill bath was clearly different as not only did it lie away from any arterial roads, but also it was built into the steep hillside overlooking the Thames, where it was able to use the natural water supply that issued out of the springline all along the edge of the river in the City. One of the major problems concerns its great size, for this shows that a very considerable number of people must have congregated in this south-western corner of the city even though it lay away from the nucleus of *Londinium* across the Walbrook valley, and on the southern edge of the western hill. Indeed, the possibility that there was a substantial population in this area is reinforced by the fact that the baths were enlarged during the second century. Just what was that public attraction is difficult to judge though there are several possibilities. The first is that it perhaps served the dockland waterfront, though as there is very little evidence of an active commercial waterfront west of the mouth of the Walbrook in Roman London, this explanation is unsatisfactory. A second possibility is that the south-western part of the city might have been an area of public gathering and entertainment, as is suggested by the discovery of various massive and extensive Roman constructions, presumably of a public or semi-public character. Unfortunately, these buildings are largely undated, though two phases of 'public' building are clearly represented on some sites, the later phase buildings possibly continuing a form of civic land use in the area that began in the late first to early second century. The suspected 'public' constructions are as follows:

1. The two parallel walls formerly under Knightrider Street (Fig. 20) more than 178m long.⁴⁴
2. On the Salvation Army headquarters site, Lambeth Hill (Fig. 20) traces were found of massive Roman walls of an early phase underlying later Roman terraces.⁴⁵
3. Also on the Salvation Army headquarters site, Lambeth Hill, were extensive later Roman chalk terraces on which lay massive Roman structures which included large shaped stone architectural elements evidently reused from a monumental building or buildings of some kind situated, no doubt, in the area.⁴⁶
4. Many reused architectural stone elements were found in a massive Roman wall by Charles Roach Smith in 1841 beneath Upper Thames Street (Fig. 20) between Lambeth Hill and Queenhithe.⁴⁷ There is some evidence to suggest that the wall was contemporary with No. 3 above.

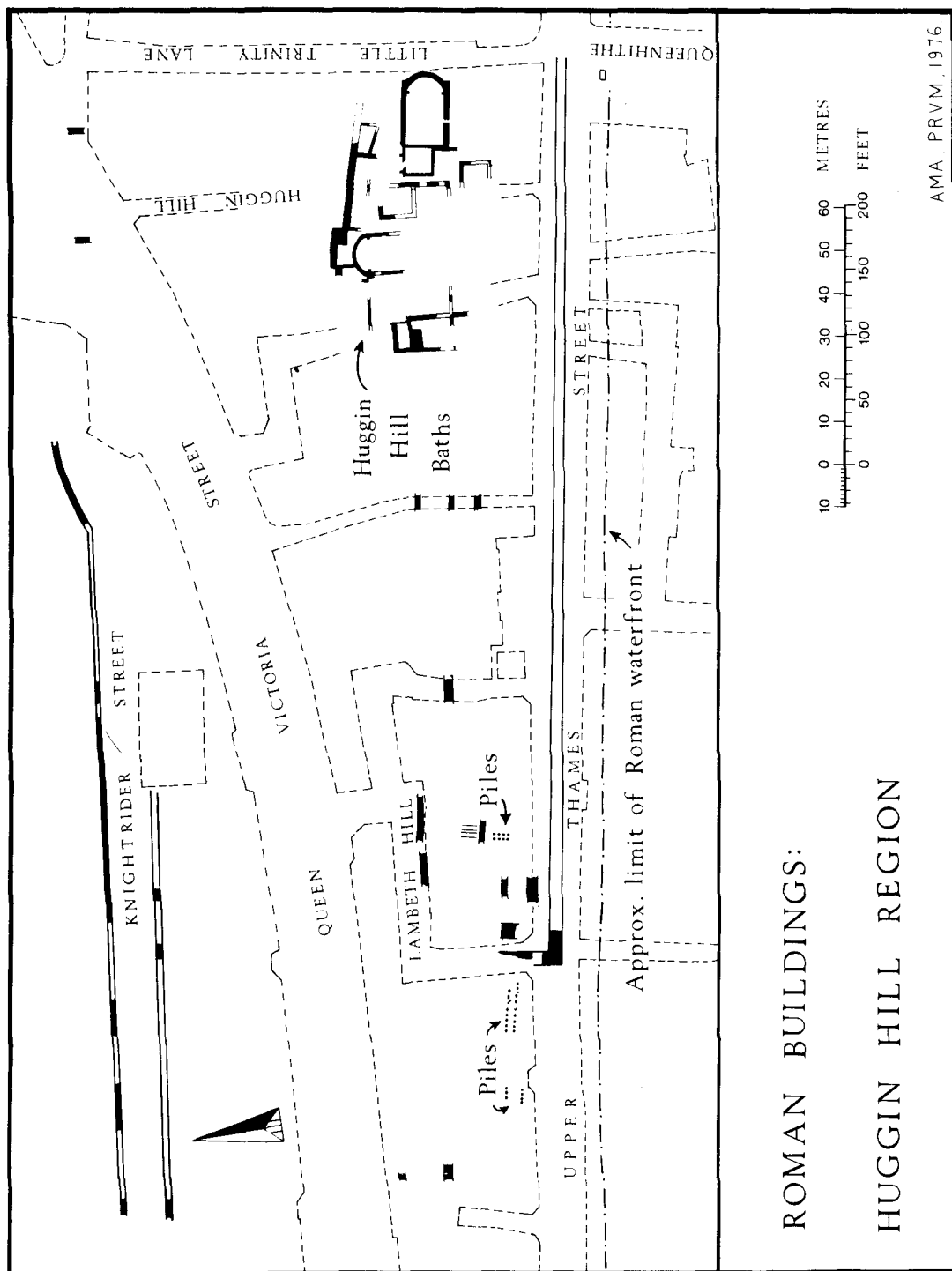


Fig. 20 Roman structures near the Huggin Hill baths site.

5. A massive Roman wall recently discovered on the site of Baynard's Castle and under Upper Thames Street, the south face of which had been eroded away, while its north face had several broad offsets.⁴⁹
6. Many sculptured reused architectural elements from an earlier monumental building or buildings found reused in a massive Roman wall, possibly of later date than No. 5, recently found under Upper Thames Street just west of the site of Baynard's Castle.⁵⁰

But whatever the reason, the Huggin Hill baths clearly formed a prestige building probably constructed with a provincial government subsidy as part of an attempt to create a capital city for the province. Its size, enormous by provincial standards, its prominent position on the hillside terraces, its separate large bathing rooms for men and women, and, if the fragments of building debris in the dumped deposits were derived from the baths following its abandonment, its tessellated floors and colourful frescoes on the walls (Fig. 23, Nos. 45–53), and its wall veneers and mouldings of imported marbles from Carrara in Italy, and from the Pyrenees, as well as the use of more local Purbeck marble (which contrast with the rough facing of some walls in imitation ashlar), generally indicate a lavish injection of finance in public building at a level suggestive of more than local planning. This view is supported by the presence of admittedly only a single, roof tile bearing the provincial stamp of the P.P.PR.LON type (Fig. 24, No. 55). As this tile was almost complete, it is less likely to have been a stray from elsewhere in the City. In addition, the apparently early demolition date must surely reflect an equal disregard for expense, suggesting that the Huggin Hill baths were not a necessary part of the city's civic amenities in the third century A.D.

Both the Huggin Hill and Cheapside public bath buildings, after being rebuilt or enlarged during the second century, possibly for the reasons that have already been given (p. 29), seem to have been demolished by about the end of the second century. Why this happened is unclear, though as in both cases it was evidently not to construct another major public building on the site, it must be assumed that the reason for the existence of the baths themselves on those sites must have changed. The dating evidence essentially gives the date after which demolition occurred, and it is possible that demolition took place some considerable time later than the evidence suggests.

The early demolition of two public bath buildings in London, together with their location near the western limit of the city, suggest that neither can have been the principal public baths in *Londinium*. It is to be expected that the principal public baths at least lay on the spring line at the edge of the eastern hill of the city beside the Thames, and probably close to the basilica and forum which formed the civic centre. Elsewhere in Britain public baths are frequently found to lie very close to the civic centre as at Exeter,⁵¹ Leicester,⁵² Wroxeter,⁵³ and Caerwent,⁵⁴ though that this is not an essential factor of Roman town planning in Britain as is shown by the public baths in Silchester not having been built close to the forum.⁵⁵ If we must look elsewhere in *Londinium* for the main public baths, then what alternative sites are possible? There are no certain candidates and judging from the sizes of the cold plunge baths mentioned below, many of these are probably too small for the role, though possible bath sites in London are shown in Fig. 19.

1. A Roman bath and 'aqueduct' are said to have been found in Ludgate Square after 1666.⁵⁶
2. A Roman cold water bath measuring 4.4m by 2.6m was found in Cannon Street in 1906.⁵⁷
3. A Roman cold water bath measuring 1.6m square was found in Threadneedle Street in 1895.⁵⁸
4. A rectangular room measuring 3.3m by 2.4m was found in Lime Street in 1932 and was believed to be part of a Roman bath.⁵⁹
5. A Roman bath or tank 1.5m wide was found in Mark Lane in 1935.⁶⁰

The bath building at Billingsgate (Fig. 19, No. 6) has now been completely excavated and is found to be a private bath associated with a dwelling.⁶¹

NOTES

¹ T. Milbourn 'The Vintners' Company' *Trans. London Middlesex Archaeol. Soc.* 3 (1869) 409.

² City of London Record Office, City Sewer Plan 373.

³ MS records by Dr. G. C. Dunning at the Museum of London.

⁴ P. Marsden 'The Excavation of a Roman Palace Site in London, 1961-72', *Trans. London Middlesex Archaeol. Soc.* 26 (1975) 6, 30-36.

⁵ City Sewer Plan 373.

⁶ MS records by Dr. G. C. Dunning in the Museum of London.

⁷ City Sewer Plan 373.

⁸ W. de G. Birch *Cartularium Saxonicum* 2 (London 1887) No. 561.

⁹ *Ibid.* Nos. 577-8. A full discussion of the authenticity of these charters is included in the documentary survey in C. Hill, M. Millett and T. Blagg, *The Roman Riverside Wall in London* (forthcoming in a London Middlesex Archaeol. Soc. *Special Paper*).

¹⁰ The close coincidence of the proportions of the land detailed in the Saxon charter with those on the modern map at Queenhithe is demonstrated, *ibid.*

¹¹ E. Ekwall *The Street Names of the City of London* (Oxford 1954) 37.

¹² Quoted by F. M. Stenton *Anglo-Saxon England* (3rd ed., Oxford 1971) 56.

¹³ P. Marsden *op. cit.* in Note 4, 63-4.

¹⁴ M. Biddle and D. Hill 'Late Saxon Planned Towns' *Antiq. J.* 51 (1971) 83.

¹⁵ R. Merrifield *The Roman City of London* (London 1965) 22; 222, Site 114.

¹⁶ P. Marsden 'The Riverside Defensive Wall of Roman London' *Trans. London Middlesex Archaeol. Soc.* 21 (1967) 149-54.

¹⁷ D. Atkinson *Report on the Excavations at Wroxeter in the County of Salop, 1923-27* (Oxford 1942, reprinted 1970) 30, Plate 6.

¹⁸ K. Kenyon *Excavations on the Jewry Wall Site, Leicester* Report of the Research Committee of the Society of Antiquaries, No. 15 (Oxford 1948) Plate 27; J. Wachter *The Towns of Roman Britain* (London 1975) 343, Fig. 80.

¹⁹ G. C. Boon *Silchester: the Roman Town of Calleva* (Newton Abbot 1974) Plan in back cover.

²⁰ D. Atkinson *op. cit.* in Note 17, 25-54.

²¹ J. Wachter *op. cit.* in Note 18, Fig. 9.

²² J. Carcopino *Daily Life in Ancient Rome* (1956) 257-8 and sources there cited.

²³ S. Frere *Britannia: A History of Roman Britain* (London 1974) 148, quoting *Scriptores Historiae Augustae Vita Hadriani* 2.

²⁴ Royal Commission on Historical Monuments: *An Inventory of the Historical Monuments in London 3: Roman London* (London 1928) 44, Frontispiece and Plate 1.

²⁵ R. Merrifield *Roman London* (London 1969) 100.

²⁶ J. Leland *Collectanea* (ed. T. Hearne) 1 (London 1774) 74.

²⁷ *J. Brit. Archaeol. Assoc.* 17 (1861) 328.

²⁸ Merrifield *op. cit.* in Note 15, 205, Site 56; J. E. Price 'Roman Remains in London' *Archaeol. Review* 1 (1888) 278.

²⁹ W. F. Grimes *The Excavation of Roman and Mediaeval London* (London 1968) 136-141.

³⁰ *Ibid.* Fig. 23a.

³¹ J. P. Bushe-Fox *Second Report on the Excavation of the Roman Fort at Richborough, Kent* Rep. Res. Comm. Soc. of Antiq. No. 7 (London 1928) Plate 42.

³² N. Farrant 'A Roman Crossroads in the City' *London Archaeologist* 2 (1975) 300-303.

³³ Grimes *op. cit.* in Note 29, 138-140.

³⁴ *Ibid.* 140-1.

³⁵ P. Marsden 'The Roman Pottery Industry of London' *Trans. London Middlesex Archaeol. Soc.* 22 (1969) 39-44.

³⁶ Grimes *op. cit.* in Note 29, 39.

³⁷ Marsden *op. cit.* in Note 4, 71.

³⁸ V. E. Nash-Williams and M. G. Jarrett *The Roman Frontier in Wales* (Cardiff 1969) 166, 171.

³⁹ C. Daniels 'The Roman Bath House at Red House, Beaufront, near Corbridge' *Archaeologia Aeliana* 37 (1959) 117-122.

⁴⁰ Nash-Williams and Jarrett *op. cit.* in Note 38, 170, Fig. 89.

⁴¹ Daniels *op. cit.* in Note 39.

⁴² R. Meiggs *Roman Ostia* (Oxford 1960) 416.

- ⁴³ Royal Commission *op. cit.* in Note 24, 153–163.
⁴⁴ Merrifield *op. cit.* in Note 15, 215–19, Sites 93–102.
⁴⁵ Marsden *op. cit.* in Note 16, 151; Merrifield *op. cit.* in Note 15, 220–224, Sites 110–117.
⁴⁶ Marsden *op. cit.* in Note 16, 150–4.
⁴⁷ Merrifield *op. cit.* in Note 15, 222, Site 114.
⁴⁸ Marsden *op. cit.* in Note 16, 149–151.
⁴⁹ C. Hill *op. cit.* in Note 9.
⁵⁰ *Ibid.*
⁵¹ Wachter *op. cit.* in Note 18, 329.

- ⁵² *Ibid.* 337.
⁵³ *Ibid.* 361.
⁵⁴ *Ibid.* 377.
⁵⁵ Boon *op. cit.* in Note 19.
⁵⁶ Merrifield *op. cit.* in Note 15, 195, Site 23.
⁵⁷ *Ibid.* 214, Site 86.
⁵⁸ *Ibid.* 243, Site 182.
⁵⁹ *Ibid.* 259, Site 233.
⁶⁰ *Ibid.* 294, Site 348.
⁶¹ *Ibid.* 295, Site 353.

5. THE FINDS FROM BOTH SITES

The finds from the Huggin Hill and Cheapside bath sites are described here primarily as dating evidence for the buildings and other features on the sites, and also for the information that they give about the use of the sites. The detailed study of all the finds for themselves is not necessary for the publication of the sites, and should be the subject of specialist study in the future. Thus although only the key dating groups are described in detail, the Excavation Register references (e.g. ER. 1372) are given together with the archaeological contents of all other significant Roman groups. The entire collection of finds from these sites may be studied in the Museum of London on application to the Director.

ACKNOWLEDGEMENTS

Grateful thanks are extended here to Joanna Bird, Geoff Marsh and Brian Hartley for the report on the samian ware, to Juliet Clutton-Brock and Jennifer Gask of the Natural History Museum for the bones, to F. Dymes of the Geological Museum for the report on the stone samples, to Professor E. G. Turner and Hugh Chapman for the reports on the writing tablet, and to Ralph Merrifield for the identification of the coins.

(a) The Huggin Hill Baths Site

(i) Roman Coarse Pottery (Fig. 21)

Groups from the construction and occupation of the baths.

ER. 949. Foundation trench of Room 18 (p. 19).

1. Mortarium. Soft creamy ware with small scattered inclusions probably of brick fragments, up to 2mm across.
2. Flagon. Hard, sandy, buff-pale pink jug with a ring neck (cf. for type, Kenyon [1948, Fig. 28, No. 2], dated late first–early second century).

ER. 1420. Foundation trench of Room 33 (p. 20).

3. Bowl. Hard, sandy, pale grey ware with a light brown core, and with darker grey surfaces (cf. Bird [1973, Fig. 11, No. 88] dated Neronian or early Flavian).
4. Carinated beaker. Fine, hard, pale grey ware with darker pale grey surfaces (cf. Cunliffe [1971, Vol. 2, Fig. 89, Type 69] dated first century A.D.).
5. Cylindrical pot. Fine, pale grey, micaceous ware with a dark grey-black exterior slip. Decorated with zones of applied clay pellets over the slip.

ER. 1419. Silt filling of the hypocaust in Room 30 (p. 20).

6. Dish. Hard, sandy, buff ware, burnt on underside (cf. Cunliffe [1971, Vol. 2, Fig. 84, No. 20.2] this type being dated to the first century A.D.).

Dating: Judging from the coarse pottery these groups clearly date from not earlier than the late first century, but two samian ware sherds from ER. 1420 indicate a date at least at the end of the first century A.D.

Groups from the destruction of the baths.

ER. 914. Dump in Feature 17 (see p. 22).

7. Bowl with reeded rim. Hard, sandy, micaceous, brown ware with a thin, grey core. Traces of burning on the outside, and on the underside of the rim. This is a typical Trajanic–Hadrianic pot type in London (cf. Kenyon [1948, 88]).
8. Amphora neck with two handles (missing). Soft, pale buff ware.

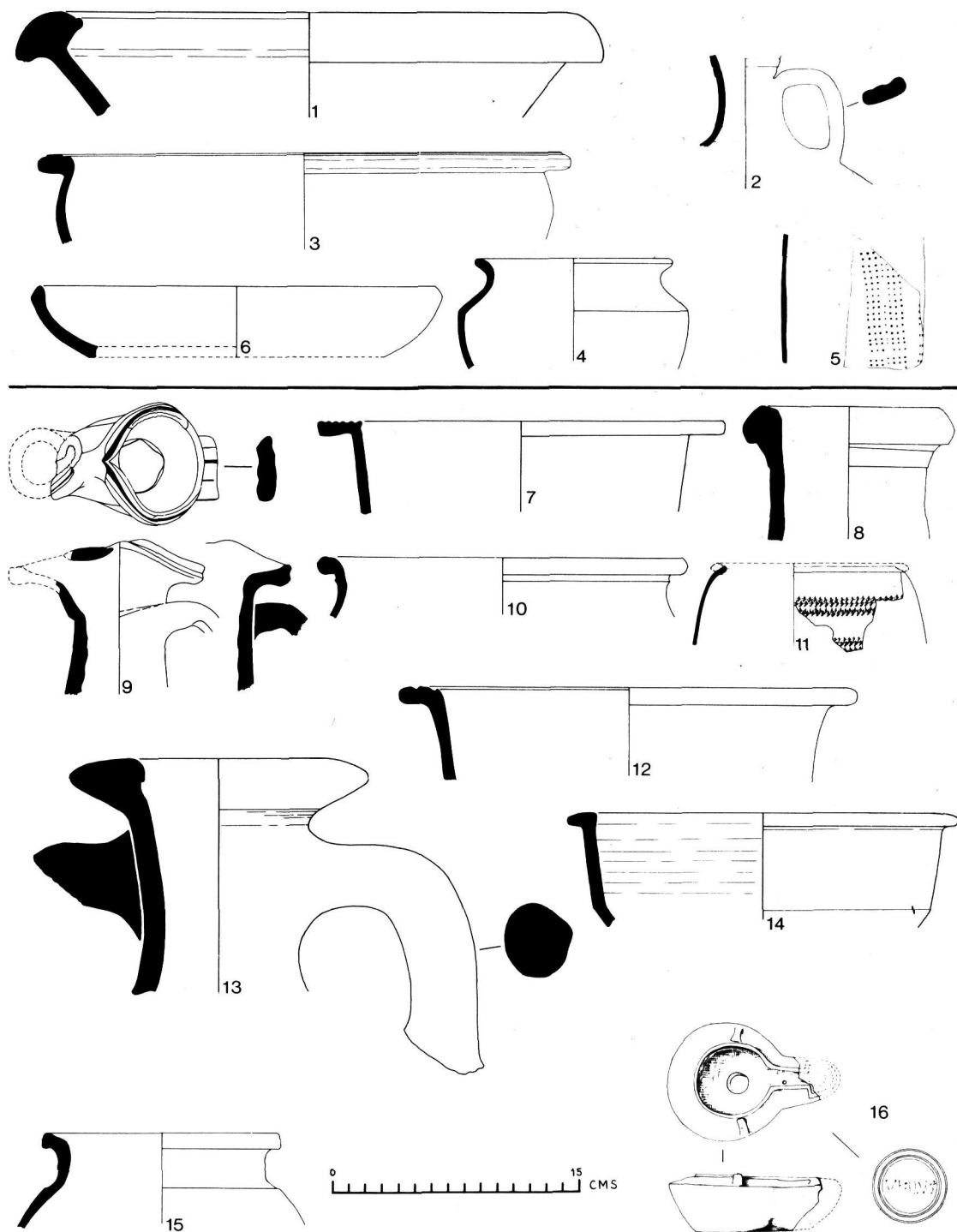


Fig. 21 Huggin Hill site: pottery. Nos. 1-6 from the construction of the baths; Nos. 7-16 from the destruction of the baths (1/4).

ER. 915. Dump in Feature 17 (see p. 22).

9. Flagon, with figure-of-eight spout. Hard, pale pink, sandy ware, the exterior slightly burnt.
10. Jar. Hard, sandy, buff ware, with pale pink core.
11. Beaker. Fine, hard, flakey, white ware, with an orange-brown slip on its inner and outer surfaces. Decorated with horizontal zones of rouletting.

ER. 920. Dump in Feature 17 (see p. 22).

12. Bowl with a reeded rim. Hard, buff, sandy ware. A little burning on the exterior, especially on the underside of the rim.
13. Amphora neck. Soft, creamy, buff ware with a pale grey core.
14. Bowl. Pale, pinkish buff, hard, sandy ware.

ER. 1422. Rubble filling of Room 30.

15. Jar. Fine, hard, orange ware. Late first-early second century type.

ER. 920 (see Nos. 12 and 13 above).

16. Lamp. Hard, fine, orange ware. Potter's name VIBIVS on the base. This is a first century type which occurs at Pompeii prior to the destruction of A.D. 79 (London Museum Catalogue No. 3 [1946, 63-4 and Fig. 15, Type 111B]).

Fig. 22.**ER. 918. Dumping in Room 18** (p. 22).

17. Flagon neck, figure-of-eight type. Hard, sandy, pale pink ware. Single handle.
18. Jar. Fine, hard, sandy, pale grey ware, with a very pale grey core.

ER. 932. Dumping in Feature 19 (p. 22).

19. Lamp. Buff ware, with an orange micaceous slip (London Museum Catalogue No. 3 [1946, 68 and Plate 28, No. 5, Type 111b] dated second century).

ER. 1418. Rubble filling of Room 29 (p. 23).

20. Bowl with reeded rim. Hard, pale brown, sandy ware, burnt on the outside and on the rim.
21. Bowl with reeded rim. Hard, pale pink ware, with some burning on the outside. (This type is characteristic of the late Flavian-Antonine period at Leicester, Kenyon [1948, 88-9]; in London it does not appear before the end of the first century cf. Bird [1973, 152-56].)
22. Flagon neck. Hard, fine, orange ware with a grey core. Mica dusted surface (cf. Sheldon [1974, Fig. 31, No. 248] dated first half of second century).

ER. 1424. Rubble filling of robbed pipe in Room 29 (p. 23).

23. Flagon neck, figure-of-eight type. Pale pink, sandy

ware. Single handle. The type originates in the pre-Flavian period but is unlikely to outlive the first century (cf. Cunliffe [1971, Vol. 2, 235, Type 301]).

24. Beaker. Poppy-head type. Fine, hard, brown ware with a dark grey slip.

25. Beaker. Poppy-head type. Fine, dark grey ware, with exterior grey slip and applied barbotine dots (cf. Kenyon [1948, Fig. 44, No. 33] dated A.D. 150-160. Poppy-head beakers appear in the late first century and are common to about the middle of the second century, Kenyon [1948, 103]; Cunliffe [1971, Vol. 2, 229]).

26. Bowl with reeded rim. Hard, fine, sandy, pale pinkish-buff ware.

27. Bowl. Fine, sandy, brownish-grey ware, with a grey slip outside, and applied dots.

28. Jar. Brown, soft, flakey ware with scattered burnt flint inclusions. The exterior surface is worn but still bears traces of a zone of decorative depressions. This is a common Flavian storage jar type (cf. for type, Bird [1973, Fig. 15, Nos. 194 and 195] dated Flavian).

29. Bowl. Fine, hard, sandy, grey ware (cf. Kenyon [1948, Fig. 29, Nos. 27 and 28] a type which occurs from about the mid second century onwards).

30. Bowl with reeded rim. Hard, dark grey, sandy ware with a pale grey core.

31. Jar. Hard, fine, sandy, buff-pale grey ware. Traces of burning on outside.

32. Jar with a bead rim: pale grey, hard, sandy ware with a darker grey exterior. Smoothed rim and shoulder (cf. at Fishbourne, Cunliffe [1971, Vol. 2, 212, Type 166] where the type is almost exclusively pre-A.D. 75. In Sheldon [1974, Fig. 29, Nos. 181-186] the type is common to the Flavian period).

33. Dish. Hard, sandy, pale pinkish-buff ware. Traces of burning (cf. Cunliffe [1971, Vol. 2, 218, Type 199] of Flavian or later date).

ER. 1425. Dumped rubble in Room 27 (p. 23).

34. Bowl. Pink ware with small flint inclusions. Some burning on the outside.

Dating: This is merely a selection of the pottery types from the many deposits dumped into the baths following the abandonment of the building, and it illustrates the general character of the dateable pottery. The bulk of the coarse pottery ranges in date from the Flavian to the Antonine periods, and it is of interest that the reeded-rim bowls are particularly common and characterize the date range of the groups as a whole. For closer dating the samian ware is especially important (p. 57) and shows a similar date range, though several sherds do date from around the mid second century (ER. 940). That the baths were not demolished until after A.D. 150 is shown by a samian ware sherd of A.D. 150-180 in a deposit pre-dating the destruction (ER. 1388).

(ii) Samian Pottery

by Joanna Bird and Geoff Marsh, with identification of potters' stamps by Brian Hartley.

(NB. These finds are not illustrated, but may be consulted at the Museum of London)

Deposits contemporary with the construction and occupation of the bath.

ER. 1388 (see p. 20).

Drag. form 37. Mould Stamp CIN[NAMIOF] amongst

the decoration by Cinnamus of Lezoux and Vichy. Not an early stamp of Cinnamus, this was used at both places. Date: probably A.D. 155-75.

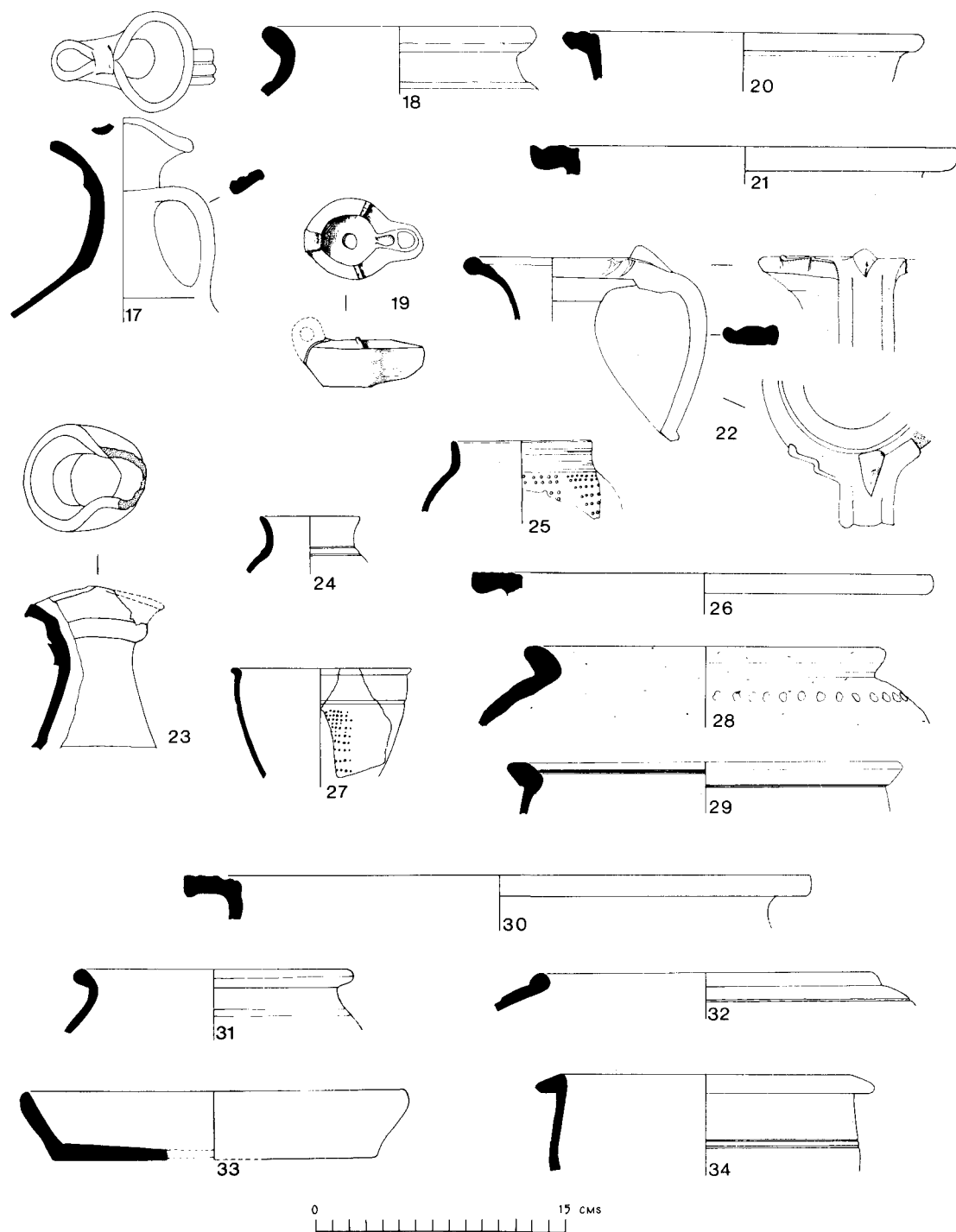


Fig. 22 Huggin Hill site: pottery Nos. 17–34 from the destruction of the baths ($\frac{1}{4}$).

ER. 1420. (see p. 20).

Drag. form 37. South Gaul. Trident ovolo, panels with leaf tendrils. Date: c. A.D. 80–100.

Drag. form 46. South Gaul. Date: late first century A.D.

Deposits contemporary with the destruction of the baths.**ER. 917.** (see p. 22).

Drag. form 38. Central Gaul. Date: Hadrianic.

ER. 940. (see p. 23).

Drag. form 37. Stamped [QVIN]TILIANIM (Die 1b) in the mould below the decoration. The style is that of the Quintilianus group: the ovolo is shown on Stanfield & Simpson (1958, Pl. 68, 4) the seven-beaded rosette and a similar ramshorn on Pl. 68, 1; the deer 0.1752 A on Pl. 71, 25; the goat 0.1844 on Pl. 68, 7; the panther 0.1553 on Pl. 68, 5; and the wavy-line saltire on Pl. 70, 18. Date: c. A.D. 125–150.

Drag. form 37. Central Gaul. Broken rosette terminal. Date: mid second century.

Walters, form 79. Central Gaul. Date: Antonine.

Sherd of Central or East Gaulish pottery.

ER. 1385. (see p. 23).

Drag. form 37. South Gaul. Date: Flavian.

ER. 1386. (see p. 23).

Drag. form 18/31 rouletted (?). Central Gaul. Date: Hadrianic–early Antonine.

ER. 1397.

Drag. form 29. South Gaul. Burnt. Date: pre-early Flavian.

Drag. form 18. South Gaul. Date: Flavian.

Drag. form 18 rouletted, or 18/31. South Gaul. Date: Flavian.

Drag. form 27 (two sherds). South Gaul. Date: pre-early Flavian.

Two sherds of South Gaulish pottery. Date: late first century.

ER. 1409. (see p. 23).

Drag. form 37. South Gaul. The cupid (cf. Oswald [1936, No. 406]) in a triple medallion was used by Vitalis, Knorr (1919, 83.5). A closely similar bowl from Pompeii, Atkinson (1914, 60) has the cupid, large S-gadroons, leaf tendrils, dog, and wavy-line and arrowhead panel; it is tentatively attributed to Mommo. The ovolo is smudged, but probably has a trident tongue. Date: c. A.D. 70–90.

ER. 1418. (see p. 23).

Drag. form 15/17. South Gaul. Date: pre-early Flavian.

ER. 1422. (see p. 23).

Drag. form 42, dish with barbotine decoration. South Gaul. Date: Flavian.

Drag. form 27. South Gaul. Date: Flavian–Trajanic.

Drag. form 27. South Gaul. Date: Flavian.

Drag. form 18 (probably). Stamped (. . . .) ERN.M. Also a sherd of South Gaulish pottery.

ER. 1427. (see p. 23).

Drag. form 18 rouletted. Stamped PASTORC.E.

Drag. form 27. South Gaul. Date: Flavian.

Drag. form 38. Central Gaul. Date: Antonine.

Deposits later than the demolition of the baths.**ER. 1389.** (see p. 25).

Drag. form 18. South Gaul. Date: Flavian.

ER. 1405. (see p. 25).

Drag. form 33. Central Gaul. Date: Antonine.

Drag. form 31. Central Gaul. Date: Antonine.

Cordoned beaker (Stanfield [1929, Fig. 6, 30–33]). Probably Central Gaul. Part of this pot occurs in ER. 1406. Date: mid–late second century.

ER. 1406. (see p. 25).

Drag. form 18/31 or 31. Central Gaul. Date: mid second century.

ER. 1432. (see p. 25).

Drag. form 31. Central Gaul. Date: early–mid Antonine (two sherds).

(iii) Building Materials (Fig. 23)**Stone**

The stone generally used in the construction of the walls was Kentish ragstone, probably from the Maidstone district of Kent. In addition there was some use of modular flints, evidently quarried direct from the chalk, which had been particularly used in the foundation of Room 30. Water-worn pebbles derived from river gravels, perhaps from the Taplow Terrace, were used in the concrete of the walls and floors.

Scattered in the destruction debris of the bath building were many small fragments of Purbeck marble, a few of the larger shaped pieces of which are illustrated and described below. Judging from these it seems that they were probably mouldings and veneers in the bath building, but the mostly small size of the pieces suggests that the marble facings were mostly salvaged for re-use elsewhere prior to the demolition of the bath building.

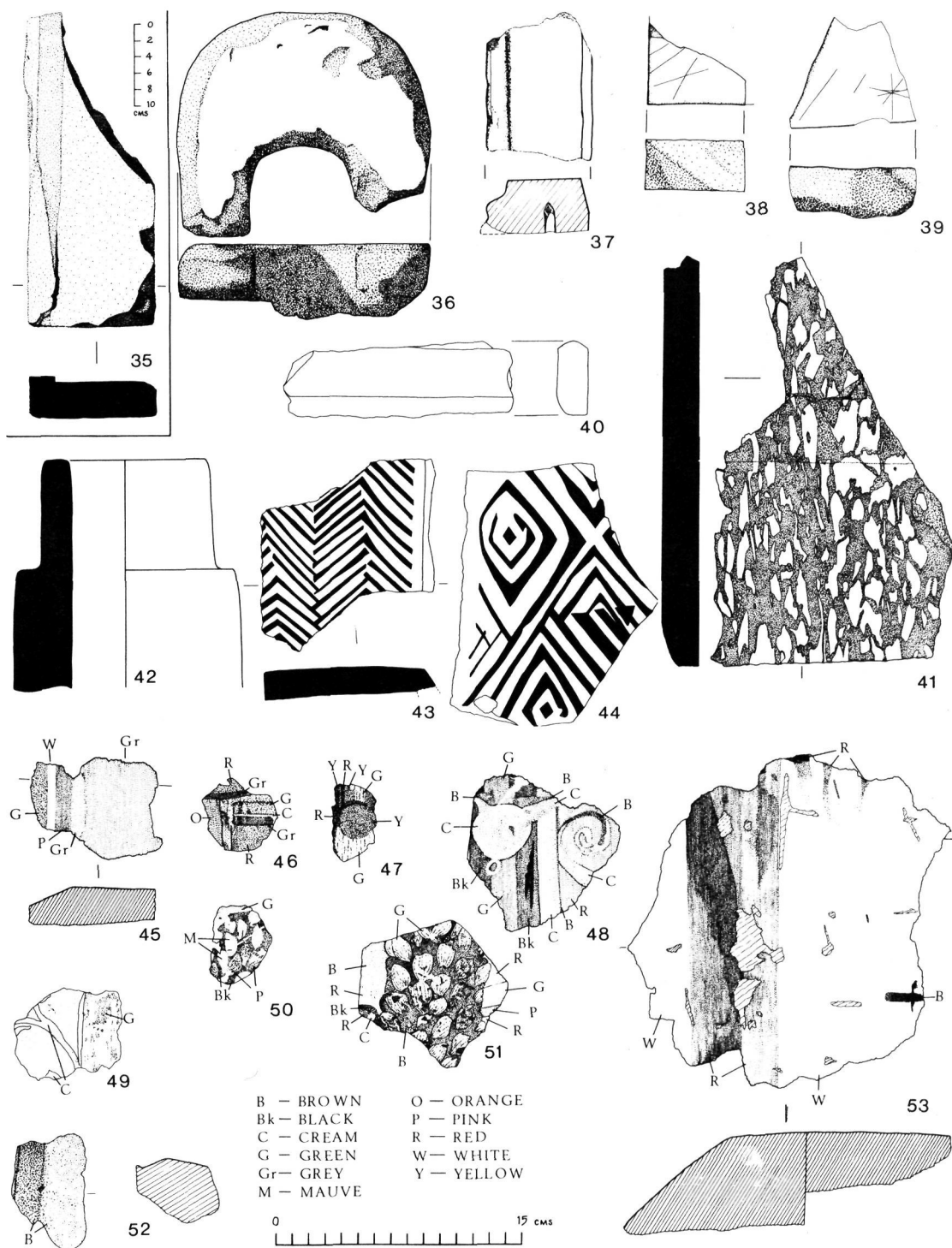


Fig. 23 Huggin Hill site: building materials, all (1/4) except No. 35 (1/8).

Marbles

Purbeck Marble (Fig. 23)

35. Marble slab with raised panel. From Room 29, section 5, layer 4 (Fig. 8). ER. 1418.
36. Base of door post socket found set into the mortar of Wall 14 on the east side of Room 13 (Fig. 3). The stone is roughly tooled to shape, while the upper surface is polished, suggesting that the stone had been reused in the wall (ER. 907).
37. Moulding, somewhat damaged, the unmoulded sides having been roughly tooled. Point of a corroded iron nail is set in the underside of the fragment (as drawn) (ER. 1408). Discovered in a dump in Room 36 (Fig. 9, section 7, layer 6).
38. Corner of a stone slab with a polished upper surface lightly scored with lines. The remaining unbroken sides are roughly shaped and have pink mortar adhering to them. From Room 29, section 5, layer 4 (Fig. 8). ER. 1418.
39. Corner of a stone slab the upper surface of which is polished and bears incised lines. From Room 29, section 5, layer 4 (Fig. 8). ER. 1418.

Italian Marbles

40. Portion of veined grey and white marble with polished upper and lower surfaces; the edges all having been broken, the lower edge as drawn having been roughly tooled to shape. Found in disturbed Roman deposits, together with painted wall plaster, in the region of Room 13 (ER. 908). This is identified by Mr. Francis Dimes of the Geological Museum as Bardiglio (or Bleu Turquin, or Italian Dove) marble from the Carrara area, Italy. The Carrara quarries were much exploited during the Roman period. The Bardiglio is a 'bluish' grey marble usually found on the edges of the main marble masses. Its colour varies in tone and the nature of its markings leads to a considerable number of names being given to it. Its bluish-grey colour with varying tones and markings make it one of the most important coloured types of Tuscany, while its close-grained and hard wearing characteristics make it suitable for flooring and paving as well as for decorative purposes.

Tiles

42. End of a water pipe in a hard, red fabric, so shaped as to be inserted into the end of an adjoining pipe. Found loose, overlying the east wall of Room 2 (p. 6).
43. Flue tile, hard, red fabric. Roller chevron pattern applied to the surface. Lowther Group 9, Lowther (1948, 10, Fig. 18). From a dumped deposit in Feature 17 (ER. 914).

Painted Wall Plaster

45. Carinated plaster moulding with coloured bands in green, white and pinkish-grey. From dumped deposits overlying Wall 19 (ER. 935). The form of this piece of plaster suggests that it may have been derived from a splayed window opening.
46. Possibly the corner of a decorative panel, mainly in greenish-blue and brown upon a red background. From dumped deposits in Room 27 (ER. 1425).
47. Yellow, circular blob upon greenish-blue paint, which has been overpainted on a red background. From dumped deposits in Room 27 (ER. 1425).

Italian marble not illustrated includes a small fragment found in the dumped filling of Room 32 (Fig. 9, section 3, layer 5). This has been identified by Mr. Dimes as "a somewhat granular, white coloured marble, which, from the absence of grey markings (although it must be realised that the specimen may not be representative of the stone in bulk) is judged to be Statuario (Statue) marble from the Carrara area, Italy."

41. A flat piece of variegated green and white marble identified by Mr. Dimes as Campan Vert, one of the 'classic' marble types from the French Pyrenees. Found in Room 29, section 5, layer 4 (Fig. 8), ER. 1418. There are slight traces of pink mortar adhering to one end. Mr. Dimes describes this marble type as follows:

"The Campan group of marbles are and were produced from the Espiadet Quarries, Campan Valley, Haute Pyrenees. In the past the Department of the Haute Pyrenees was one of the most important centres for French marble. Much development took place during the reign of Louis XIV who used many of the marbles in his palaces. The quarries at Campan yield a number of varieties of marble which are amygdaloidal in character. They are not truly metamorphosed limestones and they probably originated from modules of limestone which were later cemented together with a mainly greenish, chloritic matrix. Pink, brownish and red colouration is also found and this often determines the name given to the marble. Campan Vert is perhaps one of the best known of the marbles produced in the valley. The dominating colours are light and dark green and the white markings are amygdaloidal in shape."

This marble type was used by the Romans in both Rome and Ostia, Gnoli (1971, 156, Fig. 207) and in Britain in the Roman palace at Fishbourne, Cunliffe (1971, Vol. 2, 17).

44. Flue tile, hard, red fabric. Roller diamond pattern applied to the surface. Lowther Group 5, a type that is plentiful in Sussex and London, though of limited numbers in Surrey and elsewhere, Lowther (1948, 8, Fig. 12). Found in dumped debris in Feature 17 (ER. 914).

48. Decorative panel of yellow, pink and pale green upon a red and black background. Found in Room 31 in dumped destruction debris (ER. 1423).
49. Green zone and cream lines painted over a red background. From disturbed Roman deposits in the area of Room 13 (ER. 908).
50. Leaf shaped decoration in varying shades of mauve over a black background, with green painted over red at one edge of the fragment. From dumped deposits in Room 27 (ER. 1425).

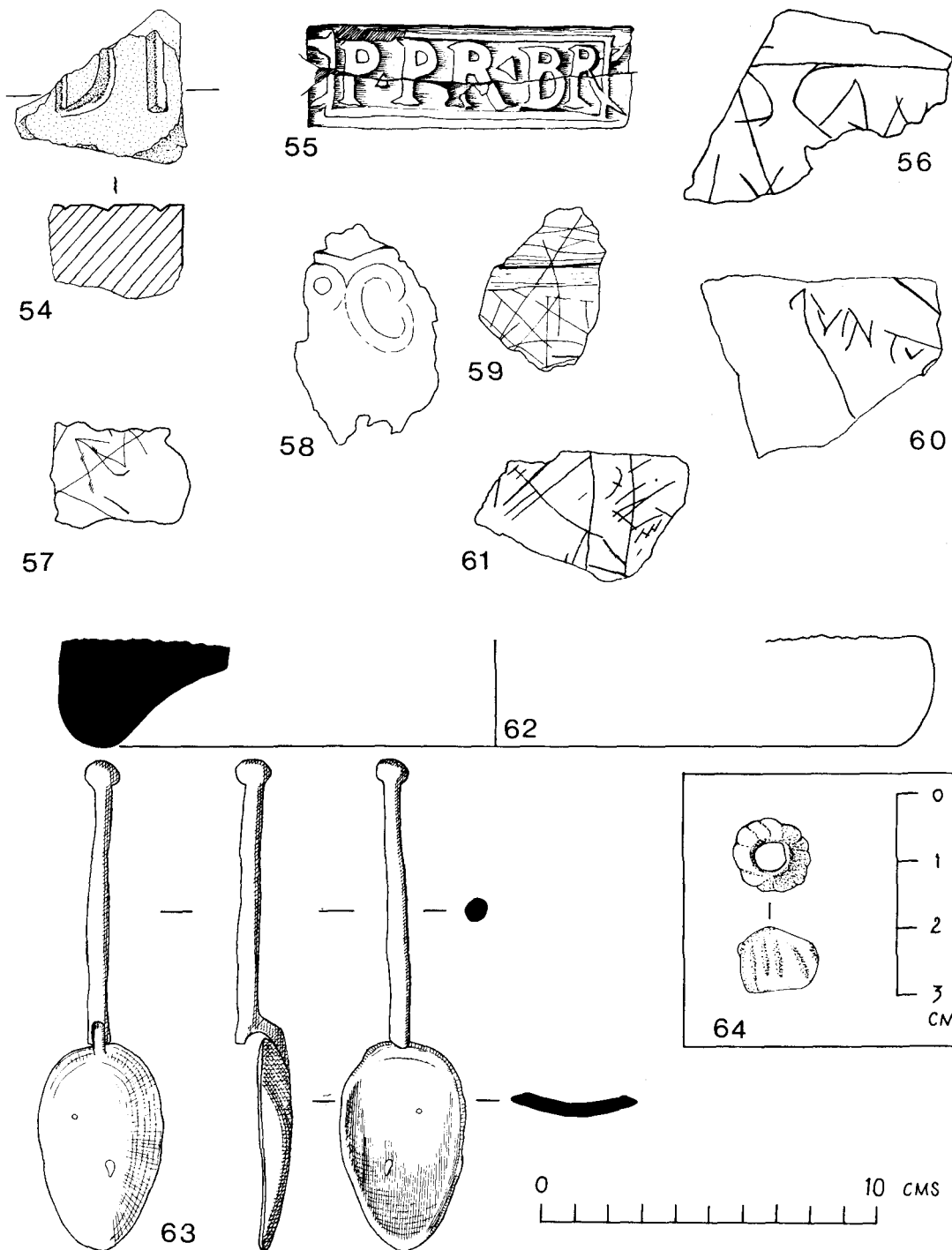


Fig. 24 Huggin Hill site: inscriptions and miscellaneous finds, all ($\frac{1}{2}$) except No. 64 ($\frac{1}{1}$).

51. Green leaf shaped decoration upon a black background; zone with red on either edge upon which there is some green and a little black painting. From dumped deposits in Room 27 (ER. 1425).
52. Wall plaster moulding painted black. From dumped

(iv) Inscriptions, Tile Stamp and Graffiti
(Fig. 24)

54. Small fragment of Purbeck marble bearing part of two letters of an inscription. In each letter recess there are clear traces of red paint. Found in the dumped debris in Room 31 (ER. 1423).
55. Tile stamp P.PR.BR on an almost complete *tegula*. The inscription within a border with ansate terminals, is one type of the official tile stamps from London which also read P.P.BR.LON, and are believed to refer to the *procurator* of the Province of Britain, Merrifield (1969, 72), Marsden (1975, 68). Stamps of similar type in the Museum of London collection include those under the following accession numbers: 2180, 2181, 2183, 2183B, 2188. The stamped tile was found in dumped deposits in Room 29 (Museum accession No. 24855).
56. Graffiti inscription scratched on red painted wall plaster, interpreted by R. P. Wright as
... S CAM ... / ... IV ...
Wright (1965, 225, No. 21).
Found in dumped brickearth overlying Wall 19, at the

(v) Miscellaneous

62. Part of the base (?) of a limestone vessel. Identified by Mr. Dimes as Barnack Stone, Lincolnshire Limestone Division of the Inferior Oolite Formation, which is of Jurassic age. Bearing in mind that the Lincolnshire limestone is a very variable deposit in which similar stone may be found at different localities, it seems that this specimen came from the village of Barnack which lies between the rivers Welland and Nene. The hard shelly oolite was quarried here at least in the Roman period until the fifteenth century when the stone was exhausted. Found in dumped brickearth overlying the floors in Room 2 of post-bath Building 'B' (ER. 1401).

(b) The Cheapside Baths Site

(i) Roman Coarse Pottery (Fig. 25)

Bath building. Filling of Period 1 Hypocaust (ER. 346). Late first-early second century A.D.

65. Dish. Flakey, red-brown ware with a grey core, and a mica-dusted surface. Cement is adhering to the rim and outer surface, and also to one broken edge (cf. Cunliffe [1971, Vol. 2, Fig. 84, Type 19] where the type is dated up to the late first-early second century. In London mica-dusted dishes do not seem to date from much before A.D. 100, e.g., Bird [1973, Fig. 14, No. 162] dated Trajan-early Hadrian).

Bath building. Blocking of Period 2 hypocaust flue (ER. 344). Latter half of second century.

66. Jar with everted rim. Hard, grey-brown ware with dark grey burnished surfaces. Second century form. Samian ware from this deposit primarily dates from the latter half of the second century (see p. 64).

deposits in Room 27 (ER. 1425).

53. Carinated plaster moulding, perhaps from a splayed window opening, with a broad red band on the angle, and traces of red and brown decoration on one side. Found in destruction debris in Room 31 (ER. 1423).

south end of the eastern *caldarium* of the baths (ER. 935) (Museum accession No. 24493).

57. Scratched graffiti possibly cursive script, on red painted wall plaster, found as No. 56 above (ER. 935).
58. Scratched graffiti decoration of curvilinear lines upon Roman white painted wall plaster. Found unstratified on the site of the Roman bath building east of Huggin Hill (ER. 1428).
59. Scratched lines on a piece of red painted wall plaster, from dumped clay in the *caldarium*, Room 18 (ER. 940).
60. Cursive inscription, interpreted by Mr. R. P. Wright as the name QVINTVS, scratched on red painted wall plaster, Wright (1965, 225, No. 21). Found as No. 56 above (ER. 935) (Museum accession No. 24492).
61. Scratched lines on a piece of plaster painted red except for a white and green line at the edge. Found as No. 56 above (ER. 935) (Museum accession No. 24494).

63. Corroded white metal spoon, possibly of silver, from dumped deposits around Room 29 (Museum accession No. 25120).

Glass

64. Green glass bead of melon type. Found in the dumped deposits in the region of Room 29.

Other glass (not illustrated) mostly from the dumping into the baths include fragments of square green glass bottles, and green glass cups. There is also a little green window-glass, one piece of which is from the right-angled corner of a window pane.

Bath building. Filling of Period 2 hypocaust (ER. 340). Late second-third century.

67. Jar with everted rim. Hard, brown-grey ware with a grey core. The rim and exterior have a grey-brown slip.
68. Beaker. Fine, hard, white ware with metallic grey slip inside and outside. The outside is decorated with a zone of rouletting. ?Nene Valley. Probably third century. The latest samian ware from this deposit dates from after the middle of the second century (see p. 64).

Bath building. Overlying the demolished bath building (ER. 334). Late second-third century.

69. Jar with everted rim. Hard, grey ware with greyish slip on the exterior surfaces.

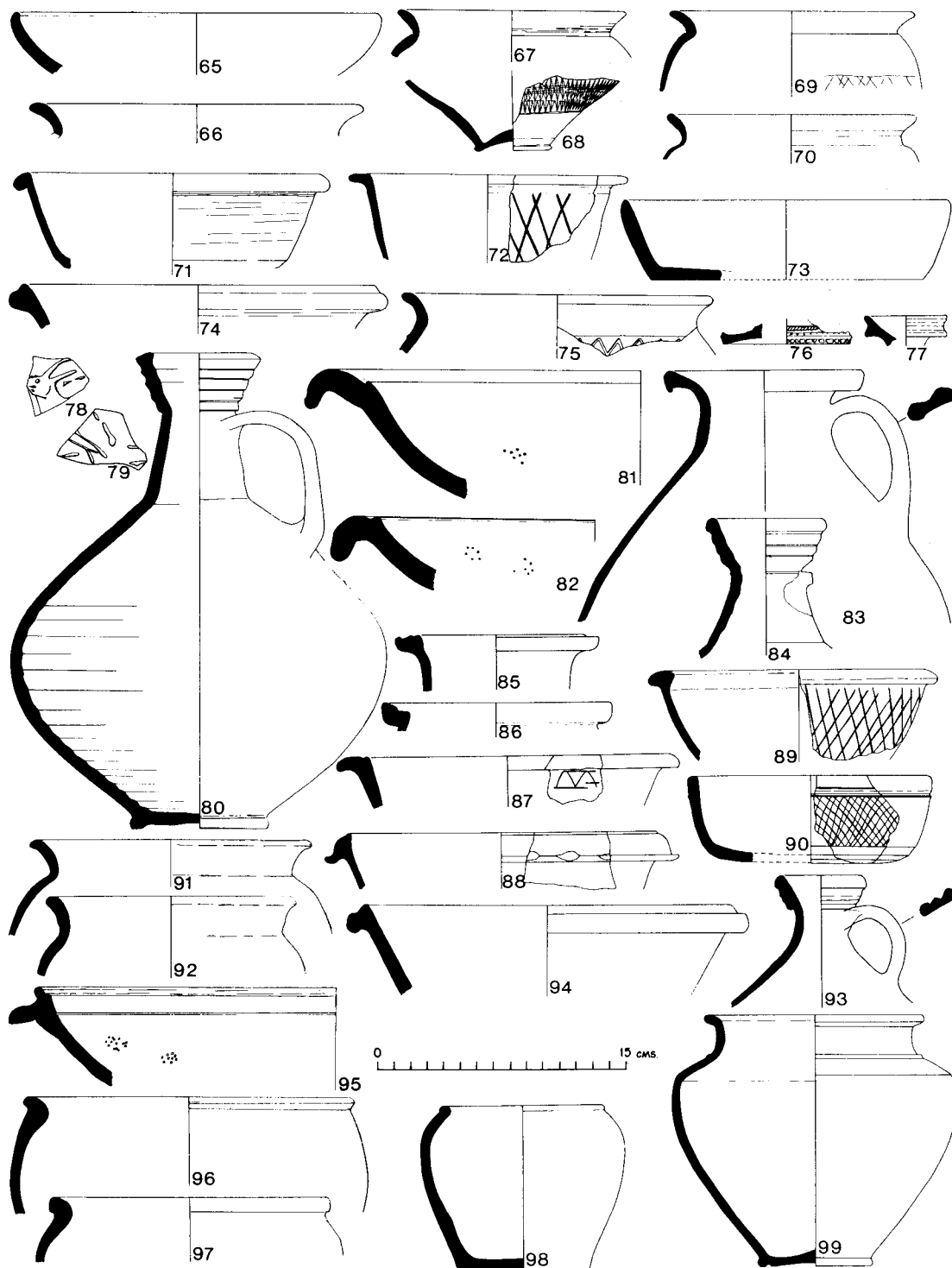


Fig. 25 Cheapside baths site: pottery (1/4).

70. Jar with everted rim. Brownish, sandy ware with black, polished exterior and lip.
71. Dish with moulded rim. Polished surfaces but no decoration. Hard, grey ware (cf. Kenyon [1948, Fig. 19, No. 1] dated second to early third centuries).
72. Dish with a plain, wide rim. Grey-brown, sandy ware with black surfaces. Lattice decoration on the exterior below the rim.
73. Dish. Hard, pale grey ware with a darker grey exterior. Interior coated with a black slip.
74. Flanged bowl. Hard, pale grey ware, with grey-white slip on inside and top of rim.
75. Jar. Hard, grey, sandy ware, with burnished rim. Lattice decoration below.
76. Tazza. Pedestal base. Orange ware with cream slip. Stabbed decoration.
77. Flagon. Fine, pink ware, with white slip on the exterior. (This is a mostly first century type cf. Frere [1972, Fig. 101, No. 57]).
78. Beaker of fine, white ware and a metallic grey slip. Barbotine decoration of a hunting scene of a stag or hare, no doubt being chased by dogs. (Latter half of second century A.D., cf. Frere [1972, Fig. 122, Nos. 791-3]).
79. Beaker of fine, white ware, perhaps part of No. 78. This includes part of a hunting scene and shows the two rear legs of an animal, probably a stag, and two front legs probably of a hunting dog. Samian ware from this deposit shows that it dates from after the later second century-early third century (see p. 63).

Bottom of water-tank, Feature 2 (ER. 356B). Second century A.D.

80. Flagon. Hard, fine sandy, white ware with a pale brown-grey surface. (Museum accession No. 22736) (cf. Kenyon [1948, Fig. 43, No. 10] dated c. 125-130 A.D.).

Main filling of the water-tank, Feature 2 (ER. 356A). Antonine.

81. Mortarium with a hooked rim. Hard, buff, sandy ware, with a greyish surface which on the rim merges to a light yellow in places. Interior surface is gritted with flint and brick. The lower part of the mortarium inside is burnt black (cf. Kenyon [1948, Fig. 18, No. 12] dated early second century).
82. Mortarium. Hard, sandy ware, with red exterior merging to a grey core, merging to a burnt dark grey interior surface. Flint grit on interior surface. First century type (cf. Kenyon [1948, Fig. 18]).
83. Flagon, probably originally having two handles of which one survives. Hard, pinkish, fine ware with a grey core and exterior buff slip (cf. Kenyon [1948, Fig. 28, No. 20] where the type is dated up to the early second century A.D.).

(ii) Samian Pottery

by Joanna Bird and Geoff Marsh

(NB. These finds are not illustrated, but may be consulted at the Museum of London)

ER. 334. (see p. 63).

Dr 37, with fragment of ovolo; Central Gaul, Antonine.
Dr 37, Central Gaul. The ovolo is not clearly impressed,

84. Flagon, with a single handle. Hard, buff, sandy ware.
85. Jar with reeded rim. Fine, hard, pinkish ware with a grey core and a mica-dusted surface.
86. Jar. Pink, sandy ware with a cream coloured slip.
87. Flanged bowl. Grey, sandy ware. Zone of decoration below flange (cf. Kenyon [1948, Fig. 19, No. 23] dated latter half of second century-third century A.D.).
88. Tazza (?). Hard, orange ware, with a cream slip. Finger pressed indentations on the rim.
89. Dish with moulded rim. Fine, grey ware, with black exterior slip, and lattice decoration (cf. Kenyon [1948, Fig. 19, No. 20] mostly Antonine and later).
90. Dish. Black, sandy ware, with polished surfaces. The exterior is decorated with a lattice pattern (cf. Cunliffe [1971, Vol. 2, Fig. 105, Type 201] dated mostly second half of the second century A.D.).
91. Jar with everted rim. Hard, grey ware with a metallic grey burnished rim and shoulder.
92. Jar. Grey, sandy ware with roughly polished exterior surface.
93. Flagon. Hard, pinkish ware with cream slip.
A considerable amount of samian ware from this deposit indicates that the filling occurred during the Antonine period (see p. 64).

Timber-lined well, Feature 8 (ER. 354). Fourth century A.D.

94. Flanged bowl. Grey, sandy ware with black slip on interior surface and on the rim.
95. Mortarium. Hard, fine, buff ware, with orange patches on rim. Interior has sandy grit. This is a characteristic fourth century type (cf. Kenyon [1948, Fig. 18, No. 25]).

Timber-lined well? (Fig. 11, No. 12) (ER. 330). First century A.D.

96. Jar with bead rim. Soft, brown ware with flint grit. Black, rough surfaces. Pre-Flavian type (cf. Cunliffe [1971, Vol. 2, Fig. 102, Type 166]).
97. Jar with bead rim. Grey ware with large pieces of flint grit.

Well? (Fig. 11, No. 11) (ER. 328). Flavian.

98. Jar with bead rim. Black ware with some shell grit; much burnt soot on shoulder (Museum accession No. 21759).
99. Jar. Hard, grey, sandy ware, with polished rim, shoulder and lower part of body (Museum accession No. 21758). This is a typical Flavian type (cf. Sheldon [1974, No. 73] dated Trajanic).

but is probably one used by Mercator (Stanfield & Simpson [1958, Pl. 146, 11 and 12] shows the rosette). The Venus is 0.331, the sea-beast similar

to 0.33. Mid-late Antonine.

Curle 11, South Gaul, Flavian-Trajanic.

Ludowici Tg, East Gaul, Antonine; burnt.

Dr 38, Central Gaul, mid second century; burnt.

Dr 37, Central Gaul, Antonine. Three sherds, one burnt.

Dr 32, Central or East Gaul, later second century.

Dr 31, Central Gaul, Antonine. At least three sherds.

Dr 18/31, Central Gaul, Hadrianic-early Antonine. Two sherds.

Dr 33, Central Gaul, Antonine. Four sherds.

Dr 33, East Gaul, Antonine. Three sherds.

Closed vessel with barbotine decoration, cf. Oswald & Pryce (1920, Pls. 79 and 80), probably East Gaul and later second-early third century.

Two Central Gaulish sherds.

ER. 340. (see p. 61).

Dr 37, in the style of Cinnamus of Lezoux: his ovolo 1 with astragalus border, leaf, and circle, Stanfield & Simpson (1958, Pl. 160, 35). For a similar scroll with double medallion, cf. Stanfield & Simpson (1958, Pl. 162, 60, c. A.D. 155-175).

Dr 36, undecorated; Central Gaul, mid second century.

Dr 18/31, East Gaul, Hadrianic-early Antonine.

ER. 344. (see p. 61).

Dr 37, Central Gaul, in the style of Iullinus. The corded border and circle terminal are shown on Stanfield & Simpson (1958, Pl. 127, 22, the panel with a stalk on Pl. 126, 11, and the leaf-spray on Pl. 126, 14; the foliage may be the trilobed motif on Pl. 126, 15). Mid-late Antonine.

ER. 355. (see p. 43).

Dr 37, with a fragment of ovolo; Rheinzabern, later second-early third century.

Dr 31, East Gaul and perhaps Argonne; late second century onwards.

ER. 356A. (see p. 63).

Dr 30, South Gaul, with trident ovolo. Flavian.

Dr 37, Central Gaul; there is no apparent parallel for the ovolo. Probably Hadrianic-early Antonine.

Dr 37, Central Gaul: a bowl in the style of Paterclus (Stanfield & Simpson [1958, Pl. 72, 38] has the leaves and gladiators, and may be from the same mould). The gladiators have no exact parallel in O. c. A.D. 125-145.

Dr 37, Central Gaul, in the style of the Sacer-Attianus group. Attianus used the horse and rider, O. 251 (Stanfield & Simpson [1958, Pl. 85, 3], and the foliage is shown on Pl. 85, 1). The other figure is probably a panther, O. 1512. c. A.D. 125-150.

Dr 37, Central Gaul, in the style of Sacer, who used the horseman with whip O. 246 (Stanfield & Simpson [1958, Pl. 83, 9 and 12]); the scroll and leaf are probably those on Pl. 83, 8, the ovolo that on Pl. 84, 2, in the Donnaucus-Sacer style. The bird is O. 2250A. c. A.D. 125-145. Slightly burnt.

Dr 37, Central Gaul. The ovolo was used, with similar beads, by Sacer (Stanfield & Simpson [1958, Pl. 84, 16]. c. A.D. 125-145).

Dr 37, Central Gaul. The figure is Vulcan (0.66), apparently lacking the tongs as on a bowl by Cinnamus (Stanfield & Simpson [1958, Pl. 159, 23]). Antonine.

Dr 37, South Gaul. A closely similar bowl from Fishbourne, Dannell (1971, 20) is attributed to Passienus: it has the goose (0.2244), leaf, and scrollery. Early Flavian.

Dr 37, South Gaul. Large saltire, and panels with a lion (0.1417) and boar (0.1690) separated by a leaf, and a deer (0.1701). The ovolo probably has a trident tongue. The animals are all shown on a bowl from Northwich (Wild 1972, 17), but the arrangement of panels on the Cheapside bowl suggests a slightly later date. c. A.D. 80-100.

Dr 37, South Gaul. Spurred bud in a wreath festoon with corded tassel. c. A.D. 75-90.

Dr 37, South Gaul. Tiny bird in a medallion. Flavian.

Dr 37, Les Martres. The ovolo has no apparent parallel. c. A.D. 100-130.

Dr 37, Central Gaul, Hadrianic-early Antonine.

Dr 37, Central Gaul, mid second century.

Dr 38, East Gaul, mid second century.

Curle 15, Central Gaul, Antonine probably.

Dr 37, Central Gaul, Antonine. Four sherds.

Dr 33, Central Gaul, Antonine. Three sherds.

Dr 27, Central Gaul, with the upper portion filed off to form a simple cup; first half of second century.

Dr 27, South Gaul, Flavian-Trajanic. Three sherds.

Dr 27, Central Gaul, first half of second century. Six sherds, one has an illegible stamp.

Closed vessel, Central Gaul, mid second century.

Dr 36, South Gaul, with unusually sharp angle cf. Oswald & Pryce (1920, Pl. 53, 20). Neronian.

Dr 36, Central Gaul, first half of second century.

Dr 36, East Gaul, mid second century.

Dr 36, burnt: fabric not identifiable.

Dr 42, dish with handles, Central Gaul, mid second century.

Dr 29, South Gaul, with fragment of foliage; Neronian-early Flavian.

At least 16 sherds of Dr 18/31, including at least two sherds of Dr 18/31R. Two are East Gaulish, the rest Central. One has a rivet hole. Hadrianic-early Antonine in general.

(iii) Miscellaneous Small Finds (Fig. 26)

100. Bone pin. From bottom of the timber-lined tank, Feature 2 (ER. 356B).

101. Head of bone pin. From the main filling of the timber-lined tank, Feature 2 (ER. 356A).

102. Writing tablet of coniferous wood, both shrunken and distorted in drying out. One edge is perforated

with two holes for thread to bind this to another tablet, while the border in the middle of each of the long sides is cut. The back of the tablet was evidently flat, and on neither side is there any trace of writing. Found in the bottom fill of the timber-lined tank, Feature 2 (ER. 356B).

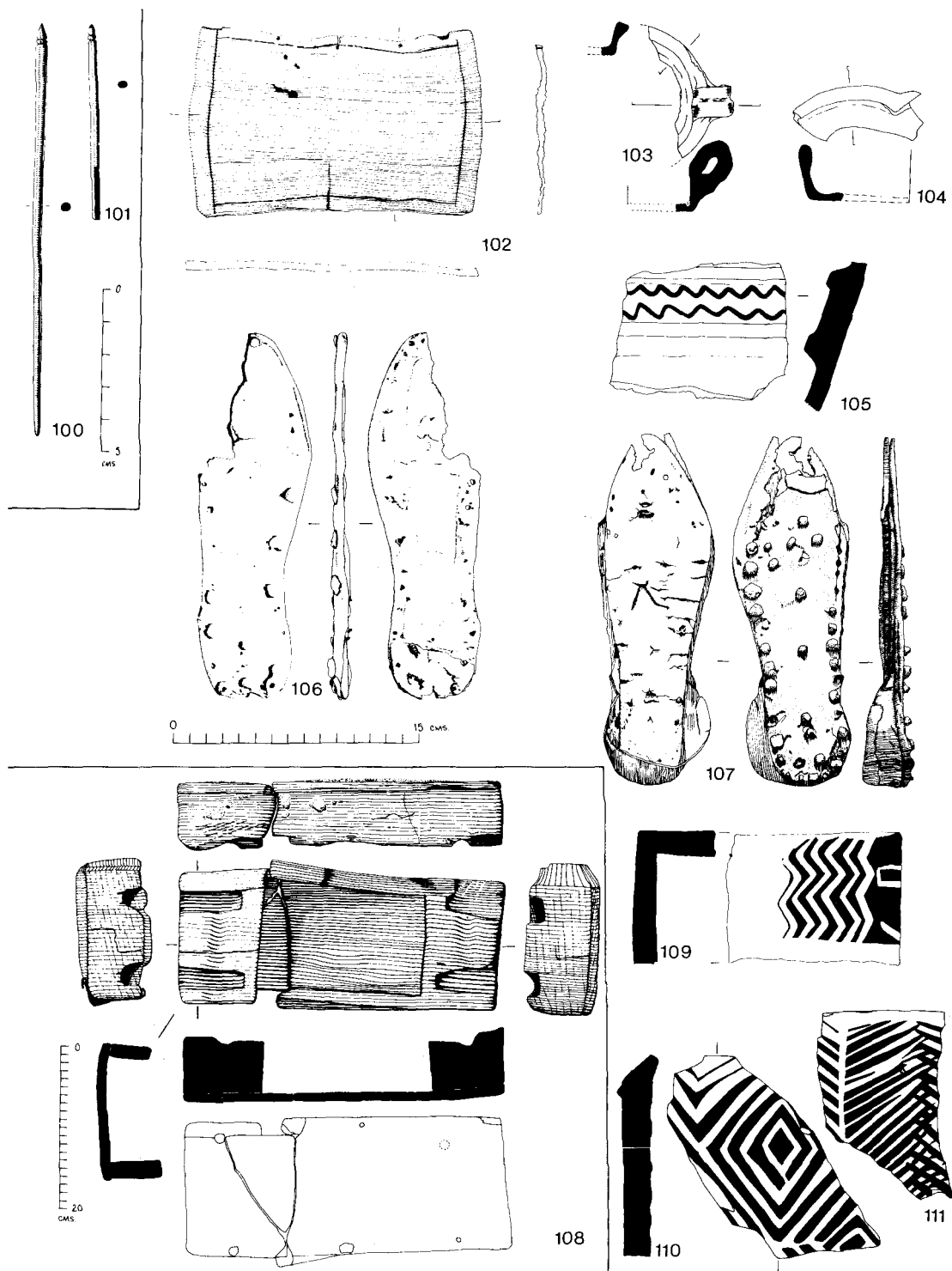


Fig. 26 Cheapside baths site: miscellaneous finds. Nos. 100-101 ($\frac{1}{2}$), Nos. 102-107, 109-111 ($\frac{1}{4}$) and No. 108 ($\frac{1}{8}$).

103. Open lamp or lamp holder with a handle. Soft, buff, slightly micaceous ware (cf. London Museum Catalogue No. 3 [1946, Pl. 29, No. 7]). Found in a brown stratum containing second century sherds, abutting against the exterior face of the east wall of the bath building at the junction of Rooms 4 and 7 (Fig. 13) at phase 2 hypocaust level (ER. 339).
104. Open lamp with projecting nozzle, the whole interior surface of the side of the lamp being heavily burnt. Hard, pink ware with a grey core and a cream coloured slip. Found in the main filling of the timber-lined tank, Feature 2 (ER. 356A).
105. Fragment of a large Roman storage jar. Red ware with a pale grey core. Scatter of flint grit inclusions. Unstratified find from the northern edge of the site (ER. 300, Museum accession No. 21302).
106. Roman shoe sole with iron hob nails, probably of a left foot. The insole is missing, to expose the impression of a piece of leather filling along the centre of the shoe. At the heel is a piece of leather packing. From the main filling of the wood-lined water tank, Feature 2 (ER. 356A).
107. Roman leather shoe sole of a right foot, the pointed toe of which is damaged. The insole is almost complete, and the heel support is intact. On the bottom the iron hob nails are distributed in a simple arrangement with a diamond pattern on the ball of the foot. Found in the main filling of the wood-lined tank, Feature 2 (ER. 356A).
108. Wooden box-like object, probably of oak, of uncertain purpose, made from two pieces of wood. The main part is a box with, at each of the long ends, three half complete drilled holes possibly to contain wooden pegs. The bottom of the box (as drawn) is covered with a flat board held by iron nails to the main part of the box. The top is all broken away, while on one side is a diagonal slit. Ivor Noël Hume suggests that as the opening in the centre of the box is the same size as the end of a box flue tile, then it might have been used as a damper to place over the open flue tiles at roof level on the bath building. The inside of the box is coated with a black, resinous substance which may have been condensed from wood smoke. Found in the bottom of the wood-lined tank, Feature 2.
109. Chevron pattern on a box-flue tile, with traces of lettering. This is not a type illustrated by Lowther (1948). This was one of several tiles found in the baths (ER. 347) and decorated as was this fragment, also with the letters TxTxP, these letters probably being the initials of the tile maker, the crosses being stops between the letters. The letters on No. 109 seem to be the upper half of the last two letters. . . xP. Found in the hypocaust of the *caldarium* apse (Room 5) of the Cheapside bath building, phase 2 (ER. 347).
110. Diamond flue-tile pattern, Lowther group 5, Lowther (1948, Fig. 12, No. 46). From black deposit (ER. 334) overlying the main flue and the tank platform of the bath building (see p. JJJ).
111. Plain chevron flue-tile pattern, Lowther group 9, cf. Lowther (1948, Fig. 18, No. 44). From the same deposit (ER. 334) as No. 110.

(iv) Inscribed Writing Tablet

by Professor E. G. Turner and H. Chapman

112. Inscribed writing tablet (Plate 13), Museum of London accession No. 20221, from the main filling

(ER. 356A), probably of Antonine date, of the wood-lined water tank, Feature 2 (Fig. 16).

Professor E. G. Turner reports on the tablet as follows:

“Front (Plate 13)

144mm wide, 54mm high. Rim at left, top, right, clearly broken at foot right across. Nick in centre top, to hold string. Rim of c. 10mm. Four vertical sawcuts go right to top edge of table. Central space hollowed, and a deeper cut (c. 28mm wide) in very centre, presumably for seals. Left hand and right hand panel contained wax, central depression indented for seal-impressions. The scribe's stylus went right through the wax, and left marks on the soft wood. A certain amount of dirt (? wax etc.) collected in these marks. Only the right hand panel has proved readable, and contains four names of Roman citizens (praenomen, nomen, cognomen), three in genitive (sc. ‘sigillum of N.N.’) and one in nominative. The left hand panel contains nine lines of writing (scratching) undeciphered.

Left

Right

. ub . . lifuri

Publili Furi? Publili is
perhaps a dittography for
Publi, which is a praenomen,
while Publilius is a nomen.

. . . .

Secundi

L Octavius

Crescens

C probably good reading but
top horizontal goes right
across.

5 L Ca . . Gamimedi

Cati ?

Marci Semproni

. .

Flori

Back (Plate 13)

Two lines of writing upside down in relation to front (i.e. raised rim is at foot). The writing (scratching) is at the top of the available space, and there seems to be nothing below it.

<i>traces</i>	<i>du . s</i>	<i>traces</i>
ret . .	<i>no trace</i>	quadr . . t . . /
	<i>blank</i>	

1. ? duos
2. Apparently not quadraginta. ? quadrantem

Note: no middle section cut out on this side."

Regarding the type and use of the tablet Hugh Chapman writes:

"This fragment of a tablet provides another example from London of a multiple leaved Roman legal or business document. Amongst a group of wooden writing tables recently recovered from a late second century pit in Southwark (shortly to be published) were three tablets that could be shown to have been originally hinged together to form a triptych. One side of the second leaf, i.e., page 4 of the complete document, had been incised with a broad, flat, horizontal groove similar to the Cheapside bath fragment. Comparison with a series of tablets from Pompeii, notably the private accounts of L. Caecilius Jucundus (*C.I.L.* IV Suppl. fasc. 1. 3340 No. 1 *et seq.*) indicated that such triptychs were used to record business agreements or similar transactions requiring the presence of witnesses. The groove received the seal-impressions of the witnesses, whose names were written alongside. Pages 2 and 3 of a 'business' triptych contained the main text of the document and were bound together with threads tied and held in the groove on page 4 by blots of wax bearing the seal-impressions. In this way an agreement between two parties was safely held

under seal and forgery prevented. On page 5 a resume of the main text was written to provide a quick means of checking the content of the document without breaking the seals. The Cheapside fragment is probably the second leaf of a triptych and bears the names of four Roman citizens who acted as witnesses to a business agreement or similar. It is a pity that no more of the document has survived."

(c) Identification of Bones from Both Sites (Table 1)

Animal Bones: Juliet Clutton-Brock, Department of Zoology, British Museum (Natural History).

Bird Bones: Jennifer Gask, Sub-Department of Ornithology, British Museum (Natural History).

As the bones from the Roman bath deposits on the sites can only be considered as casual finds due to the circumstances of their discovery, it would not be worth attempting more than identification of the samples. A fuller report may be consulted at the Museum of London.

With the exception of the one fragment of dog, the bones all appear to be debris from food, with ox, pig, sheep (and goat?), red deer, roe deer, and bird all represented; a surprising assortment of species considering the relatively small number of bones. There is much evidence of butchery and one piece of a lumbar vertebra of an ox (ER. 1425) shows chop marks on the underside of the neural arch, indicating that the method of butchery was probably by chopping downwards along the mid-line of the vertebrae with the carcass hung up by its hind quarters (Philip Armitage, personal communication). A high proportion of the bones comes from small domestic pig.

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6. ACKNOWLEDGEMENTS

Grateful thanks are extended to all who contributed to making this report possible, whether on site or in the drawing office. In the case of the Huggin Hill baths the excavations were carried out entirely by volunteers of the former City of London Excavation Group, and thanks are especially due to Nicholas Farrant who undertook supervision at weekends in addition to lending excavation equipment from the Wandsworth Historical Society. Special thanks are also due to

Huggin Hill Baths

	Ox	Pig	Sheep	Sheep or goat	Dog	Red deer	Roe deer	Domestic chicken	Domestic goose
ER.									
911								1	
912		1							
918		1?							
930		2							
944		1							
1372		1		1					
1375	1?			1?					
1380	1							1	1
1381	1	1							
1388	1?								
1389									1
1391	2								
1392							1?		
1393	1								
1394				1					
1403								1	
1408	5?	3	1					1	
1409						1		1	
1412	4	1							
1413	1?								
1420	1?	1							
1422		3		1?				1	
1424		2	1						1
1425	2	1						1	
1431				2?					
334	2	1			1				
345			1						
356A		1							

Cheapside Baths

Table 1. Bones from Huggin Hill and Cheapside baths sites.

Brian Philp and to the members of the West Kent Border Excavation Group who at very short notice abandoned their own project to assist in the initial investigation of the baths soon after it was discovered in 1964.

In the case of the Cheapside baths grateful thanks are extended to Ivor Noël Hume who has helped and advised in all stages of the preparation of that report. It was due to his working single-handed for the then Guildhall Museum, without any financial support or staff and equipment, and with a pressing need to watch other building sites, that it was not possible to publish fully the Cheapside baths at the time, though he wrote a useful descriptive booklet, produced by the Sun Life Assurance Company.

The final preparation of these reports had been carried out as part of the work of the Department of Urban Archaeology of the Museum of London, and thanks are extended to Vanessa Mead and Anna Amblin who undertook the drawings, their initials appearing on their work. Advice on the preparation and content of these reports was gratefully received from Hugh Chapman, Tony Dyson, Brian Hobley and Ralph Merrifield, while the typing was carried out by Diana Twells.

The Society is grateful to the Department of the Environment for a grant towards the cost of publishing this report.

THE ARCHAEOLOGY OF STAINES AND THE EXCAVATION AT ELMSLEIGH HOUSE

by
Kevin Crouch

This report on Staines (the Roman settlement of *Pontes*) has been divided into two parts.

Part 1 deals with some of the evidence for settlement from the prehistoric (neolithic?) to the late medieval, with emphasis on the Roman occupation. Information has been collated from literary references, chance finds and excavations to 1975. The 1974-75 excavation at Elmsleigh House forms Part 2 of the report.

Part One

Staines (TQ 035 716) occupies a position at the confluence of the River Colne with the River Thames at the south-western edge of the old county of Middlesex¹ (Fig. 1). A number of chance finds have been recorded since the eighteenth century and the first archaeological excavation was conducted in 1969. This was followed by a number of small scale excavations on behalf of the then London Museum and the London and Middlesex Archaeological Society by Mrs. M. Rendell. In 1974 due to the imminent redevelopment of the town centre, the London and Middlesex Archaeological Society appointed the author as Field Officer.

Geology and Geography

The 'drift' geology consists of the Thames Valley River Alluviums, Brick earth (an alluvial) and the Flood Plain Gravels. The 'solid' geology is that of London Clay, the top surface at approximately 6.09m O.D. The Flood Plain Gravels abut each side of the Thames at Staines outcropping at approximately 14.00m O.D.; this being exploited by the siting of the medieval bridge and most probably its Roman predecessor. Brick earth outcrops to the east of Staines along the line of the modern A30 road and the river alluviums outcrop to the north and south of Staines.

The Flood Plain Gravels on Elmsleigh House site (TQ 0376 7165) and the Friends Burial Ground (excavated 1975-76, TQ 0372 7168) have a top surface at 12.04m O.D., and shelve southward of an east-west line (Fig. 2) to approximately 12.00m O.D. at the southern edge of the sites. These are covered by a build-up of alluvial deposits ranging from muddy silts (south of the line) to sands and gravels (in the north) with a level surface at 13.48m O.D. During the prehistoric period these sands and gravels were occupied and in the Roman period were important in the determination of the line of the major London-Silchester road and the extent of the settlement to the sides.

In the third century silts covered part of the earlier occupation abutting against sands and gravels at 13.48m O.D. This flooding only reaching as far as the Friends Burial Ground (see Fig. 2 and p. 74). During the late third and early fourth century the deposited silts dried out and were occupied. On the Elmsleigh House site (Fig. 8) there are indications of flooding during the Saxon period and again in the late thirteenth

century removing most of the earlier levels, but the flooding did not apparently extend as far towards the High Street as the earlier floods. From this time onwards the land lying below 13.48m O.D. was marsh and was not re-occupied until the nineteenth century.

Roman Staines

At present there is insufficient evidence to provide a proven picture of the origin and subsequent development of Roman Staines. A possible course of development is outlined below in the hope that this will provide a model which may be proved or disproved by future archaeological work. It must, however, be emphasised that the picture presented is a hypothetical one only.

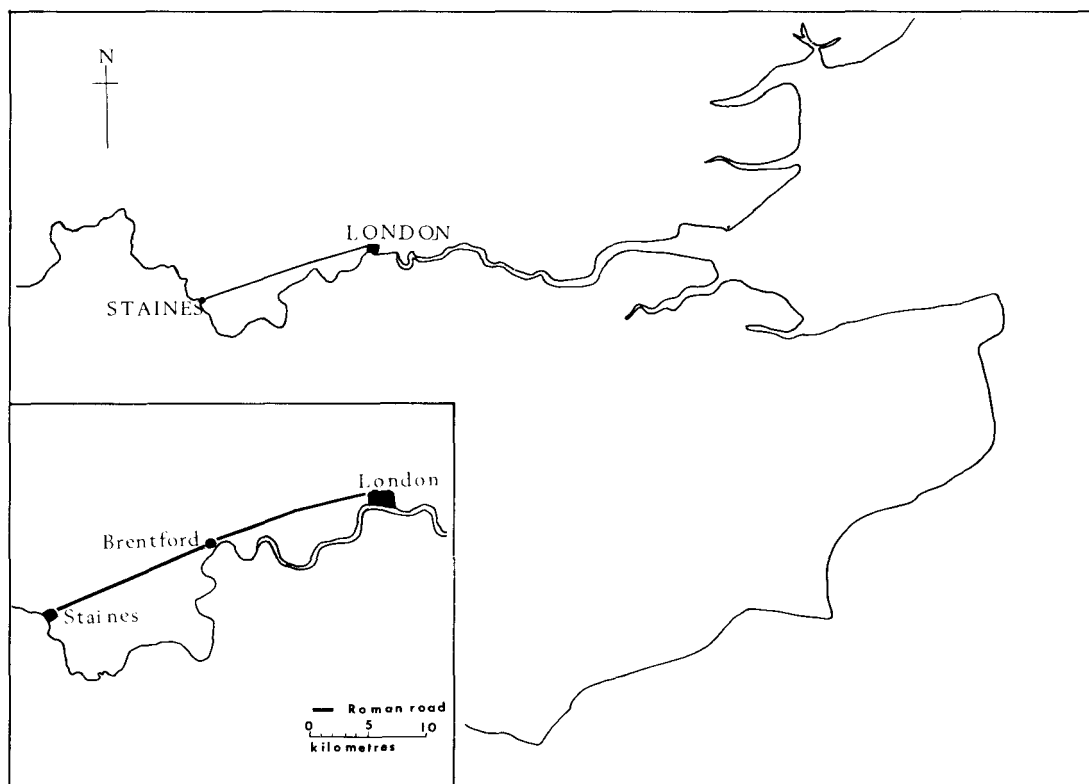


Fig. 1. Location map of Staines.

Staines (*Pontes*) lies $20\frac{1}{2}$ Roman miles (19 miles) from Roman London (*Londinium*) and $28\frac{1}{2}$ Roman miles (25 miles) from Roman Silchester (*Calleva*)² on the London-Silchester road (Margary 4a).³ The outcrops of gravels from the alluvial muds of the flood plain, the confluence of the rivers, Thames and Colne and marsh to the south were contributory to the siting of the road and the development of the settlement.

The Thames was probably bridged at Staines and this is supported by its Latin name of *Pontes* ('at the Bridges'). The first bridge may have been of pontoon construction,⁴ possibly later replaced. This was perhaps built in conjunction with the construction of

what must have been a primary road soon after the invasion of A.D. 43, from London to the west of the country. The position of the bridge is unknown but most likely in the area of its medieval successor with the line of approach dictated by the geology (see above). Supporting evidence comes from the quantities of material dredged from the river at this point (Fig. 2).⁵ Any such major route would in the first instance have been furnished with military policing posts of some kind, later to be developed as posting-stations, *mansiones* or *mutationes* of the *cursus publicus*, the official communications system. Military activity at Staines is indicated by the find of a cheek-piece of a cavalry helmet from the Barclays Bank site and dated c. A.D. 60 (Appendix 1, p. 77). Stukeley⁶ writing in 1723 and identifying Staines as *Pontes* suggests that the settlement 'was fenced round with a ditch' but it is not clear whether or not he actually saw traces of a defensive system.⁷

Apart from its actual topographical siting, a further indication that Staines may well have served as and had the status of a *mansio* or posting-station, is provided by the inclusion of the settlement in the seventh journey of the British section of the Antonine Itinerary.⁸ This journey runs from (probably) Chichester to London with *Pontes* as the entry between Silchester and London. Despite mileage errors the identification of *Pontes* with Staines is certain⁹ and the actual entry in the text *Pontibus* (in the locative plural) can be translated 'at the Bridges'. It provides the only evidence for the Latin name of the settlement.

From the Antonine Itinerary as a whole, it can be shown that the routes in the document consist of lists of *mansiones* and do not generally include the smaller 'changing' stations, *mutationes* that lie between the *mansiones*. Thus the inclusion of *Pontes* in such a list can be taken to indicate that it probably had at sometime the status and function of a *mansio*.¹⁰ Brentford, midway between Staines and London, may well prove to be the *mutatio* between the two.¹¹ No certain date for Staines as a *mansio* can be deduced from the Itinerary, as the document consists of material of varying dates, but it would be natural to see any earlier military policing-point developing or being replaced after the pacification of south-east Britain in the second half of the first century A.D., by an official *mansio* of the *cursus publicus*. The establishment of an official complex, whether policing-point or *mansio*, would soon act as a nucleus or springboard for the growth of a civil settlement. This settlement probably also developed as a small marketing centre for the surrounding countryside, and in turn relied on the out-lying farmsteads and villas to supply it with food. Other roads, coming from Farnham, St. Albans and the Midlands,¹² besides the major London-Silchester road may have been built once the civilian settlement was established. It is possible that a road coming from the north-west has been observed on an aerial photograph at TQ 054 753 joining the Roman London-Silchester road to the east of Staines.¹³

The name *Pontes*, being plural, deserves some comment. There are three other entries in the Antonine Itinerary recording similar place-names, *ad Pontem* twice, once in Britain (East Stoke, Nottinghamshire);¹⁴ the second in Spain;¹⁵ the third, again in the locative plural case, is in the Gaulish section (perhaps modern Ponches near Boulogne).¹⁶ The plural of *Pontes* (Staines) perhaps refers to two bridges at Staines, one across the Thames, the second across the Colne, but until topographical and archaeological work has established the position of the course of the Colne in the Roman period and the exact line of the main Roman road, this can only be a tentative explanation. Other explanations are possible.

Excavation before 1974

Between 1969 and 1973 some nine sites were explored by Mrs. M. Rendell, but as yet remain unpublished. Information from them is limited to short notes, but all are of importance to any discussion regarding the Roman settlement of *Pontes* and the later development of the town.

(The number of each site refers to Fig.2)

1. Thames Street 1970 (TQ 0366 7157); Roman? road with side ditch alignment uncertain, but either parallel to Barclays Bank road (see below) or at right angles to it. Roman pottery recovered from side ditch. In the topsoil eleventh and eighteenth century material.
2. Conservative Club 1970 (TQ 0351 7158); in section two daub walls superimposed, a burnt layer separating them. Material recovered gave similar dates to those of Barclays Bank site.
3. Johnson and Clark, 19 High Street (TQ 0345 7159); extension at rear of building. First to fourth century Roman material, twelfth century pit group, thirteenth and fourteenth century pottery and seventeenth century tin glaze.
4. Halifax Building Society 1971 (TQ 0368 7169); cross-section of a Roman kiln, six wasters found with kiln dated to the second century. Fill of the kiln containing late third-fourth century material.
5. Halifax Car Park 1971 (TQ 0369 7175); a Roman clay floor cut by two features; a ditch with grass tempered pottery and a pit with fourteenth century pottery.
6. Perrings (TQ 0360 7165); Roman pottery of first-fourth centuries. Medieval and post-medieval pottery present in topsoil.
7. Mumford and Lobb 1972 (TQ 0385 7177); excavation in advance of redevelopment. Roman material from first-fourth centuries found. Fourteenth century and post-medieval pottery present in topsoil.
8. Friends Burial Ground (TQ 0370 7152); first explored by Mrs. M. Rendell in 1970. Two trenches 3m square were opened up and material from prehistoric-fourth century Roman found. The amount of material recovered made further investigation worthwhile and work started in 1975 continuing in 1976 by the London and Middlesex Archaeological Society under direction of the author.

The site had been divided into two by a nineteenth century brick wall. To the north of this the land had been heightened by 2m to accommodate the Quaker burials and to the south by 1m. 100 sq.m of land to the north of the wall were excavated, the removal of 2m of topsoil exposed a fourth century land surface and the eroded top surface of a third century clay bank built against flooding. Beneath this bank was a road with side-ditch and bank. These sealed two pits containing prehistoric (neolithic-iron age) material and the skeleton of a cow (dated to the late iron age¹⁷). 200 sq.m to the south of the wall were also excavated and here the silts abutted against the clay bank (see above) and they had been cut into by fourth century gullies, pits and thirteenth century cess pits. The silts sealed material dating from the prehistoric period to the early third century. At present (March 1976) examination of the material from the 1975 excavation suggests on the first assessment of the prehistoric (neolithic-iron age) material recovered, that there is substantial prehistoric occupation in the area. Material from the Roman period is equally extensive, consisting of a wide range of pottery types, imported and local,

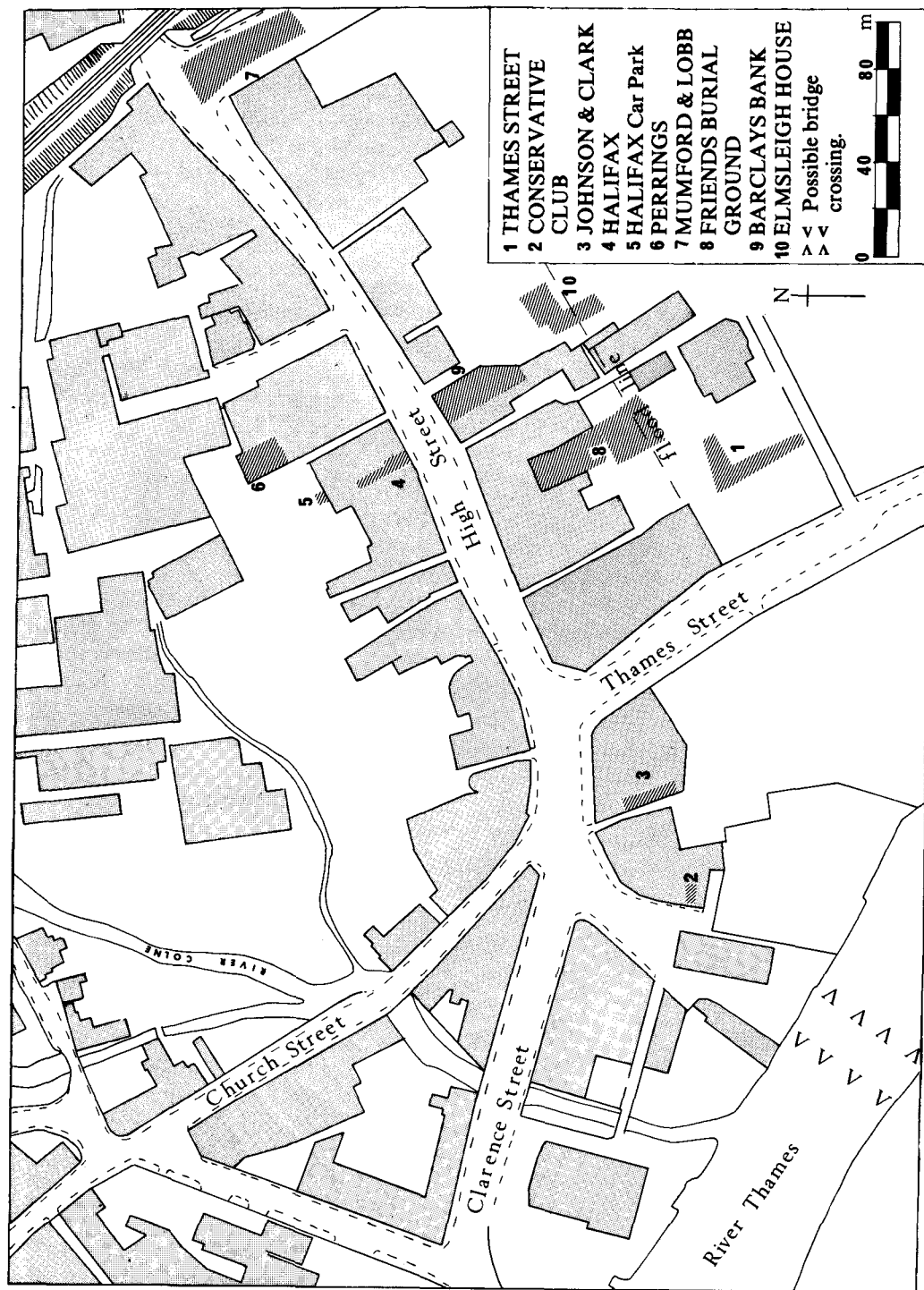


Fig. 2. Staines: Map of sites.

quantities of window and vessel glass, wall plaster, tesserae fragments, building materials of brick and stone (Purbeck marble), roofing, hypocaust and flue tiles, all indicating the presence of at least one substantial building in the vicinity.

9. During the redevelopment of Barclays Bank¹⁸ High Street, the first major evidence for the Roman settlement was uncovered. The earliest feature reported is that of a road running east–west across the front of the site; being 11 feet wide (3.453m), cambered, with side ditches. A thin layer of mud covered the road surface followed by a burnt layer with two timber buildings superimposed. Dating from pottery would seem to suggest that Building 1 had a date of *c.* A.D. 70 while Building 2 a date *c.* A.D. 130–150. The site also produced a group of imported pottery with a date range of *c.* A.D. 40–60. A number of military pieces were found, in particular a cheek-piece from a cavalry helmet dated *c.* A.D. 60 (Plate 1, Figs. 3, 4; Appendix 1, p. 77). Among the domestic pottery were, grey ware, bowls, dishes and jars, mica dusted vessels, half a lead glazed bowl (Plate 2, Fig. 5; Appendix 2, p. 80), samian and Spanish amphorae, their necks having been removed and the rest of the vessel reused possibly for the storage of foodstuffs.¹⁹ A black soil sealed all the previous levels and contained third and fourth century material. This in turn had been cut by a pit? ditch?, containing twelfth to early thirteenth century pottery. No later material was recovered due to the advanced state of redevelopment at the time of discovery.

Conclusion

From evidence to date it would seem that the Staines area has had occupation in one form or other since the neolithic period,²⁰ though there is little doubt that the Roman settlement owes its origin to the existence of the road, and perhaps a small military establishment guarding the bridge. A civilian settlement no doubt soon followed, grew and prospered in the first and second centuries, probably relying on out-lying farmsteads and villas to supply it with food. As a riparian settlement river-borne trade would also possibly have been important to the economy.

Imported material comes from Gaul, Italy, Spain and Germany and British wares from Brockley Hill, Dorset, Surrey, Sussex, Buckinghamshire, London and local kilns are also present. It is possible that some form of decline occurred in the third century though this assumption is based on the lack of material of this date from the sites excavated so far. Material from the fourth century, suggests expansion, if one accepts the above premise, with pottery coming from Hampshire, Surrey, Oxford, Nene Valley, Colchester and Germany (Rheinish and Mayen wares). The final collapse of the Roman settlement appears to have occurred at the end of the fourth or early fifth century.

Saxon material, predominately grass tempered pottery, is present from the town. It is impossible to suggest a date for this material as there is, at present, no securely stratified sequence from the fourth–tenth centuries. The medieval town arose quickly after the tenth century to judge from the pottery imports from Holland and East Anglia in addition to local products. It was probably, however, not until the late twelfth–early thirteenth century that the medieval town reached the size and prosperity of its Roman predecessor.

NOTES

¹ Since 1963 following the London Government Act which abolished the Administrative County of

Middlesex, Staines has formed part of the County of Surrey.

- ² A Roman mile is 1,618 yards.
- ³ I. D. Margary *Roman Roads in Britain* (Baker 1967).
- ⁴ S. S. Frere *Britannia* (London 1967) 65 Footnote 1.
- ⁵ Thames Conservancy Board dredging 1956 *Berks. Archaeol. Journ.* 56 (1958) 54–56.
- ⁶ W. Stukeley *Itinerarium Curiosum* (1726) 205.
- ⁷ *Ibid.* 205. It is possible that Stukeley saw the ditch (now canalised) that is called the Sweeps Ditch. The date of this ditch is unknown but probably medieval.
- ⁸ O. Cuntz *Itineraria Romana* i (Leipzig 1929); Wess 478.4.
- ⁹ A. L. F. Rivet 'The British Section of the Antonine Itinerary' *Britannia* 1 (1970) 49–50, 77.
- ¹⁰ Information and discussion with Mr. Hugh Chapman.
- ¹¹ A. Laws 'Excavations at Northumberland Wharf, Brentford' *Trans. London and Middlesex Archaeol. Soc.* 27 (1976).
- ¹² The Viatores *Roman roads in the South East Midlands* (1964) 125–136.
- ¹³ Aerofilms. Hunting Surveys. No. HSL/UK/62/230.
- ¹⁴ Cuntz *op. cit.* in n. 8, Wess 477.7, A. L. F. Rivet *op. cit.* in n. 9, 49.
- ¹⁵ *Ibid.* Wess 409.2 The first stop north on the road from Cadiz to Cordoba.
- ¹⁶ *Ibid.* Wess 363.1.
- ¹⁷ Information from the Natural History Museum.
- ¹⁸ *London Archaeol.* 1 (1970) 161.
- ¹⁹ G. C. Boon *Silchester: The Roman Town of Calleva* (Newton Abbot & London 1974) 239.
- ²⁰ Causewayed enclosure (Neolithic). Excavated by Mr. R. Robertson-Mackay.

Appendix 1

Fragment of a helmet cheek-piece, Barclays Bank Site, 1969 by H. Russell Robinson

Figs. 3, 4 and Plate 1

The cheek-piece (right side) is made of an iron plate wrapped on the outer face with a thin sheet of embossed bronze which is turned in at the edges. The remaining portion consists of the upper forward two-thirds which would cover the wearer's cheek from just below the hinge by which it was attached to the helmet skull and includes the cut-out for the eye in the forward edge and the projecting lobe for the cheek-bone. The lower edge terminates just above the centre of the cut-out for the mouth and curves backwards and upwards to the forward edge of the ear.

The decoration embossed on the outer sheathing consists of a cabled border following the outline of the plate set in at approximately 10mm from the edge but excluding the ear; the normal outline of a cheek-piece. In this case however, the ear was not left uncovered for the plate continued over the front with a stylised representation of that appendage embossed in both the iron and the outer bronze.

Occupying the central panel is a broad V shaped cabled ridge which joins the upper corners of the inner border and a large male head of which only the top of the skull and nose, mouth and chin survive. The absence of a cap or helmet suggests an imperial head or deity such as Hercules.

Between the bronze and the iron in the area of the head are traces of a black substance, possibly pitch which may well have been left adhering to the inside of the bronze when it was removed from the pitch-block upon which the finishing of the embossing was carried out with punches. The presence of pitch proves that the cheek-piece sheathing was hand worked and not die-struck as are some examples.

This cheek-piece belongs to a well defined group which belonged to Roman cavalry service helmets of the first and early second centuries A.D. The skulls of two such helmets stripped of their bronze sheathing have been found in Britain, one from Newstead¹ and another from Northwich.² A more complete example with much of its tinned and embossed sheathing was found recently near Koblenz.³

Cheek-pieces survive in slightly greater quantity in Britain and on the continent though not all of them have yet been published. The British examples are from Newstead,⁴ Carlisle,⁶ Brough,⁷ Kingsholm,⁸ and Usk.⁹

Continental examples are from the Waal near IJzendoorn, Holland;¹⁰ Mainz, now at Mannheim,¹¹ and Heddernheim now at Frankfurt.¹²

The quality of the embossed decoration varies considerably probably due to the manner in which it was executed. The Brough, Kingsholm and Heddernheim pieces are die-struck and in consequence are far superior to the others which are raised with a hammer and then worked with punches. Three examples bear heads for comparison with the Staines fragment. That from Corbridge carries a female bust, the Mainz example a head of Minerva and the recently found Heddernheim specimen a youthful imperial bust wearing a laurel wreath.

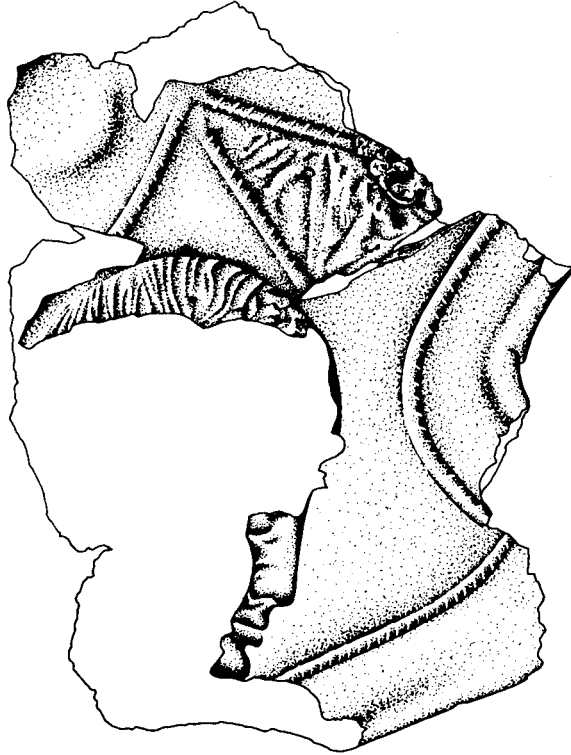


Fig. 3. Staines: Helmet cheek-piece ($\frac{1}{1}$).

For sculptural representations of these helmets we must look at the series of grave stelae found along the Rhine frontier such as that of Romanius at Mainz, Bassus at Cologne and two unidentified riders at Worms.¹³

The helmets are of classical Attic form with their skulls covered with embossed bronze to represent hair; a feature well shown on the Koblenz helmet.

Not all cavalry units had such elaborate helmets for there are examples such as that from Witcham Gravel now in the British Museum¹⁴ and a cheek-piece from the Valkenburg in Holland¹⁵ which are of the same date and character but whose decoration is confined to raised borders, bands and bosses.

The embossed decoration was either entirely tinned or had the background tinned with the ornament in bright yellow bronze relief.

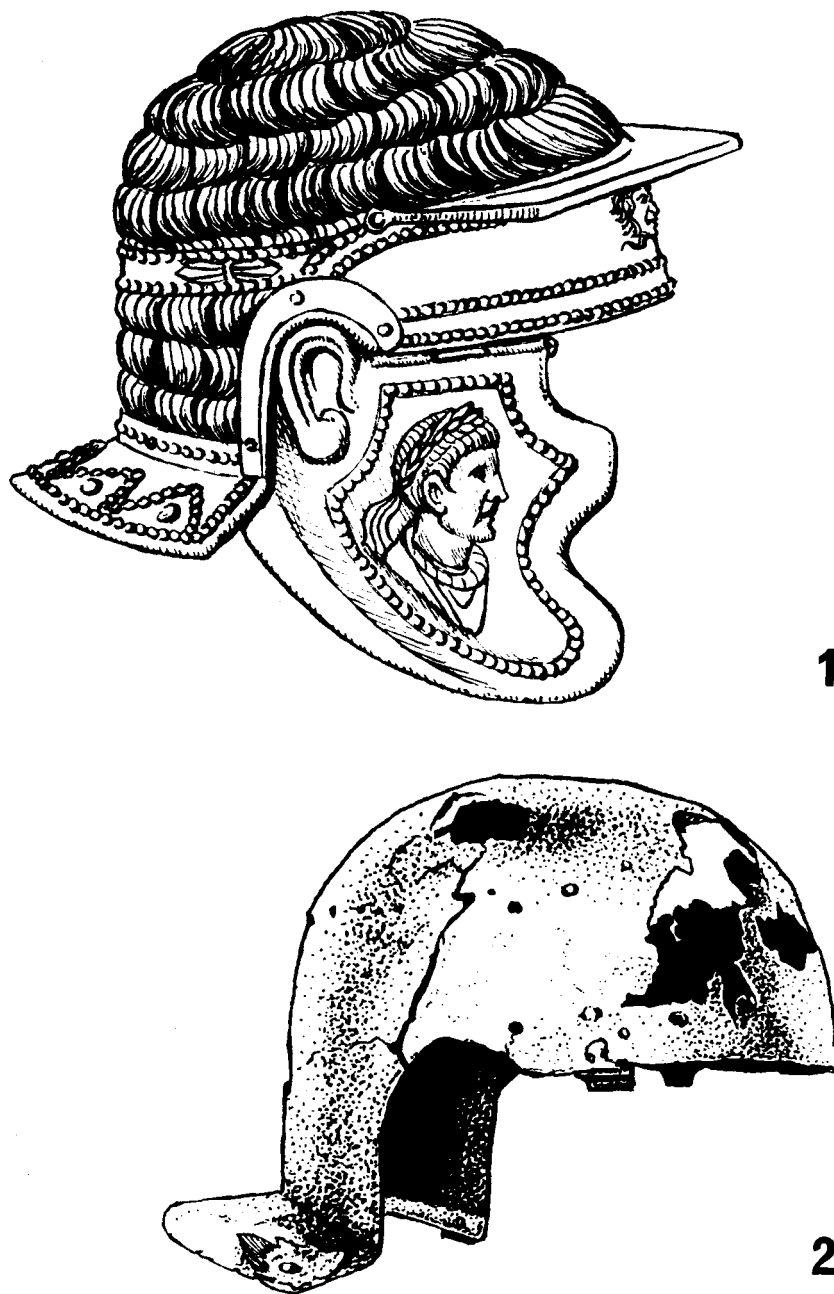


Fig. 4. Staines: Reconstruction of helmet cheek-piece. 1. Reconstruction of a first century A.D. cavalry helmet found near Koblenz. (City Museum, Koblenz.) (Not to scale.) 2. Iron skull of a cavalry helmet from the fort at Newstead. Late first century A.D.

NOTES

¹ H. Russell Robinson *The Armour of Imperial Rome* (London 1975) 94 Plate 246.

² *Ibid.* 94 Plates 248–9.

³ Hans Klumbach *Romisches Helme aus Niedergermanien* (Bonn 1974) 45 No. 32, Taf. 32.

⁴ H. Russell Robinson *op. cit.* 133, Plate 400.

⁵ *Ibid.* 134, Plate 402.

⁶ *Ibid.* 134, Plate 403.

⁷ *Ibid.* 134, Plate 401.

⁸ *Ibid.* 134, Plate 406.

⁹ This piece has not yet been published.

¹⁰ H. Russell Robinson 'Fragments of a Roman Cavalry Cheek-piece from the Fort at Newstead' *Proc. Soc. Antiq. Scot.* 102 (1969–70) 291, Fig. 2.

¹¹ *Op. cit.* Note 1, 135, Plate 404.

¹² This piece has not yet been published.

¹³ All of these are shown together in the *Armour of Imperial Rome* 104–5, Plates 297, 299, 301, 302.

¹⁴ Robinson *op. cit.* Note 1, 94–5, Plates 250–3.

¹⁵ W. Groenman-Van Waateringe *Romeins lederwerk uit Valkenburg Z. H.* (Groningen 1967) 203, Abb. 76.

Another similar cheek-piece was found at Nijmegen, see Klumbach *op. cit.* in Note 3, 57, No. 45, Taf. 44.

Appendix 2

The Roman Lead Glazed Pottery by Paul Arthur

Fig. 5 and Plate 2

Two fragments of a Central Gaulish globular beaker in hard off-white fabric and with a lemon-yellow glaze covering both internal and external surfaces. Decoration consists of arrangements of barbotine dots. Date: Middle of the first century A.D. From Barclays Bank site 1969. The type is illustrated by Greene¹ and Brenders has a full discussion.²

(Not illustrated)

1. Almost exactly half of a Romano-British beaker imitating samian form Dr. 30 (Plate 2). It has a brick-red fabric with grey core and thin grey surface covered by a yellowish glaze which appears olive-green. Decoration consists of a central zone filled with criss-cross barbotine threads forming a continuous line of diamonds. There is no exact parallel published although the piece is similar to the glazed form 30 'Sussex' beakers³ and an example from Hambledon Valley, Bucks.⁴ This piece probably did not come from the same kilns, but was also fired upside down. Date: Late first–early second century A.D. From Barclays Bank 1969.

2. Rim and body sherd from Romano-British vessel imitating form Dr. 30. The medium grey fabric is covered, strictly speaking, with a yellow glaze which appears olive-green over the pottery. It is decorated with a central zone filled by, at least, one row of circles in underglaze white barbotine. This fragment is very unlike the previous piece and I would suspect that it came from a different kiln site in south-east England. Parallels can be cited from Springhead, Kent (two pieces; one published⁵). There is no indication of inverted firing of this piece. Date: Late first–early second century A.D. Elmsleigh House site—topsoil.

3. A small body sherd in light pink fabric with an external yellow glaze appearing green and an internal light brown glaze. Underglaze lines of white slip suggest that the vessel may originally have been decorated with a honey-combed lattice pattern. This piece may be related to No. 2 above and to a series of pear-shaped flagons also found in south-east England. Date: Late first–early second century A.D. From Elmsleigh House site—early medieval plough soil.

4. A simple bead rim and a body sherd in pink fabric and light brown glaze, both of the same vessel. The vessel was probably a globular jar or beaker derived from native traditions.⁶ The body sherd appears to display the ends of four vertical combed lines.

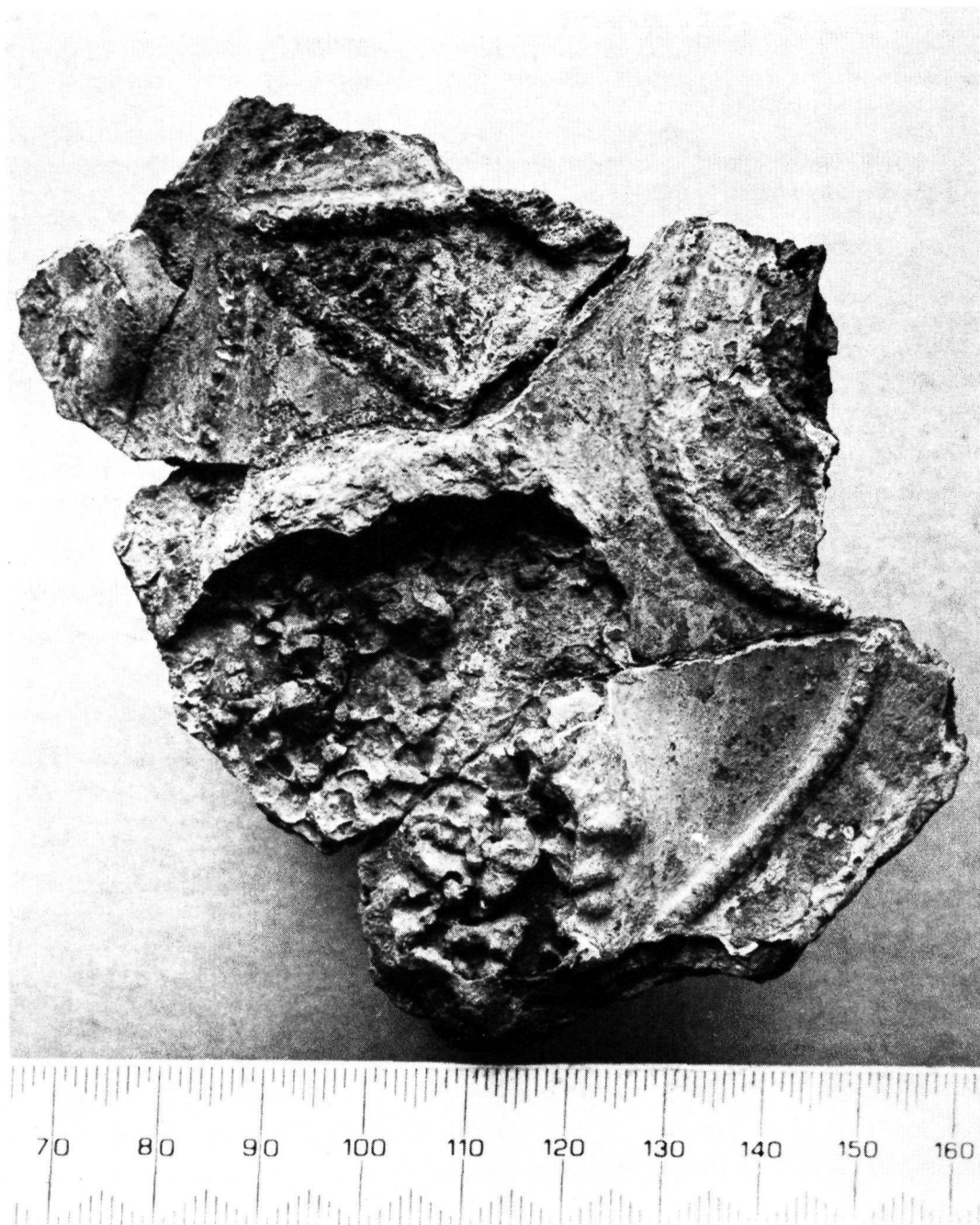


Plate 1. Staines: Cheek-piece of Roman helmet. (Scale in mm.) (p. 77.)



Plate 2. Staines: Roman lead glazed beaker. (p. 80.)

Date: Late first–early second century A.D. From Elmsleigh House site—early medieval pit.

The main interest in the Staines lead glazed vessels is their variety. The Central Gaulish type is often found in connection with early military activity. Local British variation is indicated by the rest. Nos. 1 and 2 typically copy popular imported samian vessels, while No. 4 is less common in that it would seem to have derived from a well known native type. This is interesting, and Mr. Peter Leach informs me of a small glazed jar decorated with Durotrigan inspired motifs from recent excavations at Ilchester. It is unfortunate that all these vessels are from later layers as what is now needed are securely dated examples on which a tighter chronology can be based.

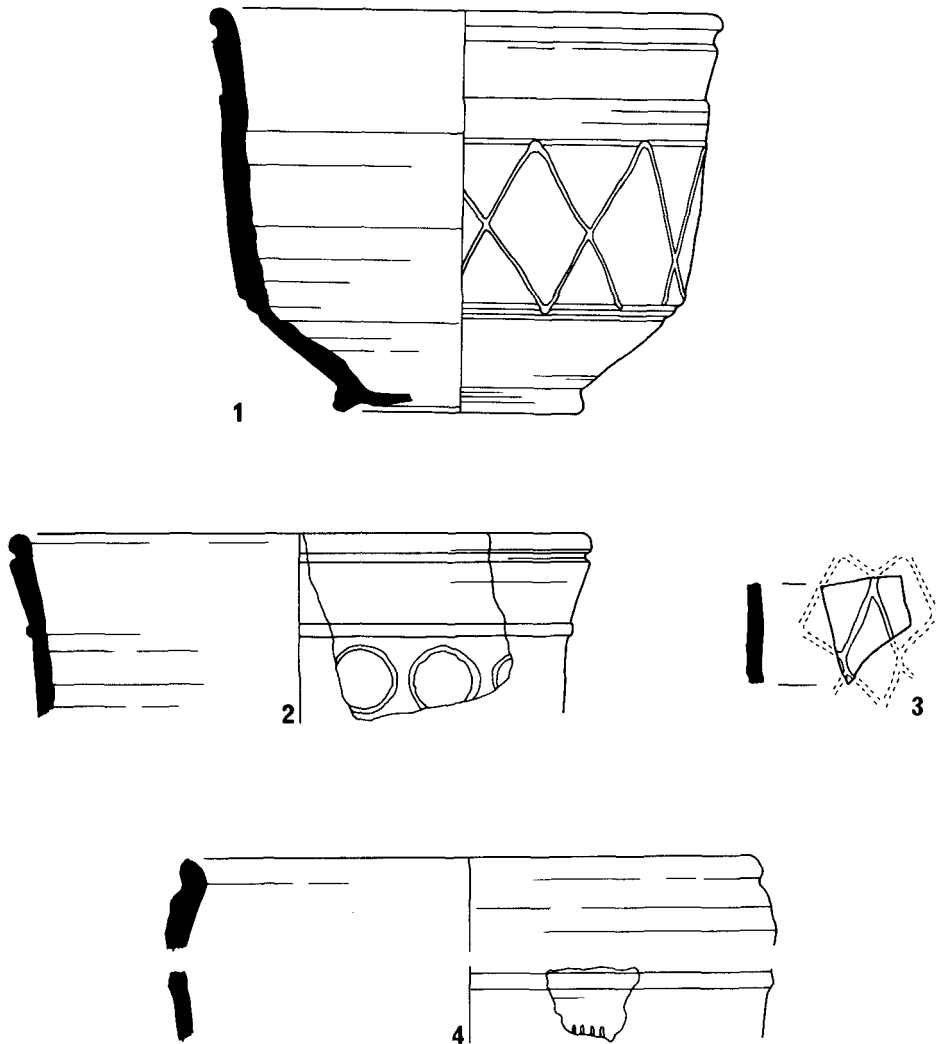


Fig. 5. Staines: Lead glazed pottery (Nos. 1–4) ($\frac{1}{2}$).

NOTES

¹ K. Greene *Guide to Pre-Flavian Fine Wares* (Cardiff 1972) Fig. 12, No. 16.

² F. Brenders *Het Romeins Geglazuurd Aardewerk* (Leuven 1975) 43–46 (Privately circulated doctoral thesis).

³ A. Down & M. Rule *Chichester Excavations I* (Oxford 1971) 77–79, Nos. 45 and 247g.

⁴ A. H. Cocks 'A Romano-British Homestead in the Hambledon Valley, Bucks' *Archaeologia* 71 (1920–21) 175.

⁵ W. Penn 'Springhead, The Temple Ditch Site' *Archaeol. Cant.* 79 (1964) 182, No. 4.

⁶ cf. B. Philp *Excavations in West Kent 1960–1970* (Dover 1973) 75, No. 202.

Part Two. The Elmsleigh House Excavation

Introduction

The site (TQ 0376 7165) was situated off the High Street behind the Barclays Bank site excavated in 1969 (Fig. 6). With demolition of Elmsleigh House in advance of redevelopment the London and Middlesex Archaeological Society were given permission to excavate the garden area. Funds were made available by the Department of the Environment and Spelthorne Borough Council and excavation commenced in August 1975 and lasted until May 1976. Several months were lost due to flooding.

An 'L' shaped area of 170 square metres was excavated (Fig. 7). This showed that the site had had very little modern disturbance. Only at the southern edge was there any major disturbance and here a fifteenth–sixteenth century brick building had destroyed all earlier layers. In the nineteenth century the southern part of the site was heightened by 0.50m to a level of approximately 15.24m O.D.

Summary of results

1. Although traces of prehistoric and first–second century Roman material were found, the first identifiable occupation began probably in the third century.
2. A Roman roadway was built running north-east–north-west across the northern part of the site and had one structural phase.
3. A series of Roman buildings were erected on the gravels of the road. Some demolition and rebuilding took place, probably in the early–mid fourth century. Associated pits and post-holes were found.
4. During the Saxon period there was occupation in the northern part of the site, but the southern part was affected by flooding. Covering the Roman and Saxon was a black soil of ninth–twelfth century date, used at sometime for cultivation. Traces of ridge and furrows were discovered running along the contour and parallel to the High Street.
5. Flooding again occurred in the late thirteenth century, though not to the same extent as before but sufficient to remove any earlier features. The black soil again covered all the site and was used for cultivation. It contained pottery and other materials from the Roman period to the fifteenth century.
6. A gravel surface sealed the above plough soil. The gravel had been cut by a number of post-holes and post pits, but due to later destruction no plan could be discerned. It is probable that the gravel is contemporary with the building (see below) found at the southern end of the site.
7. This building was built probably in the late fourteenth–early fifteenth century and of timber-framed construction. It was replaced in the sixteenth century by a brick structure, demolished in turn in the seventeenth century. Later in the same century an out-building was constructed utilising part of the foundation wall of the earlier brick building. This appears to have been deliberately demolished in the early eighteenth century and replaced by a second out-building, demolished in the 1760's. Finally a nineteenth century garden wall was built upon part of the previous structures and the rest of the site used as a garden for Elmsleigh House.

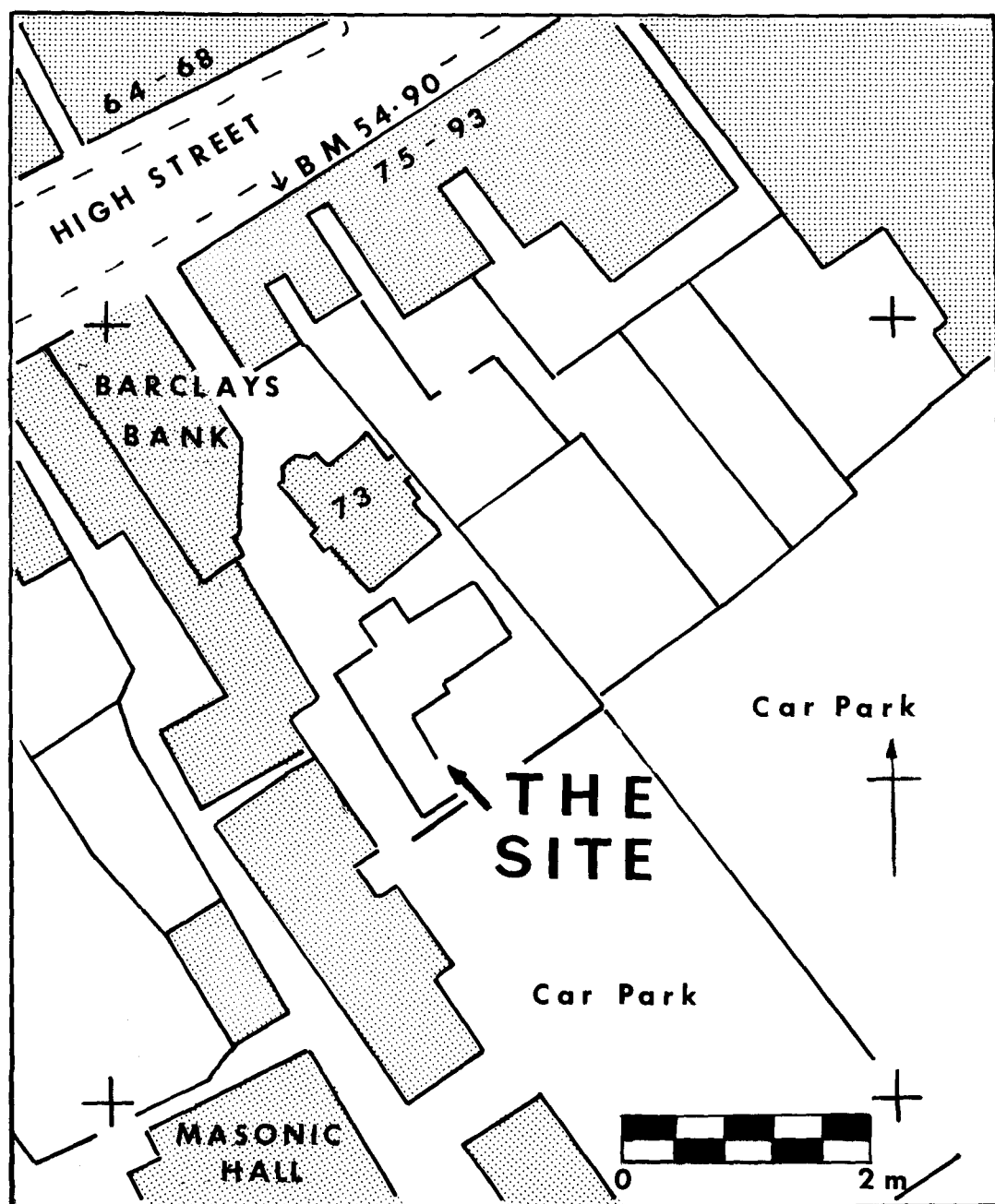


Fig. 6. Elmsleigh House, Staines: Location of site.

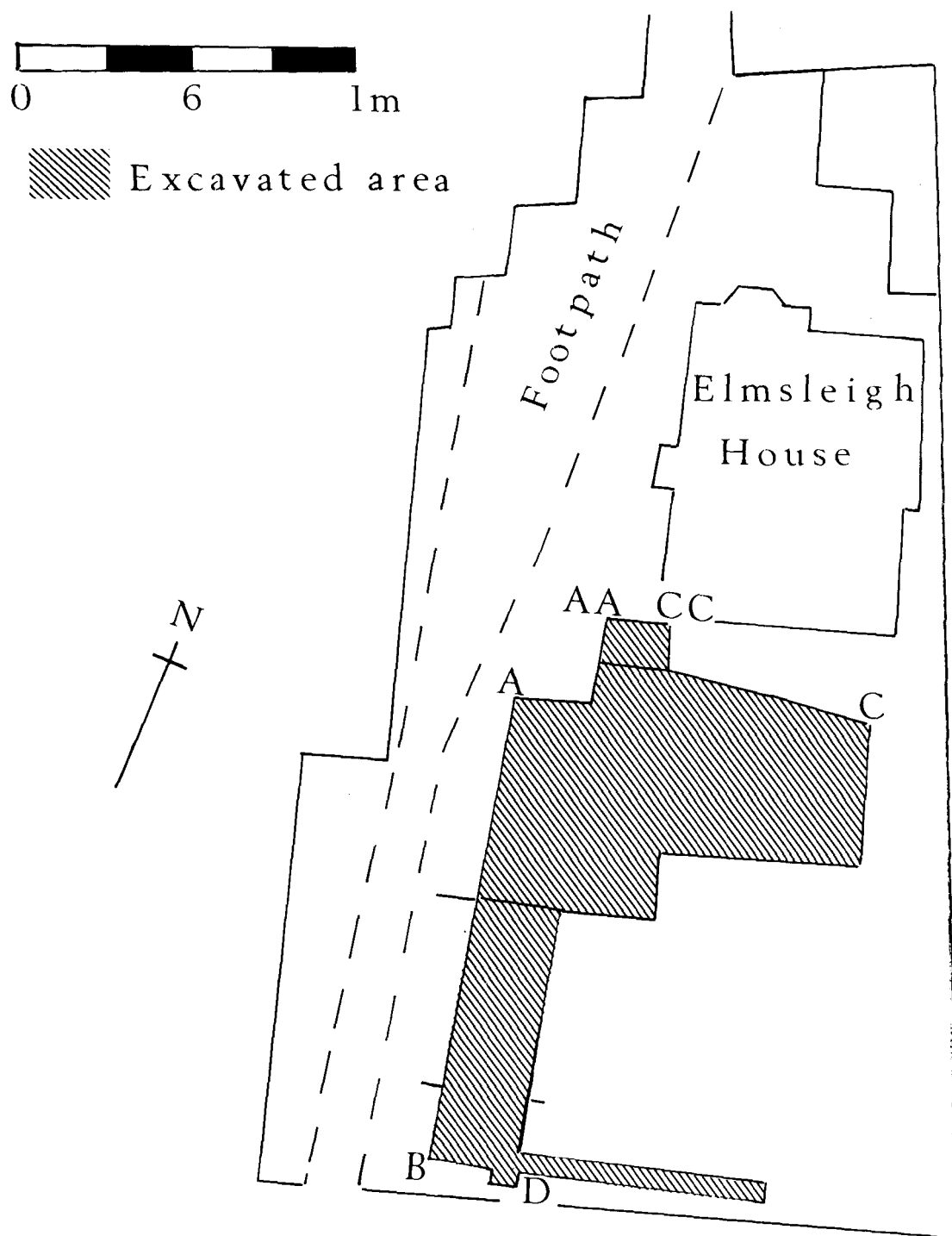


Fig. 7. Elmsleigh House, Staines: Site Plan.

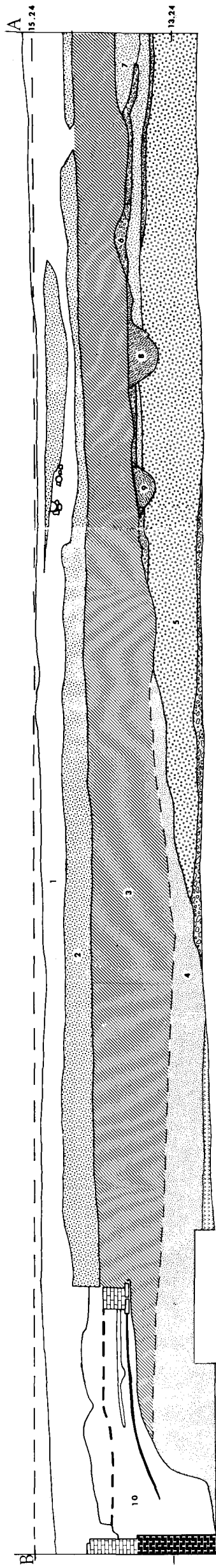
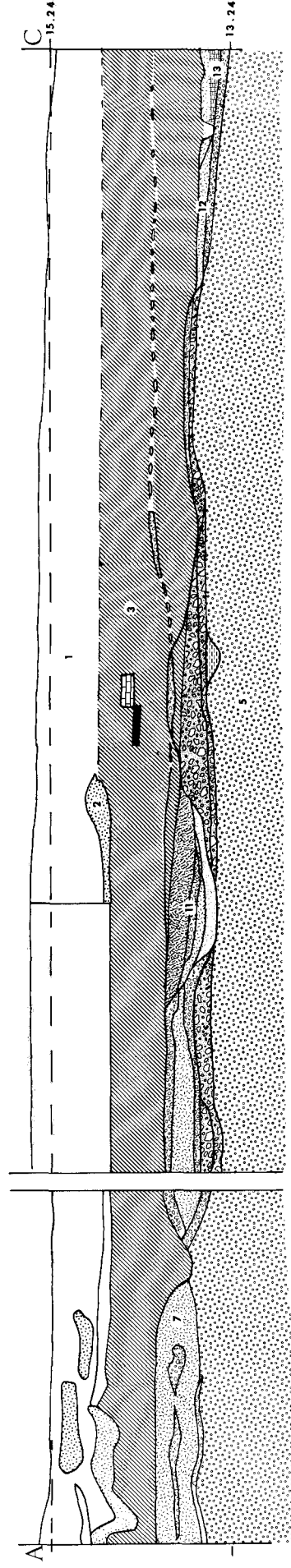


Fig. 8. Elmsleigh House, Staines: Section A-B. 1. Topsoil. 2. Nineteenth century gravel. 3. Plough soil. 4. Silts. 5. Natural sands and gravels. 6. Road gravel. 7. Yellow clay. 8. Gully (Z33). 9. Beam trench Building III. 10. Sixteenth-eighteenth century Building.

(Below) Section A-C. 1. Topsoil. 2. Nineteenth century gravel. 3. Plough soil. 5. Natural sands and gravels. 7. Yellow clay. 11. Gully (Z33). 12. Yellow clay Building I, phase 2. 13. Clay floor Building I, phase 1.



The findings

Pre-third century

Little evidence of activity prior to the third century was obtained from excavation. Some worked flints and a few pieces of abraded prehistoric (neolithic-iron age?) pottery were found within the Roman and medieval layers. First and second century Roman coarse wares and lead-glazed wares (Appendix 2, p. 80) were found in medieval features and modern topsoil.

The evidence does not suggest any settlement and it is likely that the prehistoric material was brought in with the clays and gravels for the construction of the road during the Roman period.

The road (Fig. 8)

The road ran north-east to north-west across the northern part of the site. Its uppermost metallised surface lay about 1.60m below modern ground level and was overlaid in part by building structures and black soil.

The road in the north-west was constructed of dumped gravels and yellow clay laid upon natural sands and ironstone. The first was of gravel 0.06m thick, followed by a layer of yellow clay 0.12m thick at north thinning to 0.06m in the south. Above this a final gravel surface, 0.16m thick thinning to 0.08m, had been laid. It was difficult to determine the width of the road due to extensive cutting by later features, but it was probably *c.* 3m wide. To the south the road sloped down for a further 3.70m. A side ditch to the north terminated 8.00m in from the western edge of the trench and was 2.00m wide, 0.36m deep. At the north-east the road was constructed entirely of gravel with three separate layers. The date of the side-ditch and road was difficult to ascertain due to the lack of dateable finds from the make-up of the road. It is probable that the road is no later than the mid-third century as it was cut by a pit (Z119) (2×2×1m and with four stake-holes in the bottom). The fill of the pit was of green clay containing freshwater gastropoda and sealed by a layer of animal bones (see bone report p. 131) 0.20m below the top surface. This in turn was covered by a black soil with mid-third century pottery (No. 1, p. 98).

Settlement

The buildings (Fig. 9)

Part of three buildings have been interpreted from the site of which two, buildings I and II each had two phases. The buildings were built either upon the underlying gravel road or natural sand and apart from the road and associated pit (see above) there was little stratigraphical evidence of Roman activity preceding their construction. No frontage on which the buildings may have been aligned was discovered, though this may have lain under the northern edge of the trench.

Building I (Fig. 9)

Phase one

The north-eastern part of the road was sealed with yellow clay flecked with chalk and the clay utilised as a floor. This was apparently the south-west corner of a Roman building which carried on under the baulks. The remains of the southern wall of this building, of gravel and clay, survived to a height of 0.10m and was 0.32m wide. No dateable material was obtained from the wall or floor of this building itself, but two gullies which cut through the floor level provide some evidence. Gully (Z136) was 0.60m wide and 0.10m deep at west sloping to 0.30m against eastern edge of trench. Gully (Z105) is 0.70m, where it enters the first gully, narrowing to 0.30m. The fill of both gullies was a black soil and this contained sherds of coarse grey wares of Farnham-Alice Holt type (late third-fourth century).

Phase two

Sealing the building and gullies was a second yellow clay floor, probably of mid-late fourth century date. A beam slot cut into the floor of the building. The corner of this building occurred close to the east edge of the trench, where a second beam slot (0.30m wide, 1.40m in length and 0.12m deep) cut obliquely across the gullies (see above). The fill of this slot contained a flake of iron from a larger object, one nail and pottery of mid fourth century date (Fig. 15, Nos. 2-4). The fact that the beam slots had had their timbers removed suggests that Building I may have been

deliberately demolished when it was replaced by Building II at an oblique angle. Material from a wall of this second building which had collapsed to the south and west perhaps indicates that the building was simply abandoned. Sealed beneath the collapsed material was pottery of fourth century date. Two gullies were cut into the remains of Building I (phase two). One gully (Z137) (0.30m long, 0.10m wide, 0.20m deep), contained a Saxon grass tempered rim sherd. The second gully or beam slot (Z101) ran along the northern edge of the trench (0.24m wide, an exposed length 1.30m, 0.20m deep). Fine gravel lay at the bottom and contained pottery sherds of eleventh–twelfth century date (p. 102, No. 45).

Associated activities

Direct evidence of associated activities for these two buildings is absent. But to the south west of Building I was an oval dump of iron ore (Z106) with a hollow centre. Around the outer edges of this dump were a series of stake-holes. The fill of this iron dump being of green clay with pottery of mid fourth century date (Fig. 15, Nos. 20–25) together with animal bone, tile, iron nails and an iron bar. It is possible that this is connected with metal working. The plough soil above this level contained a number of iron blanks, iron knives and slag of probable Roman date. Between the iron dump and buildings there was a post-hole (Z102) (0.14m dia, 0.30m deep), again containing pottery of the mid fourth century. This had been partly covered by collapse from the adjacent building. On the other side of the site the road and side ditch had also been levelled with a yellow clay deposit. This however did not show any indications of buildings.

Building II

Phase one (Fig. 10)

To the north of the road a yellow clay flecked with chalk (0.18m thick) had been laid upon the natural sand, and a trench with a rectangular section (0.24m wide and 0.20m deep) had been cut into it running north–south. This had a black fill of black soil though with no dateable material and is best interpreted as a beam slot. This suggests that the building was perhaps contemporary with Building I (phase one). Sealing the clay floor was a gravel layer 0.11m thick with a post-hole (0.30m × 0.20m) cut into it.

Building II (Figs. 10 and 11)

Phase two

A second yellow clay floor had been laid over the gravel and had been cut by a number of features. The main feature was a series of beam slots (Z125) forming three sides of a rectangular structure. Two ran north to south 1.40m apart and both were rectangular in section (0.30m wide and 0.15m deep). These were joined by a third, with the same dimensions, running along the southern edge. A fourth beam slot met the top and eastern slot. Much of this and part of the eastern beam slot had been destroyed by later disturbance. At each side of the western beam slot were two post-holes (0.15m dia.) with gravel fill. The date for this building depends upon pottery recovered from the beam slots and this suggests a date in the mid fourth century (Fig. 15, Nos. 5–10), possibly indicating that it was contemporary with Building I (phase two).

Building III (Fig. 9)

On the western side of the site lying upon the gravels of the road was a third building. Cut into the gravels were two beam slots. The first (Z30) (4.20m in length, 0.40m wide, 0.20m deep) ran north–south and had been mostly destroyed by a later gully. Running at right angles to this and forming the southern edge was a second beam slot (Z37) (0.40m wide, 0.20m deep and recorded length of 2.60m). At its east end a square cut post-hole (0.30 × 0.30m) had been sunk. All the features had a fill of black soil with pottery of the mid fourth century (Figs. 15, 16, Nos. 31–34). The third side of this building would have ran parallel to the second side but had been completely destroyed by a later gully (Z25).

All these buildings were probably of timber/clay construction and of a rectangular plan.

Associated activities

To the south of Building II was the remains of a pit. This had been cut into the end of the side

ditch and in turn cut by a Saxon pit and gully, leaving only part of the base. Interpretation of the existence of this pit relies principally upon the large amounts of Roman pot found in a good condition even though found with grass tempered pottery.

To the south-east of Building III was a post-hole (Z48) (0.60m × 0.40m) with a black soil fill but no dateable material though it is likely that this may be associated with Building III.

Gravel surface (Z35) (Fig. 9)

The rest of the site consisted of the gravels of the Roman road which had in turn been covered by a layer of fourth century domestic debris. (Fig. 16, Nos. 38–42). Into the gravel had been cut a number of pits and gullies of late Roman and medieval date.

Late fourth century activity

An elliptical shaped pit (Z112 Fig. 9) (3.30m × 2.00m and 1.20m deep) had been cut through the gravels into the natural ironstone. The fill consisted of pebbles at lowest level sealed in turn by grey silts, green clay and pebbles, and finally covered by a further green silt and grey clay. The fill of the pit contained pottery of mid-late fourth century date with a predominance of Alice Holt and Oxfordshire wares (Fig. 15, Nos. 11–19). There were also quantities of animal bone (see bone report p. 131) tile and oyster shell. Two shallow gullies (Z113 and Z114) led into the pit above, one following the camber of the road and cutting through the collapse wall material (0.50m wide and 0.10m deep) with pottery of late fourth century date (Fig. 15, 29–30). The other gully ran parallel to southern edge of trench and ended 1.20m from above pit. Adjacent to this gully, but running in opposite direction was a similar cut gully (Z107) again with pottery of the fourth century. A post-hole (Z122) cut the north-east edge of the above pit (0.70m dia. and approximately 0.60m deep) containing late fourth century pottery (Fig. 15, Nos. 27–28).

Post-Roman activity

It is probable that abandonment of the site occurred sometime in the fifth century, possibly caused by flooding which was seen in the southern part of the site, sealing beneath it Roman material. The number of gullies and pits of Saxon date show that the site was re-occupied. Unfortunately no exact date can be given for these features as the dating of the ceramic evidence cannot be precise, (see p. 101).

One Saxon gully (Fig. 9) cut into the floor of Building I (see above) but on the western side of the site there was more definite evidence of Saxon occupation. The Saxon pit (Z131) had cut into and almost completely destroyed an earlier Roman pit and had in turn been cut by a gully (Z33) (Fig. 9) which curved round through the beam slot and floor of Building III. Both these features contained a high percentage of residual Roman material but with some sherds of Saxon grass tempered pottery (Fig. 20, Nos. 153, 155).

To the south of this gully and cutting through the gravels and natural ironstone, was a roughly rectangular feature (Z44: 3.00m × 2.60m) which had at its northern end the possible indications of a beam having been laid with two post-holes at either end (Fig. 9). The floor of the feature was a grey sandy soil mixed with gravel and charcoal. Pot (Late Roman and Saxon grass tempered sherds) tile fragments and animal bones were found (Fig. 20, No. 152 and bone report p. 131). The tentative interpretation of this feature is that it is the floor of a Saxon hut.

Eleventh–twelfth centuries

From sometime towards the end of the Saxon period to the fifteenth century much of the area was apparently used for arable cultivation. Evidence of ploughing was seen by ridge and furrows in section running parallel to the High Street and cutting into the silt deposit and gravels.

A number of features of late eleventh–twelfth century were found, confined mostly to the north and west of the site.

A beam slot (Z101) contained pottery of eleventh–twelfth century date.

Two gullies (Z25) joined each other and possibly drained into a pit (Z52 see below and Fig. 9). The gullies (0.80m wide and 0.20m deep) were cut into the yellow clay of Roman date, the right hand branch having destroyed the beam slot of Building III and contained pottery of late eleventh–twelfth century date (Fig. 17, Nos. 48–49).

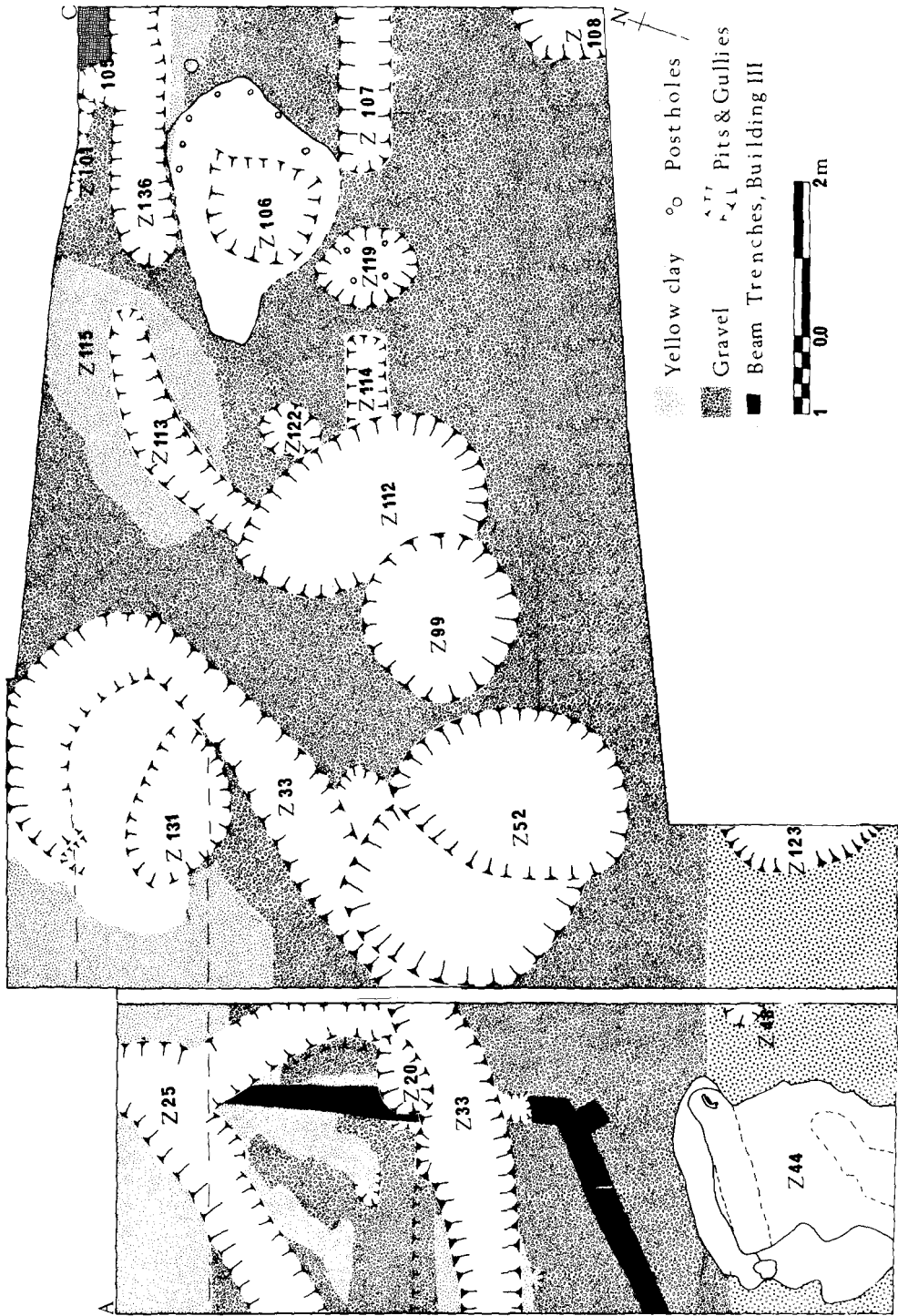


Fig. 9. Elmsleigh House, Staines: Plan of fourth century level.

A pit (Z99) (2.20m × 2.00m and 1m deep) had cut into a Roman pit (Z112) and contained pottery with latest date of early twelfth century (Fig. 17, Nos. 50–55).

A grey clay, containing a single sherd of twelfth century pottery, covered part of the Saxon feature (Z44). To the north of the above a rectangular strip of gravel had been built upon the underlying Roman gravel. Within this gravel two body sherds and one rim of late eleventh–twelfth century date were found (No. 47). Due to heavy ploughing during the later centuries these eleventh–twelfth century features seem to have little to connect them, except for the pottery, and it is possible that all are connected with occupation close by.

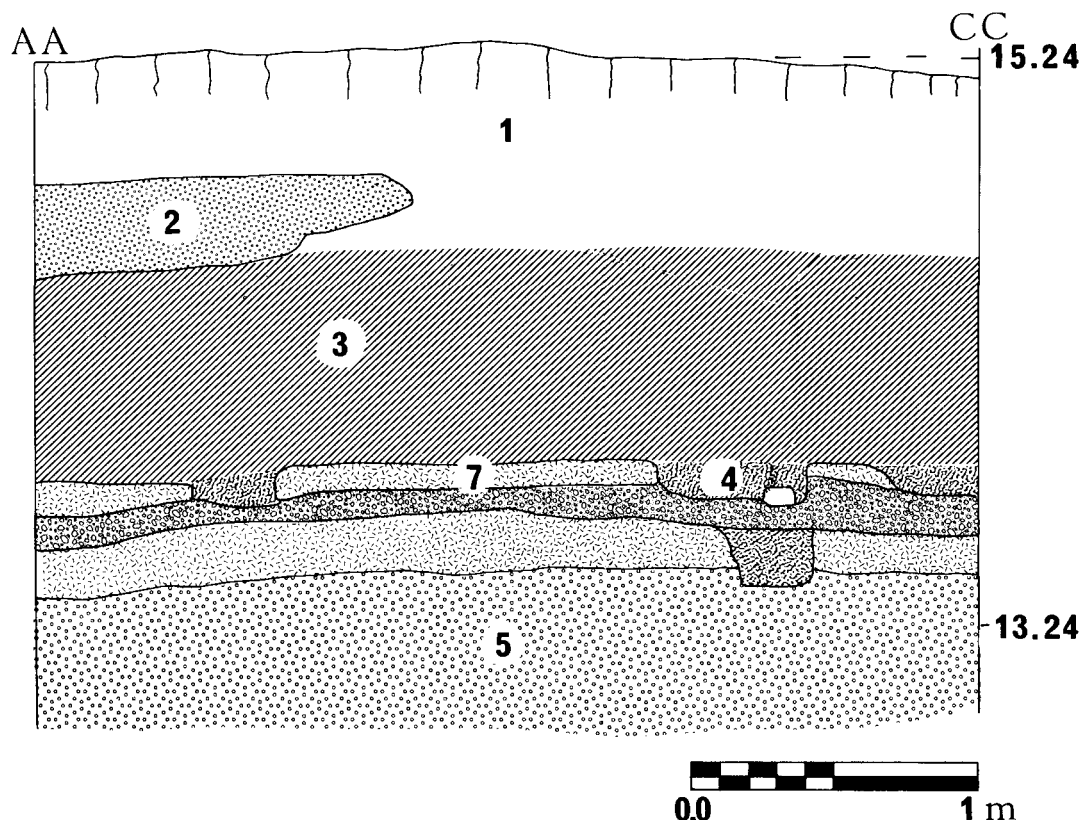


Fig. 10. Elmsleigh House, Staines: Section A/A–C/C. 1. Topsoil. 2. Nineteenth century gravel. 3. Plough soil. 4. Beam trench, Beam trench Building II, phase 2. 5. Natural sands and gravels. 7. Clay floor, Building II, phase 2.

Late twelfth–fifteenth centuries

Two pits (Z108, Z123) (Fig. 9) were dug to the south of the site both with pottery of late twelfth–early thirteenth century date (Fig. 17, Nos. 56–64). During the late thirteenth century flooding occurred in the south of the site though not to the same extent as the earlier flood (see above and Fig 8) covering the pits and a sherd of shell tempered pottery of late twelfth–early thirteenth century found on natural gravel. The silts had been cut by a pit (Z16) containing the skeleton of a horse and pottery of late thirteenth–early fourteenth century, (Fig. 18, Nos. 75–79 and bone report p. 131), and at extreme northern end by a black soil and gravel mix with pottery

of late thirteenth–early fourteenth century, brick, tile and chalk.

To the north-west there were a series of pits (Z18, 19, 20) of late thirteenth–early fourteenth century date and one post-hole with early fourteenth century pottery sherds in its fill (Fig. 12).

A large double pit of late thirteenth–early fourteenth century (Z52) had cut into an earlier eleventh–twelfth century pit (see above and p. 87). The double pit was at first thought to be two separate pits, excavation showed that they were in fact two parts of a single pit that had been divided by wood or wicker shuttering. They are described separately here.

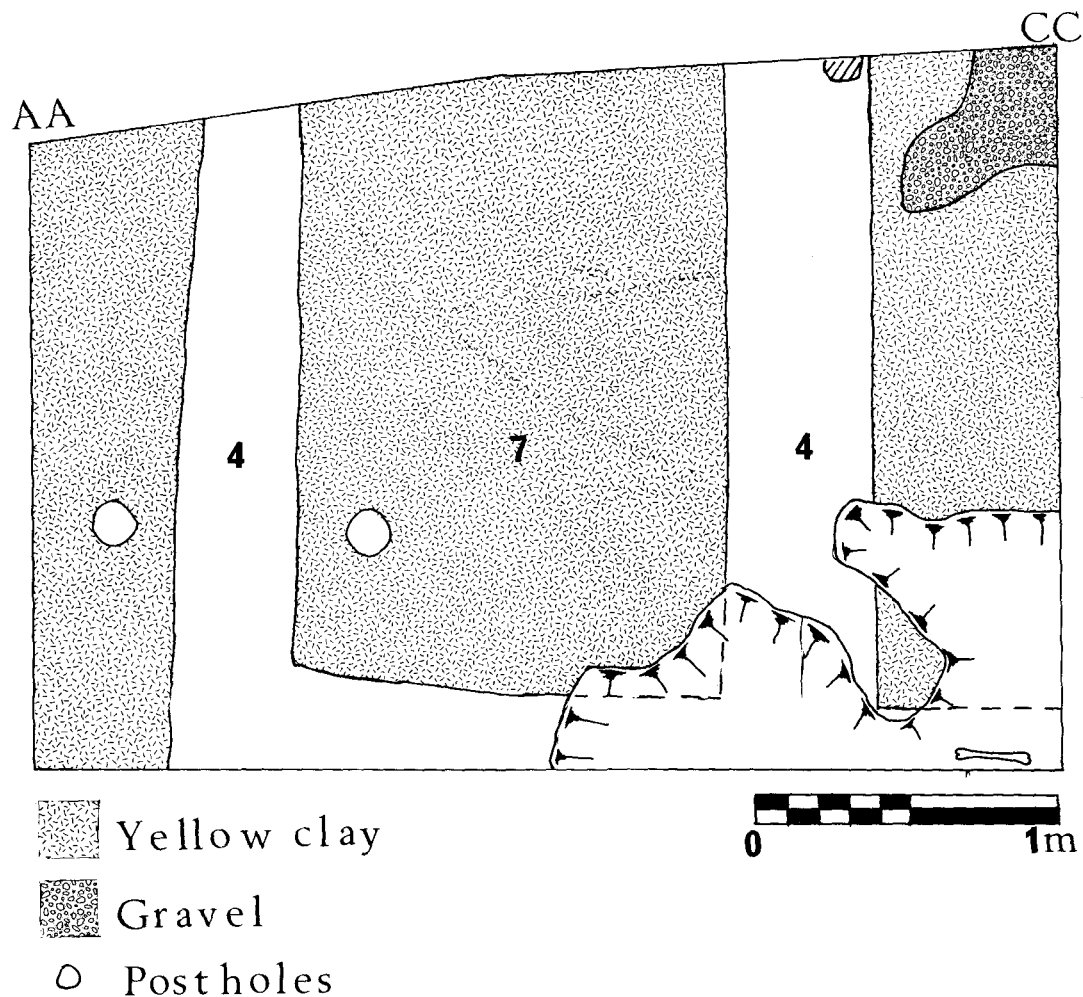


Fig. 11. Elmsleigh House, Staines: Plan of Building II, phase 2. 4. Beam trenches. 7. Clay floor.

The top layer (i) of both pits was a black soil, and contained medieval and early sixteenth century pottery (Figs. 19, 20, Nos. 104–144).

Pit I. Most of the fill consisted of a fine black soil (ii) containing medieval sherds, animal bones, tiles and shells with at the base two large quartzite blocks, one having a moulded interface. Below was a peaty soil (iii) containing preserved wood and medieval sherds. Around the sides was a mix of soil and pit side collapse. Beneath the two quartzite blocks were two post-holes with their stakes preserved and there was at least one other post-hole but flooding prevented examination.

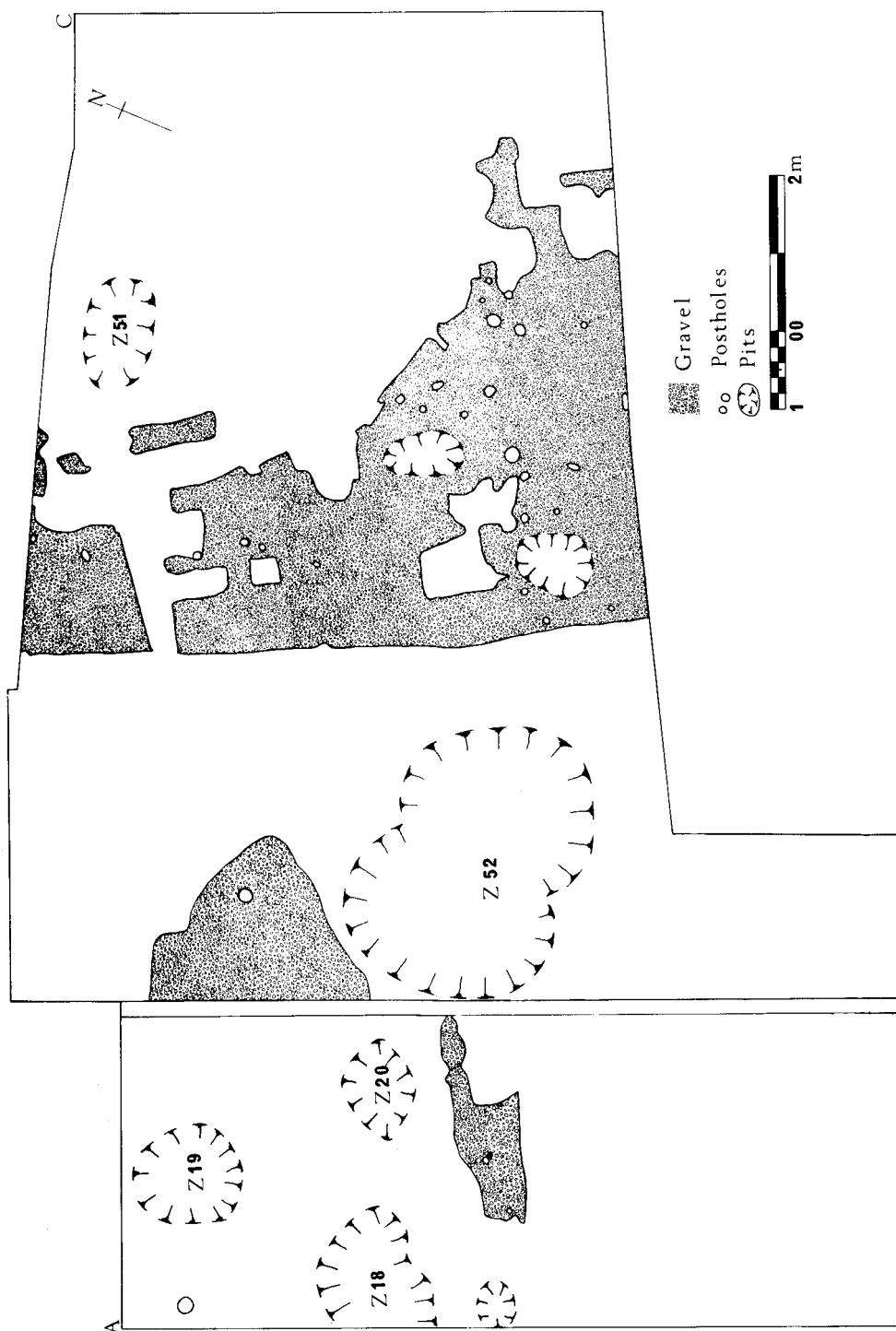


Fig. 12. Elmsleigh House, Staines: Plan of late medieval surface.

Pit. II. Below the black soil was a yellow/grey clay (v) filling the centre of the pit. This abutted against a straight edge which separated the clay from a fine black soil (vi). This straight edge was either a wicker or wood shuttering separating the two parts of the pit. The fine black soil (vi) merged into a peaty soil as in Pit I and below this and cut into the natural were four irregular shallow holes, probably post-holes. Beneath the yellow/grey clay was a circular hole (approximately 0.15m deep) filled with clay and cut into the natural. The western edge of the clay was built up against layer ii of Pit I and in a similar way to the shuttering of Pit II. The northern side of the clay was probably pit collapse.

Late medieval

Sealing all earlier levels was a gravel surface approximately 1.12m below modern ground surface and of late medieval date. Most of the surface had been destroyed by later digging so that it was impossible to discern any plan from the post-holes and two post pits remaining. It is probable that this surface is contemporary with the brick building at the southern end of the site (see below and Fig. 12).

The brick building (Fig. 13)

Only the front edge of this building was discovered; the rest lay beneath the car park to the south (Fig. 6). Several phases of construction were interpreted for this brick building.

The first phase was probably of late fourteenth–early fifteenth century date, of timber framed construction with foundations dug into late thirteenth century flood deposits. The timber framed building was replaced in the late fifteenth–early sixteenth century by a brick building which was demolished in the mid seventeenth century. During the late seventeenth century an out-building was constructed upon part of the foundation wall of the earlier building. This first out-building was probably deliberately burnt down and demolished before being rebuilt in the early eighteenth century. It was finally demolished in the late eighteenth century.

From material recovered from the excavation it is probable that this late medieval–early post-medieval building was of some importance though to date no documentary evidence from Staines has been found for its existence.

Phase I late fourteenth–early sixteenth century

The earliest surviving construction phase for this building consisted of a beam slot and a brick pier. The beam slot (Z135) (2.40m in length, 0.30m wide and 0.20m deep) was found at 12.64m O.D. and had been cut into the flood deposits of the thirteenth century. The slot and associated layer contained pottery of late fourteenth–early fifteenth century date (Fig. 18, Nos. 80–103) and associated with it was the remains of a brick pier (Fig. 13). Originally the brick pier had abutted the beam slot, though it had been partly robbed leaving only seven layers of brick intact (2.12m × 0.53m height). The top layer of brick showed traces of mortar suggesting that the structure was higher while the southern face of the pier had been faced and curved inward. A tentative interpretation is that this is the remains of a pier being part of a supporting superstructure for the entrance into the building which lay to the south. The building itself was probably constructed of timber and plaster with a tiled roof, for sealed beneath a yellow clay floor were a beam and a post of oak (?) together with roofing tiles and mortar rubble. The beam (0.15m square with an excavated length of 1.05m) ran diagonally across the bottom of the trench and the post had been sunk into the flood deposits (surviving length 0.74m × 0.30m × 0.25m). The top of the post had been carved into a column (0.33m in length and 0.20m dia.) with the back left flat so that it would stand flush against a wall. Around the post on three sides were four tiles set on edge.

Phase II sixteenth century

The timber framed building and bridge pier were demolished in the early sixteenth century and replaced by a brick building. This brick building was built to the south of the brick pier (see above and Fig. 13). The front wall of this brick building, which was the only part available for excavation, had a zig-zag plan (Fig. 13). The wall survived to a height of 1.05m and was built on rubble and roof tiles of the previous building. The wall had alternate layers of headers and stretchers and a relieving arch had been built to the west end perhaps to support a drain or culvert. On the inside of the wall there was a yellow clay layer (0.29m thick) utilised as a floor and sealed

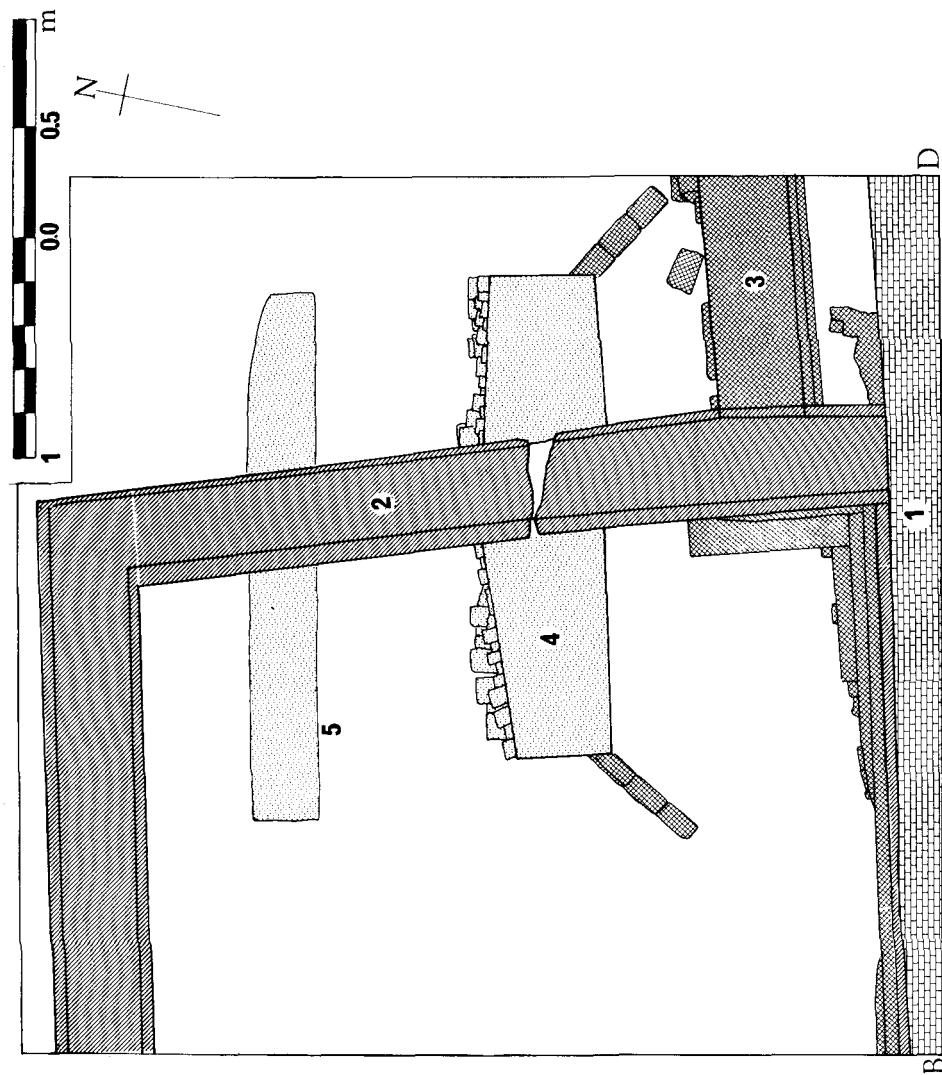


Fig. 13. Elmsleigh House, Staines: Plan of brick building phases. 1. Nineteenth century. 2. Sixteenth-seventeenth century. 3. Pier, fifteenth century. 4. Beam trench, fourteenth-fifteenth century. 5. Beam trench, fourteenth-fifteenth century.

beneath it the remains of the earlier building (see above). It is possible that tiles had been laid upon this clay, though none survived intact, but from the layer above broken glazed tiles and mortar were recovered suggesting that the tiles had been deliberately removed before destruction of the building.

At the point where the line of the wall changed direction the wall had been widened at sometime during the late sixteenth or early seventeenth century from its original width of 0.33m to 0.47m by addition of offsets. These offsets were incorporated in an extension built between the wall and surviving part of the brick pier (Fig. 13). An arch was formed between the wall and brick pier and the gully formed was blocked at some later date with mortar and tile.

An extension trench was dug to find the full length of the front of the brick building. The east corner of the building was found and gave a length of 12m. This however was not the complete length, as the wall was traced to the west beneath the footpath but no return was established.

Phase III Late seventeenth century

The brick building was probably demolished sometime in the mid seventeenth century. Part of the remaining wall was used as a base for the southern and part of the eastern wall of an out-building. The rest of the east side and the north side were built directly upon the soil. The eastern face was 3.80m in length, and the exposed length of the north and south walls 2.50m. The walls (0.34m wide) rested upon a single layer of bricks (0.44m wide) forming offsets on each side. The out-building had a tiled floor set on mortar, which sank into the underlying foundation trench and pit of seventeenth century date. This subsidence caused part of the east wall to crack and it is probably due to these factors that the building was demolished and the rubble used to form a solid base for a second out-building constructed on the same plan.

Pipes and pottery suggest a date of c. 1710 for this re-building. (See clay pipe report, p. 129 and pottery, Fig. 21, Nos. 5–15.)

Phase IV eighteenth century

The second out-building was built on same plan as first. Mortar was laid on the rubble and on to this the tiles from the earlier building were laid. This out-building continued in use until the 1760's when it was demolished and the site levelled (Fig. 21, Nos. 1–4). The only evidence of occupation connected with the eighteenth century is a pit of c. 1760 (Fig. 22, Nos. 35–52).

Nineteenth century

The site it would seem was left vacant until the building of Elmsleigh House towards the High Street (Fig. 13). Gardens were laid out over the site with gravel paths, the southern end being heightened by 0.50m and a garden wall constructed using part of the sixteenth and eighteenth century walls as foundations. This nineteenth century garden wall was demolished c. 1950 and house demolished c. 1968.

General Conclusions

The findings from the Elmsleigh House site have to be dealt with in isolation at present, though some reference to previous and present excavations is cited.

Prehistoric

The evidence of prehistoric occupation is limited. The nearest major evidence of prehistoric activity during the neolithic is the causewayed camp (TQ 025 725) at Yeoveney¹ and late bronze age–early iron age at Runnymede Bridge, Egham (TQ 019 718);² and it is therefore likely that there was prehistoric occupation of some character at Staines itself. This has been hinted at by a quantity of neolithic–iron age material recently found on the Friends Burial Ground (Fig. 2) in 1975–76.

From the limited evidence so far available it is probable that any occupation occurred on the higher ground above 13.48m O.D. towards the River Thames. Consequently

examination of sites set on the higher ground at about 13.48m O.D. might produce more substantial evidence of pre-Roman occupation.

The Roman Settlement: Late third–fourth century A.D.

From the Elmsleigh House site some change in the estimation of the extent of occupation to the back of the High Street has been necessary. It is now known that clay and timber buildings stood some 50m to the south of the main London–Silchester road and that probably metal-working, indicated by the presence of iron and bronze slag and half finished artefacts, was a minor industry.

The end of the Roman settlement and Saxon occupation

It is not possible at present to say what happened in Staines at the end of the fourth and the beginning of the fifth centuries A.D. It is probable that a gradual decline occurred as shown by the collapse material from the late Roman clay and timber buildings and the decline in the quantity of late Roman pottery after about A.D. 370. A similar picture is reflected in the coin percentages (p. 120).

When and exactly how the Saxon occupation started is still doubtful, but it is likely that there was a slow transition from Roman to Saxon settlement and that occupation became centered along the High Street and towards the bridge-head. The flooding which occurred during the Saxon period may well have concentrated any occupation to these areas.

Medieval period

The medieval period is characterised by plough soil of up to a thickness of 1m. Ploughing occurred close to the town along the contour line and parallel to the High Street. It is interesting to note that the Domesday Survey mentions some 24 ploughs³ in Staines.

The presence of pottery from a wide area, e.g. Pingsdorf, St. Neots and East Anglia suggests that the medieval town acted as a market centre from an early date, at least by 1218.⁴ The presence of Windsor Castle, six miles to the north, would also be an added stimulus to growth.

Late thirteenth century flooding

The evidence of flooding on Elmsleigh House site is of interest as it is possibly contemporary with the flooding which occurred in London in 1294, evidence for which has recently been found at Toppings and Sun Wharves, Southwark.⁵ Whether this flooding is of precisely the same date and from which direction it came up or down stream, it is not at present possible to be certain.

Late fifteenth–sixteenth century building

Only the front part of this substantial building was excavated. At present there is no traced documentary evidence for it, but the depth of foundation and material found in association would suggest that it was of some importance in the town. The demolition of the building occurred in the 1650's, possibly at the same time as that of Oatlands Palace, Weybridge (TQ 079 652) in 1650–52, by order of Oliver Cromwell.⁶

NOTES

¹ Report forthcoming. Interim report. *Archaeol. News Letter* 7 (1962) 131-134.

² Excavation by Surrey Archaeol. Society, directed by David Longley 1976.

³ Victoria County History *Middlesex* 3 (London 1962).

⁴ *Ibid.*

⁵ H. Sheldon 'Excavations at Toppings and Sun Wharves 1970-72' *Trans. London and Middlesex Archaeol. Soc.* 25 (1974) 25.

⁶ Excavations carried out by Department of the Environment 1967-72. Report forthcoming. Information from Weybridge Museum.

THE FINDS

The Flints by Phil. Jones

Fifteen struck flints were recovered from various features and layers of Roman, medieval and post-medieval date throughout the site. They could have been introduced onto the site with road metalling gravels extracted outside the settlement area, but current excavations (Friends Burial Ground) suggests that there is considerable prehistoric activity in Staines and that it is more likely that the Elmsleigh House flints represent peripheral activity of at least one period of neolithic-bronze age activity near the foreshore of the Thames. There are no implements that can adequately be used to determine specific phases of flint working with the possible exceptions of the shouldered point/blade (No. 7) which, with its steep retouched notches, is of mesolithic ancestry though known to continue through the neolithic; and the waisted end scraper (No. 5) which has been observed as a scraper sub-type of late neolithic and early bronze age settlements as at the beaker settlement of Belle Tout, Sussex, Bradley (1970, 36). All but one of the five scrapers are on fairly thick flakes and are generally convex end scrapers with occasional supplementary side working. The spurred scraper (No. 2) is another distinct sub-type, but the rolled condition indicates its introduction into the area via the Thames.

Seven small flakes and blades show retouching or utilization as knives on one or both edges and include a primary flake (No. 6) with a convex working edge.

Most of the flints were of a brown to buff colour although the rolled and presumed alien spurred scraper was a mottled red and tan; the shouldered point blade (No. 6) was dark olive; and the two unworked parallel sided blades (No. 4 and unillustrated) were a buff colour. These exceptions could still fall within the range of local flints from the floodplain and Thames Terrace gravels.

Flints (Fig. 14)

1. Convex end scraper on a thick flake, with retouch extending down three-quarters of the right side and half-way down the left. Maximum thickness 15mm.
2. Rolled flake with much cortex. Scraper edge on lower left side and a spur with concave retouch on the left side. Maximum thickness 10mm. Purple-red flint.
3. Convex end scraper on primary flake, retouch extends down most of left and right sides. Maximum thickness 10mm.
4. Bulbar end of broken parallel sided blade. No retouch or utilization. Long thin arrises. Some degree of calcination. Maximum thickness 20mm. Pale grey flint.
5. Broad convex end scraper on a waisted flake, retouch extends down whole of left side. Much cortex, maximum thickness 10mm.
6. End and side scraper edges on small flake. Slightly convex end retouch extending down left side. Right side possibly utilized as a knife edge. Maximum thickness 7mm.
7. Shouldered point/blade (broken at tip and base), steep retouch in upper right and lower left notches, and knife utilization down left side, some cortex.

Brown/olive-green flint.

8. Blade with knife retouch down whole of left side and intermittently down right side. Hinge fracture on the end. Maximum thickness 3mm.
9. Irregular shaped blade with knife retouch and use down both sides. Hinge fracture on the end. Maximum thickness 3mm.
10. Broken blade with retouch down whole of right side, possible knife. Maximum thickness 5mm. Brown flint with pale blue patina.
11. Broken blade with retouch down left side and utilization of right side. Maximum thickness 25mm.

Not illustrated

Broken blade, no retouch or utilization. Maximum thickness 2mm. Beige/pale grey flint.

Flake with convex knife retouch down whole of left side and shaping retouch on right side. Maximum thickness 9mm.

Broken blade segment. Some invasive retouch on lower right edge, possible knife. Maximum thickness 5mm.

Small blade with some utilization on right side. Maximum thickness 3mm.

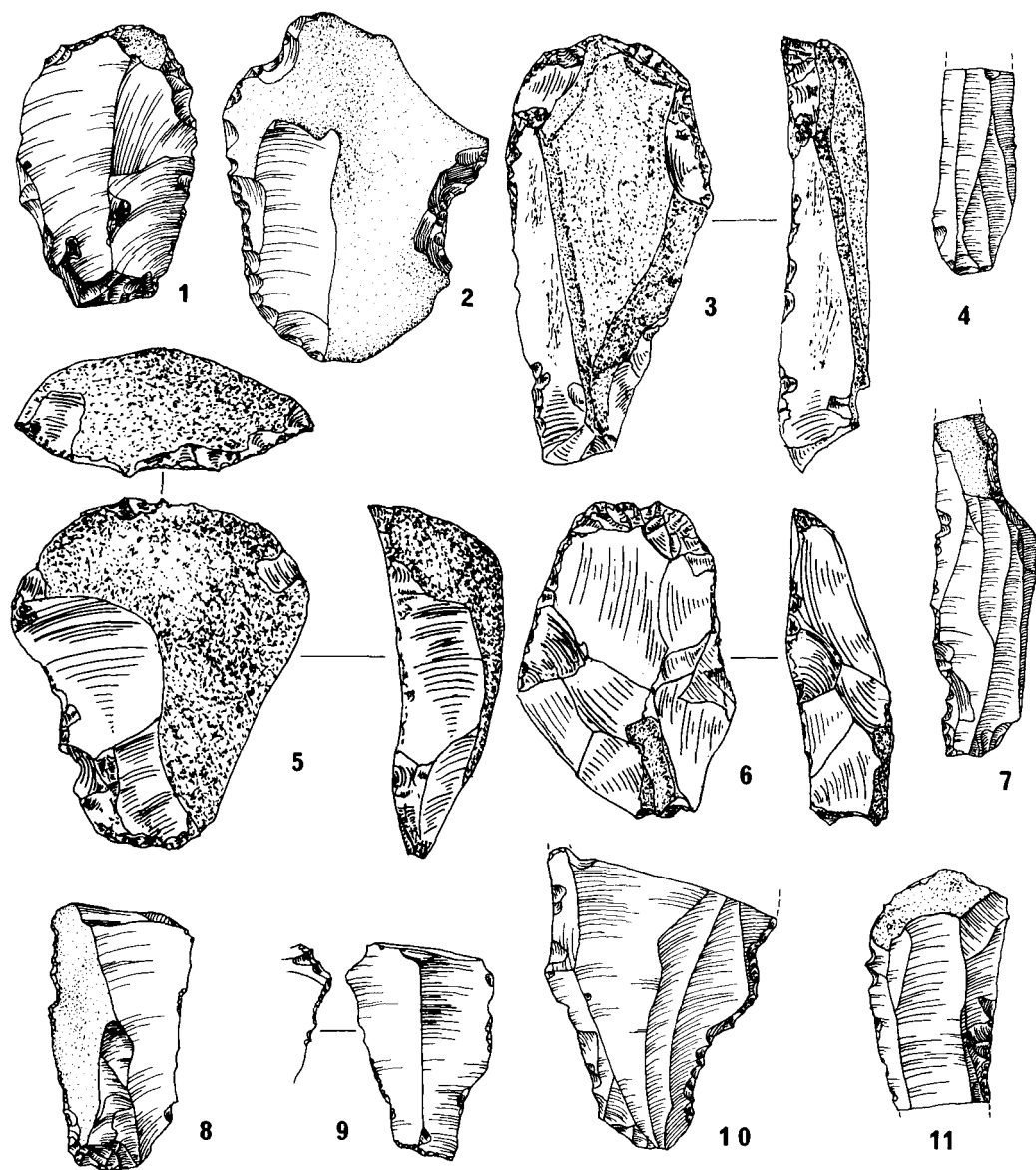


Fig. 14. Elmsleigh House, Staines: Prehistoric Flints (1/1).

The Roman Pottery by Kevin Crouch

1. Introduction

The groups of illustrated pottery represent most of the vessels from the features of the Late Roman occupation which could be drawn.

The pottery is presented in a stratigraphical sequence starting with the earliest (third century A.D. to the late fourth century A.D.). Within this outline is further grouping into material from pits and buildings.

The two stamped wares which are illustrated, though being residual, are of interest.

Limited dating has been attempted by using other excavations, dated primarily by coins.

Conventions used in the descriptions of the drawn vessels follows that of Southwark, Sheldon (1974, 41).

1. Temper, 'sandy' indicates that small grains were visible in the clay, 'gritty' that large grains were present. Where no tempering is mentioned none was present.
2. Quality, 'fine' and 'coarse' indicates the texture of the clay.
3. Colour, a hyphen indicates an intermediate colour (e.g. blue-grey a colour between blue and grey) and a solidus a mixture of colours (e.g. blue/grey patches of blue and grey).

(Numbers in text refer to Figs. 15–16)

(Z119) Pit (mid third century)

1. Bowl. Sandy, soft, fine fabric. Light grey core. Silver-grey slip on inside and top of flange. Third century. Philp (1973, 147–8).
Not illustrated: Mortarium rim, sandy, fairly hard, pink-buff fabric. Slight burning on part of rim. Third century A.D.

(Z103) Beam trench Building I phase 2

2. Bowl, sandy, soft, fine fabric. Orange-pink core with reduced grey centre. Red colour coat. Imitation samian Dr. 18/31R. Neal (1974, 236–7, No. 272) second quarter of fourth century—A.D. 353.
3. Handle from flagon. Gritty, hard, fairly coarse fabric. Brick red core, with reduced grey centre. White slip. Oxfordshire?
4. Jar. Gritty, hard, coarse fabric. Grey core. No burnish. Two ridges on underside of rim.
Seven sherds of grey coarse ware. Farnham-Alice Holt.

(Z125) Beam trenches Building II phase 2

5. Jar. Sandy, fairly hard, fine fabric. Grey core. Burnishing on inside of rim lip and underside of rim. Sheldon (1972, 115–6, No. 2) A.D. 317–355.
6. Jar. Sandy, hard, fine fabric. Grey core. Blue-grey surface. Sheldon (1972, 122, No. 16) A.D. 270–320.
7. Jar. Sandy, hard, fine fabric. Grey core. Silver-white slip. Cordon on shoulder. Farnham-Alice Holt. Fourth century.
8. Jar. Gritty, hard, shell tempered fabric. Light brown colour. Neal (1974, 240, No. 315, dated to second quarter of fourth century—c. A.D. 353).
9. Bowl. Sandy, fairly hard, coarse fabric. Grey core. Silver-blue slip on inside and top edge of rim. Groove 15mm below rim. Farnham-Alice Holt type.
10. Bowl. Sandy, hard, fairly fine fabric. Blue-black burnish. Soot residue on outer surface. Inside of rim imperfect, indentation caused by thumb print. Woods (1970, 59, Fig. 11, No. 48) Late third–first half of fourth century.

(Z112) Pit

11. Bowl. Sandy, soft, fine fabric. Buff-beige core. Pink-cream slip on inside of bowl and top surface of rim. Farnham-Alice Holt. Fourth century.
12. Bowl. Sandy, fairly hard, fine fabric. Grey core. White slip on inner surface and top surface of rim. Neal (1974, 242–3, No. 354, accumulation date A.D. 340–350).
13. Jar/Beaker. Sandy, hard, fine fabric. Orange-beige core, with reduced grey centre. Red colour coat. Probable late third–fourth century.
14. Bowl. Sandy, fairly soft, fine fabric. Light grey core. Blue-black slip on inner surface and on upper surface of flange. Sheldon (1972, 112–3, No. 11, A.D. 317–c. 355).
15. Bowl. Gritty, hard, coarse fabric. Light grey core. Blue-black burnish. Third century. Frere (1972, 342–3, No. 1065, A.D. 200–275).
16. Jar. Sandy, soft, fine fabric. Light grey core. Silver-blue slip on both faces of rim. Farnham-Alice Holt. Frere (1972, 353–4, No. 1187, A.D. 315–360).
17. Storage jar. Sandy, fairly hard, fine fabric. Brick red core reduced to grey centre. Pink-white slip. Farnham-Alice Holt. Fourth century.
18. Storage jar. Sandy, soft, fine fabric. Light grey core. Blue-grey slip. Farnham-Alice Holt. Frere (1972, 358–9, No. 1243, A.D. 350–410+).
19. Mortarium. Sandy, hard, fine fabric. Brick red core, reduced to grey in centre. White slip. Oxfordshire. Late third–fourth century.

(Z106) Pit

20. Jar. Gritty, hard, coarse fabric. Light grey core. Neal (1974, 239–40, No. 320. Second quarter of fourth century—353 A.D.).
21. Bowl. Soft, fine fabric. White powdery-pinkish core. Painted red/brown decoration. Parchment ware. Oxfordshire. Fourth century.
22. Jar. Sandy, soft, fine fabric. Light grey core. Blue-black slip. Sheldon (1972, 124–6, No. 22, House of Theodosius—408 A.D.).

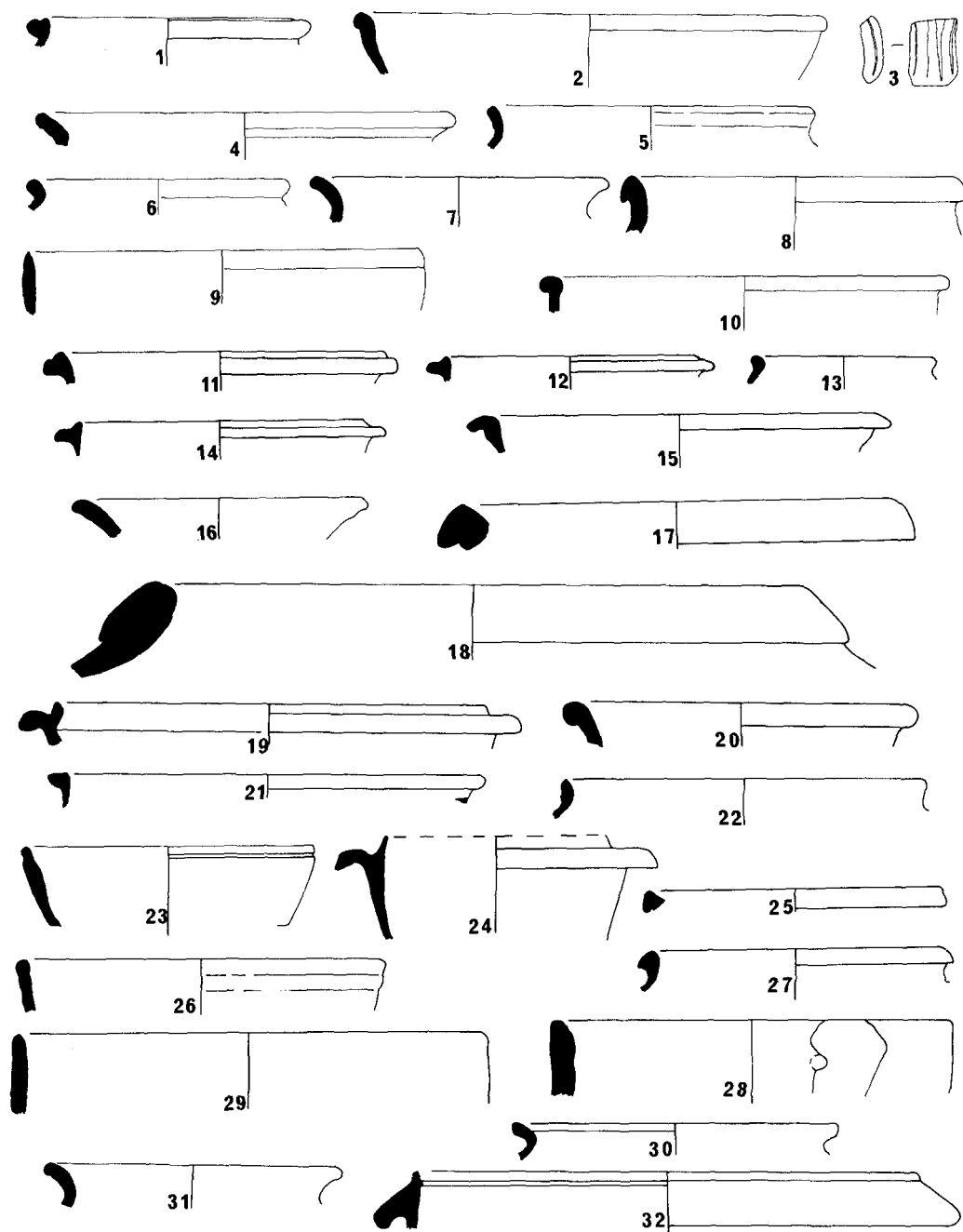


Fig. 15. Elmsleigh House, Staines: Roman pottery, Nos. 1-32 ($\frac{1}{4}$).

23. Dish. Sandy, fairly hard, fine fabric. Light grey core. Blue/black colour. External horizontal groove 1mm below rim. Sheldon (1972, 113-4, No. 34, A.D. 317-c. 355).
24. Bowl. Sandy, soft, fine fabric. Red-orange core, reduced grey centre. Red colour coat. Imitation samian. Drag. 38. Philp (1973, 149-50, No. 389, second half of fourth century).
25. Jar. Gritty, hard, coarse fabric. Grey-pink core. Surface 'smoked' grey. Sheldon (1972, 115-6, No. 21, A.D. 317-c. 355).

(Z102) Post-hole

26. Jar. Fairly hard, fine fabric. Light grey core. Ridge 12mm below rim. No burnish or slip. Frere (1972, 353-4, No. 1178, similar but not same fabric, A.D. 310-315 and No. 1220, 357, A.D. 360-370).

(Z122) Post-pit

27. Jar. Sandy, hard, fine fabric. Light grey core. Darker grey external surfaces. Slightly worn. Sheldon (1972, 124-5, No. 16, Theodosius—408 A.D.).
28. Dish. Hard, coarse fabric. Dark grey core. Blue-black slip on internal surface. Blue/black external surface, no burnish. Hand made finish. Hole drilled in centre of body. Cunliffe (1964, 74-5, No. 27, mid fourth century).

(Z113) Gully

29. Dish. Soft, fine fabric. Light grey core. Silver-blue slip on external surface. Sheldon (1972, 113-4, No. 24, A.D. 317-c. 355).
30. Jar. Sandy, hard, fine fabric. Grey core, red centre. Two grooves on upper surface of rim. Sheldon (1972, 124-5, No. 20. House of Theodosius—A.D. 408).

(Z30) Beam trench Building III

31. Jar. Fairly hard, fine fabric. Light grey core. Slight burning on rim. Cunliffe (1964, 71-2, No. 7, mid fourth century).
32. Mortarium. Fairly hard, fine, sandy fabric. Red-pink core. Burning on inner edge. Third-fourth century.

(Z37) Beam trench Building III

33. Jar. Sandy, hard, fine fabric. Light grey core. Grey

slip on inside of rim. Sheldon (1972, 115-6, No. 2, A.D. 317-c. 355).

34. Jar. Soft, fine fabric. Light grey core. No burnishing or slip. Neal (1974, 239-40, No. 313, second quarter of fourth century—353).

(Z115) Collapse material

35. Beaker. Hard, fine fabric. Red-orange core, reduced grey centre. Orange/red colour coat. Neal (1974, 246, No. 379, A.D. 270-353).
36. Bowl. Gritty, fairly hard, coarse fabric. Grey core. Brown/beige slip. Burnt rim and body. Sheldon (1972, 112-3, No. 12, Carausius—317-c. 355).
37. Bowl. Sandy, hard, fine fabric. Light grey core. Blue/black slip. Sheldon (1972, 112-3, No. 13, A.D. 317-c. 355).

(Z35) Gravel surface

38. Jar. Hard, fine fabric. Medium grey core. Brown-beige slip on external surface of rim, in horizontal bands. Neal (1974, 247-8, No. 393, A.D. 270-388/402).
39. Jar. Hard, fine fabric. Medium grey core. Silver/grey slip on external surface and half of internal surface of rim. Neal (1974, 248-9, No. 404, A.D. 350-410+).
40. Jar. Gritty, hard, coarse fabric. Light grey core. Heavily gritted. Part of rim distorted.
41. Jar. Hard, coarse fabric. Grey core. Hand made. Johnson (1972, 132-3, No. 62, end of fourth century).
42. Bowl. Sandy, hard, fine fabric. Light grey core. Reeded rim. Blue-black slip, on external surfaces. Farnham-Alice Holt, fourth century.

(Z3)

43. Sherd. Fairly hard, fine fabric. Orange-brown core. Brown-red colour coat. Decoration of vertical bands of rosettes between vertical rows of small sunk squares.

(Z10)

44. Fairly hard, fine fabric. Orange-red core. Red colour coat. Stamped decoration of wheels. Frere (1972, 358-9, No. 1229, Fig. 137, dated 370-410+).

Eighty percent of the Roman material recovered from the excavation came from residual levels. The range of material from late third-fourth century possibly indicates that the ploughing carried out in later centuries along the contour and parallel to the High Street destroyed most of the late Roman occupation levels.

As would be expected a high percentage of the pottery is of the Farnham-Alice Holt and Oxfordshire types. 70% Farnham-Alice Holt, 25% Oxfordshire, 5% Local and other types.

The period between the late fourth century and the fifth century is unclear in Staines. No typical 'Romano Saxon' forms have been found and the relationship between the Roman and Saxon settlement is undefined (p. 95).

The Oxfordshire wares were easily transported down the River Thames to Staines. The passage of the Farnham-Alice Holt wares causes more difficulty as there is no direct route-way between Staines and Farnham area that has been definitely identified. However there is the probability of a direct road link between Staines and Farnham area or by use of the river Wey to Weybridge (TQ 074 658) and then up the Thames to Staines.

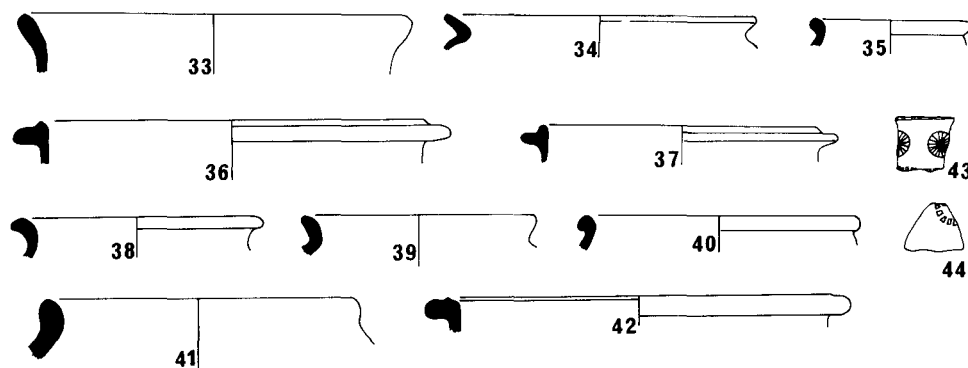


Fig. 16. Elmsleigh House, Staines: Roman pottery, Nos. 33-44 (1/4).

Saxon and Medieval Pottery by Phil. Jones and Susan Shanks

Part A: Introduction

This first medieval pottery report from Staines is a preliminary survey of the ceramic range found in the south-west corner of Old Middlesex. Consideration of the Elmsleigh House site material was hindered by four factors that detracted from the adequacy of chronology:

- (i) The nature of the stratigraphy; whereby late medieval and post-medieval reversion to arable land and ploughing along the contour behind and parallel to the High Street disturbed much of the Roman and medieval domestic activity.
- (ii) Lack of dateable structures related to documentary evidence.
- (iii) The mixed nature of most of the surviving features, with a preponderance of residual material.
- (iv) The lack of published accounts of sites of comparable material in the immediate area. Many Saxo-Norman and early medieval wares are of handmade types and should adhere even more rigidly to Le Patourel's deduction that a ten mile radius is a reasonable limit for distribution of pottery from a manufacturing centre, Le Patourel (1968, 101-26).

Nevertheless, if a broad generalised time scale is allowed for, the material presents an outline of pottery traditions distinct from London groups. Staines is the only other Middlesex town where a Saxon and medieval range has been published in some quantity.

Much use has been made in this report of the published account of Northolt, Hurst (1961) c. 15 kms. from Staines. Although this report dealt only with a small area of the total excavation it provided an outline of a type series that has provided useful comparisons for many other sites both inside and outside Middlesex. It should be noted, however, that most of the dates put forward for the fabric types at Northolt were themselves analogous from other sites, and that independent dating was generally lacking.

It is to be clearly understood that all references to fabric types of Northolt, or other such series, are visual considerations and that similarities of rim profile have not been cited as other than of generalised contemporaneity.

Descriptions of the pottery within the catalogue make use of some of the conventions adopted at Southwark, Sheldon (1974, 64). A vessel of variable colour will be signified by a solidus (/), separating the two or more extremes of shading (e.g. red/brown) and intermediate colours will be hyphenated (e.g. red-brown). Texture has also been described as Southwark i.e. 'fine sandy' implying a sandy feel although no grains are discernible; 'coarse sandy' when grains can be seen, and 'gritty' which departs somewhat from Southwark analysis in that angular particles are generally present although larger rounded grains are included within this category. Fingernail

tests for hardness have been considered too arbitrary as a strict guide, and so a simple progression of soft, fairly hard and hard has been adopted.

Since little is known about medieval pottery in the Staines area, the catalogue (B) has been arranged in feature groups which run in chronological order according to the latest dated sherds which may or may not indicate the date of deposition or infill.

Saxon features can be found at the beginning of the catalogue sequence, but a fuller exposition of their contents plus residual Saxon (or iron age?) pottery is to be found towards the end of the report under the separate headings of 'Saxon grass/chaff tempered pottery' (C), (p. 111) and 'Other Hand Made Wares' (D), (p. 111). Reasons for their separation from the main body of the report are given in the introductions to those sections. A small miscellaneous section (E) has been included to deal with other medieval items of interest from post-medieval levels.

(The pottery numbers refer to Figs. 17–20)

Part B: Catalogue

(Z137) Gully

Like other Saxon features on the Elmsleigh House site, it is not yet possible to narrow the dating of this gully down to reasonable limits. The sequence of grass tempered pottery in Staines is unclear and the small size of the rim sherd 149 (the only artefact recovered) detracts from any possible typological assessment. (See section C, p. 111 for full description and illustration.)

(Z33) Gully

Although the quantity of residual fourth century material is dominant within this gully, its stratigraphical context and the inclusion of grass tempered pottery (including the rim sherd 153) brings its period of infilling forward to the Saxon occupation of the area. (See section C, p. 111 for description and illustration.)

(Z43)

Apart from several residual fourth century sherds, the dating is dependent on a sherd of grass tempered pottery of Saxon date.

(Z131) Pit

Two grass tempered body sherds of black ware were found within this pit; one of black paste and surfaces with occasional small shell fragments, and another thicker sherd of black fabric with a smooth brown exterior.

(Z101) Gully

Only one sherd was found within this gully, so firm dating of the feature cannot be reliably established from the pottery. Possibly late eleventh–early twelfth century.

45. Everted rim of a cooking pot in a soft black fabric with purple/brown surfaces and much crushed shell temper. The ware and rim diameter is akin to the

'Developed St. Neots' type as found in phase 1C at Northolt, Hurst (1961) although no sand is present to give harsher surfaces.

(Z118) Plough soil

Dating for this black plough soil is probably of mid to late eleventh century based on the rim sherd below, and a fragment of grass tempered pottery. (See section C, p. 111.)

46. Large sherd from the simple everted rim of a cooking pot in a hard gritty black ware with some shell. The body appears handmade and has some external burnishing after a slow turning of the rim. The profile and narrow diameter of the rim displays the Saxon ancestry of this particular 'Early Medieval'

form and so is assigned here to the mid to late eleventh century. Dunning (1959) and Hurst (1961) for consideration of 'Early Medieval' hard sandy fabrics. The rougher tempering is unlike Northolt examples and is more like the Oxford area variants of this ware. Jope (1946–47, 171; 1952, 87–89).

(Z35a) Gravel.

This earliest intact medieval layer of dirty gravel is presumed to be of the eleventh or early twelfth century on the basis of two sherds of 'Early Medieval' type black sandy ware, and the shell

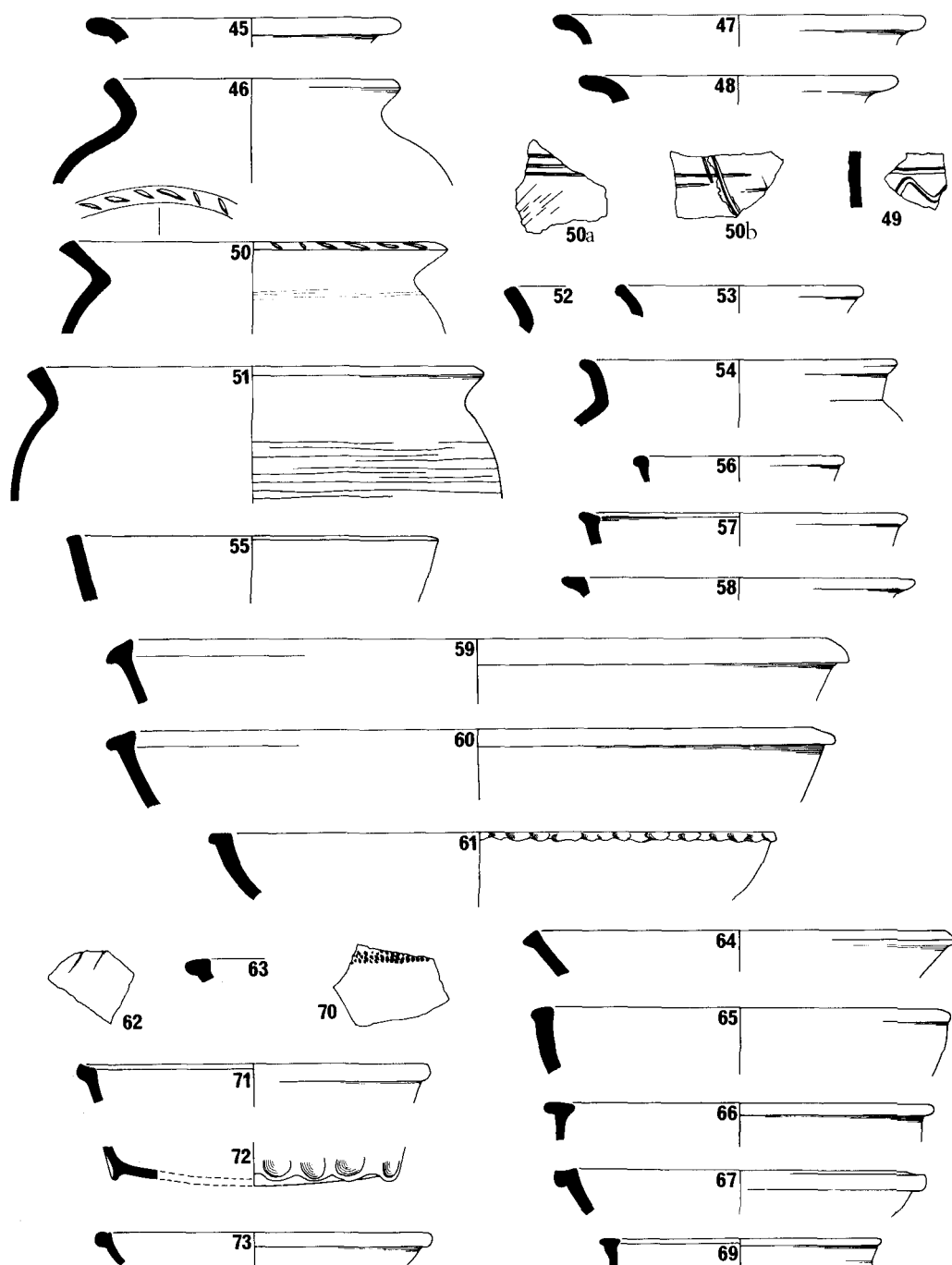


Fig. 17. Elmsleigh House, Staines: Saxon and medieval pottery, Nos. 45-73 ($\frac{1}{4}$).

tempered rim of general 'Developed St. Neots' type.

47. Rim sherd in a grey ware with purple/brown or blackened surfaces, tempered with crushed shell and some sand.

(Z25) Two gullies

The black soil fill of these two gullies contained only two medieval sherds, amongst the Roman wares, dating to the late eleventh–early twelfth century as both accord to the characteristics of 'Early Medieval' type ware.

48. Everted rim of a cooking pot in a hard grey sandy ware with black surfaces.
49. Body sherd in a similar ware to 48 (and possibly of

the same vessel), decorated with a horizontal line surmounted by a wave pattern executed by grooving with a blunt object.

(Z99) Pit

The date of this feature is possibly early twelfth century, considering the relatively slight development of the rims from simple everted forms to more expanded versions, and comparisons to the Northolt type series. Also present were some soft shelly and grass tempered sherds (not illustrated) probably representing eleventh century residue.

50. A sharply everted and slightly thickened rim sherd of a cooking pot with slashed decoration, made of a hard grey ware with grey-brown inside surface. Tempered with sand, shell and chalk. The outer surface of the body is marked on several sherds with irregularly placed grooves (50a and b).
51. Everted and thickened rim of a cooking pot in a hard grey fabric with brown surfaces. The temper of rounded brown grits and quartz fragments is less resistant than the paste in the manner of the Northolt 'Developed Early Medieval' type, to which this rim form, and horizontal grooving of the body is

also comparable.

52. Small everted rim sherd of a cooking pot in a hard gritty grey ware.
53. Everted and slightly beaded rim in a fairly hard grey ware with sand temper and some grits.
54. Everted rim sherd of a cooking pot in a light grey ware with red-brown outer surfaces. The dense 'Early Medieval' sandy fabric also contains occasional crushed shell fragments.
55. A straight sided rim sherd of a bowl in a similar fabric to that of 51.

(Z45) Pit

Dating evidence for this pit deposit is slight and dependent on a single sherd of 'Developed Early Medieval' type possibly twelfth century. (Not illustrated.)

(Z39) Green clay

Four sherds of 'Developed Early Medieval' type are the latest fragments from this green clay with building debris. They are accompanied by three presumed contemporary sherds of shell and sand tempered ware, and one sherd of a sandy black fabric of 'Early Medieval' type plus residual fourth century material. The relative sequence, however, together with (Z9), must place this layer up into the late thirteenth or fourteenth century. (Not illustrated.)

(Z123) Pit

Although several sherds from this pit are of early twelfth century and late Saxon character, the bowl forms of 59, 60, 61 and the rim fragment of 58 are well developed, with pronounced external flanges. Whilst differing in character from the early twelfth century group of (Z99), there is no true squaring of the rims as one would expect in thirteenth century pottery, so the pit is assigned to the late twelfth century, until more clearly dated groups are forthcoming from Staines.

56. A small dish or bowl with thickened and externally beaded rim in a dark grey sandy ware with black burnished surfaces. It compares with the 'Early Medieval' fabric found at Northolt but has a more developed rim form.
57. An expanded rim sherd in a hard dark grey ware with pale grey inner surfaces. Grit tempering.
58. Flat topped rim sherd in a light grey sandy ware with pink/buff interior surfaces and grey/buff outer surfaces.

59. Large bowl with straight sides and developed rim in hard sandy grey ware with grey or light brown surfaces.
60. A similar bowl to 59 but with a less developed rim profile. Hard sandy grey ware with grey or buff/grey inside surface.
61. Flat topped rim sherd of a bowl with thumb impressions modifying the outer edge. Dark grey sandy ware with shell fragments and red-brown surfaces.

62. Body sherd of a sandy grey ware with brown surfaces and an oblique thumb pressed plastic cordon.
63. Fragmentary rim sherd of a bowl in a sandy grey ware with orange/pink outer, and pale grey interior

surfaces.

154. Grass tempered rim sherd. (See section C, p. 111 for full description and illustration.)

(Z108) Pit

This pit contained only a few sherds of various fabrics that include soft and shelly, sandy and shelly, and rough gritty wares that roughly correspond to Northolt types (e.g. 'Developed Early Medieval' and 'Rough Medieval'). The absence of comparable material in this area, makes the dating of this feature dependent on Northolt conclusions and so an early thirteenth century date has been deduced from the presence of 'Rough Medieval' type pottery (j) and the absence of 'Hard Medieval Grey' (k) wares. (Not illustrated.)

(Z134) Gravel surface

Only one sherd was recovered from this gravel surface which, on the basis of form and the persistence of shell tempering, is assigned to the late twelfth–early thirteenth centuries.

64. Straight sided rim sherd with expanded rim, in a grey ware with blackened outer surface. The temper

is of fine sand and occasional crushed shell.

(Z117) Green clay

Residual sherds from this flood deposit of green clay includes Roman fourth century pottery and two rim forms of late eleventh–twelfth century character, but the sherd of Surrey fabric albeit of simple profile brings the date forward to the late thirteenth or early fourteenth century.

65. Expanded rim of a bowl in a hard grey fabric with brown surfaces. Sandy temper with occasional grits.
66. Typical Surrey ware rim profile with undercut

exterior and rounded internal bead. Sandy off white fabric with buff surfaces and a spot of green glaze on the rim. Closest parallels with Northolt examples is to the cooking pot (68/65) of period II 1300–1350.

(Z18) Pit

Included among residual body sherds (grass tempered, shell tempered, and 'Rough Medieval' type wares) within this pit was a rim with a more developed profile of thirteenth century character. But according to the site stratigraphy (p. 90) the feature should be dated as contemporary with or before the fourteenth century deposits of (Z22).

67. Expanded and hollow topped rim sherd of a bowl in a pinky-grey sandy ware.

(Z20) Pit

Five body sherds and a grass tempered rim from this pit do not provide any concrete dating evidence for the deposit which is stratigraphically of, or not much before the fourteenth century. Two small fragments are presumably Roman, and another is of 'Developed Early Medieval' type with horizontal striations across the body, but the remaining three sherds are of Saxon type.

68. Fairly soft and only slightly sandy ware from a hand made pot. Pale grey to grey ware fired red on the outside and pale buff on the inside. (Not illustrated.)

Grass tempered rim. (See section C, p. 111, No. 154 for description and illustration.)

(Z22) Pit

An early fourteenth century date for this pit is deduced from the persistence of fabrics that correspond to the 'Hard Grey Medieval' of Northolt (known elsewhere as Hertfordshire Reduced ware, Renn [1964]) and the percentage of Surrey ware vessels (c. 33%) represented by a sherd count. By 1350 the off-white fabrics dominate in London and Northolt and the proximity of Staines to the manufacturing centres suggest that a similar (if not earlier) pattern should be expected here.

69. Rim sherd of a jug in a fine sandy grey ware with brown and black surfaces.
70. Body sherd of Surrey off-white fabric with exterior mottled green glazed decoration that also covers a band of rouletted impressions.

71. Rim sherd of a bowl in a hard grey fabric with reduced surfaces. Sand temper with some larger grits.

72. Thumb impressed base angle in sandy buff Surrey ware with occasional green glaze speckles.

73. Small bowl or dish in a fairly soft and smooth grey ware with pale pink surfaces, tempered with a few brown grits. A body sherd (not illustrated), of this

ware, if not this vessel displays a patch of mustard coloured glaze on the outside surface.

(Z9) Green clay

A sherd of Surrey fabric with external mottled green and yellow glaze together with a fragment of hard gritty grey ware were the only inclusions within this silt deposit. Probably late thirteenth or early fourteenth century.

(Z21) Pit

Whereas three of the four sherds found within this pit were of shell tempered fabrics (soft grey ware with red-brown surfaces; grey ware with brown surfaces and some sand; soft slightly sandy grey wares with red-brown surfaces and minutely crushed shell); the fourth fragment was from a Surrey ware jug. Together with stratigraphical evidence, this feature is assigned to the fourteenth century.

74. A body sherd which includes the lower end of a handle. Surrey off-white sandy ware with buff outer

surfaces splashed with glossy light green glaze. (Not illustrated.)

(Z16) Pit

This pit with horse burial contained numerous sherds of Saxon and 'Early Medieval' fabrics that are loosely comparable to the Northolt series e.g. types (a), (h), and (j), but the presence of at least one Surrey ware vessel moves the dating forward to the late thirteenth or early fourteenth centuries but probably no later, as with any later deposition of material one would expect a higher ratio of off-white fabrics.

75. Everted and expanded rim of a cooking pot in a fine sandy grey ware with pale grey interior and pink exterior surface occasionally soot blackened.
76. A basal angle (flat bottomed) of the same ware and presumed to be of the same vessel as 75.
77. Everted and expanded flat topped rim of a small cooking pot in a fine sandy grey ware with grey-pink surfaces.
78. Flat topped and beaded rim in a dark grey ware with dark grey surfaces. Tempered with sand, grits and some shell.

79. A basal angle (sagging) in a black roughly finished ware tempered with small quartz grits, grog, brown grits and crushed shell (this has closest parallels with the 'Rough Medieval' of the Northolt type series).

Other sherds (not illustrated) include Surrey off-white fabrics, a black ware with grass tempering, fine sandy grey sherds with pink interior and black exterior surfaces, similar to the 'Early Medieval' fabric of Northolt (h) and Dunning's group 5; and a finer ware, grey with red/brown surfaces and external ginger or clear glaze over parallel lightly incised lines.

(Z135) Foundation trench

There is nothing in this foundation trench that would be out of place within a fourteenth century context. Surrey off-white products constitute just over half of all vessels included, at the expense of gritty and sandy grey wares, which are the dominant coarse ware types of the thirteenth century.

Red ware vessels made from iron-bearing clays make their first appearance on the site within this feature, and are of two variants, namely a hard sandy fabric (99) which compares well with so called 'East Anglian' types and a more friable ware (100) possibly made from local ferruginous clays.

The dip-slipped jug fabric (93) shows the lengths taken to achieve a near white surface, presumably in imitation of the popular Surrey industry, and the same reasoning could be applied to the smearing of a buff slip over the surface of another jug (92). The appearance of hard gritty sherds with triangular rouletting (103) could well be of thirteenth-fourteenth century date although no parallels for this ware have so far been found. The presence of shell tempered pottery is presumed to be residual, from its fragmentary and eroded nature and by analogy with other sites.

Surrey Off-White Wares

80. Rim sherd in an off-white sandy ware with buff exterior surface. A body sherd, probably from the same pot was decorated with vertical applied band.
81. Cooking pot with splashes of green glaze inside and outside of the rim.

82. Cooking pot.
83. Cooking pot rim in off-white sandy ware with cream surfaces.
84. Rim sherd of a bowl in Surrey fabric.

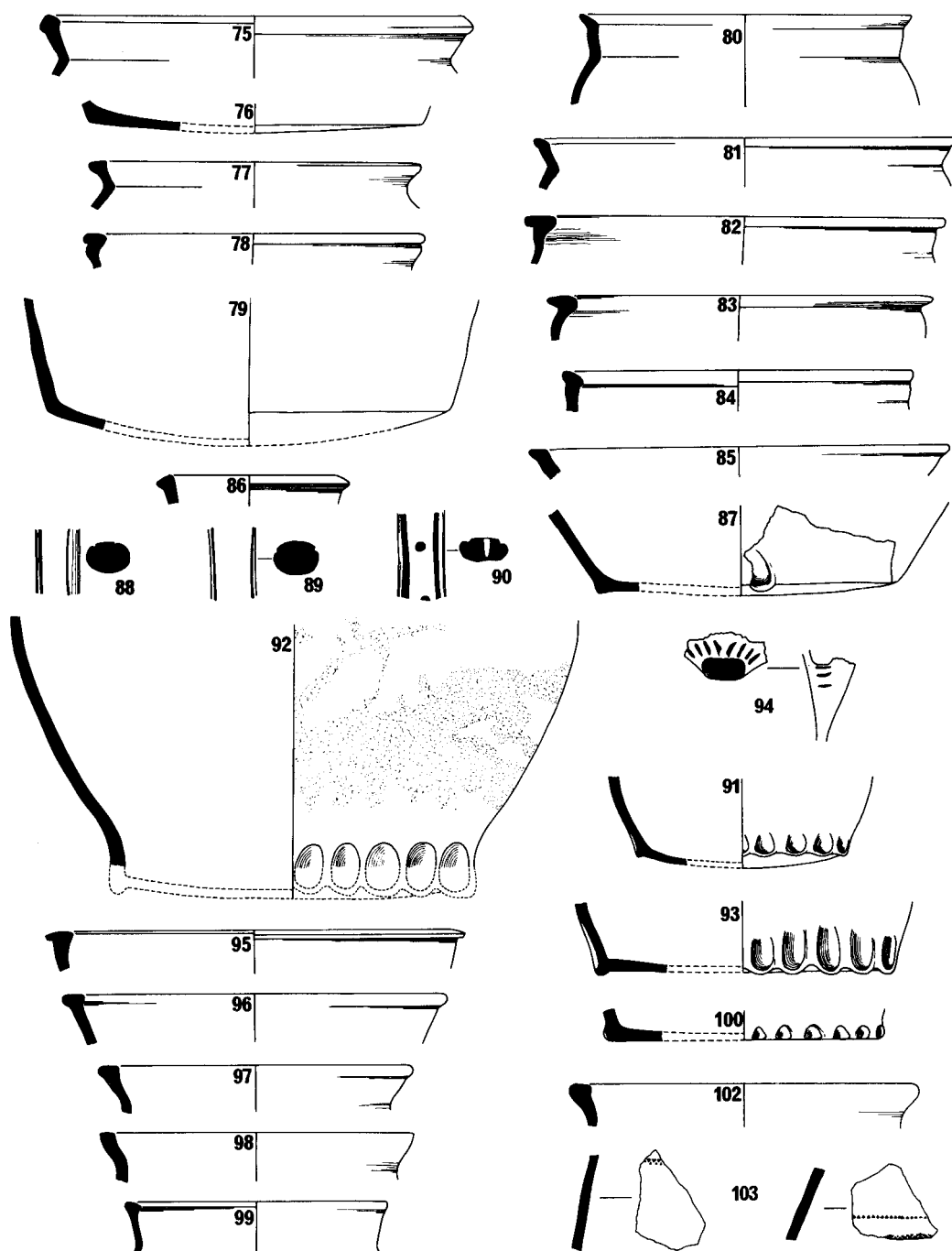


Fig. 18. Elmsleigh House, Staines: Saxon and medieval pottery, Nos. 75-103 ($\frac{1}{4}$).

85. Flat topped rim of a bowl in a sandy pink-tinged cream fabric with off-white/grey surfaces.
86. Rim of a jug in Surrey fabric with a splash of green glaze outside and over the rim.
87. Base angle of a wide bodied jug with only one thumb impression on the edge of the sherd. Pink-tinged cream sandy ware with some red grits and a mottled yellow and green glaze which disappears before the base.
88. Grooved rod handle in Surrey off-white ware, retaining a grey core.
89. Grooved rod handle of oval section, at its junction with the body of a Surrey ware jug.
90. Grooved and pierced strap handle in Surrey ware with some grits.
91. Basal angle with thumb impressions in a Surrey off-white fabric with buff surfaces and patchy green and yellow glaze on the outside.
Several other body sherds with overall mottled green glaze are decorated in a variety of techniques that include thin raised horizontal cordons, parallel grooving, and grooved wave patterns.

Pink Wares

A few small sherds of a fine pink fabric with patches of yellow, orange and green glaze and combed decoration. (Not illustrated.)

Slipped Wares

92. Large fragments of a wide bodied jug in a grey sandy ware with red/pink surfaces. The lower body above the thumb impressed base is smeared with a buff slip and splashed with a pale green glaze. (Slip shown as stippled.)
93. Thumbed base in a sandy bright pink ware with overall pale grey slip. The interior of the base was trimmed with a knife before the application of the slip.
94. Flattened rod handle at its junction with the body of a vessel, with stabbing for firmer adherence and to prevent mishaps in firing. Sandy pink ware with some larger pink grits. Similar sherds from the same pot are covered with green glaze on the outside surface.

(Z52) Pit

Most of the vessels represented within this oval pit are Surrey wares (just under half of all the recovered medieval rim forms) in a variety of shades and textures. In the coarse wares other generalised types are Red wares, some sherds of which could well be local; a mixture of grey wares, presumably of local, Surrey, and north-west Middlesex manufacture; and shell tempered forms which, with their roughly square-sectioned rim profiles, are probably residual and of the thirteenth century. A wide variety of jug fabrics were also found, ranging through the thirteenth to fifteenth centuries, and body sherds of note include those of grass tempered ware (see section C, p. 111) and a percentage of Roman pottery higher in fact than that for all phases of medieval pottery.

Sherds of so-called 'Tudor Green' pottery have been taken as a relatively reliable criterion for the final dating of the fill of this feature. Two rims conform to the accepted characteristics but are of different types that recall Hurst's division, Cunliffe (1964, 140) into fine and coarser fabrics.

No. 126 is of the coarser type which is identical in most respects to the Surrey Off-White and sandy tradition. It should probably be considered as part of that industry as also No. 127 which although of a more distinct fabric, glaze and form, was undoubtedly contemporary with, and manufactured alongside traditional Surrey wares as at Farnborough Hill. If it is accepted that the rim and its few

Grey Wares

95. Rim sherd of a bowl with a knife trimmed external flange. Hard grey sandy ware with some grits and a mottled green glaze on the inside which has also dribbled onto the rim.
A sagging base in a similar ware to 95 is possibly of the same pot. (Not illustrated.)
96. Rim sherd of a bowl in gritty grey ware with pink/buff internal surfaces.
97. Rim sherd of a cooking pot in a sandy pale grey-pink fabric.
98. Slightly everted and recurving rim in a fine sandy light grey ware with buff surfaces and some blackening on the outside surface.

Red Wares

99. Everted and thickened rim sherd in a red-brown fabric tempered with fine sand.
100. Basal angle of a jug in a gritty red ware with a black external surface and spots of clear glaze both inside and outside. The thumb impressions are purely decorative, serving neither to affix a separately made body and base, or to provide support for a sagging base as in the Surrey tradition where the technique survives until the late fifteenth century as at Farnborough Hill, Hollings (1971).

Shell Tempered Wares

101. Small rim sherd of a grey sandy ware with large shell fragments and purple/brown surfaces. (Not illustrated.)
102. Flat topped rim sherd of a bowl in a grey sandy ware with shell tempering and red/brown to black surfaces.

Miscellaneous

103. Four sherds of a hard grey ware with yellow internal, and pale brown external surfaces. There is much sand tempering that stands out from the surface to give a 'sandpaper' feel. At least two runs of rouletting were made round the main body of the vessel(s) to leave a raised zigzag line where contact with the pot was maintained. (Two sherds illustrated.)

body sherds are from a corrugated cup then analogous dating (corrugated cup found in a deposit of c. 1521 at Farnham castle, Moorhouse [1971] and from Winchester, Cunliffe [1964, Fig. 27, No. 8]) should place it within the early sixteenth century, although their manufacture before the sixteenth century has been attested in the late fifteenth century Farnborough Hill kiln alongside standard medieval types of Surrey ware, Holling (1971). The absence of any definitely later sixteenth century pottery within the pit confirms a date in the late fifteenth or early sixteenth century.

Other body sherds of note within this feature include three sherds of grass/chaff tempered ware. (See section C, p. 111.)

Grey Wares

104. Rim of a bowl in a pinky-grey ware with fine sand temper.
105. Rim of a straight-sided bowl with flattened bead rim. The fabric is dark grey and tempered with sand plus some grits and occasional crushed shell.
106. Rim sherd of a bowl in a grey sandy fabric with pink surfaces.
107. Rim sherd of a bowl in a smooth sandy grey ware.
108. Square-sectioned rim sherd in a gritty grey ware with darker grey surfaces.
109. Rim sherd in a grey ware with dark grey exterior pale grey/pink interior surfaces. Tempered with sand and some grits.
110. Rim sherd in a sandy grey ware with grey and pink exterior and pale grey inside surfaces. Indentations on the rim are possibly an attempt at decoration or mishandling in the workshop.
111. Rim of a bowl or dish in similar ware to that of 104.
112. Simple everted rim of a cooking pot in a similar fabric to 105. Dark grey with sand, occasional shell and calcined grit temper.
113. Body sherd of a gritty grey ware with an applied vertical cordon.

Shell Tempered Wares

114. Rim sherd of twelfth century character in a dark grey ware with red/brown surfaces. Tempered with sand and some crushed shell.
115. Square-sectioned rim sherd in a similar ware to 114.
116. Similar square-sectioned rim sherd to 115 but without the grey core.
117. Rim sherd in a similar fabric to that of 114 and 115 with dark grey paste tempered with sand and some crushed shell. (Not illustrated.)

Red Wares

118. Body sherds in a smooth and sandy reddish/brown ware with an applied white slip pattern (curves and lines), covered with a pale yellow or clear glaze. (Only one illustration.)
119. Sharply everted and thickened rim sherd in a sandy red ware.

Other red wares found within this feature include a body sherd with mottled clear glaze; another red sandy fragment retaining a grey core and coated with a paler red self-slip; and a basal angle of a brick-red sandy ware with pale grey core and spots of internal mustard glaze.

Jug Fabrics

120. Jug base in a smooth pale grey ware, with green glaze speckles on the body and liberally over the exterior of the base. Probable baluster jug.

121. Three sherds (one illustration) of a sandy buff ware with some grits. The outside surface is decorated with irregular vertical stripes of an applied red-brown slip, and occasional blobs of pale green to yellow glaze.
122. Body sherd of a jug in a soft and smooth grey ware with brown surfaces and tempered with some small grits and shell fragments. The exterior decoration of parallel grooved lines and impressions is covered with a thin ginger brown glaze.
123. Jug base in a smooth grey ware with pale brown surfaces and a similar body sherd with green glaze speckles. Probable baluster jug.
124. Body sherd of a jug in a sandy pink ware with lustrous external olive green glaze covering a modelled design of probable floral character.
125. Three sherds of a rough sandy grey ware with pale brown surfaces (the texture and appearance of the fabric is similar to that of 122). The pitted external surface is intermittently covered with a thin mottled green glaze.

Surrey Off-White fabrics

126. Rim sherd of a bowl in off-white sandy fabric with overall mottled green glaze.
127. Rim sherd of a cup in a smooth beige ware with overall glossy 'Tudor Green' glaze. The rim form and some body sherds, presumed to be from the same vessel, suggests a corrugated cup of small rim diameter not unlike the type 4 of the Cistercian Ware type series, Brears (1971). The best associations of this form have been at Winchester and Farnham Castle of the early part of the sixteenth century, Cunliffe (1964, 94, Fig. 27, No. 8) and Moorhouse (1971, 45, Fig. 1, No. 18).
128. Body sherd from a jug with grooved decoration.
129. Protruding foot of a tripod pitcher in off-white sandy ware with green glazed exterior walls and soot blackened base.
130. Rod handle of a pitcher in off-white sandy fabric with mottled green glaze on the upper surface.
131. Flanged rim of a cooking pot in off-white sandy ware with spots of green glaze below the flange, and a blackened exterior.
132. Rim of a jug in pale grey sandy ware with off-white internal, and grey external surfaces.
133. Rim of a jug in off-white sandy fabric.
134. Base of a strap handle in pinky-buff sandy ware with centrally-placed piercing and thumb impression.
135. Strap handle with deep central groove separating two rows of stabmarks on the lower half and two grooves on the upper half. Buff sandy ware with splashes of red and green mottled glaze.
136. Rim of pale buff sandy ware with buff surfaces and a splash of pale green glaze across the rim. (Not illustrated.)

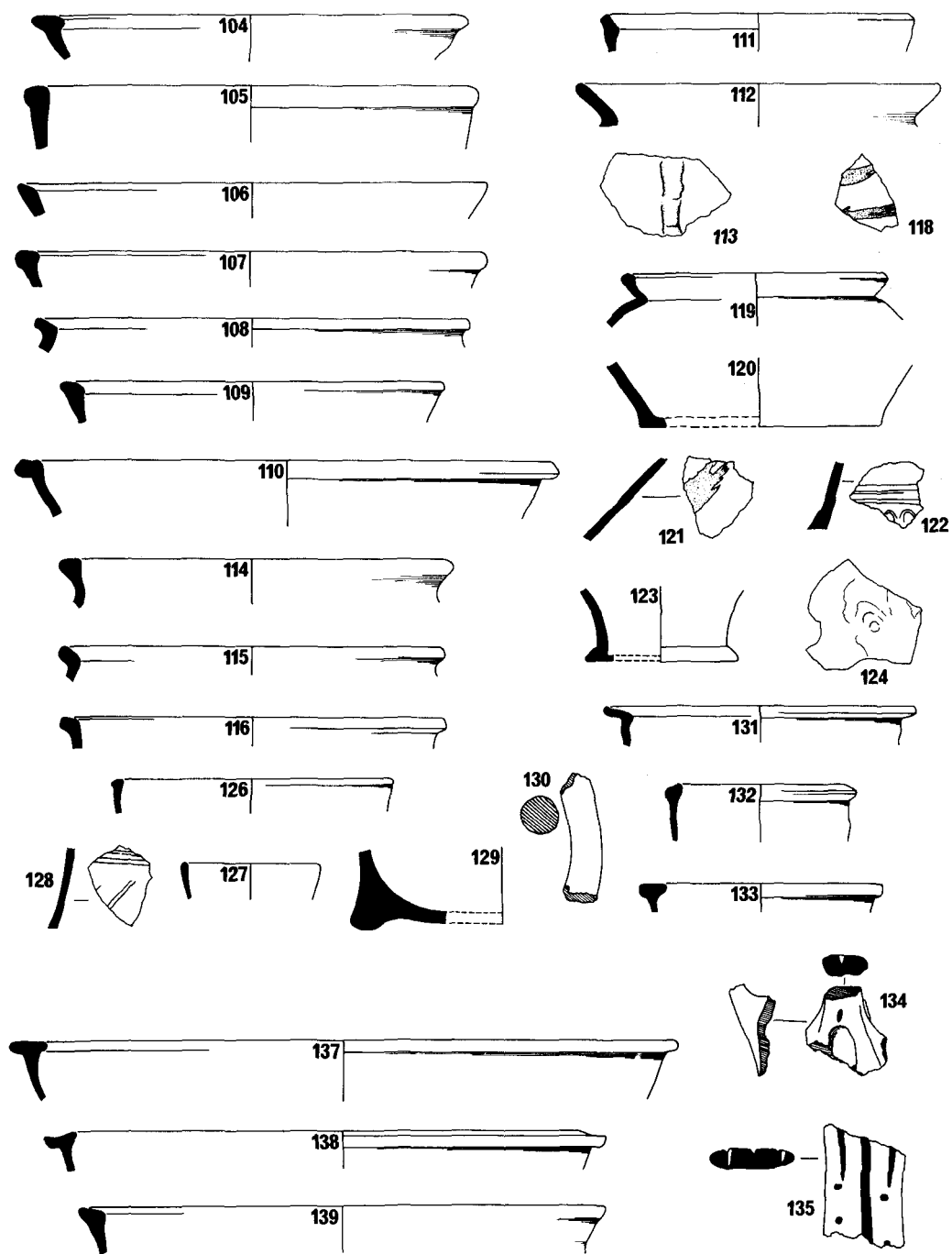


Fig. 19. Elmsleigh House, Staines: Saxon and medieval pottery, Nos. 104-139 ($\frac{1}{4}$).

137. Surrey ware cooking pot in a pale buff sandy fabric with dribbles of pale green glaze on the rim surfaces, and a blackened exterior.
138. Rim sherd of a bowl in off-white sandy fabric with upturned external flange and blobs of glossy green glaze on the inside surface.
139. Rim of a bowl in off-white sandy fabric.
140. Cooking pot rim in off-white fabric with blackened exterior and one spot of pale green glaze on the shoulder.
142. Rim of a cooking pot in a pale pink sandy fabric with buff surfaces and traces of green glaze under the internal flange.
143. Rim of a bowl in off-white sandy fabric.
144. Cooking pot rim with pronounced external flange and splashes of mottled green glaze across and under the rim.
- Other sherds not worthy of illustration display a wide range of Surrey type characteristics from off-white to beige and pale pink fabrics with sandy or small gritted temper and occasional decorative elements of incision, grooving, rouletting and raised cordons.

Part C: Saxon Grass/Chaff Tempered Pottery

Residual material has been included within this section which deals mainly with organically tempered handmade fabrics, for although Saxon occupation should be as extensive over the Mid Thames gravels as in the Upper Thames; little has been excavated south-east of Bray and even less published. Reliance on the verbal descriptions of the Old Windsor series is hazardous and access to the material, which is to be stored at the Reading Museum, at present is difficult. The probable domestic production of these wares and the relatively homogenous nature of the recovered fragments makes typology difficult and the material is presented as a series of forms that could range from the fourth century, Rodwell (1970, 271, Fig. 5f) to mid eleventh century as at Old Windsor.

48 sherds were found of grass or chaff temper, with a black or occasionally dull red paste and brown to black outer surfaces. The rim forms of these were generally simple eversions with the same thickness as the body, although there is a tendency for the rim to taper towards its extremity and in instances (148, 156) have been roughly squared off. The makeup of the body of the vessels show signs of lamination; especially so in the shoulder of 151 where two layers of clay of equal thickness can be observed. External surfaces show various degrees of smoothing, ranging from the rather coarse wiping of 148, through to the relatively even surface of 147, but a common feature is a burnishing of the inside surface of the rim edge (seen on 149, 150, 153, 154, 156). Occasional grog and grits are found within the fabric but are not consistent with anything other than accidental inclusion.

145. Large rim fragment from plough soil (Z10). Simple everted and almost vertical rim. Black fabric with brown outer surface and burnished on the inside of the rim.
146. Thick everted rim sherd from (Z10), with a diameter that suggests a storage jar. Black paste with red/brown outer surface that extends over the top of the rim.
147. Upstanding rim sherd with no neck constriction, found within the gravel layer (Z126) (residual). Black fabric with smooth brown outer surface.
148. A tapering everted rim sherd with a roughly squared edge recovered from the modern topsoil. Black paste and surfaces with slight burnishing on the inside of the rim.
149. Simple everted rim sherd of black ware and surfaces with burnishing on the inside of the rim.
150. Everted rim fragment from (Z10) (residual) in a black ware and with black surfaces. The inside of the rim has been burnished, and occasional small shell fragments supplement the organic tempering.
151. Everted rim sherd from (Z10) in a black paste and surface. The pronounced shoulder has been formed by the lamination of two layers of clay that do not appear to extend beyond the neck constriction.
152. Simple everted rim in a black fabric with black-brown exterior surface.
153. Simple everted rim from (Z33) with black paste and surfaces.
154. Cooking pot of grass tempered fabric but the everted neck tapers to a sharper rim edge than other such rims so far found in Staines. The paste is black with a brown exterior surface.
155. Everted rim from (Z137) in a red/brown ware with long dark grass strands and chaff. Black smoothed surfaces.
156. Everted rim sherd from (Z10) in black paste and surfaces.

Part D: Other Handmade Forms

Several sherds, recovered in the main from the deep medieval plough soil, are of handmade forms and do not fit easily into either a Roman or medieval typography. From what is known of the nature of occupation most can be assigned to the early or mid Saxon period, to supplement the grass/chaff tempered wares, although no more specific dating can be forthcoming, due to the small size of the sherds and the lack of sealed groups before the introduction of Saxo-Norman techniques.

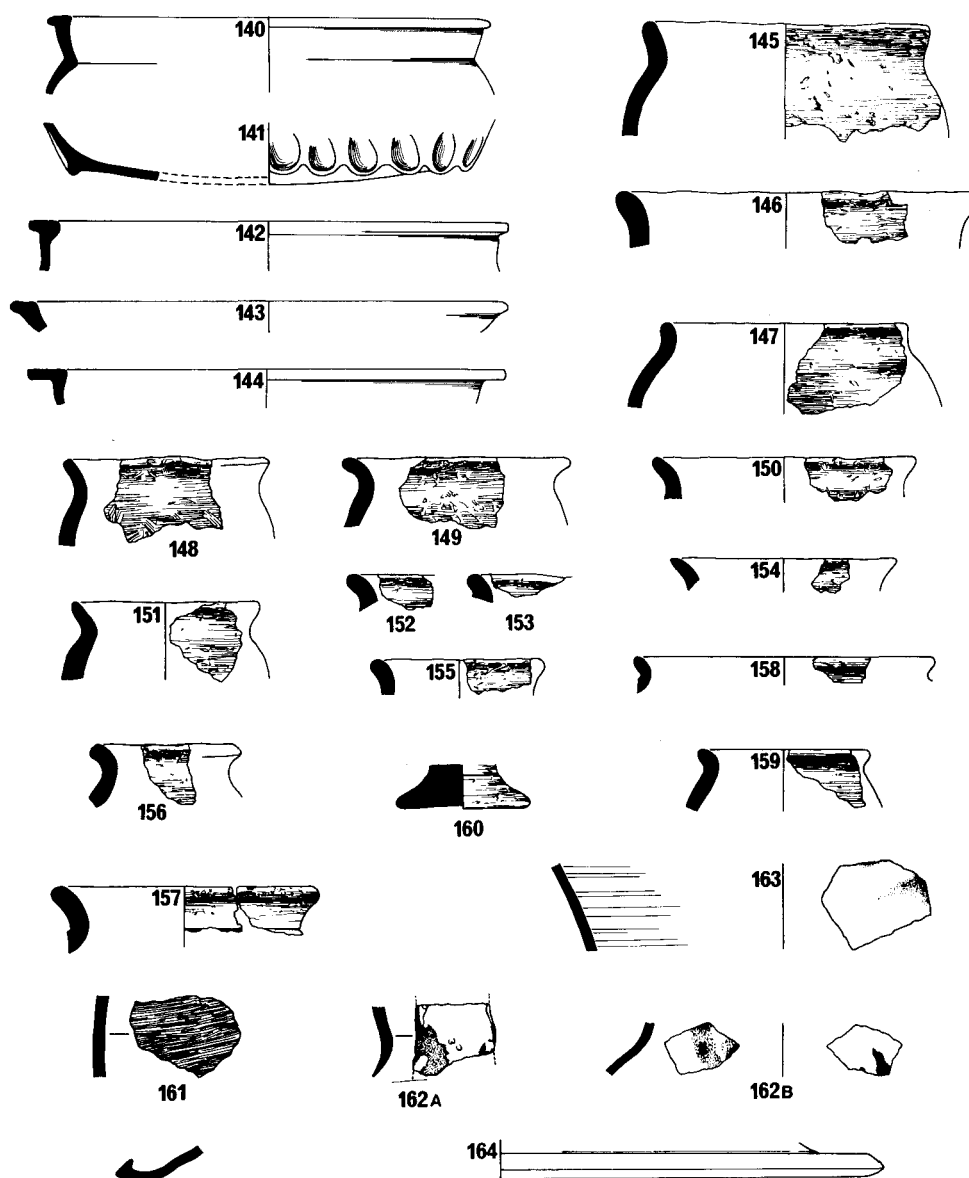


Fig. 20. Elmsleigh House, Staines: Saxon and medieval pottery, Nos. 140–164 (1/4).

Their inclusion within this report is considered necessary because of the possibility of a continuity of settlement from late Roman to Saxon occupation. It must be stated, however, that examination of the late Roman pottery reveals mostly early to mid fourth century types and an absence of characteristic sub-Roman types (such as 'Romano-Saxon', and grog tempered handmade pottery in Roman forms). Therefore the relationship between the Roman settlement and the Saxon town of Staines is still unclear in archaeological terms.

The wares are listed below under Roman numerals to make for ease of reference and are not intended as a definitive typology of fabric types.

- (i) Four sherds of very rough flint gritted ware generally black with brown outer surfaces. The paste is less resistant to erosion with the result that the calcined grits stand out from the surface. Similar sherds were found at Northolt in two pits of Period 1b and represent fabric C (c. 700–1050) of the type series there, Hurst (1961).
 - (ii) Three sherds of thin dark grey ware with red-brown surfaces, sometimes blackened inside. The tempering is of sand and blue calcined grits that unlike (i), do not stand out from the surface to make for a harsh surface. Some vesiculation.
 - (iii) Three body sherds, a basal angle and rim of a rough grey-black ware with some shell, grits, and/or chalk some of which had leached out.
157. An everted and slightly beaded rim of a high shouldered jar found in (Z50). The profile and wheel thrown character at least on the upper part, suggests influence from Saxo-Norman styles and is more developed than a similar handmade cooking pot of the ninth century from Portchester, Cunliffe (1970). Possibly tenth century.
158. Flat base and wall angle of above or another similar vessel. Some oxidation of the outer body surface. (Not illustrated.)
- (iv) Two sherds of a fine black ware with black inner surface showing some degree of wheel manufacture, and burnished black outer surfaces. One of the sherds is from a carination of the body and is perforated possibly for suspension. The general character of this ware and the angled body sherd seem to be similar to types found at Portchester, Cunliffe (1970, Fig. 2, Nos. 2, 3, 7) and Mucking, Jones (1968, Fig. 5) of the early fifth century, but clearly more quantitative samples are needed from Staines and especially the decorated forms, before we can think of Germanic intrusion, whether mercenary or otherwise.
 - (v) Four sherds of a friable brown ware with some sand and organic tempering. Surfaces vary in colour from black to red-brown and have a soapy feel.
158. Small and simple everted rim from (Z10) in this ware with slight ridging that suggests some degree of wheel turning.

Rimsherds in Other Handmade Fabrics

159. Typical everted rim as found on the grass tempered wares but in a granular black ware with some grits. The brown or black surfaces have been burnished, especially so on the inside of the rim which is also typical of the organically tempered rims, to which this form is closely similar. A major difference though, is that this rim was probably made on a turn-table.
160. Lower part of a pedestal based lamp in an orange handmade fabric with some sand and grog inclusions. The irregular grooving on the surface is consistent with the use of a turntable. Whereas the form is recognised widely in shell-tempered fabrics of the Midlands, it is interesting to see handmade forms being used for similar purposes.

Part E: Miscellaneous

This section deals with those medieval sherds recovered from later contexts which are therefore residual, but have sufficient value to warrant their inclusion within this report.

161. Body sherd of scratch-marked pottery in a gritty grey ware with a black internal surface. The outer surface was probably self-slipped to facilitate the scratched decoration, as the grey fabric becomes brown just below the black surface coating. The sherd was found on the Johnson and Clark site, No. 19 High Street (Fig. 2) but is included in this report to show the presence of this ware type within Staines. The distribution is centered on the Wessex region and extends through Hampshire but was not known from Middlesex until recent examination of Northolt material which revealed some fragments (personal communication R. Lancaster, Gunnersbury Museum). Although a late Saxon trait, the technique is known to survive till the early thirteenth century, Platt (1975, 22, Fig. 144, Nos. 299–301, early thirteenth century group, Fig. 145, Nos. 304–5, A.D. 1200–1250) and probably late thirteenth century, Musty (1969, 105, Fig. 10, Nos. 32–38, for 'Developed scratch-marked ware' from Laverstock). The hard gritty character of the Johnson and Clark sherd is consistent with a late survival.
- 162A, B. Thin and hard sandy grey ware with buff surfaces from the mixed plough soils of (Z10). Red painted smears have been applied to the upper surface of the handle (162A) and the outer surface of the body sherds (162B). The presence of paint on the inside surface of the sherds could well be accidental although internal decoration is known on these Pingsdorf derivative forms, Dunning (1959, Fig. 29, No. 5) is a wine amphora with painted strokes on the inside of the rim. The Staines sherds probably come from the angle between a short neck and globular body and could well imply some degree of rim decoration. The most common form of these red painted imports found in this country are the wine amphorae ultimately derived from the Badorf types and the diameter of the vessel obtained from the body sherd is consistent with this form. In comparing the Staines fragments with the series of wasters from Continental kiln sites producing red-painted pottery (British Museum reference collection) it was noted that the closest parallel for these sherds was Pingsdorf itself with a similar mid-

grey fabric. Products from elsewhere, including the Limburg kilns (e.g. Brunssum, Schinveld) which manufactured a derivative style in the twelfth-thirteenth centuries, Dunning (1959), were generally a lighter grey fabric.

163. Body sherd of a pale grey sandy ware with some rounded grits and buff surfaces. Red paint smears are present on the external surface. This is also a continental red painted vessel and its dimensions

suggests a wine amphora, Dunning (1959).

164. Rim sherd of a lid in a hard sandy red ware of considerable size. Although it is possible that a pottery vessel could have been made large enough to accommodate this lid, it is reasonable to suggest that a barrel or even a pit could have been covered. The fabric is a common type in the later Middle Ages of the London area and begins in the mid thirteenth century as at Waltham, Essex, Huggins (1973).

Part F: Discussion

Recent excavations in Hendon have shown that village sites do offer some opportunities for extended type series but Staines must qualify for rather more status than that of a forest clearance settlement, as its position on the navigable Thames adjacent to a good bridging point and its hinterland of rich gravel and brickearths provided a firm basis for prosperity. Staines was a market town by at least 1218 when its date within the calendar year was changed, V. C. H. (1962, 20) and could have achieved that status as early as the other major markets of Middlesex, such as Uxbridge 1170, V. C. H. (1971, 79) and High Barnet 1199, both in similar positions on the edges of the county and straddling major routes out of London.

The geographical position of Staines, relative to Dunning's distribution map, Dunning (1959, Fig. 30) shows that the town could have important trading implications, not only within the trading area of London, but for the Thames Valley to Oxford and Kingston; the Colne Valley to St. Albans; and the south-west route to Winchester. It is this central position for the ebb and flow of ceramic traditions that should make study of medieval pottery from Staines worthwhile.

It is hoped that future redevelopment within the town, and consideration of material from previous excavations, will provide adequate opportunity for the establishment of an independent type series that will present another facet of Middlesex to add to that of the manorial enclosure and earlier settlement at Northolt, which remains the best sequence in Middlesex.

A concrete example of the value of the work in Staines is the recovery of red painted sherds, albeit from a residual context, on the Elmsleigh House site. When Dunning considered the distribution of imports of this type from Northern France in an evaluation of material from below Oxford Castle, Jope (1952, 90-1) he deduced an overland route from the port at Hamwih via Winchester. The distribution of the finer quality ware (e.g. Pingsdorf type) was contemporary with the coarser Northern French series, Cunliffe (1964, 125), and his theoretical overland route from Southampton to Oxford could have remained viable with the absence of such pottery on the Thames between Oxford and London (the latter presumably with independent trading links to the continent). The presence of red painted sherds in Staines is supporting evidence that the material in Oxford could have been the result of a direct trading route along the Thames. In this way ceramic studies in Staines have relevance for the whole of the south-east, as well as the hitherto unknown nature of pottery from south-west Middlesex.

Post-medieval Pottery by Patricia Croft and William Woodadge

The pottery which is drawn is that which is of importance to the dating of the post-medieval structures. Examination of other material from the Elmsleigh House site showed similar types and date range to that described.

For the purpose of describing the colour of glazes and fabric only, we have adopted the conventions adopted at Southwark, Sheldon (1974, 64).

(i) colour: a hyphen indicates an intermediate colour; while a solidus (/) indicates a mixture of colours (e.g. red-brown means a colour between red and brown; red/brown means red in parts and brown in parts).

(The pottery Nos. refer to Figs. 21-23)

(Z4) Demolition layer of out-house phase 2

The evidence of clay pipes dated 1660-1770 and glass ware 1720-1730 places this group in the mid eighteenth century. The pottery is in the main seventeenth century type, apart from the cream-ware which was introduced in 1720 and was universal by 1750.

Red Wares

1. Rim of a basin. Fairly hard, orange-red sandy ware. Unglazed.
2. Rim of a bowl. Fairly hard, orange-red sandy ware. Green-brown glaze.

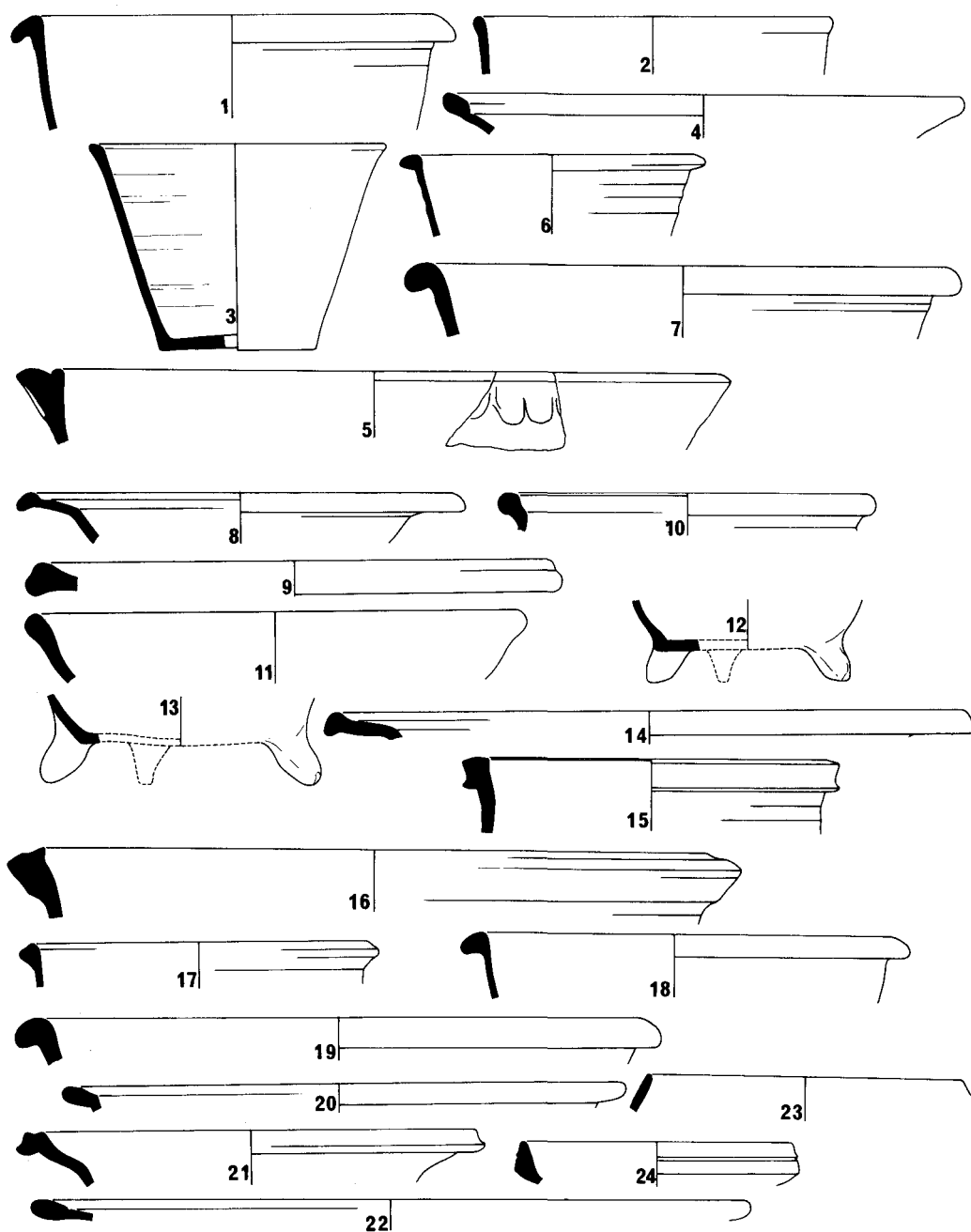


Fig. 21. Elmsleigh House, Staines: Post-medieval pottery, Nos. 1-24 ($\frac{1}{4}$).

3. Flower pot. Hard, orange-red sandy ware. Unglazed apart from splashes of brown glaze.
Various body sherds of orange-red sandy ware, mostly glazed.

Surrey White Wares

4. Rim of a dish, hard cream fabric. Light green glaze on outside.
Various glazed body sherds.

Cream Wares

A rim and body sherd. (Not illustrated.)

Stone Wares

Various sherds of Bellermino, one of which has part of a face mask. (Not illustrated.)

(Z5) Ash layer

The clay pipes suggest a date of about 1710 for this group, which consists of just two body sherds of orange-red sandy ware. One sherd has a light brown glaze and the other has a green-brown glaze on the interior. (Not illustrated.)

(Z6) Demolition layer of out-building phase 1

The clay pipes (1640–1710) and glass (1700) would seem to date this group to the late seventeenth century–early eighteenth century.

Red Wares

5. Rim of a basin/bowl. Hard orange-red sandy ware. Brown glazed interior. Unglazed exterior, which has thumb impressions.
6. Rim of bowl. Hard, orange-red sandy ware. Light brown glazed interior. Unglazed exterior.
7. Rim of bowl. Hard, orange-red sandy ware with grey core. Dark brown glaze.
8. Rim of dish. Fairly hard, orange-red sandy ware. Light brown glazed interior. Unglazed exterior.
9. Rim of dish. Soft, orange-red sandy ware. Brown glazed interior. Unglazed exterior.
10. Rim of Pitcher. Hard, orange-red sandy ware with grey core. Dark brown glazed interior. Unglazed exterior. Handle scar present. Hollings (1971, Fig. 13).

Surrey White Wares

11. Rim of bowl. Hard white fabric. Mottled yellow/green glazed interior. Unglazed exterior.
12. Base of cooking pot. Hard cream fabric. Pale green-yellow interior. Unglazed exterior.
13. Foot of cooking pot. Hard white fabric. Yellow glazed interior. Unglazed, fine blackened exterior.
14. Rim of dish. Soft cream fabric. Dark green glazed interior. Unglazed exterior.
15. Rim of dish. Hard cream fabric. Light brown/green glazed interior. Rim and exterior unglazed.

Staffordshire Slipware

Body sherd. Hard buff fabric, glazed overall yellow back-ground and raised dark brown motif superimposed with white dots (possibly the letter 'P'). (Not illustrated.)

Stoneware

Base and body sherd of jar. Westerwald type.

(German stoneware.) Hard grey fabric. Mottled blue glazed exterior with a dark blue 'random mark'. Grey glazed interior. (Not illustrated.)

(Z8) Foundation trench of sixteenth–seventeenth century building

The clay pipes are dated to 1640–1680 and the glass to 1700. The pottery in this group consists of types in use from the mid sixteenth–late seventeenth century.

Red Wares

16. Rim of basin. Fairly hard, orange-red sandy ware. Unglazed except for streak of glaze on exterior.
17. Rim of basin. Hard, orange-red sandy ware with white grits. Green-brown glazed interior. Unglazed exterior.
18. Rim of basin. Fairly hard, orange-red sandy ware. Light brown glaze on interior with some light green on rim itself. Unglazed exterior. Drewett (1974, Fig. 15, No. 474).
19. Rim of basin/bowl. Fairly hard, orange-red sandy ware with grey core. Green-brown glaze.
20. Rim of bowl/dish. Fairly hard, orange-red sandy ware with grey core. Mottled green/light brown glaze.
21. Rim of dish. Fairly hard orange-red sandy ware with grey core. Mottled green/light brown glazed interior with a light brown glaze on top of rim. The exterior has a 35mm unglazed strip around the top of the sherd, and then has a mottled brown/green glaze. There is a dark brown splash of glaze on top of rim and on to unglazed strip.
22. Rim of dish. Fairly hard, orange-red sandy ware. Mottled green/light brown glaze on interior. Unglazed exterior.
23. Rim of dish. Hard, orange-red sandy ware. Green-brown glazed interior. Dark brown glazed exterior.
24. Rim of dish. Soft, orange-red sandy ware. Unglazed.

Surrey White Wares

25. Rim of basin/bowl. Hard cream fabric. Green-yellow glazed interior. Unglazed exterior except for 8mm strip along rim.
26. Foot of cooking pot. Soft cream fabric. Dark yellow glazed interior. Partly green-yellow glazed exterior.
27. Rim of dish. Hard, cream fabric. Dark yellow glazed interior. Unglazed exterior.
28. Rim of dish/plate. Hard, cream fabric. Mottled yellow/dark green glazed interior. Unglazed exterior.
29. Rim of dish/plate. Hard, cream fabric. Pale green-yellow glazed interior. Unglazed exterior.
30. Lid? Hard, cream fabric. Mottled yellow/green glazed exterior. The unglazed interior has small glazed splashes.
31. Rim of pipkin. Hard cream fabric. Yellow-green glazed interior and to flange on exterior. Hollings (1969, Fig. 5, A1), Drewett (1974, Fig. 11, No. 28).
32. Rim of cup. Hard grey fabric. Light brown salt glazed exterior; light grey interior.

Tin Glazed Earthenware

33. Rim of chamber pot. Soft, cream fabric. White glaze.
34. Jar in soft, pink fabric. Off-white glaze. Drewett (1974, Fig. 14, No. 310 but no blue decoration).

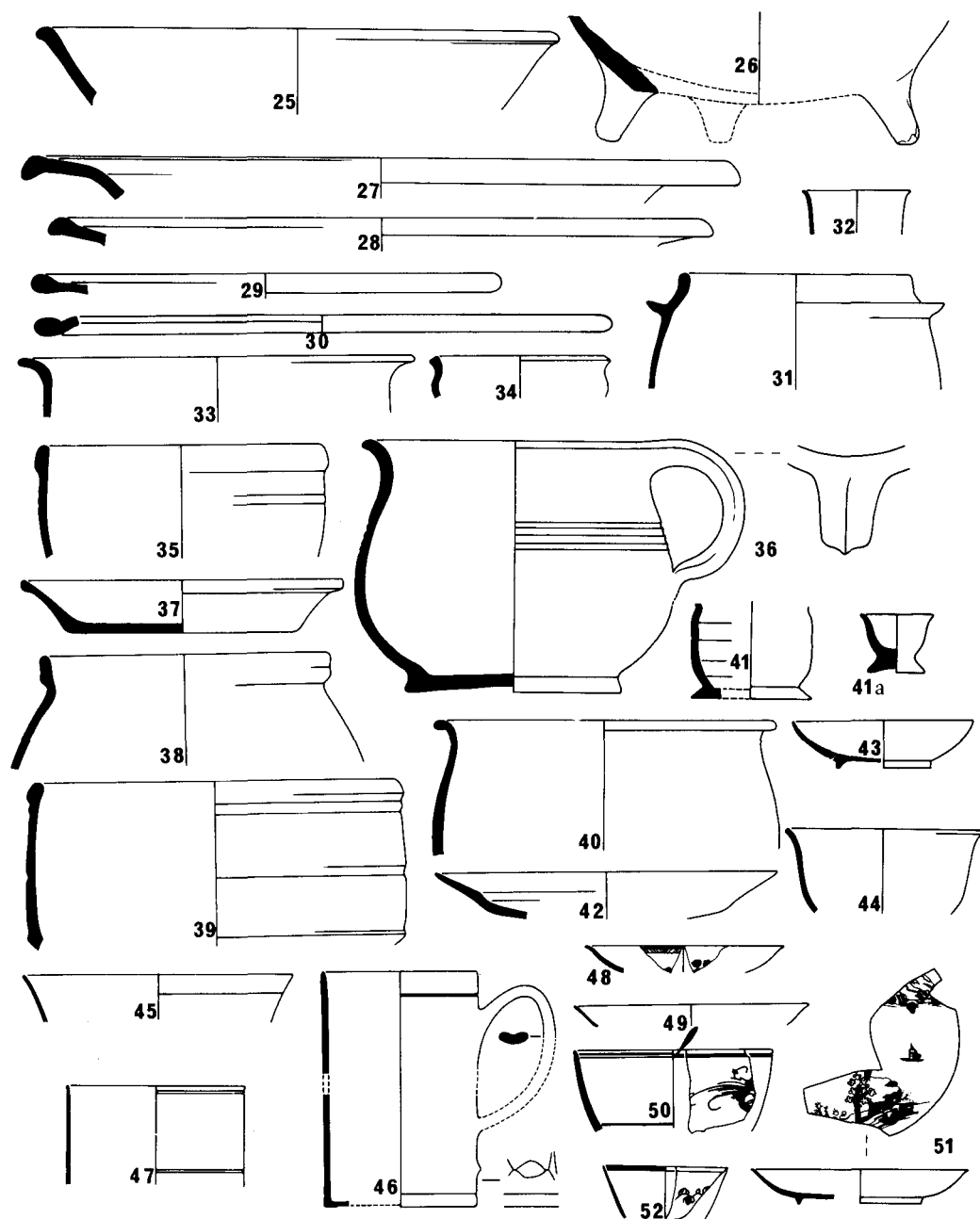


Fig. 22. Elmsleigh House, Staines: Post-medieval pottery, Nos. 25-52 ($\frac{1}{4}$).

(Z51) Pit

This group is dated to the eighteenth century on the evidence of the clay pipes (1700–1770) and glass (1729–1800). The bulk of the sherds are of eighteenth century pottery types apart from one rim (38) which is of a seventeenth century type.

Red Wares

35. Rim of bowl. Hard orange-red sandy ware. Light brown glazed interior. Unglazed exterior.
36. Chamber pot. Complete section. Hard, pale orange-red sandy ware. Dark brown glaze.
37. Complete section of a dish. Hard, orange-red sandy ware. Light brown glazed interior. Unglazed exterior with some glaze splashes.
38. Rim of a pitcher. Hard, orange-red sandy ware. Dark brown glaze.
39. Rim. Hard orange-red sandy ware. Streaked light brown/dark brown glaze. Part of an unglazed possibly sagging base.

Staffordshire Slipware

Body sherd. Hard, cream fabric. Yellow glazed interior with brown feathered decoration. Unglazed exterior. (Not illustrated.)

Tin Glazed Earthenware

40. Rim of a chamber pot. Soft, cream fabric. Light blue glaze.
41. Chemists drug jar. Near complete. Hard off-white fabric. Off-white glaze. Underneath of vessel rough finish.
- 41a. Chemists drug jar. Complete. Hard, off-white fabric. Off-white glaze.
42. Rim of a plate. Hard cream fabric. Light grey glaze. Also present, a minimum of five chamber pots with a range of glaze colours from eggshell blue–pink/blue, a plate sherd in soft white fabric with pale blue glaze and dark blue decoration; a second plate sherd in soft white fabric, pale blue glaze with polychrome decoration, and base sherd in soft white fabric with mottled mauve glaze. (Not illustrated.)

Stonewares

43. Complete section of a bowl. Hard, cream fabric.

Clear salt-glaze.

44. Rim of bowl. Hard, light grey fabric. Off-white salt-glaze, with dark brown line running along top of rim. Traces of brown each side of rim.
45. Rim of a bowl. Hard, off-white fabric. Clear salt-glaze.
46. Rim and base of a mug. Hard, off-white fabric. Clear salt-glaze. (Calculations indicate that the mug would have held one pint to the exterior groove.)
47. Rim of a mug. Hard, off-white fabric. Clear salt-glaze.

Porcelain

48. Rim of a bowl. Hard, white fabric. Light blue glaze. Dark blue line on inside of rim. Orange and blue interior decoration. Blue line 2mm below interior of rim. Chinese import.
49. Rim of bowl. Hard, white fabric. Light blue glaze. Dark blue hatched decoration just below interior of rim. Chinese import.
50. Rim of bowl. Hard, white fabric. Light blue glaze. Dark blue and orange decoration with boat and landscape. Chinese import.
51. Rim of bowl. Hard white fabric. Light blue glaze. Parallel blue lines just below rim on interior and exterior. Blue decoration on exterior and possibly interior. Chinese import.
52. Rim of a cup. Hard, white fabric. Clear glaze. Parallel blue lines just below rim on interior. Thin blue line below rim and floral decoration on exterior. Chinese import.

(Z133) Eighteenth century garden soil

The pottery was of seventeenth and eighteenth century type, but there was no other dating evidence.

Red Wares

53. Base of a chafing dish. Hard, orange-red sandy ware. Yellow-green glazed interior. Unglazed exterior.

Surrey White Wares

54. Rim of bowl. Fairly hard, cream fabric. Dark yellow glazed interior. Unglazed exterior.
55. Rim. Hard, cream fabric. Pale yellow glaze.

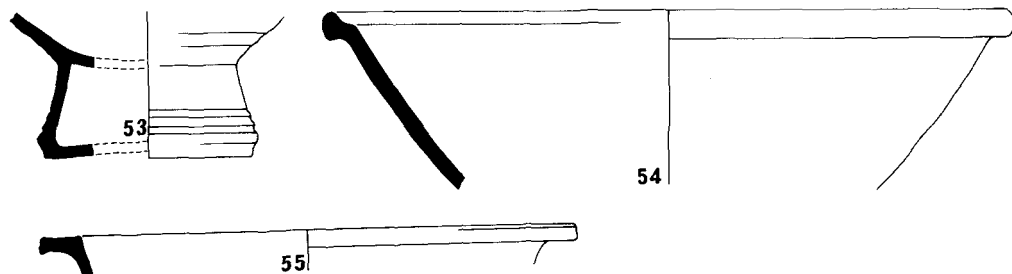


Fig. 23. Elmsleigh House, Staines: Post-medieval pottery, Nos. 53–55 (1/4).

Coins Roman by M. J. Hammerson

Elmsleigh House 1974 and Barclays Bank 1969

Summary (Chronological)

Vespasian	2 (Barclays Bank)	Constantinian: 330-35	4
Domitian	1 (Barclays Bank)	337-41	2
Trajan	3 (2 from Barclays Bank)	341-46	3
Julia Domna	1	Irregular, 330's-40's	1
Severus Alexander	1	Magentius	1
Victorinus	1	Irregular, 350's-60's?	1
Tetricus II?	1	Valens	1
Irregular Radiates	2	Theodosius I	2
Allectus	1	Honorius	1
		House of Theodosius	3
		Late eighteenth century	1
		Illegible	2


State of Wear

A = Unworn	D = Quite heavily worn
B = Slightly worn	E = Heavily worn
C = Worn	? = Too corroded to ascertain


Barclays Bank

<i>Small Find No.</i>	<i>Context</i>	<i>Identification</i>	<i>Date</i>	<i>Wear</i>
B.B.5	—	Vespasian, As. RIC. 84, IVDAEA CAPTA SC.	77- 78	?A
B.B.3	—	Vespasian, As.	69- 79	D/E
B.B.1	—	Domitian, Dupondius. RIC. 352, FIDEI PVBLICAE SC.	87	B
B.B.4	—	Trajan, Dupondius. RIC. 489, SPQR.		
B.B.4	—	OPTIMO PRINCIPI, Rome seated with Victory and Spear.	106-111	D
B.B.2	—	Trajan, As.	98-117	?

Elmsleigh House

<i>Small Find No.</i>	<i>Context</i>	<i>Identification</i>	<i>Date</i>	<i>Wear</i>
146	(Z100)	Trajan, As.	98-117	E
81	(Z10)	Julia Domna, Denarius. RIC (Severus) 165, VESTA. (Flan irregular: legend weak, sometimes of poor standard; possibly a contemporary copy.)	193-196	D
68	(Z50)	Severus Alexander, Denarius. RIC. 133, ANNONA AVG.	233-235	B
39	(Z8)	Victorinus, Antoninianus. RIC. 112-114, INVICTVS.	268-270	E
71	(Z20)	?Tetricus II, Antoninianus. (Identification uncertain.)	?270-273	?
58	(Z10)	Irregular copy, Victorinus or Tetricus I, 14½mm dia.	270's-290's	B/C
147	(Z100)	Irregular copy, Tetricus II. 12½mm dia. Reverse probably Pax or Fides.	270's-290's	C
194	(Z35)	Allectus, 'Quinarius'. RIC. 55, VIRTVS AVG. Mint-mark QL (London).	293-296	D
69	(Z50)	Constantine I, AE3, GLORIA EXERCITVS (two standards).	330-335	C
227	(Z52)	Constantine II, AE3, GLORIA EXERCITVS (two standards).	330-335	C
77	(Z50)	Constantinopolis, AE3.	330-335	?
101	(Z10)	Urbs Roma, AE3. LRBI-65.	c.332	C/D
108	(Z33)	Constans, AE3, LRBI-774, GLORIA EXERCITVS (one standard). Mint-mark  (Siscia).	c.338	C

-ASIS

121	(Z10)	Constantius II, AE3. LRBI-441, GLORIA EXERCITVS (one standard). Mint-mark <u>G</u> (Arles). <u>PARL</u>	c.341	C
90	(Z10)	POP ROMANVS, AE3. LRBI-1066. Mint-mark CONSA (Constantinople).	c.342-3	C
42	(Z50)	Constans, AE3. LRBI-142, VICTORIAE DD AVGGQ NN, 2 victories facing. Mint-mark <u>D</u> (Trier). <u>TRP</u>	c.343-4	B
130	(Z100)	Constans, AE3. LRBI-160. As above, but  <u>TRP</u>	c.345	C
144	(Z43)	House of Constantine, AE3, possibly irregular.	330's-340's	B
222	(Z35)	Magentius, AE2. LRBII-50, FELICITAS REIPVBLICE. Mint-mark <u>IA</u> (Trier). (N.B. obverse reads IMP CAE MAGENTIUS AVG, missing S after CAE.) <u>TRP</u>	c.350	A
142	(Z24)	Almost certainly Irregular copy of type imitating FEL TEMP REPARATIO (Fallen horsemen) reverse. Dia. 6mm. Design struck on both surfaces, but not sufficiently detailed to be recognisable.	350's-360's	C/D
94	(Z79)	Valens, AE3 LRBII-1018, GLORIA ROMANORVM. Mint-mark .SMAQP (Aquileia).	c.369	B
180	(Z110)	Theodosius I, AE4. LRBII-1871, VICTORIA AVG, two victories facing. Mint-mark <u>TESA</u> (Thessalonika).	383-392	B
119	(Z100)	Theodosius I, AE4 VICTORIA AVGGG. Victory with wreath and palm. Mint of Western Empire.	388-395	D
185	(Z135)	Honorius, AE4. LRBII-806 or 809, SALVS REIPVBLICAE, victory dragging captive. Mint-mark <u>RP</u> (Rome).	395-408	B
63	(Z50)	House of Theodosius, as above.	388-408	B
72	(Z79)	House of Theodosius, AE4, VICTORIA AVGGG; part shaved off in antiquity.	388-402	C
150	(Z1)	House of Theodosius, as above, also shaved.	388-402	C/D
34	(Z50)	Token farthing of George III, late eighteenth century.		E

All the Barclays Bank finds date from c. 70-120 A.D. They generally show average wear and, by themselves, suggest late first to later second century occupation; this evidence should be examined in the light of ceramic and other finds from the site, as coin and ceramic evidence are often *prima facie* contradictory at this period.

The Elmsleigh finds show a typical selection of coins from a small site occupied from the mid third century onwards. The coin of Trajan is very worn and need not have reached the site until the third century; large first and second century bronzes often remained in circulation until the 260's. The coins of Julia Domna and Severus Alexander likewise could have reached the site some years after their manufacture.

The general coin distribution shows an interesting parallel with that seen at Old Ford, Sheldon (1972), as follows:

	Old Ford (%) Elmsleigh	
First to second century	3	3.5
Third century	26	25
House of Constantine	24.5	42
House of Valentinian	9.5	3.5
House of Theodosius	17.5	21
Illegible	17.5	3.5

Allowing for the fact that most of the Old Ford illegible specimens are Constantinian or Theodosian, the numbers will approximate more closely. The figures for both sites are typical of sites occupied throughout the third and fourth centuries; the Old Ford pattern is characteristic of sites with intensive continuous occupation possibly into the fifth century, whereas the Elmsleigh pattern is more that of sites which saw their maximum prosperity during the Constantinian period.

Interesting specimens

The Sesterius of Vespasian, reverse IVDAEA CAPTA, is a scarce coin. The POP ROMANVS issue of Constantinople is an unusual find from Britain, as is the Theodosius I VICTORIA AVG (two victories facing) from the mint of Thessalonika.

Small Finds by David Barker

(Numbers refer to Figs. 24–28)

Copper alloy

Roman

1. A disc brooch with ten lugs. Champlevé enamelled in red and turquoise. Retains spring of two turns, pin and catch-plate. This type usually associated with a central boss or stud. (Z10 Medieval plough soil.)
2. Pair of tweezers. (Z10 Medieval plough soil.)
3. Pair of tweezers. (Z50 Post-medieval plough soil.)
4. A two piece manicure set comprising tweezers and nail cleaner attached to a ring. (Drawn separately.) (Z10 Medieval plough soil.)
5. An unfolded expanding ring decorated with 'S' shaped punched decoration. Neal (1974, 138, Nos. 135 and 140). (Z10 Medieval plough soil.)
6. Part of a bangle with notched decoration on the outer edge. (Z10 Medieval plough soil.)
7. Ligula or unguent spoon. Hole for suspension at one end and small cupped hollow on the opposite end. (Z35 Roman gravel surface.)
8. Stylus case? (Z3 Post-medieval layer.)
9. Length of wire with a small ring bonded to the middle. Probably an unfolded bangle. Frere (1972, 119, No. 35). (Z10 Medieval plough soil.)
10. Fragment of a ring with raised bezel. (Z10 Medieval plough soil.)
11. Ear-ring. Tapered oval section. One end cleft to receive other tip. Bushe-Fox (1949, No. 108). (Z8 Foundation trench of seventeenth century building.)
12. Part of a circular plate c. 2mm thick with pierced decoration presumed to be part of a buckle. Bushe-Fox (1928, 50, No. 64. Other examples from Roman military sites). (Z10 Medieval plough soil.)
13. Part of a lathe turned bracelet. Internal diameter 40mm. (Z8 Foundation trench of seventeenth century building.)

Not illustrated:

- Heavy undecorated domed stud, c. 30mm diameter.
- Small fragment from the shank of a ring.

Medieval and post-medieval

14. Dress pin. Head of circular section. (Z10 Medieval plough soil.)
15. Plain buckle, possibly from a harness. (Z10 Medieval plough soil.)
16. Belt fitting. Gilt with punched decoration on one side. (Z10 Medieval plough soil.)

17. Shoe buckle. Flat cast. 2mm thick. (Z50 Post-medieval plough soil.)
18. Spherical-headed pin. Roman? or medieval? (Z4 Demolition layer of out-building II.)
19. Knife handle. Late seventeenth century. Champlevé enamelled decoration of stylised flowers and leaves in red, white and blue. Contains original 'loading' of resin. Probably English.

Other small fragments of bronze, mainly from the plough soil, were found. Mainly very small fragments of wire and sheet incapable of interpretation or dating owing to the mixed nature of the deposit. A noticeable feature of much of the copper alloy finds was the excellent state of preservation of many of the objects, many only having a light patination.

Iron

20. Knife. End of blade broken and possibly also plate tang end *cf.* London Museum Medieval Catalogue (53, Plate 13, No. 8). (Z100 Medieval plough soil.)
21. Knife, complete. Tang of rectangular section. (Z52 Late medieval pit.)
22. Knife. Tang broken short. (Z52 Late medieval pit.)
23. Knife. Blank? Tang? of rounded triangular section. (Z100 Medieval plough soil.)
24. Knife. End of blade and plate tang broken. Cutlers mark a crescent. Steeled cutting edge c. 4mm wide. (Z100 Medieval plough soil.)
25. Knife. Blade and plate tang broken. Rivet holes c. 2.5mm diameter. (Z100 Medieval plough soil.)
26. Knife. Blade broken short. The notch on the blade is damage as the blade is probably of brittle steel. General seventeenth century date, *cf.* finds from Basing House, Moorhouse (1971, 36, No. 8). (Z11 Eighteenth century garden soil.)

In all 17 knife blades or parts of blades were found during excavation, although the majority of these are represented by fragments. Those illustrated show the broad range of types present. As with the bronze, much of the iron material was from medieval plough soil, containing both Roman and medieval material. Although the majority of knives would seem to be of general medieval form, No. 23 possible knife blank is of interest and may suggest a bladesmith's workshop in the vicinity as although a knife was a basic item of personnel equipment the numbers found on the site would seem to represent more than ordinary loss.

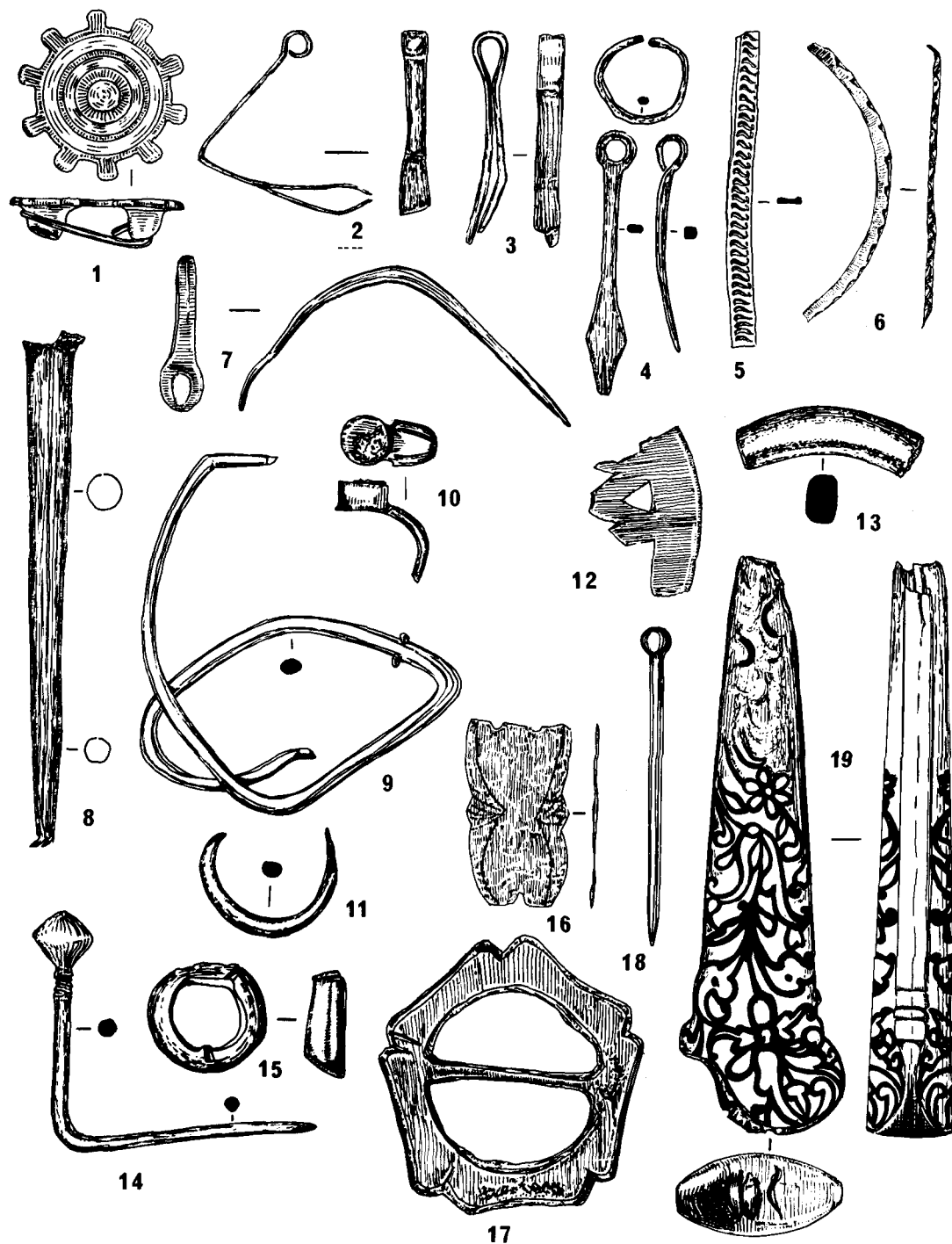


Fig. 24. Elmsleigh House, Staines: Small finds; copper alloy, Nos. 1-19 ($\frac{1}{1}$).

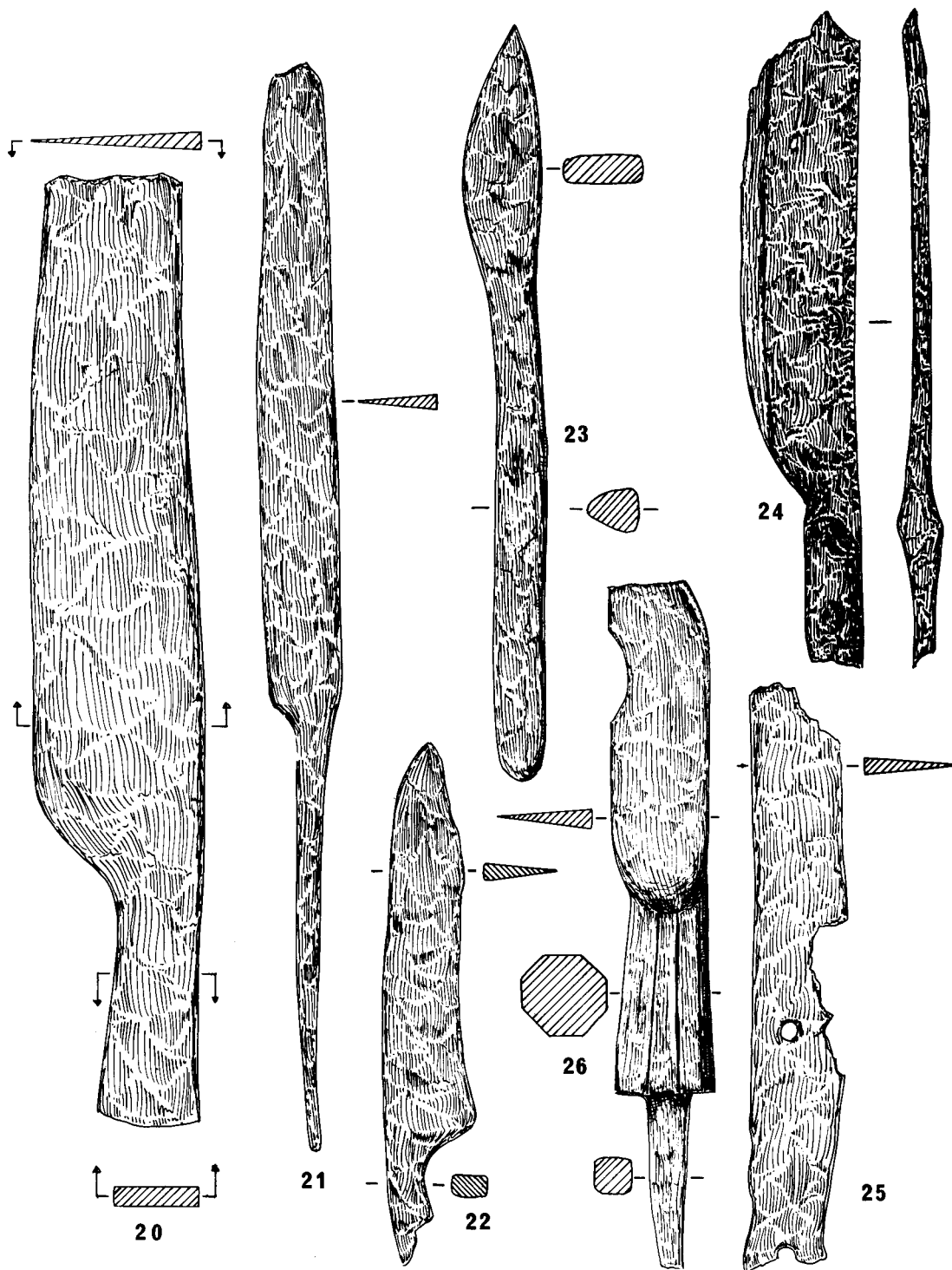


Fig. 25. Elmsleigh House, Staines: Small finds; iron knives, Nos. 27-32 ($\frac{1}{4}$).

Iron miscellaneous

27. Key? Possibly a type of casket key of the general type 9, *cf.* London Museum Medieval Catalogue (135). Its large size and the asymmetrical form may suggest another unknown function. (Z100 Medieval plough soil.)
28. Handle. Possibly from a knife or key and of Roman date. (Z23 Medieval gravel surface.)
29. Key. General Type 4 *cf.* London Museum Medieval Catalogue (135). Hollow shank, bored to a depth of 15mm. Dated to fourteenth-fifteenth centuries. (Z100 Medieval plough soil.)

Bone

33. Lathe turned roundel. A pattern of circles and studs in relief. Holes drilled around edge to allow it to be attached by sewing, probably to fabric. (Topsoil.)
34. Double sided bone comb. A common seventeenth century type. (Z15 Sixteenth century gully.)
35. Lathe turned bone object with an intricately carved decoration of lozenges and ovals. A hole 10mm diameter bored in one end, perhaps a handle for a tool or knife. Considerable wear on one side and damage at base. (Z8 Foundation trench of sixteenth century building.)

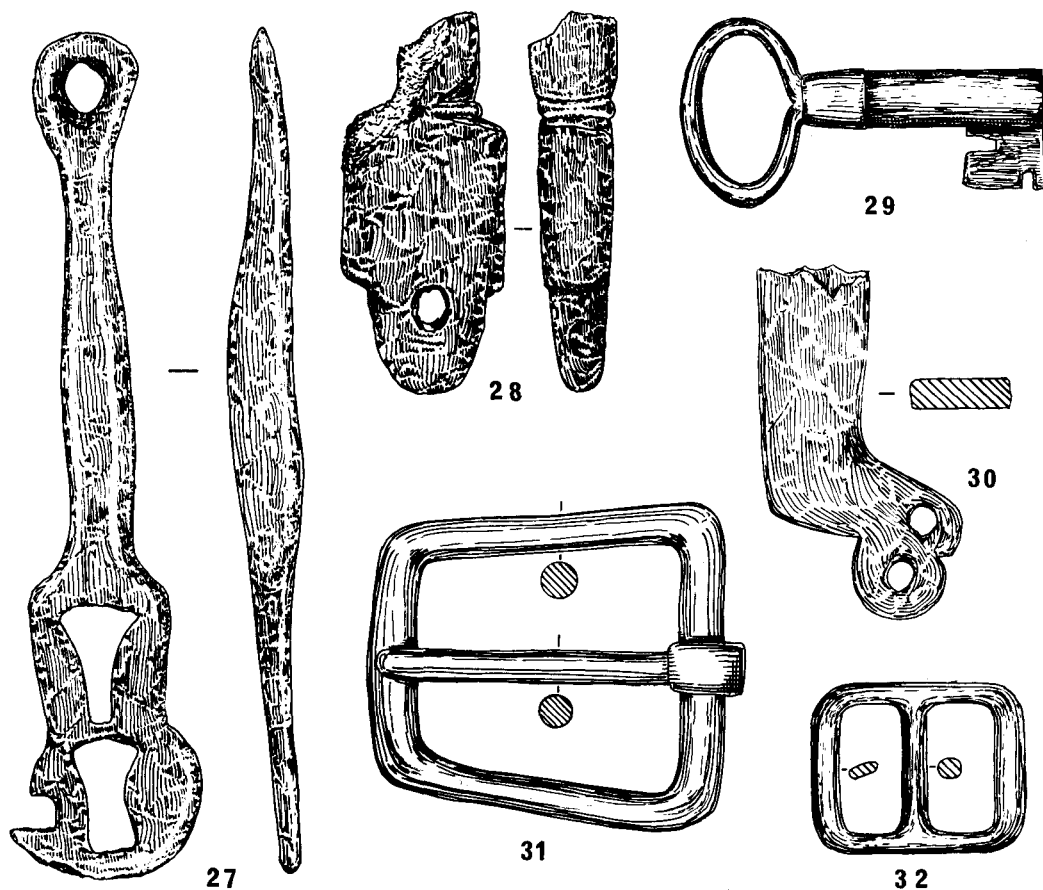


Fig. 26. Elmsleigh House, Staines: Small finds; miscellaneous iron, Nos. 27-32 ($\frac{1}{4}$).

30. Spur terminal. Fifteenth century, *cf.* London Museum Medieval Catalogue (103-112). (Z100 Medieval plough soil.)
31. Buckle. Frame and pin of circular section. Tudor or later. (Z100 Medieval plough soil.)
32. Buckle frame. Seventeenth-eighteenth century. (Z6 Out-building demolition Phase 1.)

36. Pointed implement made of a rib bone. All surfaces are polished as from considerable use. A leather working or pottery-making tool? (Z100 Medieval plough soil.)
37. Antler hammer. A tapered hole bored to receive a handle. The tines trimmed with a metal tool. Considerable wear on hammer face. Probably used to

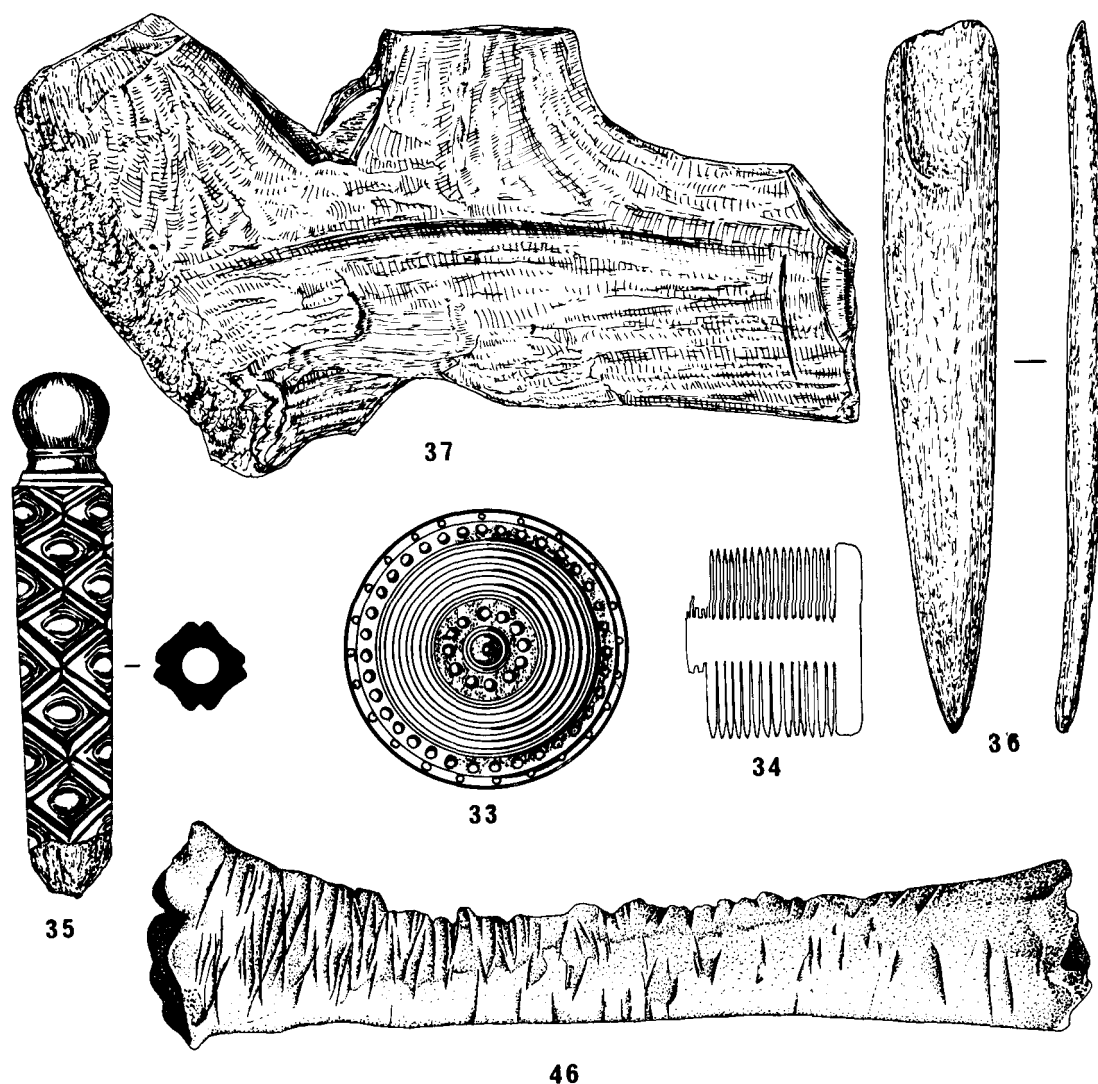


Fig. 27. Elmsleigh House, Staines: Small finds; bone, Nos. 33-37 and 46, all ($\frac{1}{4}$) except No. 34 ($\frac{1}{2}$).

work soft metals such as lead or copper without damaging the surfaces. For Roman antler tools, Philp (1974, 143). (Z4)

Small Finds Miscellaneous

38. Decorated floor tile. This example is probably a second, being badly warped and has glaze over one of the fractured edges. Cf. London Museum Medieval Catalogue (244, No. 34). (Z100)

39. Fragment of whetstone. Micaceous sandstone.

40. Fragment of whetstone. Micaceous sandstone.

41. Fragment of whetstone. Micaceous sandstone. All post-medieval.

42. Pipe clay figurine. (Z6)

43. Baked clay loom weight. Probably late Saxon. Bun shaped type. Dunning (1959, 24). (Z100 Medieval plough soil.)

44. Lead token. Scales and skittle? and W.B. in relief. (Topsoil.)

45. Glass bead, blue. (Z100 Medieval plough soil.)

46. Sheep radius with numerous cut marks. Use unknown.

Not illustrated

Strip of five lead shot attached to a sprue. Diameter of shot 5mm.

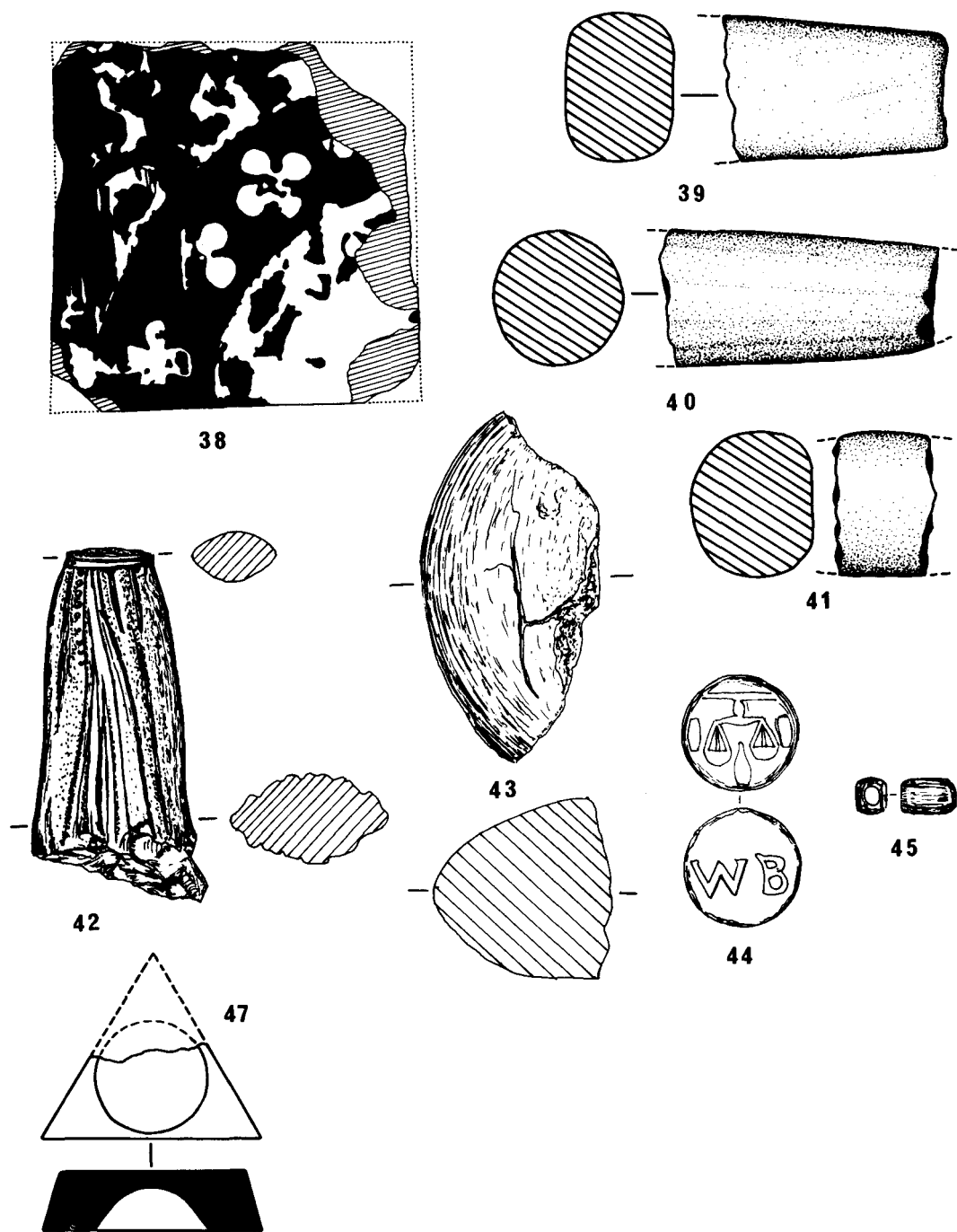


Fig. 28. Elmsleigh House, Staines: Small finds; miscellaneous, Nos. 38-41, 47 ($\frac{1}{2}$), Nos. 42-45 ($\frac{1}{1}$).

47. Earthen tin-glaze salt? D. M. Archer, Assistant Keeper, Department of Ceramics, Victoria and Albert Museum writes: "Salts are known with a triangular upper part with a depression in the centre, but there are no signs of this piece ever having feet. This does not mean that it was not used as a salt, but it

is just as likely that it was meant for some form of unguent or possibly for mixing up ingredients of some kind like paint. Late seventeenth-early eighteenth century and could have been made in England or on the continent."

The Querns by Hugh Chapman

Roman

1. (Z25) Fragment of bottom stone of Mayen basalt lava quern. Rough dressing marks visible on underside. 58 × 26 × 62 (thickness) mm.

Roman material residual in post-Roman contexts

2. (Z7) Worn fragments of bottom (?) stone of lava quern. 120 × 124 × 30mm.
3. (Z33) Fragment of lower stone of lava quern. 90 × 50 × 30mm.
4. (Z39) Fragment of top (?) stone of lava quern. Both sides appear to have been worn. 108 × 44 × c. 22mm.
5. (Z46) Fragment of bottom stone of lava quern. Dressing marks visible on underside. 94 × 64 × 50mm.

6. (Z52) Edge fragment of (upper?) stone of lava quern. Striations and vertical tooling on edge visible. 81 × 75 × 25mm.
7. (Z53) Fragment of upper stone of quern of concave grinding surface. Diameter c. 460mm.
8. (Z99) Fragment of lava quern.
9. (Z100) Seventeen fragments of lava quern (upper and lower stones). Largest fragment 150 × 90 × 32mm.
10. (Z131) Five fragments of lava quern. Four very small; the fifth, fragment of upper (?) stone, grinding surfaces slightly concave. 190 × 200 × 55mm, diameter c. 460mm.
11. Eleven unstratified fragments.

With the exception of No. 7 above, all the quern fragments from this site at Staines are of basalt lava and are examples of the well-known trade at all periods in milling equipment between the Mayen district of Germany and Britain, Hörter *et al.* (1950-51). The broken nature of the fragments means that it is not possible to identify the number of complete stones represented, but it is considerable for the size and nature of the site.

There are indications that London was the centre of the trade in the Roman period and acted as a distribution point. It is perhaps not surprising therefore that Staines, situated on the main Roman road to the west, has apparently a larger than normal number of imported quern stones. The lack of suitable local stone would have intensified a dependence on imported products.

Wood Samples by Alison Locker

Oak (*Quercus sp.*) Nine fragments, three probably belong to the same piece. (Phase 1. Late fourteenth-

early sixteenth century building.) Also five root fragments which could not be identified.

The Glass by Mary Wood (Numbers refer to Fig. 29)

Roman

1. Fragment of greenish glass from rim of vessel. Down (1974, 134).
Fragment of pale green glass, part of a base. Sheldon (1974, 103 and Fig. 50, No. 11).

Late medieval

Two fragments of pale green glass. One slightly curved, possibly from the neck of a vessel. Dating of pottery from this layer gives latest date of early sixteenth century.

Seventeenth century

2. A glass bottle, pale green colour. Probably an apothecary's phial, in this case the earliest example from the site. Possibly sixteenth century Venetian— Influenced bulging or oviform phial. Thorpe (1961). This phial could be later than sixteenth century, in spite of distinctive shape. Found with token dated 1656 and pipe 1660-80, in floor of late seventeenth century out-building.

3. Glass goblet knob, in colourless glass. From a design by Measey and Greene, importers of Venetian glass which was popular until around 1680, after which Ravenscroft's lead crystal was preferred, Hume (1970, 190).
4. Almost complete neck of apothecary's phial, similar in size and thickness and colour (pale green) to Nos. 13 and 14 (below). Neck flares outward from rim. Hume (1970, Fig. 17, 3, 4). Associated with late seventeenth-early eighteenth century material and coin of Queen Anne.

Eighteenth century

- Four bases from bottles; three alike (one complete, two large fragments). Similar to example from out-building I, demolition layer (below).
5. Neck from apothecary's phial.
 6. Bottleneck, flaring out sharply into a globular or cylindrical body. In light green glass with flat wide flange. Wine bottle?

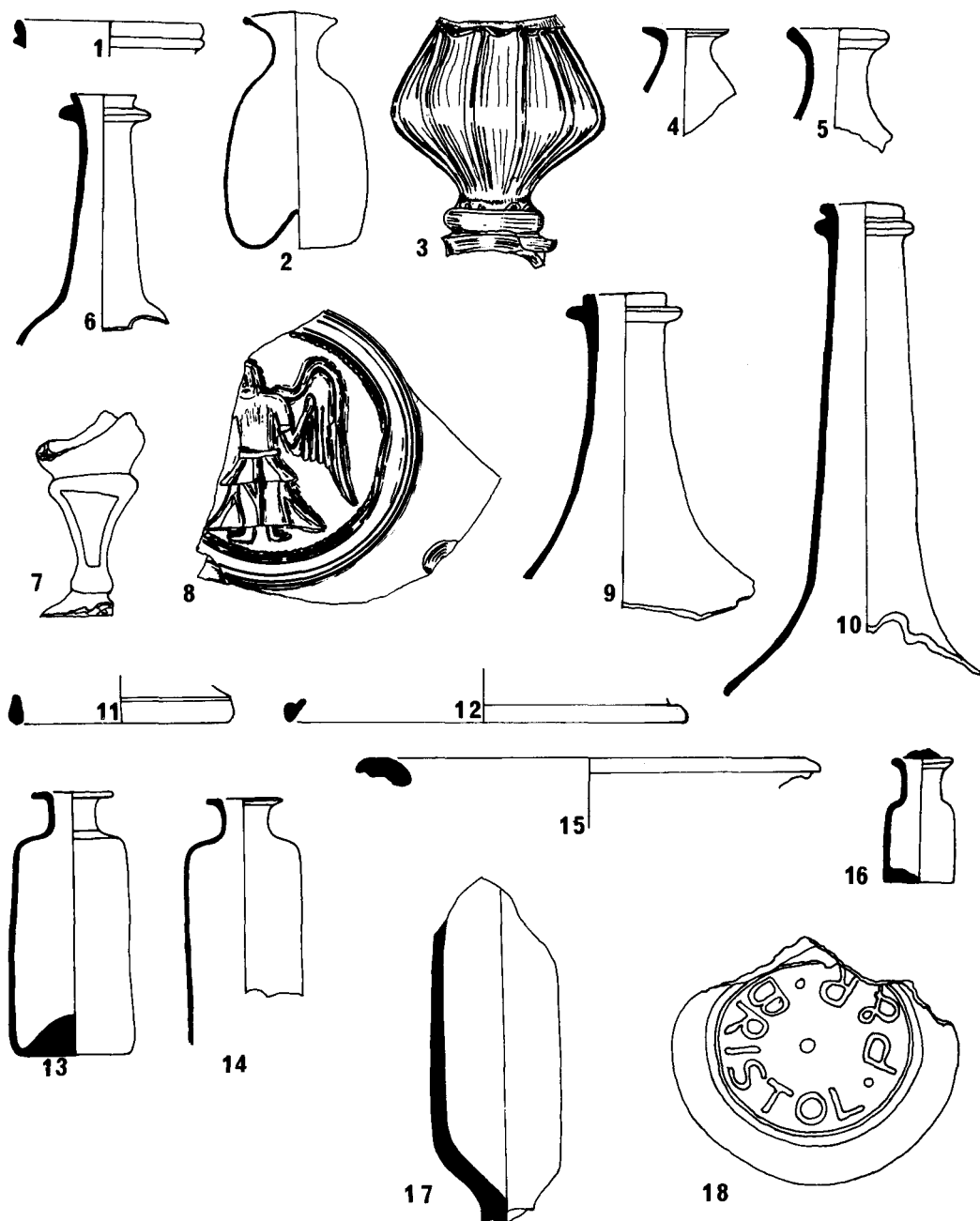


Fig. 29. Elmsleigh House, Staines: Glass, Nos. 1-18 ($\frac{1}{2}$) except 3 and 8 ($\frac{1}{4}$).

7. Goblet stem in coloured glass. Pipes from 1640–1710 with pottery of similar dates. (Rubble of late seventeenth–early eighteenth century out-building 1.)
8. Part of a bottle seal in dark green glass. The design on the seal is the picture of an angel and suggests that the seal is from a bottle made for the Angel Inn, High Street, Staines. Probable date 1720–30.
Fragments of wine bottles, consisting of four necks (one incomplete). Nine bases and base sherds and approximately 30 body sherds; dating generally to between 1729–1800. All bottles manufactured by blowing. Dark green colour.
9. With two others (not illustrated) an early example. Short and flared. (Similar to one dated 1733 in Hume [1970] or 1732 in Davis [1972, 24].)

(Z51) Mid eighteenth century pit

10. Long neck and narrower than No. 9. It is difficult to tell from the surviving sherd whether it had a globular (early) or straight (late), and in view of dating of other material from this pit (Z51) most likely the later.
11. Fragment from drinking glass featuring the 'folded foot'.
12. Fragment from drinking glass featuring the 'folded foot'. 'Folded foot' was seldom added to glasses after 1750, due to the increased duty on glass.
13. Apothecary's phial. Broad flattened lip, cylindrical shape with shoulder, faintly tinted green glass.

Clay Pipes by David Barker
(Fig. 30)

Previous excavations in Staines have produced many hundred clay tobacco pipes and although these must now be regarded as coming from unstratified contexts certain observations may be made on the group as a whole.

No very early pipes (i.e. sixteenth century) are represented and no makers marks before the eighteenth century are found in the group. In general the quality of many of the bowls of the seventeenth century is poor, the finish and firing variable, and many examples exhibit a distinctly sub-standard appearance. In general the typology of the pipes from Staines follows the main London sequences published by Atkinson and Oswald (1969) whose type numbers are referred to in the text. Two pipes from the Reeves site and two burnt wasters from the Elmsleigh House site are of interest and provide possible evidence for the manufacture of clay pipes in Staines. The two burnt wasters from Elmsleigh House are of Type 15 and 21 and may provide evidence for the manufacture of clay pipes in Staines during the seventeenth century, although no detailed documentary research has been undertaken yet to prove this. The two pipes from Reeves site are of Type 25 (1700–70), with an incuse stamp on the stem 'STAINS' (*sic*). A single letter M on the heel is presumably the surname of the maker (No. 1).

Elmsleigh House site

Over 135 pipe bowls were recovered during excavation although the majority of these were from unstratified or topsoil contexts. An interesting sequence from post-medieval building provides the first securely stratified group from the town. Of the 25 dateable bowls, from post-medieval pit cut into the foundation trench of the sixteenth century building (Z8), the majority give a typological date 1660–80, 18 bowls of Type 13, 15, 18 being found. One stem fragment had been moulded into a barley sugar form (No. 2).

A rubble layer (Z6) produced a total of 15 pipes with a date range 1660–1710; eight bowls of Type 18, six bowls of Type 25 and one bowl of a variant of Type 15 (No. 3).

A second rubble layer (Z4); from the eight bowls found, a date range of 1660–1770 is indicated. Four bowls of Type 25, (three of which have maker's mark of a crowned star, Atkinson and Oswald [1969] [No. 4]), and two each of Type 15 and 18. A variant of Type 18 is illustrated (No. 5).

14. Neck of phial without shoulder. Broad flattened lip. Also from pit (Z51). Sherd incorporating part of neck and shoulder from bottle similar to No. 14. Base of straight sided bottle in colourless glass. One sherd of thin colourless glass, completely flat, probably window glass. One semi-circular flat fragment; shape suggests it was part of some type of lens. Spectacles?

(Z50) Post-medieval layer

15. Rim sherd from a vessel in dark green glass. Appears to be some type of bowl.
Two sherds of dark green bottle glass. Two pieces of flat thin colourless glass. Window glass, as larger of two pieces shows the line along which it was cut to form a diamond shaped pane.

Nineteenth century

16. Small bottle, complete with cork.
17. Sherd of what appears to have been a cylindrical phial; rounded base with break where possibly stem attached.
18. Base sherd from dark green wine bottle. Has very shallow kick, and lettering 'Bristol. P and R'. After the early eighteenth century Bristol was a more important centre of glass making even than London. The 'P and R' probably refers to the Bristol firm Powell and Ricketts, and dates the bottle after 1856: before this date the firm was known as Powell, Ricketts and Filer. Wills, (1968).

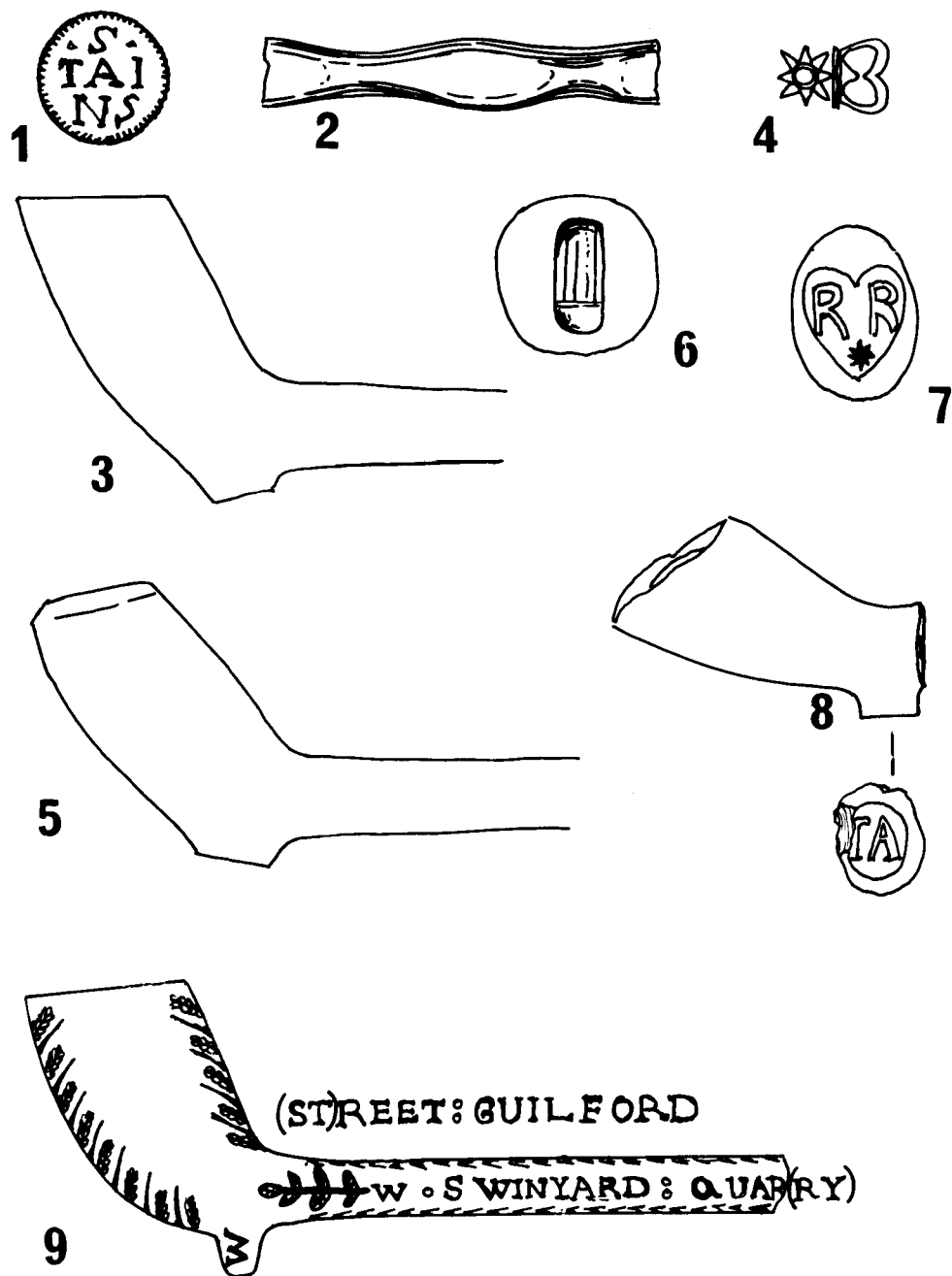


Fig. 30. Elmsleigh House, Staines: Clay pipes, Nos. 2-3, 5, 8-9 ($\frac{1}{4}$) and Stamps, Nos. 1, 4, 6-8 ($\frac{3}{4}$).

Unstratified

Three seventeenth century pipes from unstratified levels have maker's marks in relief on the bottom of the heel (No. 6) of Type 16, is the monkey paw mark of the Gauntlet family of Amesbury, Wiltshire, Atkinson (1970, 179). No. 7, Type 18 with initials R. R. is possibly the product of a Salisbury maker. Atkinson (1970, 179). No. 8, initials I?A., is possibly one of the many Bristol makers with those initials, working during the latter part of the seventeenth century. All three pipes have well made burnished bowls, another characteristic of west country types. A bowl of Type 20 (1690–1710) has a small contemporary knife cut hole (c. 2mm square) in the base of the bowl just above the heel. This curious feature is perhaps explained as an attempt to obtain a better 'draw' by providing a vent at the bottom of the bowl.

A pipe decorated with the royal coat of arms, maker's initials M. H., is the fourth example to come from sites in Staines. All are of Type 26 and by the same maker who is not recorded by Atkinson and Oswald (1969, 197). Unfortunately the quality of the moulding on this example is poor and details of the coat of arms and legend unclear, Hume (1970).

Late eighteenth century and early nineteenth century pipes from the topsoil include twelve examples of the Type 27 (1780–1820). Maker's initials found are; I. C., I. F., M. N., R. P., W. S. and W. W. A pipe of c. 1850 is decorated with sprigs of leaves and marked W. SWINYARD. QUAR(RY) STREET. GUILFORD (*sic*) in relief, Oswald (1975, 196) (No. 9). William Swinyard worked between 1832 and 1859.

The three west country pipes are of interest but should not be regarded as evidence for trade in pipes, but rather as representing individual pipes discarded by eastward bound traffic. Recent excavations of a mid eighteenth century inn rubbish dump at Egham, Surrey also produced examples of pipes stamped by west country makers.

Many of the other pipes may possibly come from local makers. Clay pipe manufacture was established at Eton, Buckinghamshire from at least 1666, Ayto (1972) and Oswald (1975, 161), and eighteenth century makers are recorded at Brentford, Kingston on Thames and Guildford. A 'Pipe House' is shown on Rocques map of Surrey c. 1768 at Thorpe Lea (TQ019 701) although the maker and its origins is not yet known. Thus Staines was in a position to receive pipes from many makers within approximately 15 mile radius, no attempt has been made to assign late eighteenth and early nineteenth century pipes to particular makers owing to the duplication of initials and the use of common mould types.

Animal and Bird Bone by John Chapman and Norman Shanks*Introduction*

The animal bone was generally in a good condition, although very few complete bones were recovered, most having their proximal or distal extremities missing. The cause of this, and the large amount of fragmentary bone, is considered to be a direct result of ploughing, dating from the eleventh–sixteenth centuries. The report, therefore, does not contain a minimum number analysis or percentage calculation.

A catalogue of bones for each feature or layer (Z numbers) was made. This has not been published. The following table (Fig. 31) gives an indication of the animals/birds found on the site. The full report is available on request.

Conclusion

As can be seen from the table (Fig. 31), the predominant bone type excavated was that of cattle (*Bos*). As no age analysis was carried out it is difficult to say if this indicates a cattle bias in the diet or that a large number of mature animals were kept as beasts of burden. In contrast to this the horse bones showed signs of butchery which suggests that they were used as a supplement to the diet, or the bone used for the manufacture of artefacts, as well as the normal role as work-animals. Bones of donkey proportions were also found, as were those of a pony (New Forest type).

Pig (*Sus*) and Sheep/goat (*Ovis*) bones were also present, in all phases, but in smaller quantities. One complete skull of a dog (*Canis*) was found and identified as that of a hunting dog. Associated with this were bones of a cat (*Felis*), Red Deer (*Cervus*), Hare (*Lepus*), Rabbit (*Oryctolagus calcanulus*) and wild fowl.

Z. Number,	ANIMAL									BIRD				
	Cat	Cattle	Dog	Deer	Hare	Horse	Sheep/ Goat	Pig	Rabbit	Chicken	Crow	Duck	Goose	Mallard
3		0				0	0							
4		0				0	0	0		0				0
6		0				0	0							
7		0				0	0	0					0	
8		0				0	0	0		0		0		
9						0								
10/100	0	0	0	0	0	0	0	0	0	0	0	0	0	
11		0				0	0							
12						0								
15		0												
16		0				0		0						
23		0				0								
30		0												
33		0		0		0	0	0						
35		0												
39		0												
40		0												
42		0				0								
43		0												
46		0												
48		0												
50	0	0												
51							0	0						
52		0	0		0		0	0					0	
79		0				0	0							
99							0	0						
101		0												
102		0												
103		0												
106		0	0			0	0							0
108		0												
112		0				0	0							
113		0												
117		0					0							
119		0					0							
124		0				0	0	0	0					
131		0	0			0	0							
132		0												
134		0												
135		0				0				0				

Fig. 31. Elmsleigh House, Staines: Table of animal and bird bones. 0 = bones present.

A sheep's radius (Fig. 27, No. 46) has many irregular cut and chop marks and this is due probably to use in a post-medieval manufacturing process (e.g. wire tensioning). A left tibia from cattle also contained an unusual chop mark. This was a 'V' shape, 20mm wide and 10mm deep, cut into the shaft through to the medullary cavity.

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EXCAVATIONS IN THE SUB-VAULT OF THE MISERICORDE OF WESTMINSTER ABBEY

FEBRUARY TO MAY 1975

by
Graham Black

Summary

The earliest finds from the site were a few abraded fragments of Roman pot, tile and glass, not associated with any feature. Some evidence was revealed of Saxon activity on the site prior to the construction of the Confessor's Abbey in the eleventh century. The sub-vault itself was found to have been inserted between the south wall of the frater, or refectory, and the north wall of the monastic kitchen in the first half of the thirteenth century, replacing an open court, and to have been demolished in the second half of the sixteenth century. Throughout its existence the sub-vault served as an extension of the kitchen, and formed a connection between the kitchen and the frater.

Introduction

Documentary research in the early part of this century established the area immediately behind 20 Dean's Yard, Westminster Abbey, as the site of the misericorde, or flesh-frater of the monastery (see below for a discussion of the role of the misericorde). Proposals for the construction of a new building in this area involved the removal of deposits down to the original floor level of the sub-vault. With the kind co-operation of Mr. Peter Foster, Surveyor of the Fabric at Westminster Abbey, the Inner London Archaeological Unit excavated an area within the east side of the sub-vault from February–May 1975, prior to its redevelopment (figs. 2–3).

The identification of the sub-vault

The use of the misericorde, or *domus misericordiae*, reflected a gradual liberalization of attitudes in the monastic world on the question of abstinence from eating flesh meat. In the rule of St. Benedict, meat was strictly prohibited except to the very ill,¹ and the prohibition was maintained in Britain in the Regularis Concordia (drawn up at some date between 963 and 975),² and Lanfranc's Statutes (late eleventh century).³ However, by degrees, this ruling was liberalized and the eating of meat was permitted to an increasing number of monks. Eventually this meant the provision of meat to all the monks during certain fixed periods of 'recreation' in the course of the year. At Westminster Abbey meat was served on 146 days in 1396–7, and on 170 days in the following year.⁴ The meat was, however, provided in a separate room, thus keeping to the letter of the Rule in that no meat was consumed in the refectory proper. This separate room was known as the misericorde, and was first mentioned at Westminster Abbey in the Customary of Abbot Ware of 1266.⁵ However, the shortage of documentation prior to this date means that it cannot be stated for certain that a misericorde chamber had not existed previously.

The position of a subsidiary structure such as the misericorde was not strictly laid down either by rule or custom, but was dictated by the site at disposal. It was, however, generally situated near the frater or infirmary. At Canterbury⁶ and Barking,⁷ for example, it was attached to the infirmary, while at Durham⁸ it was situated in a loft at the west end of the frater.

The site of the misericorde at Westminster Abbey was correctly identified by Dr.

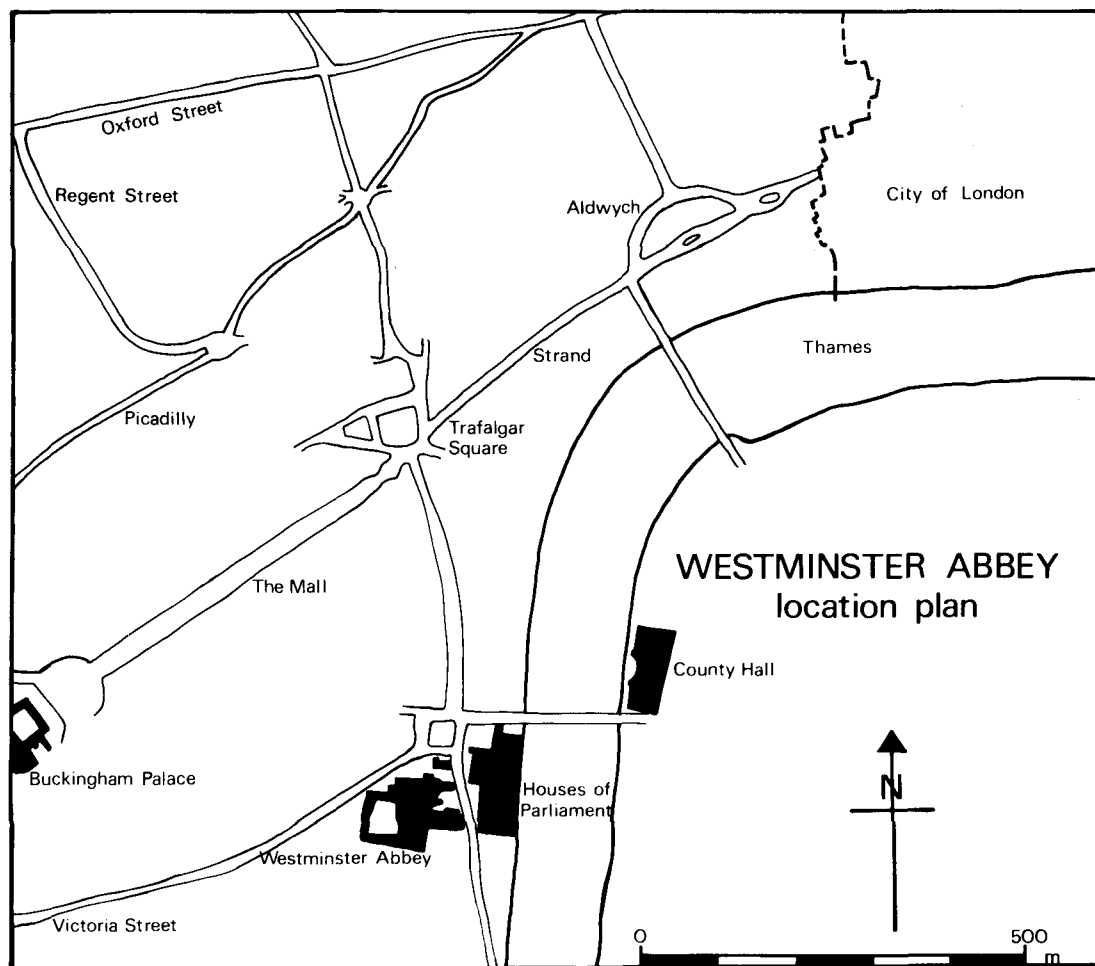


Fig. 1. Westminster Abbey location plan.

Armitage Robinson, then Dean of the Abbey, in 1911. It had been previously associated with a long range of buildings running parallel with the frater, and separated from it by about 15 metres of open ground.⁹ Practically the whole of this range is now included in the southern portion of Ashburnham House.

Dr. Armitage Robinson gave detailed reasons for differing from previous writers on the monastic buildings at Westminster.¹⁰ These may be summarized as follows:

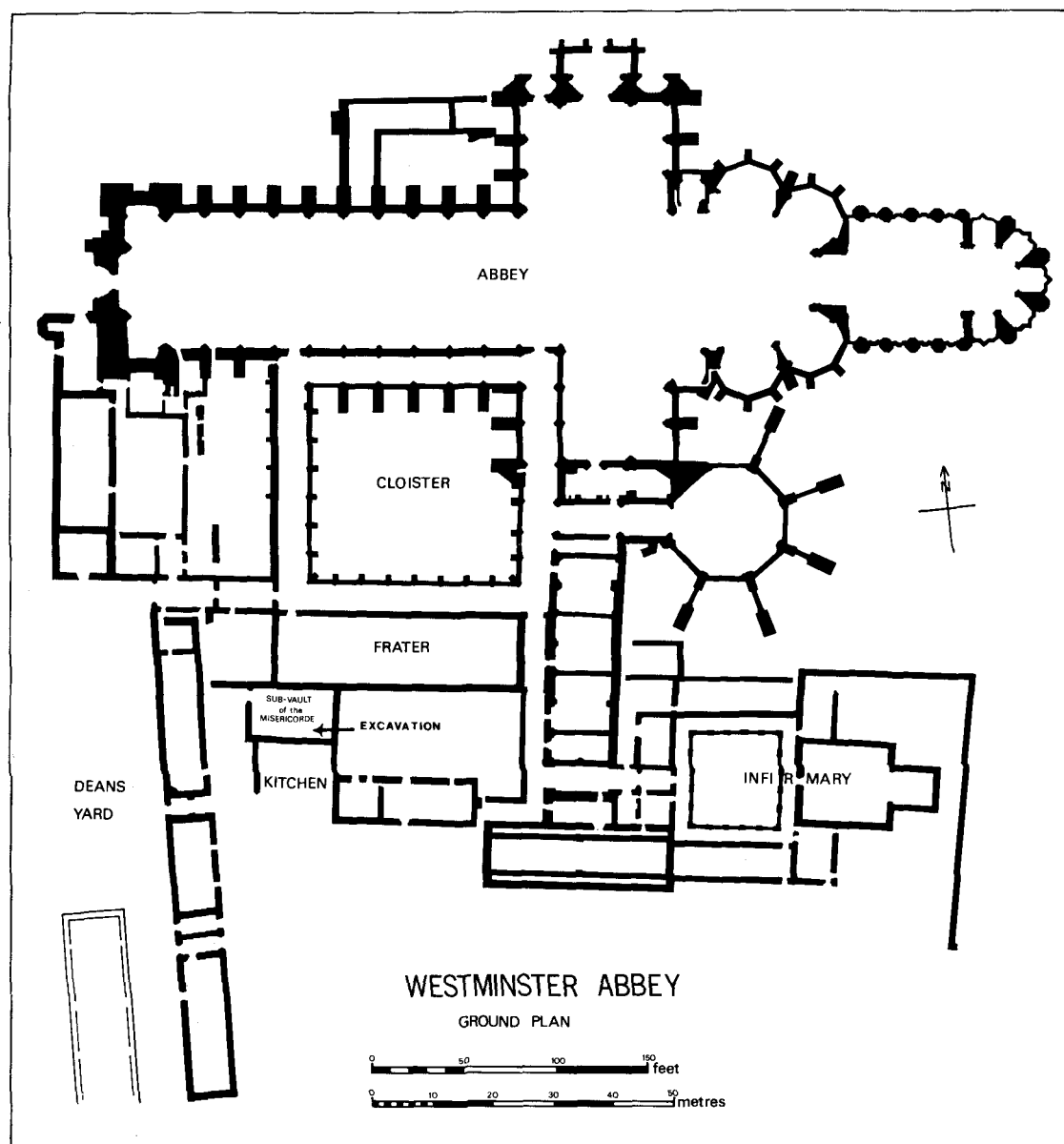


Fig. 2. Westminster Abbey ground plan. (After R.C.H.M. (*Westminster Abbey*).)

- (a) The Customary of Abbot Ware, 1266, made it incumbent on the cellarer to maintain the roof, tables and windows of the refectory, and likewise those of the adjoining chamber called the misericorde.
- (b) Another phrase speaks of the misericorde as *juxta refectorium*.
- (c) Descriptions in grants and leases of a later date join together the great kitchen, the

LOCATION OF EXCAVATION

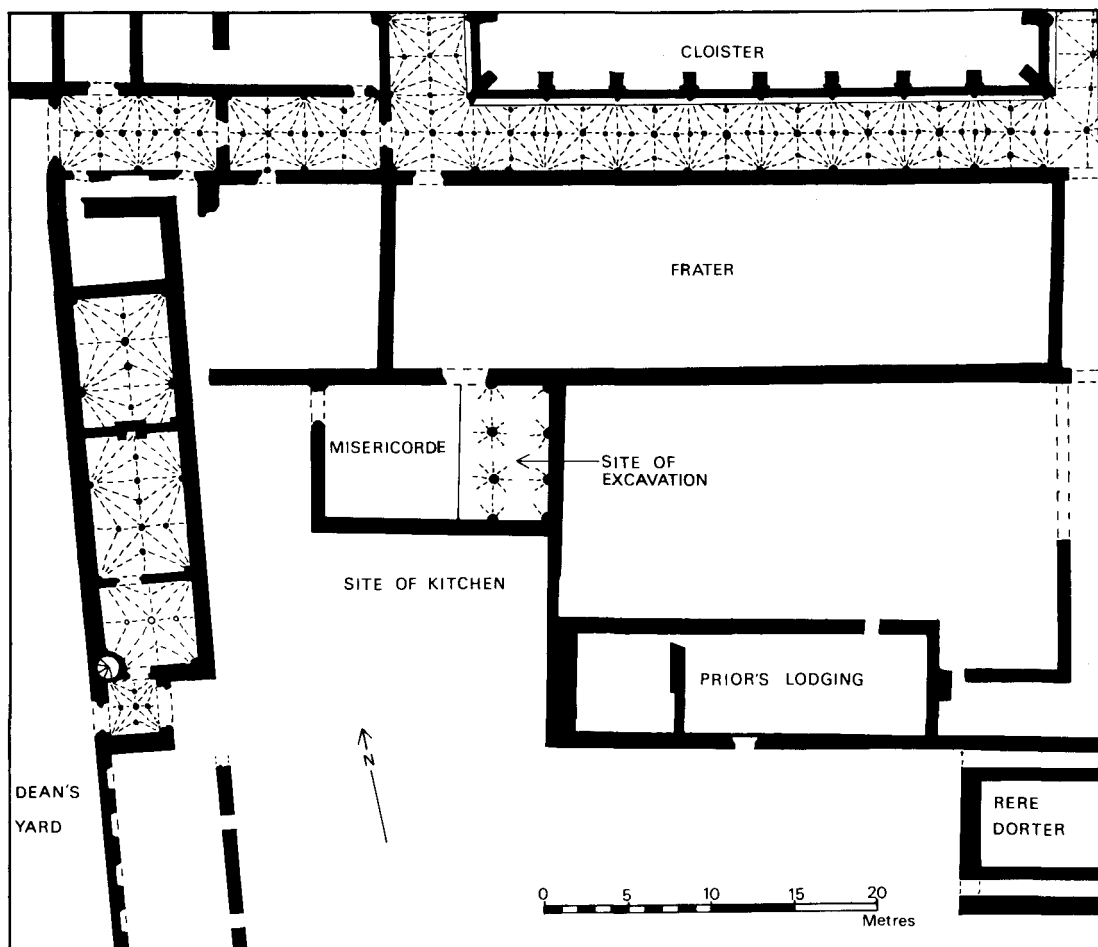


Fig. 3. Westminster Abbey sub-vault of the misericorde. Location of excavation.

misericorde, and the refectory in a manner which strongly suggests that they were adjacent. The most important of these is a document of 1571. Lady Anne Parry was leased the misericorde in 1562, but in 1571 she was released from all obligations to repair it. The document shows that the misericorde was not on the ground floor, but had beneath it certain premises belonging to the kitchen.

Armitage Robinson concluded that the misericorde was adjoining and immediately south of the refectory, and was on the first floor. He also noted a description by a former Surveyor of the Abbey, Mr. Mickelthwaite, of 'a Norman wall running from the south side of the frater at right angles to it and a little east of the existing serving hatch, in which wall are two round-headed windows, high up, which shews it to have been the east side of a building'.¹¹ This was, in fact, the east wall of the misericorde.

Robinson's work was followed up by the Rev. H. F. Westlake, who in 1921 carried out excavations¹² to test Robinson's conclusion that 'if there was a vaulted chamber under the Misericorde which formed part of a passage to the kitchen, all the facts fit well together'.¹³ This proved to be the case. The eastern wall and the two vaulting shafts on either side of the hatch communicating with the frater were already known. Westlake found another shaft to the west of these and, 'further to the west again the splayed stones of what seemed to be a doorway were found, thus fixing the line of the western wall, a portion of which was soon discovered. . .'.¹⁴ He also discovered the two most easterly vaulting arches in the south wall, and noted above these 'two corbels, unsymmetrically placed as regards the arches beneath, which evidently supported a hearthstone above. Such a hearthstone in the misericorde finds mention in the almoner's roll for the year 1361-2'.¹⁵ Westlake was thus able to prove the existence of the sub-vault. He could not investigate the central line of shafts which were believed to exist because of the presence of a large drain. He had, however, established the size and approximate height of the sub-vault.

Prior to the 1975 excavations, it was believed that the sub-vault was two bays wide. This premise was based on comments made in the late nineteenth century by its original discoverer, Thomas Wright Senior, then Surveyor of the Fabric, who believed it to be the monastic kitchen, and stated that ' . . . although so little is left of the kitchen, there is enough to show that . . . it was a vaulted room of four bays in length, by two bays in width, and therefore had three pillars down its centre, the bases of which have been removed to make room for a common drain. . .'.¹⁶

In 1884 Thomas Wright Senior discovered the remains of two ovens 'side by side with parts of the firestone soles, and side walls, as well as the tile-built roofs' in the southern side of the south wall.¹⁷

An archway with hatches can still be seen in the south wall of the present Abbey Song School. This is the remains of the serving hatch between the kitchen and frater (see *Description of the Masonry*, p. 153). A passage in the Customary of Abbot Ware states that 'up to the time of Prior Philip (1253-8) there was a hollow and a mural arch with a vault skilfully contrived between the refectory and the convent kitchen',¹⁸ and this may refer to an early version of the serving hatch separating the two. For food to be passed from the kitchen to the frater through this hatchway, there must also have been direct access between the kitchen and the sub-vault.

Two other points must be noted. The first is that nothing was known of how the misericorde or its sub-vault fared in the great fire of 1298 at the monastery, although a document referred to damage to both the kitchen and the frater (see discussion of phase 4, p. 150). Secondly, although the document of 1571 referred to above released the lessee from any obligation to repair the misericorde, there is no actual order known for its demolition. The frater was pulled down in accordance with an order of the Dean and Chapter dated November 5th, 1544.¹⁹

Part I. Description of the Excavations

Investigations were confined to the eastern portion of the sub-vault, but extended to the centre of the hatchway known to exist between the sub-vault and the frater, and still to be seen in the Abbey Song School. The excavated area thus covered one and a half bays of the sub-vault. The remainder of the sub-vault was observed during re-development. The site was heavily disturbed by post-medieval pitting.

PHASE 1. (Fig. 4)

This phase consists of all the pre-Norman levels on the site, five sub-phases were discernible:

(a) A layer of chocolate brown river silt 0.40m thick (F91), O.D. 2.54m, overlay fine natural sand, O.D. 2.14m. Because of the depth involved, it was not possible to excavate this silt.

(b) The earliest finds from the site were nine sherds of Roman pot, two fragments of Roman tile, and one fragment of glass, all trampled into the top of the silt in the S. W. corner of the site. No associated feature was located.

(c) In the N.E. quarter of the site was a shallow trench filled with pinkish mortar (F 108), orientated S.E.-N.W. cut on both sides, on the west by a seventeenth century pit (F 18), and on the east by a slot (F 89), but surviving to a length of 1.20m. It was 0.55m wide and 0.05m deep, with vertical sides and a flat bottom. It contained a few small fragments of bone, but no pottery.

Two post-holes (F 83, F 84) may have been associated with this trench. Both were cut by a pit (F 18), and one (F 83) was cut through the centre of the trench (F 108) to a depth of 0.72m. The other (F 84) was about 0.70m to the south and at right angles to the line of the trench and the post-hole (F 83). The fill of the two post-holes consisted of a loose mid-grey sandy soil with light grey mortar flecks. One (F 83) contained a single sherd of coarse dark grey shell-gritted fabric, a few fragments of tile, and some small fragments of bone and oyster shell. There were no finds from the other.

The trench (F 108) is interpreted as a footing for a timber sill beam, which, in association with the two post-holes, may have been the corner of a building.

(d) An irregular slot (F 89) with an associated post-hole (F 89(a)) cut the earlier trench (F 108) on its eastern side. This slot ran approximately north-south, and was cut at its northern end by the south wall of the frater, and at its southern end by a shallow scoop (F 85). Its eastern side was removed by the foundation trench of the east wall of the misericorde. The associated post-hole (F 89(a)) was on the western side of the slot and was partially sealed by the fill of the slot.

The surviving length of the slot was 1.70m, and its width 0.30m. Its base was highly irregular, but it was never deeper than 0.15m. It became shallower towards its south end, and was only 0.05m deep where cut by the scoop (F 85). The associated post-hole (F 89(a)) was approximately circular with a diameter of 0.25m. Its depth below the bottom of the slot was 0.07m. The fill of both was a light greyish-brown clay, with some light grey mortar flecks. There was, however, rather more mortar in the post-hole, and a few small fragments of Reigate stone and charcoal.

Sealing all these features was a very thin deposit (c. 0.01m) of trampled silt (F 91(a)).

(e) Cutting through this trample was a shallow ditch (F 100), which ran approximately S.E.-N.W. across part of the site. It was cut in the S.E. by two sewer trenches (F 27, F 28), and in the N.W. by the sleeper wall (F 101, phase 2), and then by modern pits, which removed all trace of the ditch west of the sleeper wall. Only a length of 3.80m of the ditch survived. It was 0.85m deep, and of uncertain width (see Section 3). It had partly silted up and had then been deliberately backfilled, largely with quantities of oyster and whelk shells, and bone. A thin gravel spread was laid over its surface. This backfilling occurred in the second half of the eleventh century, and contained a coin, probably of Heinrich III, Holy Roman Emperor 1039-56. The gravel spread was sealed by the make-up for the earliest floor in the excavated area (F 90, see phase 2).

The ditch (F 100) cut through two other features (F 111, F 114), both small scoops. The first (F 111) was approximately circular with a diameter of 0.45m and a depth of 0.30m. It was filled with

loose mid-brown sandy soil, and produced no finds. The second (F 114) was cut by the two sewer trenches (F 27, F 28), and only a small portion *c.* 0.30m deep survived under the ditch. It was backfilled with redeposited sand, and produced one pot body-sherd of brownish-grey coarse shell-gritted fabric.

Discussion of phase 1

The presence of river silt directly on top of natural sand in the sub-vault excavations indicates that, at one stage, a large part of Thorney Island was under water.

The very small quantity of Roman material recovered during the excavation is relevant to the widely held view that there was a major Roman structure in the vicinity of Westminster Abbey.²⁰ However, the limited extent of the excavation in the sub-vault makes it impossible to come to any conclusions on this issue.

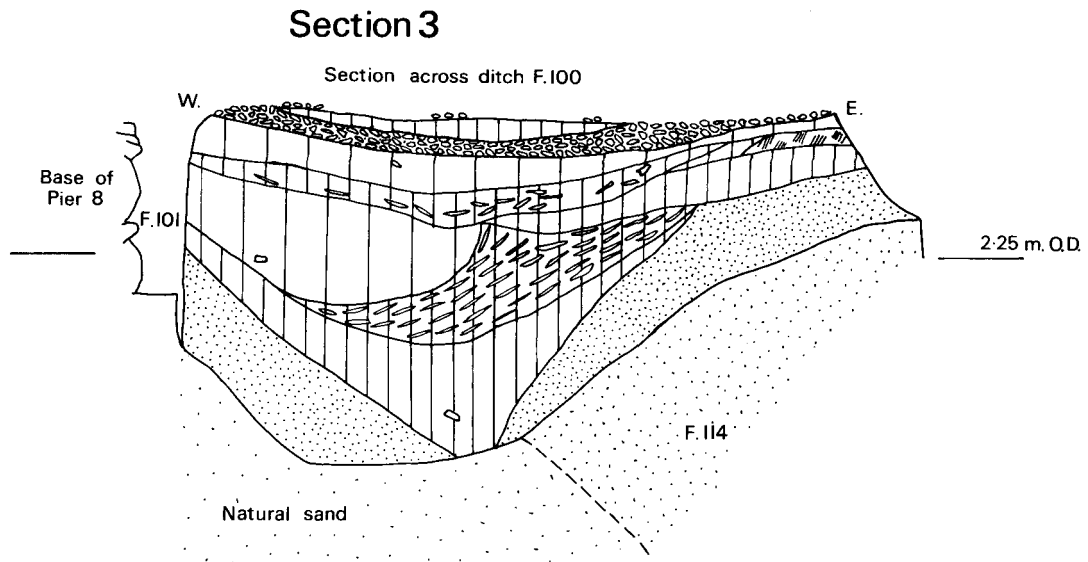


Fig. 5. Westminster Abbey sub-vault of the misericorde. Section 3 (facing south) ($\frac{1}{10}$).

The existence of at least three phases of pre-Norman activity represents the earliest archaeological evidence of inhabitation on Thorney Island. It is likely that this activity was associated with the earlier monastery.²¹ The most interesting feature was the corner of a possible timber building represented by a beam trench (F 108) and two post-holes (F 83, F 84). However only the ditch (F 100) was datable (to the second half of the eleventh century—see finds report). Its orientation suggests a construction date prior to the siting of the Norman frater and kitchen. Its backfilling consisted almost entirely of kitchen refuse (see Section 3, Fig. 5), which may have been derived from a monastic kitchen, either from a temporary wooden structure in use while the Abbey Church was being built, or from the kitchen of the earlier monastery.

PHASE 2. (Fig. 6)

This phase was contemporary with the construction of the Norman monastery in the late eleventh century, when the excavated area was bounded on the north by the monastic frater, and on the south by the kitchen. Four sub-phases were discerned:

(a) The earliest floor on the site (F 90) sealed the ditch (F 100) and the trampled river silt (F 91 (a)). Except where removed by later features, this floor covered the whole excavated area and, during redevelopment, was traced extending over the entire sub-vault and beyond its western wall.

To construct this floor, the site was first levelled by depositing a layer of fine light grey silty soil which contained a few small stones. The floor surface of crushed clunch and lime mortar was then laid on top of this.

The relationship of this floor to the monastic frater and kitchen cannot be precisely established, although it probably antedates them. The walls of both buildings were built tightly against their foundation trenches, making it impossible to establish if the floor ran up to the walls or was cut by the foundations. However, the floor abutted the foundations rather than the base of the walls, thereby making the latter more likely. If this was the case, the floor can be dated earlier than 1100, the usually accepted date for the completion of the frater.

(b) The second sub-phase saw the construction of the frater and kitchen in the late eleventh century.²² (See discussion of the masonry, p. 153.)

(c) Shortly after this, and probably within the same period of construction, a sleeper wall was built running north-south between the south wall of the frater and the north wall of the kitchen, and abutting them. It cut through the original surface of the floor (F 90). The sleeper wall was one metre wide and 0.65m deep, and was constructed on a bed of lime mortar 1.30m wide and 0.20m deep. It was built mostly of clunch with some flint, tile, and re-used Reigate stone blocks.

On top of the sleeper wall was one course of a clunch-faced wall (F 92 (e)), which may be interpreted as the remains of a partition wall. It ran from the north wall of the kitchen for a distance of just over 2m before it was cut by the base of pier 8 of the later sub-vault. On top of this, abutting the kitchen wall, was the foundation base of what may have been either a buttress or the support for an earlier pier (pier 7 of the sub-vault was later inserted on top of it).

Above the centre of the sleeper wall, between piers 8 and 9 of the later sub-vault, was an irregular patch of rubble walling 0.95m long, and 0.15m high. Its function is unknown, but, as with the base on top of the partition wall (F 92 (e)), it may have been part of an earlier vault. It seems more likely, however, to be the last remains of a partition wall on top of the sleeper wall. All deposits above it had been removed by a modern pit (F 4).

(d) The floor (F 90) continued in use during the building operations, and was in fact repaired on a number of occasions after the insertion of the sleeper wall. This was particularly the case to the west of the sleeper wall where at least four separate major repairs were made. This was the area of the pathway between the opposed entrances of the frater and kitchen, and it therefore seems likely that this pathway was in use from the time of the original construction of these two buildings.

At least two post-holes (F 87 and F 105) and a shallow scoop (F 85) were cut through the floor. (There is also a possibility that two other post-holes [F 97, F 98] were cut through the floor at this time. Their relationship to the floor had, however, been destroyed by a later feature.) It was not possible to assign these post-holes to sub-phases.

The post-hole (F 87) was approximately circular, with a diameter of 0.35m and a depth of 0.55m. It was backfilled mainly with redeposited chocolate brown silt, but also contained some small flecks of Reigate stone, clunch, and mortar, a large quantity of small bones and bone fragments, and a few fragments of oyster shell. The fill of the second post-hole (F 105) which had been cut by a later feature (F 33), consisted of a loose dark brown sandy soil with flecks of mortar and clunch. The other two post-holes (F 97, F 98) had similar mid-grey silty fills containing some oyster shell and fragments of stone.

Immediately east of the first post-hole (F 87) was a small shallow depression (F 85). It had been backfilled with a sandy black soil which contained a large quantity of charcoal, oyster shell, bone, and pottery, and some small fragments of clunch and Reigate stone.

WESTMINSTER ABBEY MISERICORDE 1975 PHASE 2

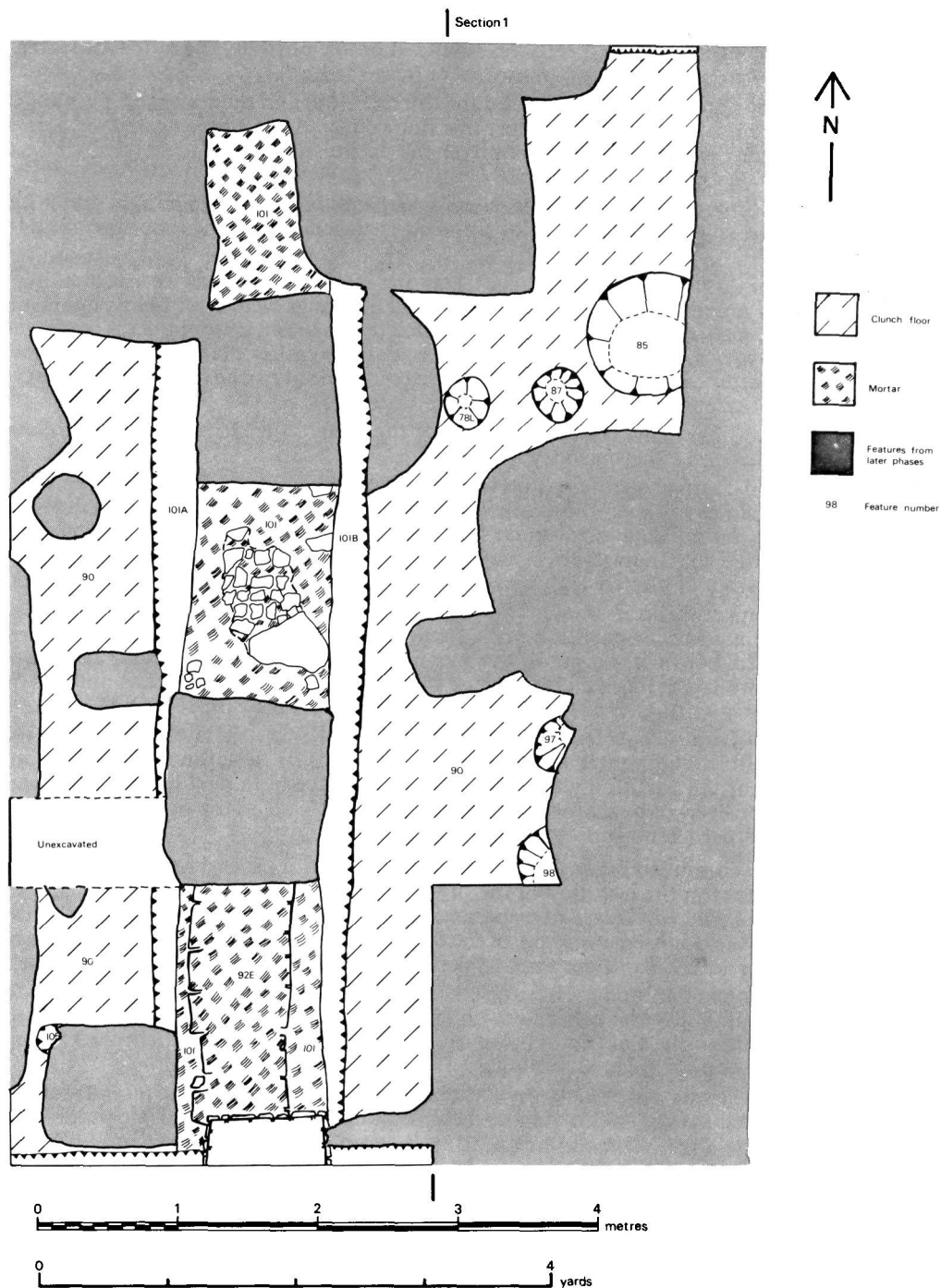


Fig. 6. Westminster Abbey sub-vault of the misericorde. Plan of Phase 2.

Discussion of phase 2

Four major problems arise from phase 2:

(a) The first concerns the role of the floor (F 90). Its original extent is unknown, but must have been large, and was possibly linked to the Great Court of the monastery (now Dean's Yard). The lack of evidence for a building with which to associate it, points to it having initially been an open court.

(b) The second problem concerns the reason why the monastic planners left a gap between the frater and kitchen. The most likely explanation is that it acted as a 'light-well', allowing windows to be inserted in the facing walls of the two buildings. There was no evidence for any roof over the pathway between them.

(c) The initial purpose of the sleeper wall (F 101) is not known. The technique of laying a sleeper wall as the foundation of a vault was relatively common in large masonry structures built on sand, thereby considerably reducing the possibility of subsidence. The same technique was used along the line of the nave arcade in the abbey church at Westminster. Within the 1975 excavated area, the sleeper wall was later used as a foundation for the sub-vault. Its original purpose is unknown, but must be associated with the possible partition wall (F 92 (e)) and the other masonry remains noted above. The issue is further confused by the fact that, during the redevelopment scheme, it was discovered that there were no more sleeper walls under the other lines of columns of the sub-vault. (This does not rule out their presence elsewhere—where the redevelopment scheme did not remove deposits to the requisite depth.)

(d) Finally, it has not been possible to closely date the end of phase 2, and the initial construction of the pit (F 78) which begins phase 3. It is difficult to date any of the pottery in phase 2 closer than likely to be eleventh and twelfth century, but taken in conjunction with the finds from phase 3 (a), a date within the second half of the twelfth century seems most likely (see pot report p. 159).

PHASE 3. (Fig. 7)

During the later twelfth and early thirteenth centuries, much of the excavated area was occupied by a large lined pit (F 78) and an associated gravel surface. Unfortunately the pit was cut by a modern drain (F 27). There were four sub-phases:

(a) The pit was cut through the floor (F 90) east of the sleeper wall (F 101), probably in the second half of the twelfth century. Its maximum surviving extent was 2.10m east-west and 2.06m north-south. The base of the pit survived under a concrete support for the modern drain (F 27), but could not be excavated below a depth of 1.75m. In its earliest phase the pit did not appear to be lined.

(b) The pit was then partially backfilled with Reigate stone, clunch, a large amount of flint rubble, and some greyish-green clayey soil (F 78 (m)).

Above this rubble fill, the sides of the feature, but not the bottom, were lined with a deposit of mid-grey clay (F 78 (k)) varying in thickness from 0.05m to 0.10m. This clay deposit was spread out over the surface east of the sleeper wall. The relationship of this deposit to those west of the sleeper wall is uncertain due to the disturbance caused by later features, however, both it and the next phase of the pit were associated with a series of thin gravel and mortar surfaces (F 76, F 82, F 95, F 99). Each of these surfaces had a thin deposit of black trampled soil on top of it.

A rubble and mortar platform (F 92), 0.30m high, was constructed on top of the partition wall (F 92 (e)) and extending west of it over the final repaving of the earliest floor (F 90). This platform was sealed by the latest gravel surface (F 76), but the previous surfaces had built up beside it, gradually reducing its height, and all of them must be considered to post-date it.

WESTMINSTER ABBEY MISERICORDE 1975 PHASES 3 and 4a

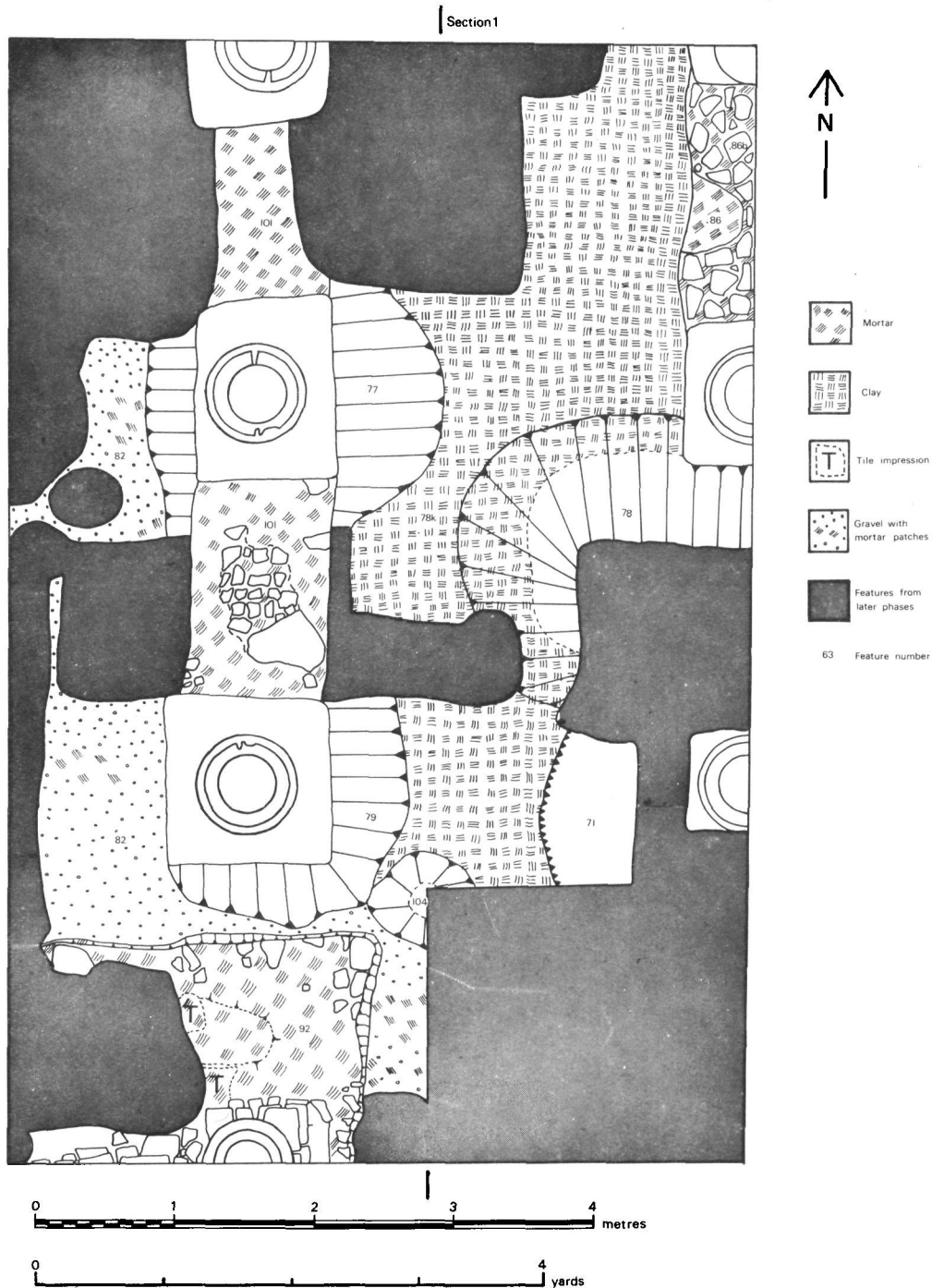


Fig. 7. Westminster Abbey sub-vault of the misericorde. Plan of Phase 3 and 4A.

(c) The pit was then again partially backfilled, with thin layers of crushed Reigate stone (F 78 (j)) and mid-brown sandy silt (F 78 (i)). It was then re-lined with loose mortar and gravel (F 78 (h)). This lining only survived on the north side and on the bottom of the feature.

(d) The pit was finally back-filled and the site levelled, in the first half of the thirteenth century, to permit the construction of the sub-vault. The backfill (F 78 (a–g), F 73, F 88) consisted of separate deposits of mid-brown sandy soil with Reigate stone and clunch rubble, light grey mortar dust containing a large quantity of building rubble, and redeposited sand.

Discussion of phase 3

Section 1 is misleading in regard to the pit, in that it only shows associated deposits which were used to level the site for floor surfaces. It was not possible to draw a section of the pit because little except its edges survived the insertion of the modern drain (F 27).

The mortar platform (F 92) was probably associated with the doorway into the monastic kitchen, and the pathway to the frater.

The use of the lined pit and its associated gravel surfaces is uncertain. However, the material used for its backfilling contained the best group of finds from the site, and the *terminus post quem* of c. 1245 for the insertion of the sub-vault provides a very useful date for the study of the pottery.

PHASE 4. (Figs. 7, 8 and 9)

The insertion of the sub-vault followed immediately upon the final backfilling of the lined pit (F 78) and the levelling of the site between c. 1220–1245. This date is based on the type of pier-base used (see p. 154). The sub-vault was probably used as an extension of the kitchen from the time of its construction, but from the lack of ovens or hearths throughout most of its existence, and from the evidence for partitioning, it seems to have had a purely storage function until the late fifteenth century. Three sub-phases were discerned:

(a) Following immediately upon the backfilling of the lined pit (F 78) and the levelling up of the area, an eastern wall three bays wide was constructed, containing a window in its central arch; this window supplied light to the eastern side of the sub-vault and was later replaced by another larger one in the same position. A small, shallow scoop (F 86) filled with loose light grey mortar dust, was cut into the top of the foundations of the east wall, and within its backfill was the base of a vessel, other fragments of which were found in the final backfilling of the lined pit (F 78). Vaulting shafts were inserted into the south wall of the frater and the north wall of the kitchen. Two construction trenches (F 77, F 79) were cut to allow the insertion of piers on top of the sleeper wall (F 101). The completed sub-vault consisted of four triple bays, with simple quadripartite vaulting, 14m long by 8.20m wide, and 2.90m high. A hatch connected it with the frater, and there were doorways between it and the kitchen, and in the northern corner of its western wall (see p. 153).

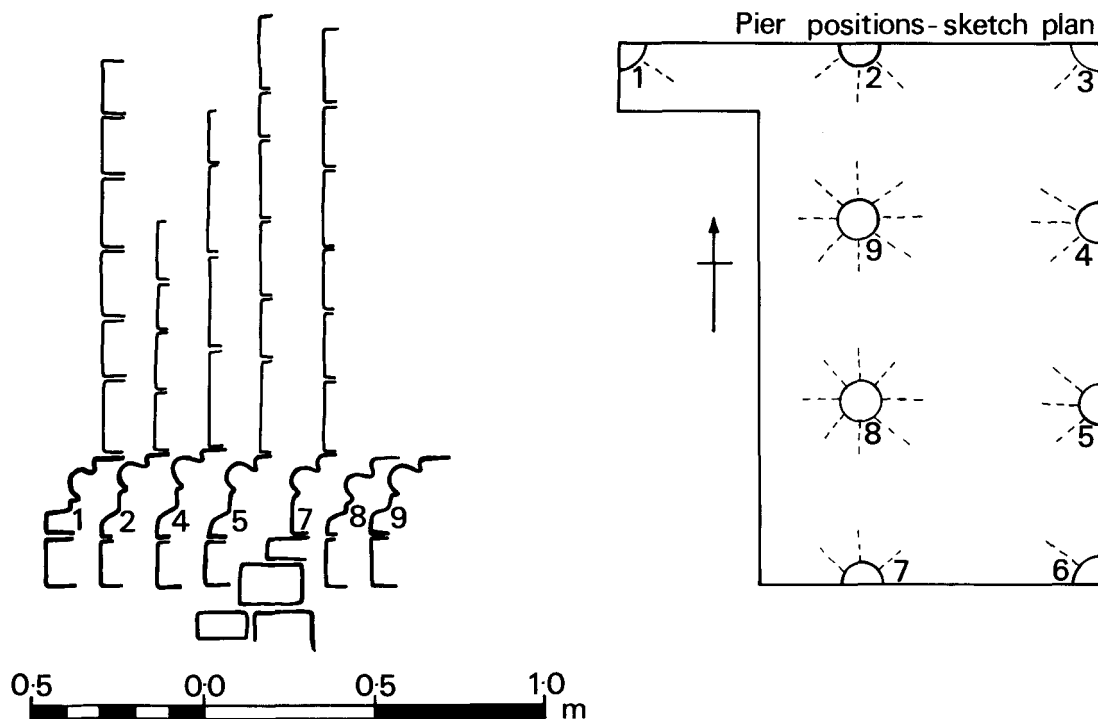
A floor of mortar rubble (F 70 (b)) surfaced with Reigate stone chippings (F 70 (a)) was constructed in association with the newly inserted vault. Slots for a timber partition were cut into piers 2, 8, and 9 (see p. 155), indicating that the area east of the pathway between the kitchen and frater was partitioned off, possibly for storage purposes.

Separating this floor from the top of the mortar platform (F 92) was a very shallow slot-like feature (F 72). Its full length is unknown, because it was cut by modern features at both ends. A length of 1.90m survived. It was 0.25m wide and 0.05m deep, and was filled with green sand containing much crushed egg-shell and some complete oyster shells.

Cut through the floor (F 70) was a large post-hole (F 68, see Section 1, Fig. 11), with an associated short trench. The post-hole was 0.60m in diameter and 0.85m deep. The trench sloped up gradually from the edge of the post-hole, and was cut by a modern feature at its western edge. The trench was probably cut to ease the insertion of the post. The function of the post is less certain, but its large size and its position nearly in the centre of one bay may indicate that it was used to prop up part of a collapsed vault. The post was removed and the hole backfilled with clunch, flint and mortar rubble, to allow the construction of a new floor.

(b) This new floor (F 57/64/67) replaced the earlier one (F 70), probably in the fourteenth century (see pot report p. 166. It is impossible to narrow down the dating range of the finds). The site was first levelled with a deposit of mid-chocolate brown sandy silt (F 59), and then the new floor was laid. The floor surface survived only patchily, and the material used varied between crushed mortar, crushed clunch, and Reigate stone chippings. These variations were probably due to floor repairs. This was again most evident west of the sleeper wall in the area of the pathway between the kitchen and frater.

(c) The floor (F 57/64/67) was replaced in the fifteenth century by another (F 56), which survived as patches of orange clay and mortar, resting on a bedding of clean sand (F 56 (a)), and black sandy soil (F 56 (b)). With the black soil was a length of lead pipe (F 53), 1.82m long, which ran in a S.E.-N.W. direction, but was cut by modern features (F 4, F 38) at both ends.



WESTMINSTER ABBEY MISERICORDE - PIER ELEVATIONS

Fig. 8. Westminster Abbey sub-vault of the misericorde. Pier elevations and sketch plan of pier positions.

Discussion of phase 4

The construction of the misericorde and its sub-vault was thus confirmed as being prior to the Customary of Abbot Ware of 1266,²³ which provides the earliest documentary evidence for a misericorde at the monastery. The most important finding was that the sub-vault was three bays wide rather than two (see Introduction p. 139). Westlake's 'splayed stones of what seemed to be a doorway'²⁴ at the northern end of the western wall were discovered during the redevelopment (see p.154).

WESTMINSTER ABBEY MISERICORDE 1975 PHASE 4

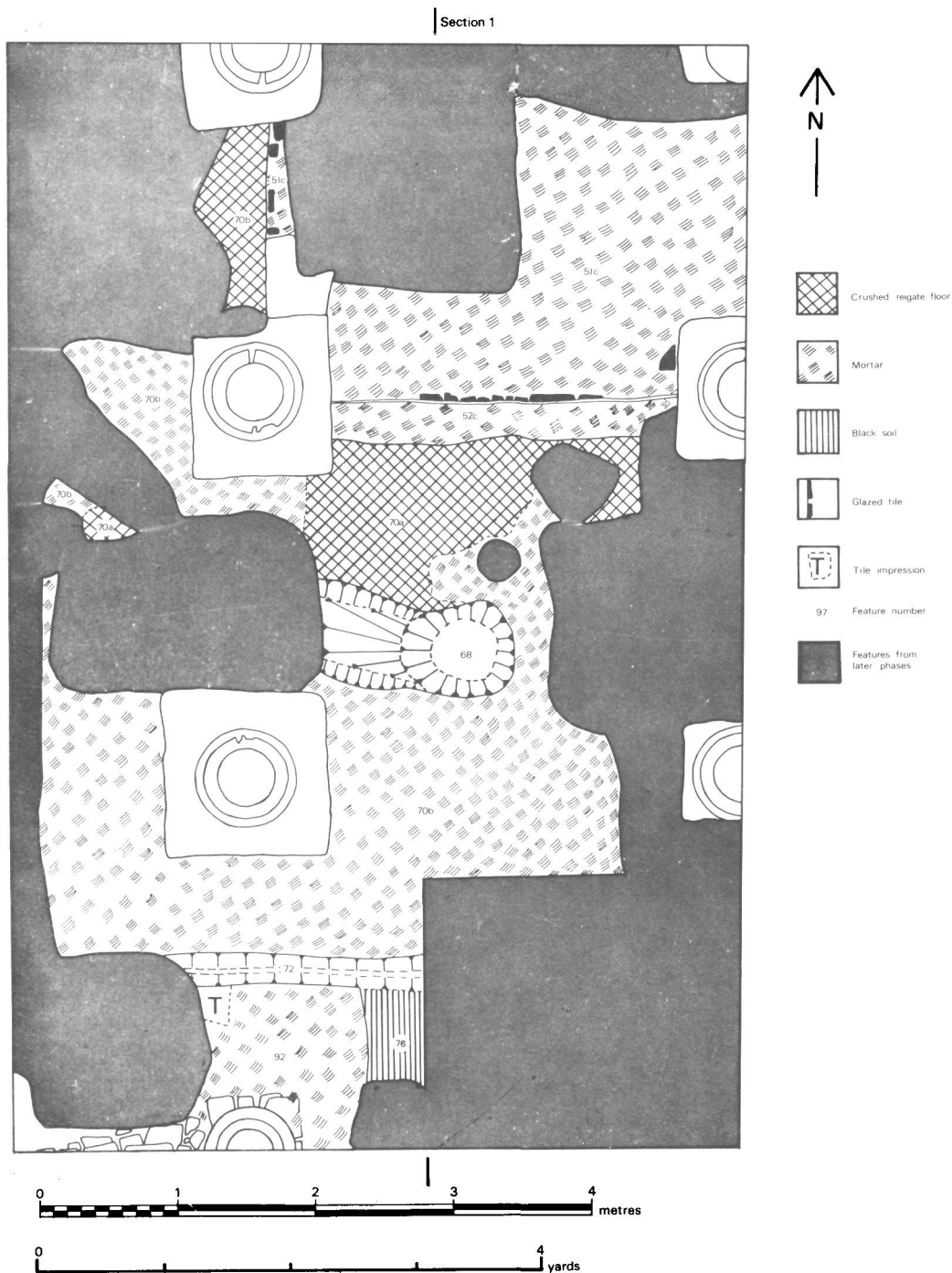


Fig. 9. Westminster Abbey sub-vault of the misericorde. Plan of Phase 4.

There was no evidence in the sub-vault of the great fire in the monastery in 1298. There was no burnt layer of that date, and no sign of burning on the masonry. 'An M.S. Chronicle of St. Mary of Southwark, in the British Museum²⁵ states that on the 29th March 1298 was burnt the little hall of the king at Westminster, also the monks' dormitory, refectory, infirmary, cellars, and the abbot's hall.' The refectory had its upper stage rebuilt and a new timber roof.²⁶ It is feasible that the hall of the misericorde was burnt, but the fire did not affect the sub-vault.

PHASE 5 (Fig. 10)

In the mid-late fifteenth century the function of the sub-vault was changed by the insertion of a circular two-bay baker's oven through the kitchen wall. Two sub-phases were evident:

(a) The oven (F 42) was inserted through the wall separating the sub-vault from the kitchen, immediately east of pier 7. The wall and dome were constructed with a facing of roof tiles over an inner layer of rubble and mortar. The two bays were of Reigate stone blocks. There was no evidence of a stoke-hole, a chimney, or an outlet; these must have been in the kitchen.

A new floor (F 52) was laid, associated with the oven. The make-up for it was of mid-grey sandy silt, with clean sand on top. Only very slight traces of a thin mortar surface survived.

The north-east corner of the sub-vault was divided off by a brick partition (F 51) and given a plain glazed tile floor. Only one course of bricks survived, laid end-to-end between piers 4 and 9. The partition also ran between piers 9 and 2, heavily disturbed by later features. A large block of Reigate stone was included in the partition immediately north of pier 9. Within the brick surround was a band approximately 0.10m wide filled with loose mortar and sand. Inside this was a thin vertical strip of yellow mortar 0.01m wide, suggesting a timber partition. Within that were the remnants of a plain glazed tile surface. This feature was inserted into the earlier deposits, and the original tile surface (F 51 (d)), was 0.15m below the surrounding floor (F 52). Under the tile surface was a layer of clean sand (F 51 (e)), apparently make-up for the tile floor, and below that a deposit of purple ash and black soil (F 51 (f)), varying in thickness to a maximum of 0.10m.

The tiles were of Netherlands type with a red fabric, and had a yellow, green, or brown glaze. The yellow glaze was over a white slip. Only a few broken fragments from around the edges of the feature survived. The rest must have been removed prior to the further deposit of clean sand (F 51 (b)), on top of which a new glazed tile surface was laid. As with the lower floor (F 51 (d)), the tiles were set into a thin layer of yellowish mortar. The tiles of this later floor were very badly laid, being set at different angles.

(b) In the late fifteenth or early sixteenth century a layer of black soil (F 47), varying in thickness up to 0.20m, was deposited on top of the floor (F 52), as build-up for a new floor. This deposit was probably kitchen refuse, as it contained a large quantity of animal bone. It did not extend over the partition (F 51), but covered the rest of the excavated area, and ran up to the side of the oven.

Cut through this layer immediately to the west of pier 9 was a post-hole (F 54) and a small length of a slot-like feature (F 55), running in a S.E.-N.W. direction, but surviving to a length of only 0.90m, being cut at both ends by later features. The fill of both was a similar mid-brown sandy soil with much oyster shell and some fragments of Reigate stone, clunch, and mortar. There were also traces of burnt wood in the post-hole.

A brick and stone wall (F 46) was constructed around the oven, and just cut into the top of the black layer (F 47). Only the bottom course survived with one side running north-south between piers 7 and 8, and the other running west-east from pier 8, before being cut through and removed by a modern feature. The wall was the width of two bricks.

A new floor was laid running up to and sealing the partitioned-off area (F 51) (see Section 1, Fig. 11). On top of the black layer (F 47) was deposited a layer of orange mortar rubble (F 49 (b)), containing some fragments of roof-tile and clunch, and a little Reigate stone. The floor was then surfaced with crushed clunch (F 49 (a)), surviving in parts only as a fine grey powdered mortar (F 49 (c)).

WESTMINSTER ABBEY MISERICORDE 1975 PHASE 5b

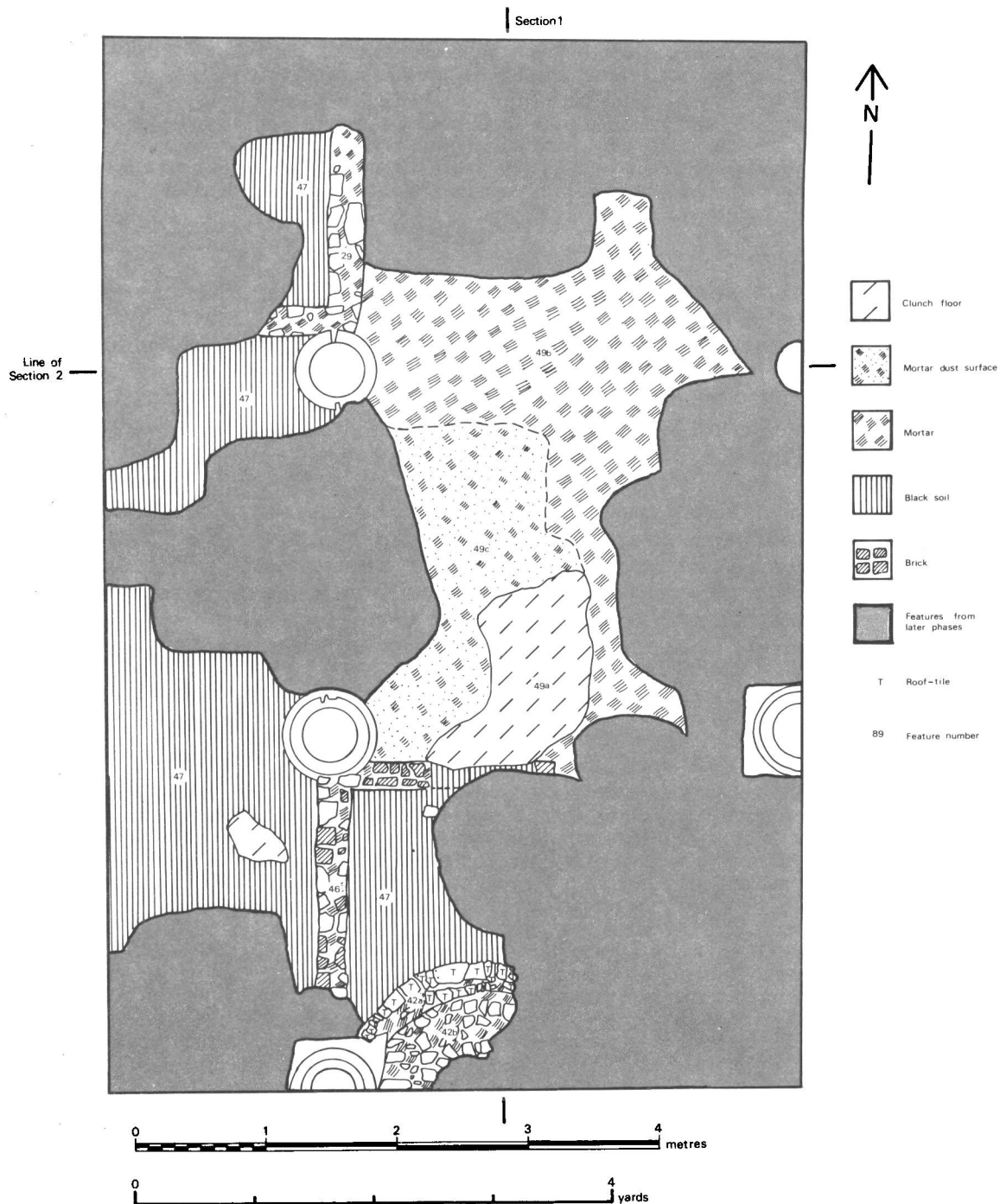


Fig. 10. Westminster Abbey sub-vault of the misericorde. Plan of Phase 5B.

A short stretch of walling (F 29) was constructed running north from pier 9, and cut short of pier 2 by a later feature. There was also a short fragment of a return wall running west from pier 9 before it in turn was cut. The wall consisted largely of Reigate stone blocks with some clunch, and survived to a height of three courses. It was cut into the top of the black deposit (F 47), and was faced on its inner, but not on its outer surface. Its purpose is unclear.

During the redevelopment scheme, a partitioned-off area, surfaced with reused thirteenth and fourteenth century tiles, and bounded by a single course of bricks laid end to end, was located extending north from the south wall of the misericorde in the second bay from the west (see p. 156). No pottery was found associated with this partition, but the dating of the bricks, and the fact that it was directly sealed by material from the demolition of the sub-vault, places the partition within this phase.

Discussion of phase 5

The insertion of the oven into the sub-vault in the mid-late fifteenth century reflects the close association of the sub-vault and the monastic kitchen. However, there was no evidence found of the two other ovens mentioned above (see p. 139), either during the excavation or during the redevelopment of the site. These ovens were probably totally contained within the kitchen.

The major issue raised by phase 5, however, was the absence of the pathway between the kitchen and frater. In previous phases this pathway was subject to much heavier wear than occurred in the rest of the excavated area, yet in this period there is no evidence for its existence, and only very scant evidence for the area west of piers 7, 8, 9, and 2 having been floored. It is unfortunate that the east-west return of the partition wall (F29) was cut at a point which makes it impossible to say whether or not it would have blocked off the pathway. Due to the presence of a seventeenth century pit, it was also impossible to date the blocking of the doorway between the kitchen and the sub-vault, or even to discover whether it occurred before or after the demolition of the sub-vault.

PHASE 6

Two sub-phases were discerned:

(a) The demolition of the sub-vault (see Sections 1 and 2, Fig. 11) occurred in the late sixteenth century. The demolition level (F 10) was just over 1.00m in depth, and consisted of two main deposits of rubble (F 10 (c), F 10 (e)), separated by a layer of dark greyish-brown sandy soil (F 10 (d)) (see Section 2). There were very few worked stones, and most of the rubble was in fact fragments of mortar and small pieces of Reigate stone, clunch, and roof tile. A large dump of clunch blocks (F 45), probably the remains of a collapsed vault, lay around the oven (F 42), which had also been demolished. *It seems highly likely that all the worked stone, including the shafts of piers 3, 8, and 9 was taken away to be re-used elsewhere.* Pits (F 10 (f), F 43) were cut through the rubble to remove the shafts of piers 9 and 3.

(b) The area then remained open until the early eighteenth century, when it was built upon once more. During its period as an open space no surface was laid, and the area was heavily pitted. Of these pits, one (F 18) seems to have contained a barrel, though only stains of the wood remained. The function of the pits is uncertain, their fill consisting mostly of redeposited building material.

Discussion of phase 6

The date of the pottery found in the rubble of the demolished sub-vault (late sixteenth century) agrees remarkably well with the documentary evidence for the building's continuance in use until the 1570's (see p. 170).

It is also noteworthy that the deposits reflected two periods of demolition although there was no discernible difference in date between them.

WESTMINSTER ABBEY MISERICORDE 1975 SECTIONS 1 and 2

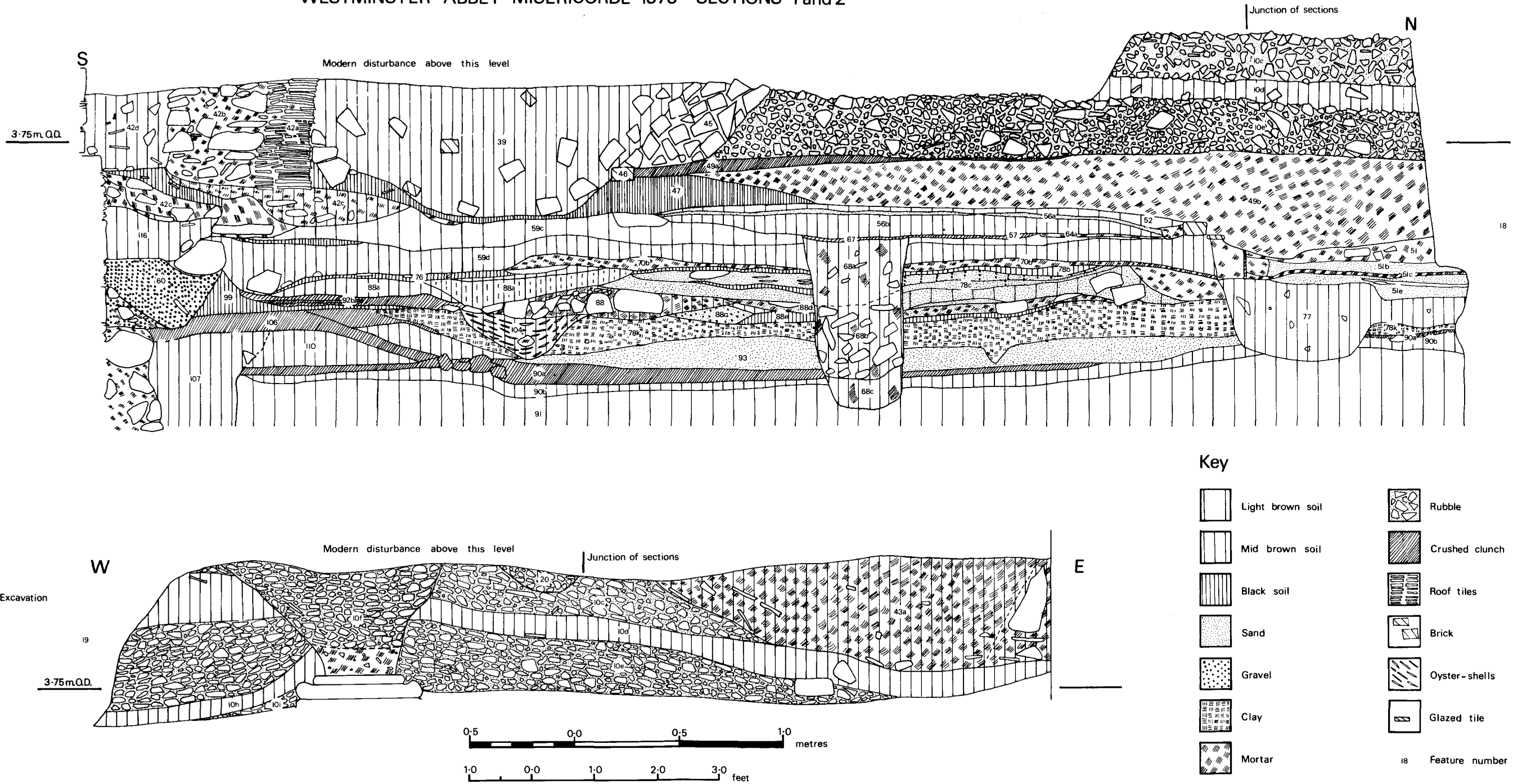


Fig. 11. Westminster Abbey sub-vault of the misericorde. Sections 1 (facing east) and 2 (facing south).

Little has been said of the mainly seventeenth century pits dug after the demolition of the sub-vault. Only very poor groups of finds were recovered from them, and the pits themselves were largely isolated from one another. The material is available for examination at the Inner London Archaeological Unit.

THE MASONRY

(i) The North Wall

This was originally the outer face of the south wall of the frater (constructed by 1100). Part of the original facing of Caen stone blocks survived between piers 2 and 3. The blocks were well laid with only very narrow gaps between each one. The facing was cut through for the insertion of piers 2 and 3. The patching of these cuts consisted of re-used Caen stone blocks, along with Reigate stone and clunch rubble, and some roof tiles. All the piers around the walls have surrounds of dressed Reigate stone blocks. There was an approximately square socket, with sides of c. 0.10m, cut into a Reigate block on the east side of pier 2. It was not possible to ascertain whether this socket was cut at the time of the insertion of the vault, or at a later date. (There were other sockets beside piers 4 and 5 in the east wall—see below.)

Between piers 1 and 2 is the hatchway connecting the sub-vault and frater. Within the sub-vault this is now concealed behind a brick wall. However, the remains of the frater are now occupied by the Abbey Song School, and here the hatchway is visible from its north side as 'a fourteenth century archway with a moulded semi-circular arch and responds with clustered shafts having moulded capitals and bases'.²⁷ Within this archway is a square-headed window, probably of sixteenth century date. Similar hatches connecting the frater with the kitchen can be seen in the frater wall at, for example, Carlisle,²⁸ Tintern,²⁹ and Beaulieu.³⁰

The mortar of the original facing of the frater wall was a very light grey colour, whereas that within the cuts for the piers was orange. The foundations were of clunch and limestone rubble, and just under 1.00m deep. They were not stepped and were built tightly against the side of the foundation trench. Their shallowness and lack of stepping is unusual in view of the looseness of the natural sand. They contained much reused building material, including a volute which may either be an unfinished Norman work, or from the earlier Saxon monastery. If the latter, it suggests that demolition of earlier stone buildings, though not necessarily of the earlier church, had begun.

More of the north wall was exposed during the redevelopment scheme, down to the level of the base of the piers. Most of its facing had been removed at an earlier unknown date, leaving only the rubble core. Part of the facing, which was largely of limestone rubble, only survived where protected by the demolition levels.

The splayed stones of the western doorway of the sub-vault were also exposed at this time. The doorway was of Reigate stone, and had been inserted into the north wall. The base of what had been a moulded semi-circular arch over the doorway was revealed immediately east of the jamb (see under west wall p. 154).

(ii) The East Wall

A large part of the wall face between piers 3 and 4 was destroyed by the insertion of a fireplace and chimney into the wall in the eighteenth century. The facing survived, however, beneath the associated hearth. It consisted of Reigate stone, clunch, and flint building rubble, including some re-used facing stones. A few pieces of tufa were present in the shadow arches of the bays. The surface of the wall was plastered over, and may have been painted.³¹

The wall was best preserved between piers 4 and 5. Here two phases of a window were visible within the archway. The earlier window survived only at the bottom corner of its south side, as two joined and chamfered blocks of Reigate stone. The replacement window had two vertical chamfered jambs of Reigate stone blocks, beginning at the top of the arch, and a base of clunch rubble. The window must have been the principal light source for the sub-vault. There was brick and roof tile present in the final blocking of the window.

There were squarish sockets at the same level immediately south of the shafts of both piers 4 and

5. The level was lower however than that of the socket beside pier 2.

The facing of the wall between piers 5 and 6 was almost totally destroyed by, in particular, the insertion of a cast iron sewer pipe. Only scanty remains of a shadow arch survived. There were also the remains of stepped foundations of flint although the levels are so disturbed that it is possible that they may have been inserted to strengthen the wall at the time of the insertion of the sewer pipe.

The rubble core of the east wall was visible in places, and consisted mainly of clunch rubble and orange mortar. Rubble and orange mortar were also used to backfill the foundation trench (F 86 (b)).

(iii) The South Wall

Pier 6 itself was totally destroyed, as was most of the original wall face between piers 6 and 7. This was caused by a combination of the cast iron sewer pipe and the insertion of the two-bay baker's oven (F 42). Most of the archway extending east from pier 7 survived.

The wall between pier 7 and the western edge of the excavated area was well preserved. Most of the archway extending west from the pier seems to have survived, although covered in modern plaster and cement. The wall below the archway contained a number of phases, the earliest of which was a flagstone surface. The surface was level with the top of the one surviving course of the partition wall (F 92 (e)) which was built on top of the sleeper wall (F 101) (see Phase 2). It was not located elsewhere in the excavated area, and was cut against the wall face by a seventeenth century pit. Resting on the flagstone surface were two very badly laid courses of Reigate stone blocks, and above that the main part of the wall itself was a doorway which was on the same level as the first floor surface of the sub-vault (F 70). Most of the doorway lay outside the area of excavation, and was only exposed during the redevelopment of the site.

The wall between pier 7 and the door jamb consisted, on its lower part, of faced Reigate stone blocks. Above that, and possibly representing a cut for the insertion of pier 7, later than the doorway, was a wall of badly-laid rubble.

The flagstone surface probably represents the position of the original doorway to the path between the kitchen and frater. The construction of a new door slightly further west may have been necessary to allow the insertion of pier 7 in its correct place in the vault. The date of the blocking of the doorway is unknown.

Above the arches between piers 6, 7 and 8 were the two corbels mentioned in the Introduction (p. 139) as evidently supporting a hearthstone in the misericorde itself.

(iv) The West Wall

The remains of the west wall were only revealed during the redevelopment scheme. The doorway in the north-west corner of the sub-vault was 2.14m wide. The door jambs were splayed, and the base survived of a moulded arch which went around the interior of the door. The wall was rubble-faced, and 1.15m thick. It survived to a height of four courses.

The doorway was partially blocked, probably in the late fifteenth century, and a flight of three stairs constructed leading out of the sub-vault to a newly constructed surface of granite sets. It was not possible to say whether this was a general surface or only a pathway from the door.

(v) The Pier Bases

The pier bases were of a simple neo-Attic type, with water-holders, common in Britain from the late twelfth century until c. 1260.³² From c. 1240, however, an intermediate roll began to be inserted to replace the water-holder, making a triple roll. This triple roll type was the favourite base in use at Westminster Abbey during its rebuilding under Henry III,³³ and can be seen, for example, in the crypt and vestibule of the Chapter House, and in the Chapel of St. Faith, at Westminster. Work on these was probably started concurrently with work at the Abbey Church in 1246.³⁴ It is probable, therefore, that the sub-vault of the misericorde was constructed before this date.

In the sub-vault, pier 7 had one element less than the others, but was otherwise of the same type. The missing element was probably due to the height of the already existing base (see Phase 2). All

the bases have rather large lower rolls which may indicate an earlier date in the lifespan of the type.³⁵

The base of pier 2 had a slot facing south; pier 9 had two slots, one facing the slot in pier 2, and the other facing a similar slot in the north side of pier 8 (p. 155).

An inscribed arrow extending up the centre of the face of pier 4 was probably used by masons for 'lining up' the rest of the vault. It was the only mason's mark visible on the masonry.

Traces of cream paint were found on the shafts of piers 4 and 5, and it is likely that all the piers, and possibly even the walls, were painted at one stage.

Piers 3 and 6 were missing, as were some others outside the excavated area. Pier 3 was removed during the demolition of the sub-vault, as were the shafts of piers 8 and 9. The tool marks from the removal of the shaft of pier 3 were still visible. Pier 6 was probably removed during the insertion of the cast iron sewer (F 28).

COMMENTS ON THE STRATIGRAPHY EXPOSED DURING REDEVELOPMENT

The scheme removed deposits down to the level of the base of the piers. As in the excavated area, these deposits were very severely disturbed by post-medieval pitting. Over much of the area, however, the sixteenth century demolition rested directly on top of a floor surface which was level with the bottom of the pier bases, i.e. at the original surface level of the sub-vault. It is probable that deposits were removed down to this level at a sixteenth century date, prior to the demolition, and a new surface constructed.

A much fuller account of the evidence revealed during the redevelopment scheme, both within the sub-vault, and in the area between the sub-vault and the cellarer's range, will appear in the next volume of the Transactions.

Discussion

The fine natural sand on the site was overlain by a layer of chocolate brown river silt. A few fragments of Roman pottery and tile were trampled into the surface of this silt, but no associated features were located.

There were three phases of pre-Norman activity on the site. The first consisted of the mortar footing for a timber sill beam with two post-holes which were possibly associated with it. The second was an irregular slot with an associated post-hole. The third was a shallow ditch, dug in the mid-eleventh century before the layout of the Norman monastery had been decided.

The ditch was backfilled, and sealed by the make-up for the surface of an open court, which may have been connected directly with the great court of the monastery (now Dean's Yard). This surface was cut before 1100 by the south wall of the frater and the north wall of the kitchen, and later by a sleeper wall running north-south between them, and abutting them. The floor continued in use after this, and was repaired on a number of occasions west of the sleeper wall, where a pathway crossed from the kitchen to the frater.

A large pit was dug east of the sleeper wall in the second half of the twelfth century. It had at least three phases of use, in the last two of which it was lined, and had associated gravel and mortar floors.

The pit was finally backfilled pre c. 1240, and the insertion of the misericorde and its sub-vault followed immediately. The completed sub-vault consisted of four triple bays, with simple quadrapartite vaulting, 14m long by 8.20m wide, and 2.90m high. A hatch connected it with the frater, and there were doorways between it and the kitchen, and in the northern corner of its western wall. It is probable that part of the original vault collapsed and had to be repaired. A new floor was laid in the sub-vault. The sub-vault

was used as storage space for the kitchen until the mid-late fifteenth century. Various sections were partitioned off, and the floor surface was replaced twice.

In the mid-late fifteenth century, a two-bay baker's oven was inserted through the kitchen wall into the sub-vault, and a new floor laid. In the late fifteenth or early sixteenth century, a layer of black soil was deposited on top of this floor, the area around the oven was partitioned off, and a new floor constructed. It was within this phase that the pathway between the kitchen and frater went out of use. A part of the sub-vault was partitioned off and surfaced with reused decorated medieval tiles.

In the late sixteenth century, the misericorde and its sub-vault were demolished, and the site levelled. It remained an open space until the early eighteenth century, when it was built upon once more.

Conclusions

It must be emphasised that the area excavated was very limited, which must qualify the value of the conclusions. It was, however, the first formal excavation to be carried out at Westminster Abbey, and is therefore of special importance.

The lack of features of Roman date was disappointing, and the existence of a major Roman structure on Thorney Island remains uncertain.

The presence of at least three phases of pre-Norman activity on the site represents the first archaeological evidence of the religious community at Westminster prior to the time of Edward the Confessor. The remains of the timber building in particular prove the site to have been occupied.

The presence of the ditch is intriguing in that, although it can probably be dated to the mid-eleventh century, it was dug before a decision had been taken on the layout of the Norman monastery, because it ran under the walls of the refectory and kitchen.

The position of the monastic kitchen has been firmly established as being south of the sub-vault. Its north wall was used as the south wall of the sub-vault, and a small section of its west wall was revealed during the redevelopment scheme.

From the late eleventh century to the thirteenth century the open court between the frater and kitchen would have acted as a light well. It was common monastic practice for food to be served through a hatch between the kitchen and frater. The problem at Westminster, however, is the reason for an 8m pathway between the two, which was open to the elements, there being no evidence of any roofing over the pathway.

The difficulty of inserting additional buildings into claustral ranges, where space was at a premium, is reflected by the insertion of the sub-vault and misericorde between the kitchen and the frater. This was a problem faced by all monastic planners, particularly with religious houses situated in, or very close to, major centres of settlement. The misericorde was especially problematical because it had to be situated close to either the infirmary or the frater. Westminster was fortunate in having a space available between the kitchen and frater. In some monasteries, such as Kirkstall and Jervaulx, the solution was to turn the frater into a two-storeyed building, the upper part becoming the frater, and the lower the misericorde.³⁶ At Furness, a new frater was built with two floors, the lower housing the misericorde.³⁷ Much research is still necessary on the siting of lesser buildings within monastic precincts.

Little is known of how the misericorde was used. Initially monks certainly ate in the misericorde on the days that meat was served. At Peterborough the rule was 'that all

singular brethren and monks of the monastery take the refection altogether in a place called the misericorde, soch dayes as they eate fleshe, and all other dayes in the refectory'.³⁸ However, by the end of the fourteenth century, meat was being eaten in the frater in most Benedictine houses.³⁹ At Westminster, in later days at least, the 'grammar children' used it as their hall, and, on certain occasions, also the servants of the monastery. It was there that the prior gave breakfasts to the singing-men, and to newly professed novices.⁴⁰

There is also very little information on the origins of the construction of a separate building for the consumption of meat, although the practice of eating meat on certain days of 'recreation' can be traced back earlier than 1216 at Abingdon, Bury, Durham, Peterborough, and St. Albans.⁴¹

At Westminster, a secondary effect of the construction of the misericorde and its sub-vault was to provide additional storage space for the kitchen, and a roof over the pathway to the frater. How the two buildings coped with the reduction in light caused by the insertion of the new hall is unknown.

The evidence for monastic diet recovered from the excavations is of major importance, although any conclusions must be limited by the fact that the deposits on the site were from the construction of floor levels, and not from the dumping of waste. The sparsity of animal bone recovered was probably due to the fact that any large bones would have been removed before the floors were laid. However, more than twenty varieties of fish, and numerous bird remains, were recorded (reports, p. 170) as well as large quantities of crushed egg-shell.

NOTES

¹ Dom Cuthbert Butler *Benedictine Monachism* (1924) reference note p. 44, p. 307.

² Regularis Concordia—rules set out by a Council under Dunstan which took place at some date between 963–975. See the edition by Dom Thomas Symons, in Nelson's Medieval Classics (1953).

³ Lanfranc's Consuetudines—he composed them in the late eleventh century for the monks of Christ Church, Canterbury. Ref. Wilkins 'Concilia' (i) 328–61.

⁴ Rev. H. F. Westlake *Westminster Abbey* 2 (1923) 393.

⁵ Ed. Sir Edward Maunde Thompson *Customary of St. Augustine's Canterbury and St. Peter's Westminster* 2 (1904).

⁶ G. H. Cook *English Monasteries in the Middle Ages* 73.

⁷ R. C. H. M. *Essex, Central and South West* (1921) 8.

⁸ R. L. Palmer *English Monasteries in the Middle Ages* (1930) 29.

⁹ Ed. M. E. C. Walcott, Westminster Abbey Suppression Inventories.

¹⁰ Dr. Armitage Robinson *The Abbot's House at Westminster* (1911) 54–58.

¹¹ Rev. H. F. Westlake *Westminster Abbey* 2 (1923) 391.

¹² Rev. H. F. Westlake 'Notes on some recent excavations at Westminster Abbey' *Antiq. J.* 50 (1921) 232–3.

¹³ *Ibid.*

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ Thomas Wright Senior, Private notes, 55, neg. no. WAM 65047.

¹⁷ *Ibid.*

¹⁸ Rev. H. F. Westlake *Westminster Abbey* 1 (1923) 30.

¹⁹ Rev. H. F. Westlake *Westminster Abbey* 2 (1923) 390.

²⁰ For example see C. A. Raleigh Radford 'Westminster Abbey Before King Edward the Confessor' Westminster Abbey Occasional Paper No. 15 (Summer 1965).

²¹ *Ibid.* There was a monastery on the site from at least the tenth century, and probably a minster church before that date.

²² R.C.H.M. London (Westminster Abbey) (1924) 84.

²³ Thompson op. cit. in note 5.

²⁴ Westlake op. cit. in note 12.

²⁵ Faust A.8. See W. R. Lethaby *Westminster Abbey and the King's Craftsmen* (1906) 199.

²⁶ *Ibid.*

²⁷ R.C.H.M. London (Westminster Abbey) (1924) 84.

²⁸ Francis Bond *Westminster Abbey* (1909) 300.

²⁹ *Ibid.*

³⁰ *Ibid.*

³¹ Some fragments of painted plaster were recovered from the demolition level close to the east wall.

³² With thanks to Mr. S. E. Rigold.

³³ Francis Bond *English Church Architecture* Vol. 2, 551.

³⁴ H. M. Colvin *History of the King's Works* Vol. 1, 141.

³⁵ With thanks to Mr. S. E. Rigold.

³⁶ R. L. Palmer *English Monasteries in the Middle Ages* (1930) 157.

³⁷ *Ibid.*

³⁸ Francis Bond *Westminster Abbey* (1909) 300.

³⁹ Palmer op. cit. in note 36.

⁴⁰ Rev. H. F. Westlake *Westminster Abbey* 2 (1923) 386.

⁴¹ Dom David Knowles *The Monastic Order in England 940–1216*.

Part II. The Finds

THE POTTERY

by

Elizabeth Platts

Introduction

The site yielded approximately 1,500 sherds of pottery dating from the Roman period to the nineteenth century. A high proportion of the sherds—more than 75%—were small (an average area of 60 sq. mm) and featureless. No complete vessels were found during the excavation, though demolition workers found four sixteenth and early seventeenth century pots during redevelopment work after the excavation. There were few assemblages and only one vessel (a large decorated jug from the pit F78, Fig. 13, No. 31) was present to any large extent.

The range of vessels represented is small, though it must be said that the nature of the sherds made definite attribution difficult. In Phases 1 and 2 cooking pots predominate and only one sherd might be considered to have come from a spouted pitcher. Phase 3 reflects the introduction of jugs, and would also appear to show a greater variety of use of cooking pot-type vessels: the proportion of these showing evidence of burning decreases in this and the next phase. However, it must be pointed out that the disparity in size of sample makes this observation likely to be misleading. Phases 4 and 5 show the greater variety of vessels produced in the later medieval period.

There are few examples of fine 'table' wares other than the decorated jugs, from Phase 3 D. Very few sherds of imported pottery were found, and no moulded sherds from such vessels as anthropomorphic jugs, so that there is little independent dating evidence—the majority of sherds coming from cooking pot-type fabrics having a long period of use without change. The importance of the group from the pit F78 lies in the date of c. pre-1240 taken from the masonry used for the insertion of the sub-vault, that date providing a fixed point for the dating of the pottery.

The small size of the sherds, the lack of complete vessels represented, and the bias towards those wares associated with kitchen use all point to the conclusion that the bulk of the pottery sherds was brought from the kitchen waste dumps rather than that the area was being used directly for rubbish pitting.

The featureless nature of the majority of the sherds makes them unillustratable. Only some rims, bases, and sherds of especial interest have been described and drawn here. (*The bulk of the material is deposited at Imex House, 42 Theobalds Road, London WC1, and may be consulted there.*)

The wares are described in the following order:

Red wares: i glazed and/or slipped
ii plain

Grey (reduced) wares

Buff wares

'Shell' tempered wares

'Surrey' white wares

Imports

The sherds are described in the following order:

- Colour of fabric
- Hardness and tempering
- Surface colouring
- Slipping and glazing
- Applied decoration

PHASE 1

Sub-phase A There were no finds from this level.

B Apparently redeposited, the nine small sherds of Roman pot, two fragments of Roman tile and one fragment of glass were the earliest finds from the site. The small amount of the sherds makes close dating difficult.

C A single Saxon sherd from F83.

D Nine sherds, all from cooking pot-type wares, some showing evidence of burning, probably tenth and eleventh century in date.

E These sherds are associated stratigraphically with a coin, probably of Heinrich III, Holy Roman Emperor 1039–56.

Phase 1 (Fig. 12)

Sub-phase A

No finds.

Sub-phase B

Roman

1 (F91 C and D) Bead rim. Samian.

Not illustrated: eight small sherds Roman pottery.

Sub-phase C

Saxon

Not illustrated: (F83) Body sherd. Dark grey coarse shell-tempered fabric.

Sub-phase D

Grey wares

2 (F89) Jar or cooking pot rim. Brown-grey very sandy fabric.

3 (F91 A) Jar or cooking pot rim. Grey-brown fairly fine fabric with red surfaces.

Sub-phase E

Grey wares

4 (F100 F) Cooking pot rim. Grey very sandy fabric, blackened exterior.

5 (F100 F) Cooking pot rim. Pink-grey very sandy fabric, blackened exterior.

PHASE 2

The very small amount of sherds, and their nature—from cooking pots—makes it difficult to date any of the pottery in Phase 2 closer than likely to be eleventh and twelfth century.

It is interesting to note the absence, both in this Phase and in Phase 1, of various Midlands wares, for example Thetford and Stamford. However, the small size of the sample does not make the absence relevant.

Phase 2 (Fig. 12)

Sub-phase B

'Shell' tempered ware

6 (F115) Cooking pot base (sagging). Dark brown coarse fabric.

8 (F94 D) Cooking pot rim. Light grey very sandy fabric, blackened exterior and interior surfaces.

Sub-phase D

Grey wares

7 (F94 C) Cooking pot rim. Light orange-buff, very sandy fabric.

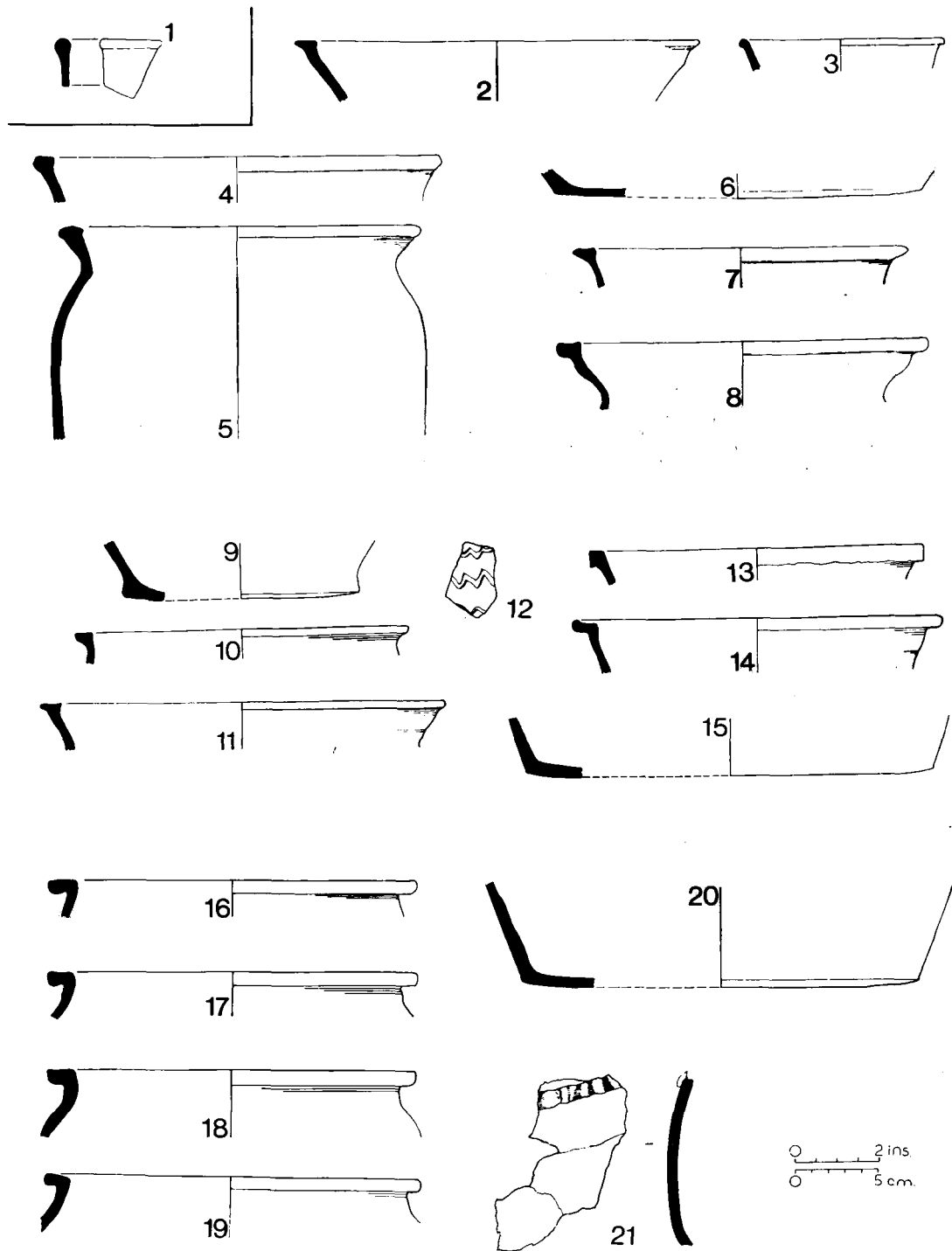


Fig. 12. Westminster Abbey sub-vault of the misericorde. Roman, Saxon and medieval pottery: Phase 1, Nos. 1 ($\frac{1}{2}$), 2 to 5 ($\frac{1}{4}$); Phase 2, Nos. 6 to 8 ($\frac{1}{4}$); Phase 3, Nos. 9 to 21 ($\frac{1}{4}$).

PHASE 3

This Phase provides the most significant information of the site for the study of medieval pottery. The group of pottery from the pit (F78) must pre-date c. 1220–1240 when the pit was finally backfilled for the insertion of the sub-vault (see discussion of the masonry, p. 153). It shows, therefore, that at this period quite a wide range of wares were in use: the reduced gritty wares of the Hertfordshire types, shell-tempered wares, oxydised wares possibly from West Kent kilns, and, most notably, the red sandy wares used for the decorated jugs, believed to have been produced near London. The best example (Fig. 13, No. 31) from the pit (F78) is a large jug—almost complete—approximately 400mm high, decorated with stripes of painted red slip and applied cream slip, partially glazed outside with a thin yellow glaze. The fabric is reduced in parts and the glaze reads green over those areas. This jug is similar to those found during the Guildhall extension excavation, Marsden (1968, 13 and Pl. 3, Fig. 8). Another interesting jug in the pit (F78) group (Fig. 14, No. 42) in a similar fabric is covered in a cream slip and decorated with applied rouletted stripes, glazed with a mottled yellow/green glaze. It would appear to be an English-made copy of a Paris or Rouen original, cf. Platt and Coleman-Smith (1975, No. 991), but this would make the introduction of the original jugs earlier than is thought at the moment.

There is a higher proportion of cooking pots and storage vessels sherds in Sub-phase B than in Sub-phase D, but there is no discernible difference in date between these two.

Phase 3 (Fig. 12, Nos. 9–21. Fig. 13, Nos. 22–37. Fig. 14, Nos. 38–62. Fig. 15, Nos. 63–88. Fig. 16, Nos. 89–97)

Sub-phase B

Red wares

- 9 (F78 M) Jug base. Red fine sandy fabric with a reduced core, spots of yellow glaze on the interior and the base.
- 10 (F78 M) Cooking pot rim. Red sandy fabric with a reduced core.
- 11 (F78 Q) Cooking pot rim. Red sandy fabric with a reduced core.

Grey wares

- 12 (F78 K) Body sherd. Reduced sandy fabric, light grey interior surface, red-brown exterior surface with incised wavy lines. Similar to a jug found at the Bank of England, now in the Museum of London (Acc. No. 5738).
- 13 (F92 F) Cooking pot rim. Reduced sandy fabric, red surface on rim, blackened partially on exterior and interior surfaces.
- 14 (F92 B) Cooking pot rim. Reduced very sandy fabric, blackened partially on exterior and interior surfaces.
- 15 (F78 L) Cooking pot base. Buff-grey very sandy fabric, dark grey surface on interior surface and base.

'Shell' tempered

- 16 (F78 M) Cooking pot rim. Reduced coarse fabric, blackened exterior and interior surfaces.
- 17 (F78 M) Cooking pot rim. Reduced coarse fabric, red exterior and interior surfaces, blackened exterior.
- 18 (F78 K) Cooking pot rim. Red coarse fabric with a reduced core.
- 19 (F78 Q) Cooking pot rim. Brown-grey coarse fabric, blackened exterior surface.
- 20 (F78 M) Cooking pot base. Red/grey coarse fabric, red surfaces, blackened exterior.
- 21 (F78 M) Three sherds (fitting). Red coarse fabric, partially blackened exterior, with an applied thumb band.

Sub-phase C

Red wares

- 22 (F78 J) Jug rim. Red fabric with a reduced core, darker red interior surface, yellow-green glaze on the exterior surface.
- 23 (F104) Cooking pot base. Red fine sandy fabric with a reduced core, spots of yellow glaze on the exterior surface.
- 24 (F78 H) Cooking pot rim. Red coarse very sandy fabric with a reduced core.

Grey wares

- 25 (F78 H) Cooking pot rim. Reduced coarse sandy fabric.
- 26 (F78 J) Cooking pot base. Dark grey/light grey/buff very sandy fabric, blackened exterior surface.

'Shell' tempered wares

- 27 (F104) Cooking pot rim. Red fabric with a reduced core.
- 28 (F78 I) Cooking pot rim. Red fabric with a reduced core.
- 29 (F78 I) Cooking pot rim. Red fabric with a reduced core.
- 30 (F78 J) Cooking pot base. Reduced coarse fabric, red interior surface, blackened exterior surface.

Sub-phase D

Red wares

- 31 (F78) Jug. Red fine sandy fabric with a reduced core, cream slip round neck and descending in stripes, dark red slip between every fourth cream stripe, thin yellow glaze over decorated area, green glaze over four areas.
- 32 (F88 E) Jug handle. Red/grey fine sandy fabric, applied cream slip stripe, yellow glaze.
- 33 (F78) Jug rim. Ribbed red fine sandy fabric with a reduced core, brown/green glaze exterior.
- 34 (F78) Jug rim. Red fine sandy fabric, partial dark green/brown glaze.

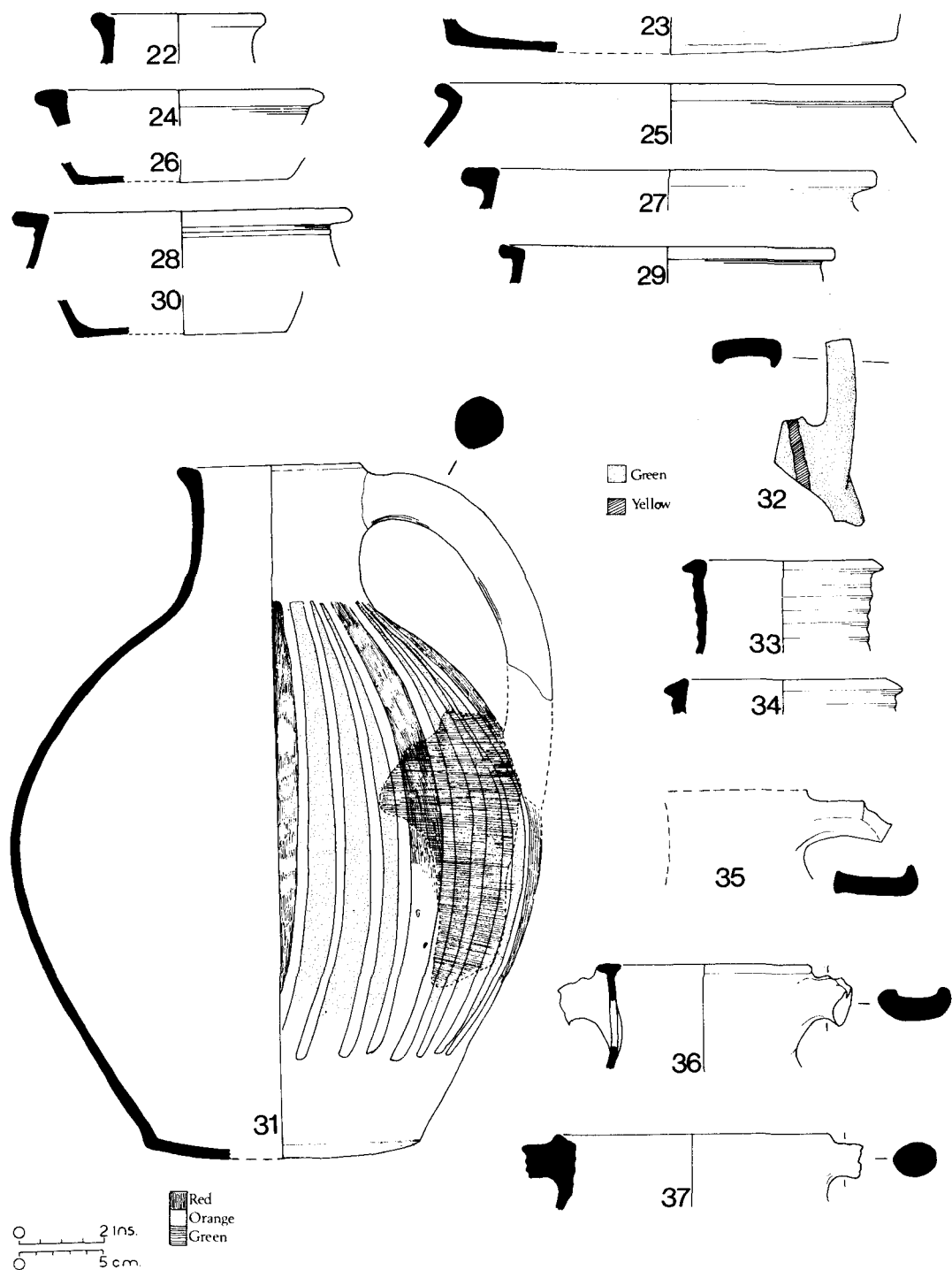


Fig. 13. Westminster Abbey sub-vault of the misericorde. Medieval pottery: Phase 3, Nos. 22 to 37 (1/4).

- 35 (F78) Jug handle. Grey/red fine sandy fabric, partial green glaze exterior.
- 36 (F78) Jug handle. Red/grey fine sandy fabric, partial yellow glaze.
- 37 (F78) Jug rim and handle. Reduced fine sandy fabric, cream slipped with spots and streaks of green and yellow glaze. The handle with red surfaces applied after the slip.
- 38 (F78) Rim. Reduced fine sandy fabric, red interior surfaces, green glaze on exterior surfaces.
- 39 (F78 E) Handle base. Reduced fine sandy fabric, red interior surface, green glaze on exterior surface. Same vessel as 38?
- 40 (F78) Body sherd. Reduced fine sandy fabric, red interior surface, applied cream slip pellets, yellow glaze exterior. *Rouen Copy*. (Similar to Tatton-Brown [1975, Nos. 214, 215] and examples in Rackham [1973].)
- 41 (F78) Body sherd. Red fine sandy fabric with a reduced core, mottled yellow and dark green glaze exterior, fingertip impressions.
- 42 (F88 A) Body sherd. Red fine sandy fabric with a reduced core, dark cream slip exterior, applied red clay rouletted strips over, mottled yellow/green glaze.
- 43 (F78) Handle (Jug). Red fine sandy fabric with a reduced core, partially yellow glazed.
- 44 (F78) Handle. Red fine sandy fabric with a reduced core, yellow and green glazed.
- 45 (F78) Jug base. Red fine sandy fabric with a reduced core, darker red exterior surface, spots yellow glaze exterior and on base. Slight pedestal.
- 46 (F78 F) Jug base. Red fine sandy fabric, with a reduced core, spots of green glaze.

Not illustrated:

(F78 B) Body sherd. Red/brown fine sandy fabric, cream slip, applied red strips, mottled dark green glaze.

(F78 C) Rouen copy sherd.

Grey wares

- 47 (F78) Jug rim with spout. Reduced very coarse fabric, dark grey exterior and interior surfaces.
- 48 (F78) Cooking pot rim. Reduced coarse fabric. Burnt.
- 49 (F78) Cooking pot rim. Brown coarse fabric. Dark grey exterior and interior surfaces.
- 50 (F78) Cooking pot rim. Reduced coarse fabric, blackened exterior.
- 51 (F78) Cooking pot rim. Reduced coarse fabric.
- 52 (F78) Cooking pot rim. Reduced coarse fabric.
- 53 (F78) Cooking pot rim. Reduced fairly fine fabric.
- 54 (F78) Cooking pot rim. Reduced coarse fabric, blackened exterior and interior.
- 55 (F88) Cooking pot rim. Reduced coarse fabric, dark grey exterior and interior surfaces.
- 56 (F88 A) Cooking pot rim. Reduced coarse fabric.
- 57 (F73) Cooking pot rim. Reduced coarse fabric, dark grey exterior and interior surfaces.
- 58 (F78 D) Cooking pot rim. Reduced very coarse fabric, blackened exterior surface.
- 59 (F78 E) Cooking pot rim. Reduced coarse fabric, blackened exterior surface.
- 60 (F78 E) Cooking pot rim. Reduced coarse fabric, blackened exterior surface.
- 61 (F78 D) Cooking pot rim. Reduced coarse fabric, blackened exterior surface.
- 62 (F78 D) Cooking pot rim. Reduced very coarse fabric, blackened exterior and interior surfaces.
- 63 (F78 E) Cooking pot rim. Reduced coarse fabric, blackened exterior surface.
- 64 (F78) Cooking pot base. Reduced very coarse fabric, blackened exterior surface.
- 65 (F78) Cooking pot base. Reduced coarse fabric, blackened exterior surface.
- 66 (F78) Cooking pot base. Reduced very coarse fabric, blackened exterior surface.
- 67 (F78) Cooking pot base. Reduced coarse fabric, blackened exterior surface.
- 68 (F78) Cooking pot base. Reduced coarse fabric, blackened exterior surface.
- 69 (F78) Cooking pot base. Reduced coarse fabric, dark grey interior surface, blackened exterior surface.
- 70 (F78) Cooking pot base. Reduced coarse fabric, blackened exterior surface, partially blackened interior surface.
- 71 (F78 A) Cooking pot base. Reduced coarse fabric, blackened on base.
- 72 (F78 A) Cooking pot base. Reduced (light grey) coarse fabric, blackened exterior surface.
- 73 (F78 A) Cooking pot base. Reduced coarse fabric, blackened exterior surface.
- 74 (F78 C) Cooking pot base. Reduced coarse fabric, blackened exterior surface.
- 75 (F78 C) Cooking pot base. Reduced coarse fabric, dark grey exterior and interior surfaces, exterior blackened.
- 76 (F78 F) Cooking pot base. Reduced very coarse fabric, partial red and blackened exterior surface.
- 77 (F78 A) Cooking pot base. Brown-grey coarse fabric, dark grey exterior and interior surfaces.

'Shell' tempered wares

- 78 (F78) Cooking pot rim. Red coarse fabric with a reduced core.
- 79 (F78 G) Cooking pot rim. Reduced coarse fabric, heavily blackened on exterior and interior surfaces.
- 80 (F78) Cooking pot base. Reduced coarse fabric, red interior surface, blackened exterior surface.
- 81 (F78) Cooking pot base. Reduced coarse fabric, red interior surface, blackened exterior surface.
- 82 (F78) Cooking pot base. Reduced coarse fabric, red interior surface.
- 83 (F78) Cooking pot base. Reduced coarse fabric, blackened exterior surface.
- 84 (F78 E) Cooking pot base. Reduced coarse fabric, red interior surface, partially blackened exterior surface.
- 85 (F88 C) Cooking pot base. Reduced coarse fabric.

Buff sandy ware

- 86 (F78) Cooking pot rim. Buff/grey very sandy fabric, brown exterior surface.
- 87 (F78) Cooking pot rim. Buff very sandy fabric.
- 88 (F78 D) Cooking pot rim. Buff/grey very sandy fabric.
- 89 (F78 P) Cooking pot rim. Grey-buff very sandy fabric.

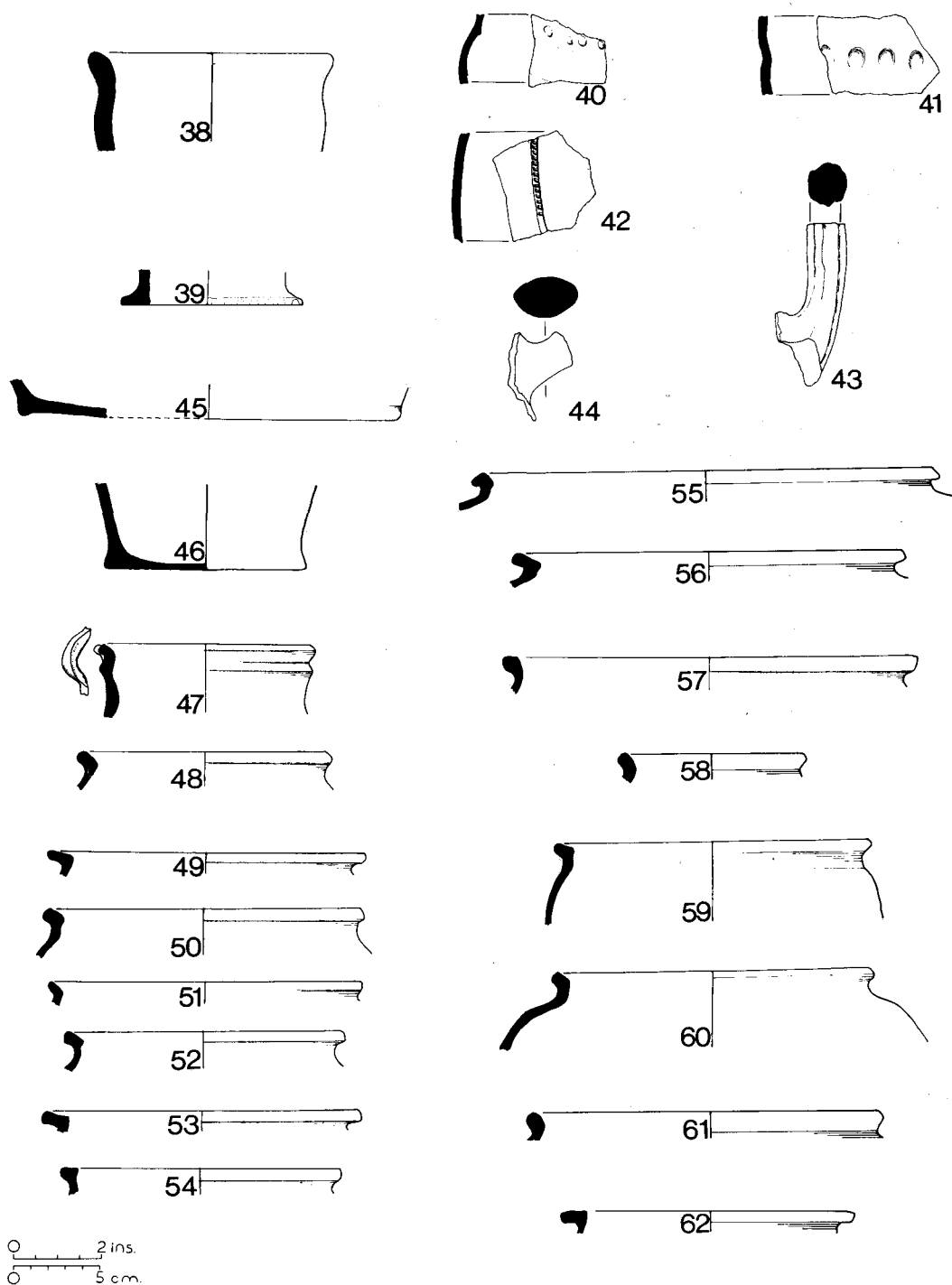


Fig. 14. Westminster Abbey sub-vault of the misericorde. Medieval pottery: Phase 3, Nos. 38 to 62 ($\frac{1}{4}$).

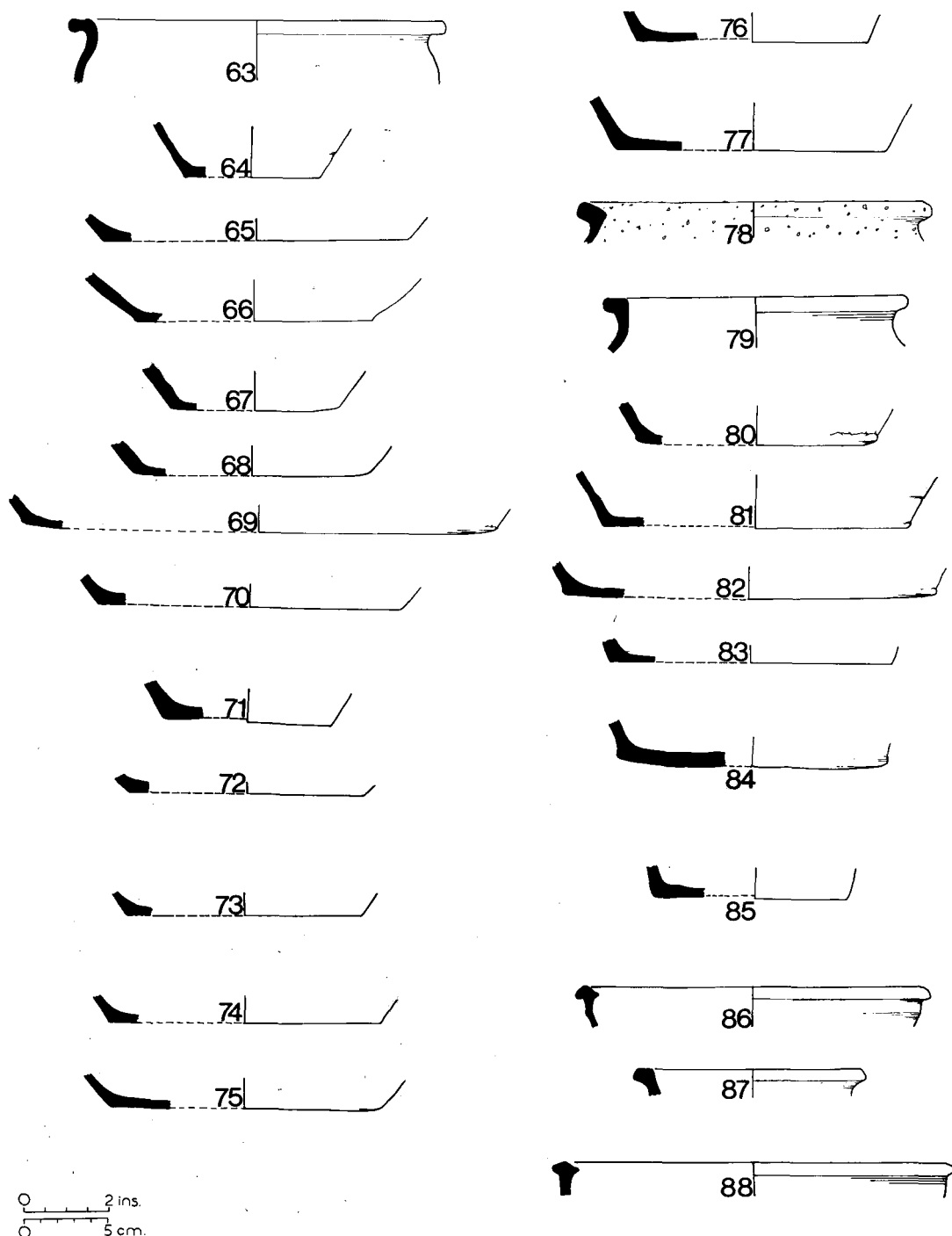


Fig. 15. Westminster Abbey sub-vault of the misericorde. Medieval pottery: Phase 3, Nos. 63 to 88 (1/4).

- 90 (F78) Cooking pot base. Buff very sandy fabric, blackened exterior surface. Same vessel as 87?
- 91 (F78 A) Cooking pot base. Pink/grey very sandy fabric, blackened exterior surface.
- 92 (F78) Cooking pot base. Buff very sandy fabric, blackened exterior surface.
- 93 (F78 E) Cooking pot base. Buff very sandy fabric, blackened exterior surface.
- 94 (F88 A) Cooking pot base. Grey/buff very sandy fabric, blackened exterior surface.
- 95 (F88 A) Cooking pot base. Buff very sandy fabric, blackened exterior surface.

- 96 (F78 N) Cooking pot base. Dark buff very sandy fabric, blackened exterior surface.

Imports

- 97 (F78 A) Jug base. Off white fine fabric, mottled green glaze on exterior and interior surfaces.

Not illustrated:

(F78) Body sherd (thin). Off white fine fabric, green glaze on exterior surface, mottled on interior surface.

(F78) Body sherd with incised line. Off white fine fabric, yellow glaze on exterior surface.

PHASE 4

Sub-phase A Material found in features within this Sub-phase is identical with that found in Phase 3 and indeed sherds from the same vessel are present.

Sub-phase B The very small number of sherds in this Sub-phase and in Sub-phase C, and the absence of any sherds from the highly decorated and anthropomorphic jugs and other vessels usually reckoned to flourish during this period (the thirteenth and fourteenth centuries) do not help to narrow down the dating range. However, it would appear that Sub-phase B should be placed in the fourteenth century: the presence of an early Surrey ware sherd indicates a date after 1275.

Sub-phase C The pottery from this Sub-phase includes several sherds apparently residual from the thirteenth century, sherds which cannot be ascribed to within a century or so (thirteenth and fourteenth centuries), and a single sherd and a fragment of imported tile which have been dated as late fifteenth century. The suggested date, therefore, for this Sub-phase would appear to be shortly before the insertion of the baker's oven.

Phase 4 (Fig. 16, Nos. 98-113. Fig. 17, Nos. 114-122)

Sub-phase A

Red wares

- 98 (F70 B) Two body sherds. Fine sandy reduced fabric, thick cream slip exterior and interior, applied cream slip stripes, alternately straight and scaled, yellow and green glazed.
- 99 (F70 B) Body sherd. Fine sandy red fabric with a reduced core, cream slip stripes and pellets on a dark red slip stripe, partly yellow glazed. Rouen copy.
- 100 (F60) Body sherd. Reduced fine sandy fabric, cream slip on exterior surface, applied strips over and mottled green and yellow glaze.
- 101 (F77) Handle. Red sandy fabric with a reduced core, impressed decoration and a yellow glaze over the top surface.
- 102 (F77) Handle. Reduced sandy fabric, traces of yellow glaze.
- 103 (F79) Base sherd. Red sandy fabric with a reduced core, thumbbed, spots of yellow glaze on the exterior surface.
- 104 (F77) Jug base sherd. Red fine sandy fabric with a reduced core, spots and streaks of yellow glaze on the exterior surface.

Grey wares

- 105 (F68 A) Cooking pot rim. Reduced (light grey) fairly fine fabric, dark grey exterior and interior surfaces, blackened exterior.
- 106 (F68 A) Cooking pot rim. Reduced coarse fabric,

dark grey exterior and interior surfaces, partially blackened exterior surface.

- 107 (F71) Cooking pot rim. Grey-brown coarse fabric.
- 108 (F77) Cooking pot rim. Grey-yellow coarse fabric.
- 109 (F77) Cooking pot rim. Reduced coarse fabric, very dark grey exterior and interior surfaces.
- 110 (F77) Cooking pot rim. Reduced coarse fabric, brown interior surface, blackened exterior surface.
- 111 (F77) Cooking pot rim. Reduced coarse fabric.
- 112 (F77) Cooking pot rim. Reduced coarse fabric.
- 113 (F68 A) Handle (of pipkin?). Reduced coarse fabric, dark grey exterior and interior surfaces.
- 114 (F77) Cooking pot base. Reduced coarse fabric, dark grey exterior and interior surfaces.
- 115 (F79) Cooking pot base. Reduced coarse fabric, blackened on base.

'Shell' tempered wares

- 116 (F80) Cooking pot rim. Reduced coarse fabric, red interior surface, blackened exterior surface.

Imports

Not illustrated:

(F68 B) Body sherd. Off white fabric, yellow glaze on exterior surface. French, possibly Normandy.

(F68 A) One rim, three body sherds (very small). Off-white fabric, mottled green glaze on exterior and interior surfaces. The rim is plain and featureless.

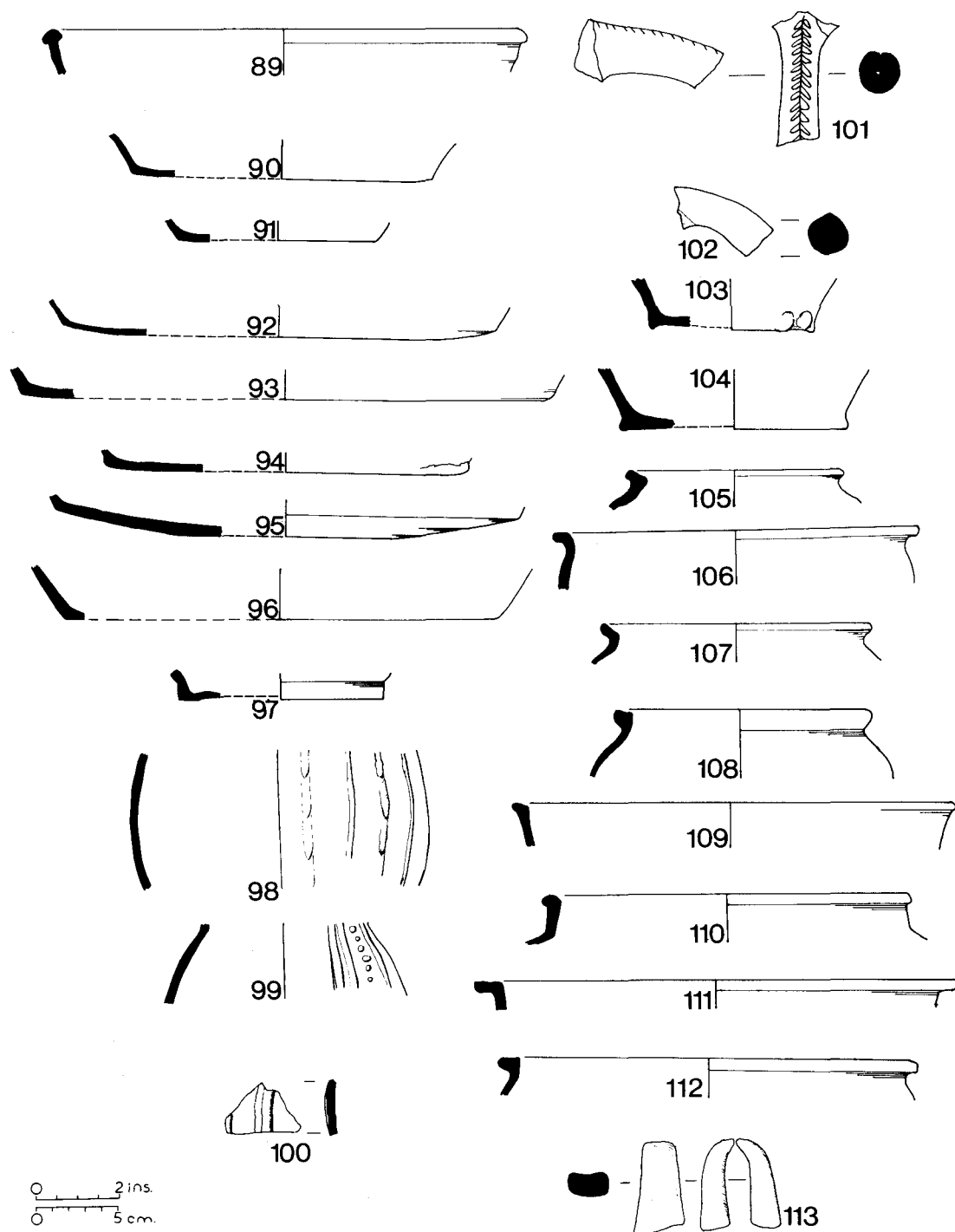


Fig. 16. Westminster Abbey sub-vault of the misericorde. Medieval pottery: Phase 3, Nos. 89 to 97 ($\frac{1}{4}$), Phase 4, Nos. 98 to 113 ($\frac{1}{4}$).

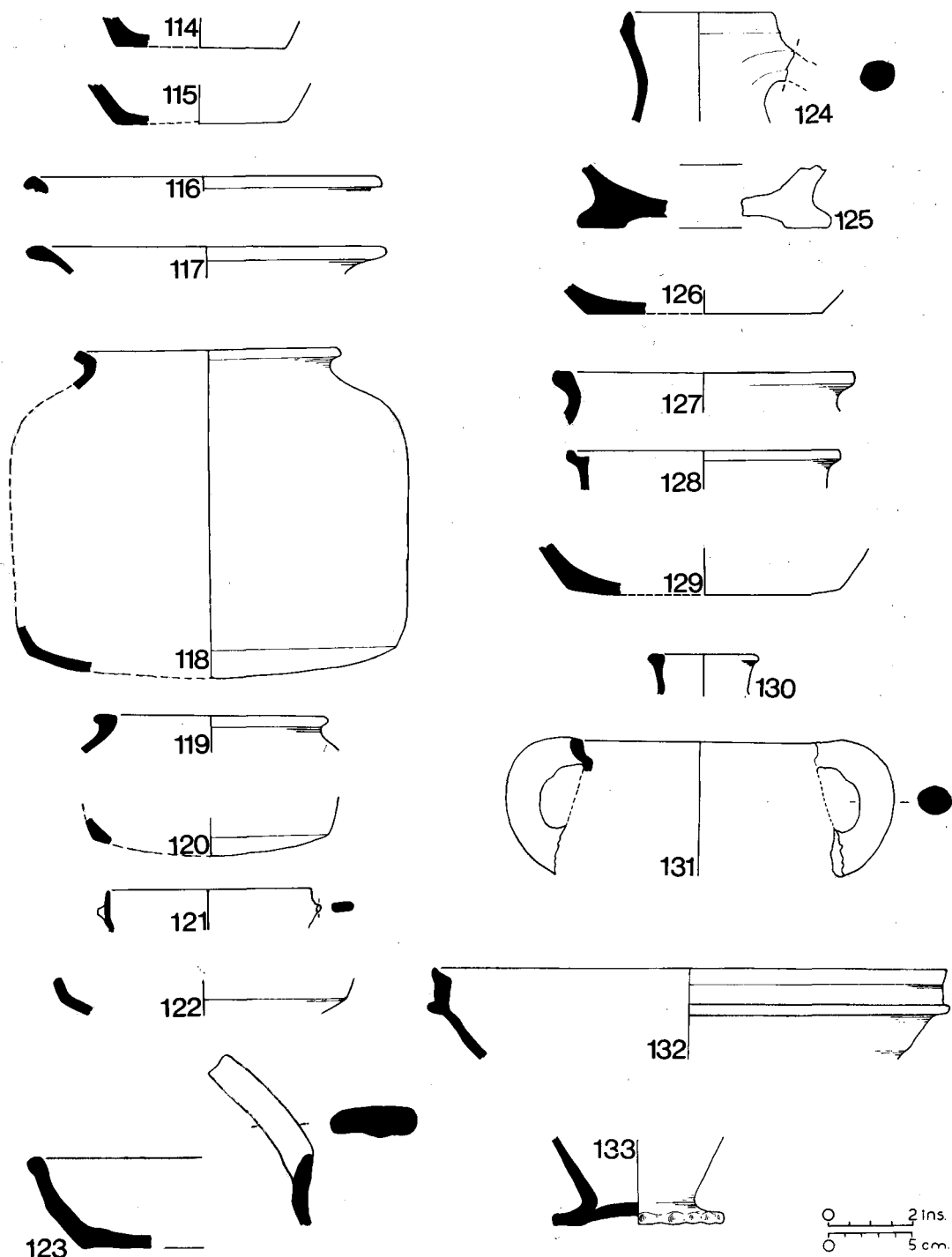


Fig. 17. Westminster Abbey sub-vault of the misericorde. Medieval pottery: Phase 4, Nos. 114 to 122 ($\frac{1}{4}$), Phase 5, Nos. 123 to 133 ($\frac{1}{4}$).

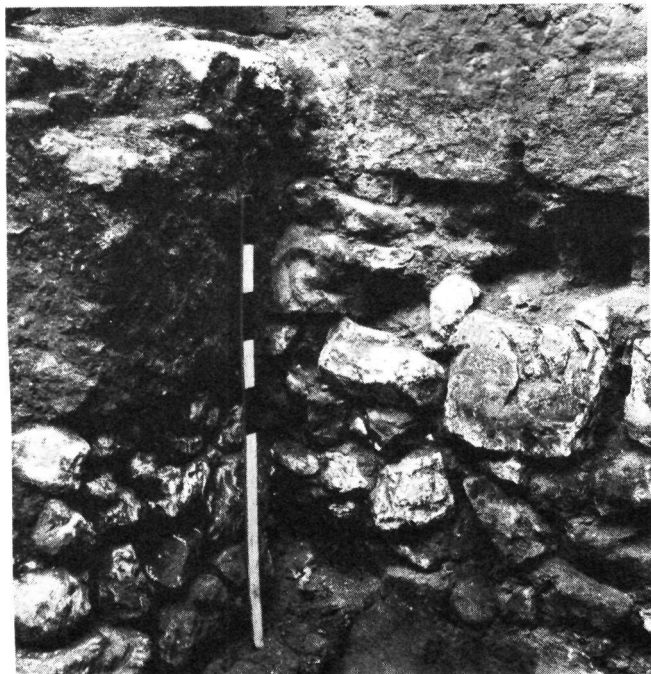


Plate 1. Westminster Abbey sub-vault of the misericorde. A reused Saxon or early Norman volute in the foundations of the frater. Note the shallowness of the foundations, and the sleeper wall butting against them on the left-hand side. (Scale 1m.)

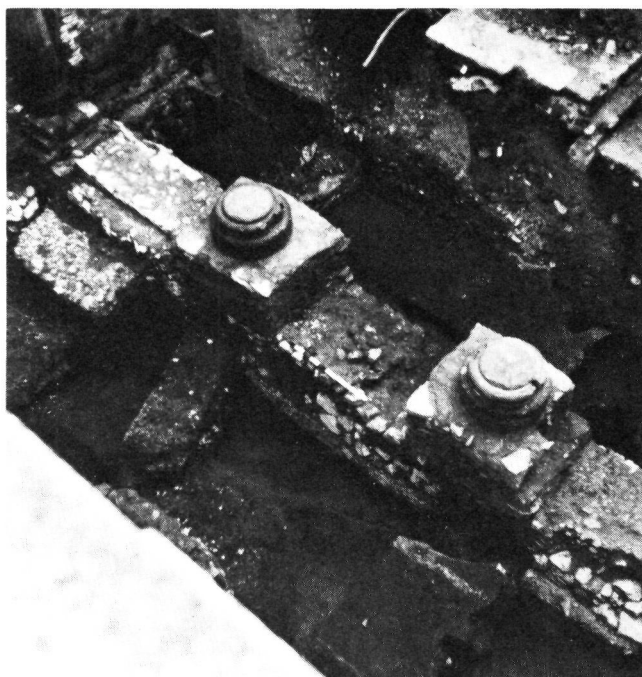


Plate 2. Westminster Abbey sub-vault of the misericorde. The sleeper wall cutting across the line of the ditch. (Scale 1m.)



Plate 3. Westminster Abbey sub-vault of the misericorde. The base of pier 2. Note the slot for the insertion of a timber partition. (Scale in divisions of 100mm.)



Plate 4. Westminster Abbey sub-vault of the misericorde. The window in the central bay of the eastern wall. The bottom of the earlier window survived as two worked stones under the chalk base of its replacement. (Scale in divisions of 100mm.)



Plate 5. Westminster Abbey sub-vault of the misericorde. The northern jamb of the western doorway. Note the base of a moulded column on the inside of the door. (Scale in divisions of 0.5m and 100mm.)



Plate 6. Westminster Abbey sub-vault of the misericorde. The southern wall of the sub-vault west of pier 7. Note the eastern jamb of the thirteenth century doorway, and the flagstone sill of the original eleventh century door (the course below the stones on which the end of the scale is resting). (Scale 1m.)



Plate 7. The two-bay baker's oven inserted into the sub-vault in the late fifteenth or early sixteenth century. (Scale 1m.)



Plate 8. Westminster Abbey sub-vault of the misericorde. Pre c. 1240 jug, (No. 31, p. 161). (Scale 300mm.)

Sub-phase B

Not illustrated:

(F57/64/67-F59) Six body sherds only:

Red ware

One slipped and glazed sherd.

Grey ware

Four reduced coarse fabric sherds.

'Surrey' ware

One sherd.

Sub-phase C

Red wares

117 (F56) Bowl rim. Red fairly coarse fabric.

Grey wares

118 (F66) Cooking pot rim. Reduced sandy fabric, blackened exterior surface.

119 (F56 B) Cooking pot rim. Reduced fairly coarse fabric.

120 (F66) Cooking pot base. Reduced fairly fine fabric, blackened exterior surface.

'Cistercian' type

121 (F53) Rim and handle base (of posset cup?). Red fine hard fabric, brown glaze on exterior and interior surfaces.

Imports

122 (F56 B) Base? Grey-yellow fine fabric. French?

PHASE 5

Sub-phase A This Sub-phase contains a small sherd of imported tin-glaze pottery. It is unfortunately too small and not sufficiently decorated to be attributed with conviction, but it is suggested that it is of Spanish origin and sixteenth century in date.

Sub-phase B Both this and the previous Sub-phase show the change towards more specialised kitchen equipment, and the influence of the Aardenburg and Low Countries potters, if not actually represented by imported pottery, becomes more pronounced.

Phase 5 (Fig. 17, Nos. 123-133. Fig. 18, Nos. 134-145)

Sub-phase A

Red wares

123 (F51 B) Dripping pan rim and handle. Red sandy fabric with some reduction, green and yellow glaze on interior surface, blackened exterior surface.

124 (F61) Jug rim and handle base. Red sandy fabric with a reduced core, cream slip and spot of yellow glaze on exterior surface.

125 (F52 A) Pipkin base and foot. Red sandy fabric with partial reduction, green-brown glaze on interior surface, spots on exterior surface.

126 (F52 A) Base. Red sandy fabric with a reduced core, spots of yellow glaze on base.

127 (F61) Jar rim. Grey-brown sandy fabric, dark grey exterior and interior surfaces, a spot of yellow glaze on the rim.

128 (F52 A) Jar rim. Red sandy fabric with a reduced core, dark grey exterior and interior surfaces.

129 (F52 A) Base. Red sandy fabric with a reduced core.

'Surrey' ware

130 (F51 F) Jug rim. Cream sandy fabric, partial mottled green glaze on exterior surface.

Imports

Not illustrated:

(F52) Body sherd (small). Cream fabric, white tin-glaze on exterior and interior surfaces, blue decoration. From Spain?

Sub-phase B

Red wares

131 (F49 B) Pipkin rim and handle. Red sandy fabric,

spots and streaks of green-brown glaze on exterior and interior surfaces.

132 (F48) Flanged rim. Red sandy fabric with a reduced core, partial cream slip on interior surface, yellow glaze over interior surface.

133 (F47 C) Jug base. Red sandy fabric, partial yellow and green glaze on exterior surfaces, some blackening on base.

134 (F47) Jug base. Red sandy fabric with a reduced core, cream slip on exterior surfaces, spots of yellow glaze on exterior surface.

135 (F47) Jar rim. Red sandy fabric with partial reduction.

136 (F47) Jar rim. Red sandy fabric with partial reduction.

137 (F47) Jar rim. Red sandy fabric with partial reduction.

138 (F47 C) Jug rim. Red sandy fabric with partial reduction, streaky cream slip on exterior and interior surfaces.

Grey wares

139 (F47) Cooking pot rim. Grey-brown fabric, dark grey exterior and interior surfaces.

140 (F47 A) Cooking pot rim. Reduced coarse fabric, blackened on exterior surface.

141 (F47 D) Cooking pot rim. Grey-yellow coarse fabric, dark grey exterior and interior surfaces.

142 (F47 D) Base. Reduced fairly coarse fabric, orange exterior surface and yellow-light brown on interior surface.

'Surrey' wares

143 (F47) Jug rim. Off white sandy fabric, green glaze on exterior and interior surfaces.

144 (F47 C) Base. Cream sandy fabric, spots of mottled green glaze on exterior surfaces.

145 (F49 B) Base. Cream/light grey sandy fabric, spots of mottled green glaze on exterior and interior surfaces.

PHASE 6 (not illustrated)

The finds from Phase 6 reflect the demolition of the misericorde in the late sixteenth century, with finds and pottery dating from that period and into the seventeenth century. There are no finds which can be dated definitely to the middle of the eighteenth century, but there are some nineteenth century clay pipes and a metal plaque. The only complete vessels came from this Phase, found during the redevelopment of the site after the excavation—a miniature albarello, a 'Surrey' ware chamber pot and a tripod pipkin—all date from the first half of the seventeenth century.

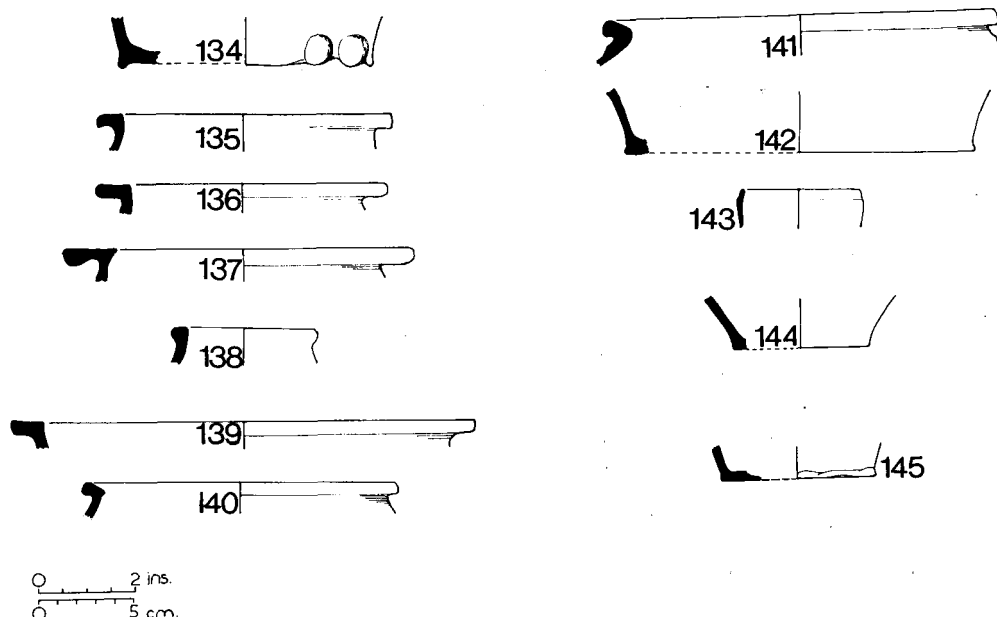


Fig. 18. Westminster Abbey sub-vault of the misericorde. Medieval pottery: Phase 5, Nos. 134 to 145 (1/4).

THE FISH BONES

by
A. G. Jones

Introduction

This report is concerned with fish remains retrieved from the Westminster Abbey site excavated in 1975. Twenty one species have been identified from a total of 396 identified bones. Fish biology is discussed in the context of the information it can provide about fishing methods and places. In addition the opportunity is taken to consider some of the theoretical problems related to interpreting the results of this type of investigation.

Methods and Materials

Two methods were employed in the retrieval of fish remains from archaeological deposits. During the course of excavation fish bones were picked out of the soil by hand, along with mammal bone, pottery etc. In addition nine 1 kg. soil samples were wet sieved using 300 micron mesh. The bones and other occupation evidence were removed from the soil residues using forceps, under a lens. The fish bones were identified at the British Museum (Natural History) using comparative skeletal material.

Measurements of certain vertebrae were taken using conventional sliding calipers. Details of these measurements are given in the full version of the results.

(A complete list of results and details of measurements is available upon request from the offices of the Inner London Archaeological Unit.)

PHASE	I	II	III	IV	Va	Vb	VI
Other Flatfish	1	(1) 1	(60) 6	(3) 2	(2) 2		
Sole			(11) 2				
Plaice			8				
Flounder			4				
Turbot	1		3				
Gurnard			2				
Mackerel			(1)				
Bass			(3) 2				
John Dory			(1)				
Ling						(1)	
Haddock			(4) 11	2	1		
Cod	(2)	(1) 4	(10) 1	(3) 2	(1) 1	(1)	1
Whiting			(59) 9	1			
Conger Eel			(4) 6	(1) 3	1		
Common Eel	(1)		(25) 3			1	
Cyprinids			(11) 1				
Pike			(4)				
Smelt	1		(2) 1				
Herring	(2)		(67) 24				
Shad			1				
Sturgeon		1	2				
Other Elasmobranchs			(1)				
Thornback Ray			2				

Table 1. A condensed version of the results. Bracketed numbers represent the quantities of vertebral centra, unbracketed numbers represent other identified bones.

Discussion

It is important to emphasise that the fish remains identified from a site represent a small proportion of the fishes actually consumed. Their survival depends not only upon soil conditions, but varies with different skeletal materials. Cartilage, which forms the entire skeleton of sharks and rays, decomposes very quickly, whereas the bones of large bony fish are much more durable. This differential survival may mean that all easily visible traces of certain fish can disappear from the soil or that other fish can be disproportionately represented in the bone samples. Secondly, because many fishes have very small bones, hand picking of excavated soil does not yield a representative sample. Without the use of sieving only 11 fish species (instead of 21) would have been recovered from this site. These excavations demonstrate how a limited amount of sieving can add significantly to the results. Finally within any group of fish bones a number are unidentifiable because they possess insufficient characteristic features. This is particularly true of ribs, fin rays and branchiostegals.

Alongside these factors it is important to consider the archaeological context of the remains. The site, lying between the kitchens and the frater, is unlikely to have been used as a prime rubbish disposal area because of the unsavoury consequences of such action. Pit 78 is a feature of unknown purpose but probably was used as a rubbish pit when the area was levelled. Evidence from the fish bones suggests that some kitchen refuse was scattered on the site during periods of building activity. The majority of the deposits are not primarily rubbish dumps but were laid down in order to provide a level surface for floors.

The present day distribution and habits of the identified fish throw light on the interpretation of results. Some biological notes are given here, based largely on Wheeler (1969).

Thornback Ray *Raja clavata*

This is the only cartilaginous fish to be specifically identified. It is probably the most abundant ray in British waters and occurs at depths between 2–60 metres. It is usually captured in trawls or on hooks and lines. It can grow to 850mm length by 610mm breadth and weigh 17 kg.

Other Elasmobranch Remains

As the skeleton of sharks and rays is composed of cartilage little evidence survives in archaeological deposits. Teeth and dermal denticles persist but are usually undiagnostic to species as well as being extremely small (often under 2mm). The Thornback Ray possesses distinctive dermal denticles or bucklers by which it was identified. It is possible that a large variety of small sharks and rays were caught in medieval times but leave no trace for the archaeologist.

Apart from Thornback Ray bucklers the only elasmobranch remain found was one mineralised core of a vertebral centrum. It was not further identified.

Sturgeon *Acipenser sturio*

This is one of the most interesting fish in this assemblage. Today it is very rare in British waters although it is thought to have occurred more commonly prior to the building of weirs for navigation and the pollution of rivers. It spends most of its life in the sea returning to rivers to spawn. Sturgeon can grow to five or six metres length and be over 100 years old. It is most often caught between depths of 20–50 metres.

The female sturgeon is famed as the source of caviar, but both sexes are prized for their flesh. It is usually caught in trawls but nets and occasionally hooks are also effective.

The remains consisted of two bony scales and two skull fragments. All were composed of a characteristic flakey mineral material and were deeply sculptured. Being large they were found by hand picking, the lack of evidence from sieved samples suggests it was not regularly eaten.

Shad *Alosa* sp.

The one dentary retrieved could be derived from one of two species *A. alosa* or *A. fallax*. Both species have similar habits and are separated on small morphological criteria.

Shads are large members of the herring family attaining 500–600mm length. They are pelagic plankton feeders migrating into rivers to spawn. Like sturgeon they have been adversely affected

by pollution. They are usually caught in seine or drift nets but will take a baited hook.

The paucity of shad remains suggests they were not commonly eaten.

Herring *Clupea harengus*

This pelagic fish formerly occurred in immense shoals in the southern North Sea. It exhibits seasonal migrations and attains 400mm length. Prior to the introduction of mid-water trawl it was usually caught in drift or seine nets. Herring remains were recovered from all sieved soil samples but because of their small size were not found by traditional techniques. In view of the number recovered it is reasonable to suggest that herring was one of the more important food fish on the site.

Smelt *Osmerus eperlanus*

This small fish rarely grows longer than 200mm. It is a pelagic shoaling migratory fish rarely occurring far from the shore.

It is caught most frequently in British waters in the southern North Sea, entering the lower reaches of east coast rivers to spawn. It is usually caught with drift nets or herring trawls. Its flesh has a good flavour but small quantities found in Westminster Abbey indicate it was not regularly eaten.

Pike *Esox lucius*

Pike is a carnivorous freshwater fish which lies in wait for its prey under the cover of aquatic plants. It frequently grows to 1,000mm and 14 kg., being caught for sport with hooks and commercially in nets or traps. Although the flesh is palatable the small quantities of remains recovered suggest it cannot be considered an important food fish. It does demonstrate that the monks of the Abbey were obtaining fish from a wide variety of sources.

Cyprinid Remains

Most of the common larger freshwater fishes in Britain (e.g. roach, dace, chub etc.) belong to the family Cyprinidae. Their bones are not especially distinctive and with a few exceptions are difficult to identify as to species. A small number of vertebrae and a single tooth from a pharyngeal bone were recovered, their size suggesting that they derived from small fish. The small amount of remains suggests that these fish were not often used for food.

Common Eel *Anguilla anguilla*

Eels were represented in almost all sieved samples by quantities of vertebrae and seem to have played an important role in the diet of the monks.

Depending on the season eels can be caught in salt, brackish or fresh waters. They can grow to over a metre in length but the size of the vertebrae suggest those in the sample did not exceed 500mm. Many methods are used to catch them including hook and line, nets, traps and eel spears.

Conger Eel *Conger conger*

This fish is usually found amongst rocks or on rough ground. It occurs in most British waters but is more often taken in the English Channel and western waters than in the North Sea. Usually it is captured on hooks at depths of 20–60 metres. It often grows to 1,200–1,500mm.

Comparatively large quantities of Conger eel remains were recovered by both sieving and hand picking. It is likely that as a result of having large hard bones they survive in the samples in disproportionately high numbers. However, the occurrence of Conger bones in three phases suggests it was a fairly important food fish.

Whiting *Merlangius merlangus*

This is a very common fish in the North Sea inhabiting depths of 30–100 metres. It is not a large fish, rarely exceeding 400mm length. It is one of the most important fish to be caught by small boat fisheries. Today it is most often taken in trawls, but drift nets, seine nets and hooks are also used. Whiting remains were found in sieved samples in such numbers that it may be suggested that they formed an important constituent of the monks' diet.

Cod *Gadus morhua*

The Cod is abundant in the North Sea occurring in both inshore and offshore waters. Today it is mainly taken in trawls but can be caught on baited hooks and in other nets. It is a large fish growing to 1,500mm and 40 kg. Cod remains were found in all phases which indicates that it was the most frequently eaten species.

Haddock *Melanogrammus aeglefinus*

This is a bottom living fish rarely caught at less than 60 metres depth. It is captured in trawls but will take a baited hook. Its distribution at present is mainly in the northern North Sea although there is evidence to suggest that it was more abundant further south. It commonly grows to 800mm and 3 kg. Haddock was represented mainly by clavicles which were all distended by hyperostosis.

Although its remains are not as common as those of cod, it played a significant part in the diet of the monks.

Ling *Molva molva*

This fish is an active mid-water predator found in depths of 100–400 metres, occasionally large specimens come close inshore. Ling grow to 2,000mm and weigh 25 kg., it is one of the largest of British bony fish. It is caught on hooks and lines or in trawls, usually in the northern North Sea, or to the south of Ireland.

The small amount of material indicates that it was not often eaten, and because prime fishing locations are so far from London it is possible that it was brought onto the site salted or dried.

John Dory *Zeus faber*

John Dory is a solitary and fairly rare fish found close inshore to depths of 200 metres. It is usually taken in trawls over sandy ground and is most common in the warmer waters off southern England and Europe. It does occasionally occur in the North Sea and is taken by hooks.

It is very significant that John Dory occurs in the sample not only because it is rather rare in British waters but because it is probably the most highly prized of any sea fish. Thus this fish, represented by one vertebral centrum, illustrates the economic status of the monks.

Bass *Dicentrarchus labrax*

Bass exhibit seasonal migrations coming inshore into bays and the lower reaches of rivers in the summer and migrating into deeper water in the winter. It can grow to 1,000mm and 9 kg. and is caught in trawls, nets and on hook and line usually off southern England. As it is a common inshore fish that readily takes a baited hook, it is popular with anglers.

The bones retrieved from the site come from at least two fish: one very large and one of average size. Bass flesh is good to eat but probably was not a regular part of the occupants' diet.

Mackerel *Scomber scombrus*

Mackerel is a pelagic active migratory fish which lies in large shoals close to the surface. It can grow to 500mm and 2 kg. and is caught most frequently in nets or on hooks. It occurs in the summer and autumn off all British coasts except the southern North Sea where it is sporadic.

Gurnard *Trigla* sp.

Gurnards are common gregarious fish which form loose shoals on the bottom. They are caught on hook and line and in trawls. The bones in the sample are two cranial bones possessing characteristic 'gurnard type' sculpturing. It is impossible to assign them to any one species. Gurnards are bony but good to eat and can grow to 600mm and 2.25 kg.

Turbot *Scophthalmus maximus*

A large flatfish growing to 25 kg. It lives on the bottom from the seashore to 80 metres and is usually taken on hook and line or in seine nets. It is the most sought after species of flatfish having an excellent flavour. It is most common in the shallow waters of southern Britain.

Although large vertebrae probably belonging to turbot were found, dentaries allowed positive identification.

Flounder *Platichthys flesus*

This is a common flatfish able to live in inshore, estuarine and freshwater situations. It lives on sandy or muddy ground in all British coastal waters. Many methods are employed in its capture, seine nets, set nets, hook and line and spearing. Like other flatfish (excluding sole) jaw bones were diagnostic, all vertebrae are grouped together under 'Other flatfish'. It will grow to 2.5 kg. and is eaten, although its flavour is not as palatable as plaice.

Plaice *Pleuronectes platessa*

This is a common flatfish living on sandy or muddy ground usually to 70 metres. It grows to 3.5 kg. and is caught in trawls, seine nets, set nets and occasionally by hook and line around the British coast. Plaice are well known for their eating qualities but an estimate of their importance in diet is impossible due to the sparsity of positively determined bones.

Sole *Solea solea*

The Sole is common in both inshore and offshore waters to depths of 40 metres. It will live in estuarine as well as marine conditions on sandy ground. It is most often caught by trawls but can be taken with seine nets and even with hooks. It is highly prized for its flesh and grows to 500mm. Sole remains were recognised by premaxillae and vertebrae and seem to be a moderately important constituent of the diet.

Other Flatfish

This group is composed of all flatfish bones that are impossible to assign to any one species. It includes vertebrae and anal pterigophores (a strong curved bone delimiting the posterior wall of the body cavity). Some species of flatfish might be represented in this group that have not been specifically mentioned due to the absence of identifiable material.

It is clear from the number of remains that flatfish played an important role in feeding the monks of Westminster Abbey.

Fishing Locations

In view of the perishable nature of the fresh fish and before quick transportation was available most fish had to be captured locally or preserved (smoked or salted). In the case of Westminster Abbey two main sources were open to fishermen, the Thames and its estuary, and the southern North Sea. With the exception of Ling all fish in this assemblage could be caught in one of these two locations. Work on medieval fish bones from East Anglia has suggested that Ling was imported to south-east England in a preserved state.

Fishing Techniques

In order to catch such a diverse group of fish several different techniques must have been employed. The pelagic fish, Herring, Bass, Mackerel, Shad and Smelt are most likely to have been caught in surface nets although Mackerel, Bass and Shad will take hooks.

Hooks and line would take all other marine species. It is likely that long lines with many hooks would be set in order to catch both middle-water and benthic fish.

Shore seine nets probably were used in conjunction with the aforementioned methods for catching Whiting, small Cod, Plaice, Sole and Smelt.

The freshwater fish Pike and Cyprinids were probably also taken by some kind of net set in the river.

Eels are traditionally captured using an iron spear (leister) or in wicker traps as they migrate to the sea.

Diet and Economy

St. Benedict forbade monks of his order to eat meat of four legged animals. Evidence from mammal remains suggests this directive was not carried out with complete diligence. It was not until the Papal Bull Benedictina (1366) that concessions were granted to meat eaters. Thus the demand for fish and fowl from Westminster Abbey and other religious houses was great.

The Benedictine order was extremely rich being often under royal patronage. It is therefore not surprising to find amongst this assemblage some rare and highly valued food fish.

Sturgeon, John Dory, Bass, Turbot and Sole are regarded as delicacies because of their flavour, flesh qualities and rarity. Benedictine monks seem to have shared these opinions. These less common fish are represented by small numbers of remains. Herring, Eels, Whiting, Cod, Haddock and Plaice/Flounder remains are more common, implying that they played a major role in diet.

Summary

Twenty one species of fish were identified. They represent fish from freshwater, estuarine and marine conditions. In order to catch this variety surface nets, hooks and lines and seine nets are likely to have been used. The fish were probably caught in the River Thames and its estuary, and the southern North Sea.

Several species are rare and highly valued food fish; they provide dietary evidence of the wealth of the monks.

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THE ANIMAL AND BIRD BONES

by

Alison Locker

The animal bone from this site was initially identified feature by feature, but for the purposes of publication this has been reduced to a chart showing the total number of fragments of each species in each phase. Since the quantity of animal bone from the site was small special mention has only been made of features containing relatively large amounts of bone. However, a more detailed account is available on request.

Measurements were taken whenever possible, they are those used by R. T. Jones of The Ancient Monuments Laboratory and are also available.

The frequency chart does not include rib fragments as these may have been broken many times and therefore would distort the figures. As the chart indicates the number of fragments is insufficient to be statistically viable, and so no relative percentages of species were assessed.

The paucity of material is due to the fact that most of the bones are from floor levels, which, as one would expect, appear to have been kept clean. This is emphasised by a comparison with the two features that produced the most animal bone, i.e., the pit (F78) from Phase 3, and the ditch (F100) from Phase 1. These two phases contain more animal bone than any other.

The ditch may not contain the monks' kitchen refuse, but may be an infill of debris by workmen.

Bos, *Ovis* and *Sus* were identified from the ditch, with no apparent selection except that no skull fragments were identified. This might indicate that the carcasses were being partially prepared elsewhere.

A variety of birds was also noted; *Gallus sp.* (Domestic fowl), *Anas sp.* (Duck), *Corvus monedula* (Jackdaw), *Columba sp.* (Pigeon), *Lagopus lagopus* (Red Grouse), *Anser sp.* (Goose). All these were probably a source of food except Jackdaw.

A fragment of human skull was found in F100 B.

Phase 2 contained a small amount of bone, mostly *Bos* and *Ovis*.

Phase 3 however, produced far more bone, mainly from the pit (F78) which contained the following; *Bos sp.* (Cow), *Ovis sp.* (Sheep), *Sus sp.* (Pig), *Cervus elaphus* (Red Deer), *Gallus sp.* (Domestic fowl), *Anas sp.* (Duck), *Anser sp.* (Goose), *Ostrea edulis* (Oyster), and *Buccinum undatum* (Whelk).

PHASE	I	II	III	IV	Va	Vb	VI
Species							
<i>Bos sp.</i>	50	13	24	16	9	11	9
<i>Ovis sp.</i>	60	12	47	19	16	9	29
<i>Sus sp.</i>	32	1	45	5	1		1
<i>Cervus elaphus</i>			2				
<i>Phocaena sp.</i>			1				
<i>Canis sp.</i>				1			
<i>Oryctolagus cuniculus</i>			1	1		1	4
<i>Gallus sp.</i>	15	3	36	1	1	1	9
<i>Anas sp.</i>	11		2				
<i>Corvus monedula</i>	1		1				3
<i>Columba sp.</i>	2	1	2				
<i>Lagopus lagopus</i>	1						
<i>Anser sp.</i>	2		10			4	1
<i>Ostrea edulis</i>	*		38	12		7	2
<i>Mytilis edulis</i>						1	1
<i>Cardium edule</i>						5	
<i>Buccinum undatum</i>	*		7	5			1

(* = sample taken)

Table of total number of fragments per species in each phase.

An unusual find was a Porpoise tooth (*Phocaena sp.*) from F88. Porpoises were an unusual, but not a rare occurrence in the Thames.

Phases 4, 5a, 5b and 6 contained little bone.

Conclusion

There is therefore no evidence from the animal bone from this site that with the insertion of the sub-vault in Phase 4, there was a relaxation of monastic rule. If this had occurred one might expect to see an increase in the quantity and variety of animal bone after Phase 4, indicating a more varied diet.

However, the possibility that this did occur cannot be dismissed since, as was previously mentioned, few features where one would expect domestic debris to accumulate were found.

In general terms *Bos* and *Ovis* are the most predominant species with *Bos* being most important in terms of meat weight. The common domestic birds also appeared regularly in the diet.

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EXCAVATIONS AT NORTHUMBERLAND WHARF, BRENTFORD

by
Alison Laws

1. Introduction

During the latter part of October 1974, sherds of Roman pottery were found on a building site at Northumberland Wharf, Brentford, by Bob and Sally Lancaster, members of the West London Archaeological Field Group. The initial stage of this development by the London Borough of Hounslow comprising flats and maisonettes was in progress, and had already involved the removal of a considerable amount of topsoil. Due to the co-operation of the site contractors, Fassnidge and Company, and the Borough's site agent, a ten day period was immediately allowed for archaeological investigation to take place in areas where construction work would not be hindered. The excavation was directed by the author on behalf of the former London Museum with members of the West London Archaeological Field Group supported by funds from the Department of the Environment.

2. Background: The Brentford Excavations

This discovery follows a series of excavations in the town which were initiated by Roy Canham, Field Officer of the former London Museum, in 1966 as a result of large scale redevelopment. A total of thirteen sites have now been excavated. One of these, a site on the east bank of the River Brent (now the Grand Union Canal) was excavated in 1966 (Fig. 1) but did not reveal any evidence of occupation earlier than c. A.D. 1800. The deep stratigraphy on this site suggested that material had been dumped as a result of the dredging of the canal. Below this sludge and capping the natural gravel lay a thick deposit of marshy material suggesting that the area had long been uninhabitable, probably due to flooding.¹ The discovery of Roman material on the west bank of the Canal therefore came as something of a surprise.

3. The Site (Fig. 2)

The site known as Northumberland Wharf lies on the west bank of the River Brent some 900m north-west of its confluence with the River Thames. Situated at the junction of land and water routes where the Roman road from London to Silchester would have crossed the tributary, it comprises a small promontory of land at the extreme western end of the possible limits of the main Roman settlement. The area lies in the centre of the Thames Valley Eocene deposits consisting of brickearth resting above the Upper Flood Plain terrace of Pleistocene date.

The contractors had already removed a considerable amount of topsoil and brickearth leaving a section c. 2m high running across the site in a NNE-SSW direction for a distance of 110m. Three large ditches showed in this section, two in the area of Site A (Fig. 4), and one at Site B and it is likely that the sherds of pottery found during site

watching derived from Site A. On investigation the feature on Site B proved to be of post-medieval date. Two areas were selected for excavation—Sites A and C (Fig. 2).

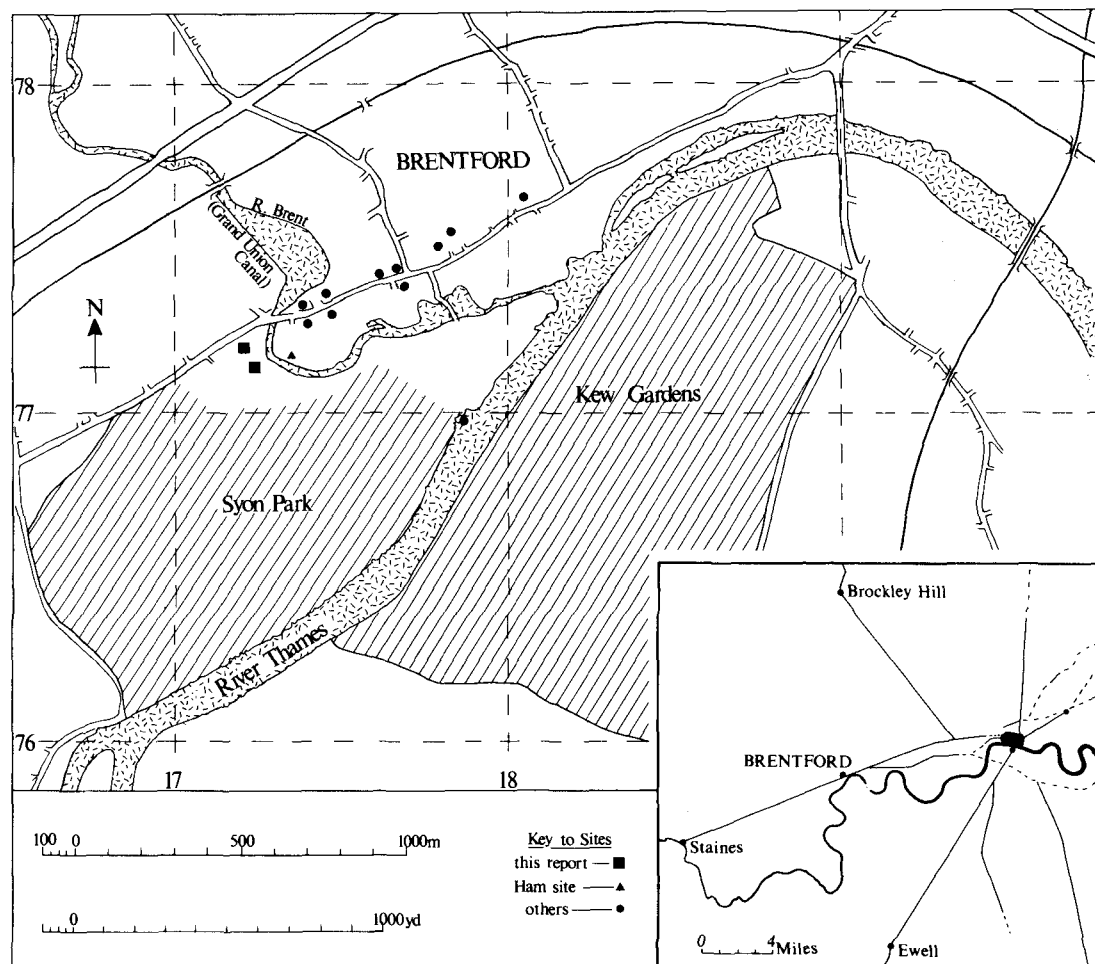


Fig. 1. Northumberland Wharf, Brentford. Location map showing the site in relation to previous excavations in the town. The inset shows the position of Brentford on the line of the Roman road.

4. The Excavation

(The Features from Sites A and C are numbered in sequence from F1–F11)

SITE A (TQ. 17237722, Fig. 3)

An area c. 8m by 9m on the eastern side of this section (Fig. 4) was cleaned and it was seen that several features of Roman date which had cut into the brickearth and gravel had survived.

Phase 1. The earliest occupation on Site A (F1)

The earliest occupation on Site A was represented by a straight sided ditch, (F1), running across the site in an east–west direction. The upper filling had been removed by machine but examination of the section revealed that it was composed mainly of a brown soil, probably building up as a

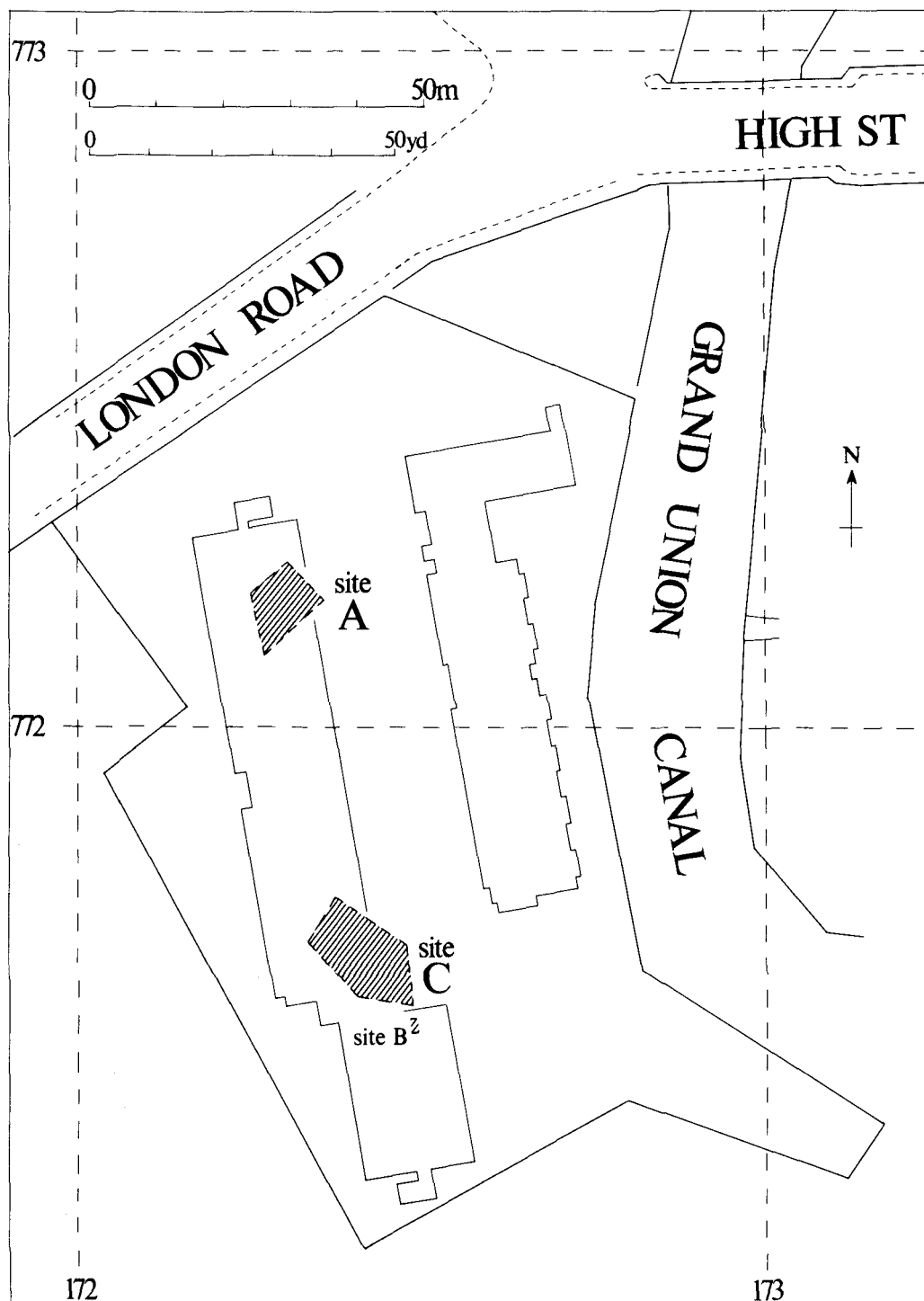


Fig. 2. Northumberland Wharf Site Plan.

silting. The main ditch filling below this consisted of a silty yellow deposit not unlike brickearth and contained a pebbly gravel. A date in the later part of the second century is suggested by the coarse pottery (Fig. 6, Nos. 1–18) and the small amount of samian present is of Antonine date. However, because of the presence of a primary silt layer in the bottom of the feature, it would appear that the ditch was open for some little time before being filled in and it may be that the secondary filling itself is a silting and not a deliberate backfilling. The ditch contained a small amount of daub and tile in addition to bone and pottery refuse. A coin of later third century date (No. 8, p. 202) was found lying on the surface of the filling.

Phase 2. The enclosure (F2)

Subsequent to the backfilling or silting of the ditch, a series of stake-holes were found to cut into its filling and give evidence that the nature of the site changed and some form of enclosure was established. The stake-holes range from 50mm to 150mm in diameter and the structure to which they belonged appears to have been of oval or circular form. If circular, the excavated area indicates that the structure would have had a diameter of c. 18m.

The dating evidence from pottery is sparse (Fig. 7, Nos. 19 and 20), two rim sherds of probable late second century date but a coin (No. 9, p. 202) of third or fourth century date was found in the filling of one of the post-holes which, although in poor condition and illegible is probably of similar date to that found lying on the surface of the ditch sealing the phase I occupation (No. 8, p. 202). No building material was associated with this structure.

Phase 3. The fourth century features (F3, F4, F5)

The enclosure does not appear to have remained in use for very long as the silt of a later ditch (F3) seals some of the stake-holes. This ditch contained a silty yellow filling which probably accumulated over a period of time, though it was, unfortunately, barren.

At a date towards the middle years of the fourth century, this feature was either re-cut or replaced by a further ditch complex (F4). A considerable amount of occupation debris in the form of domestic refuse and building material including fragments of *imbrices*, *tegulae* and building bricks, was present. It would appear the the ditch, (F4) was part of some drainage system or boundary in the vicinity of the settlement. The latest datable coin of A.D. 335–341 and the pottery (Figs. 7–9, Nos. 21–84) would suggest a mid fourth century date for the backfilling.

A gravel surface in the western part of the excavation area is probably contemporary with this ditch although no secure dating evidence was obtained for it, though it was cut by a round pit or post-hole (F5) which yielded pottery of fourth century date and a small amount of building material. It is likely that this feature is associated with the gravel surface and represents the only structural evidence found dating to this late period.

Sealing the site was a brown soil containing sherds of fourth century date which were probably derived from the ditch (F4), though the layer was considerably disturbed and contained nineteenth century material.

SITE B (Fig. 2)

No excavation work took place in the area of Site B as the ditch feature revealed in section was found to be of nineteenth century date. Due to the extreme time pressure it was decided to concentrate on areas where evidence of Roman occupation survived.

SITE C (TQ. 17247716, Fig. 5)

Situated some 40m to the south-west of Site A, the area had been stripped of topsoil but the brickearth remained intact. An area c. 8m by 12m when cleaned, revealed several features of Roman date. However, as the vertical stratigraphy above the brickearth had been destroyed, any stratigraphical association between the features was difficult to establish.

Phase 1. Pits and ditches of early Roman date (F6, F7, F8, F9)

A series of pits and ditches showed occupation of an earlier date than that encountered on Site A. (F6) was a regularly cut ditch feature running across the site in a NE–SW direction and contained a brown soil filling. There was a considerable amount of post-medieval disturbance in

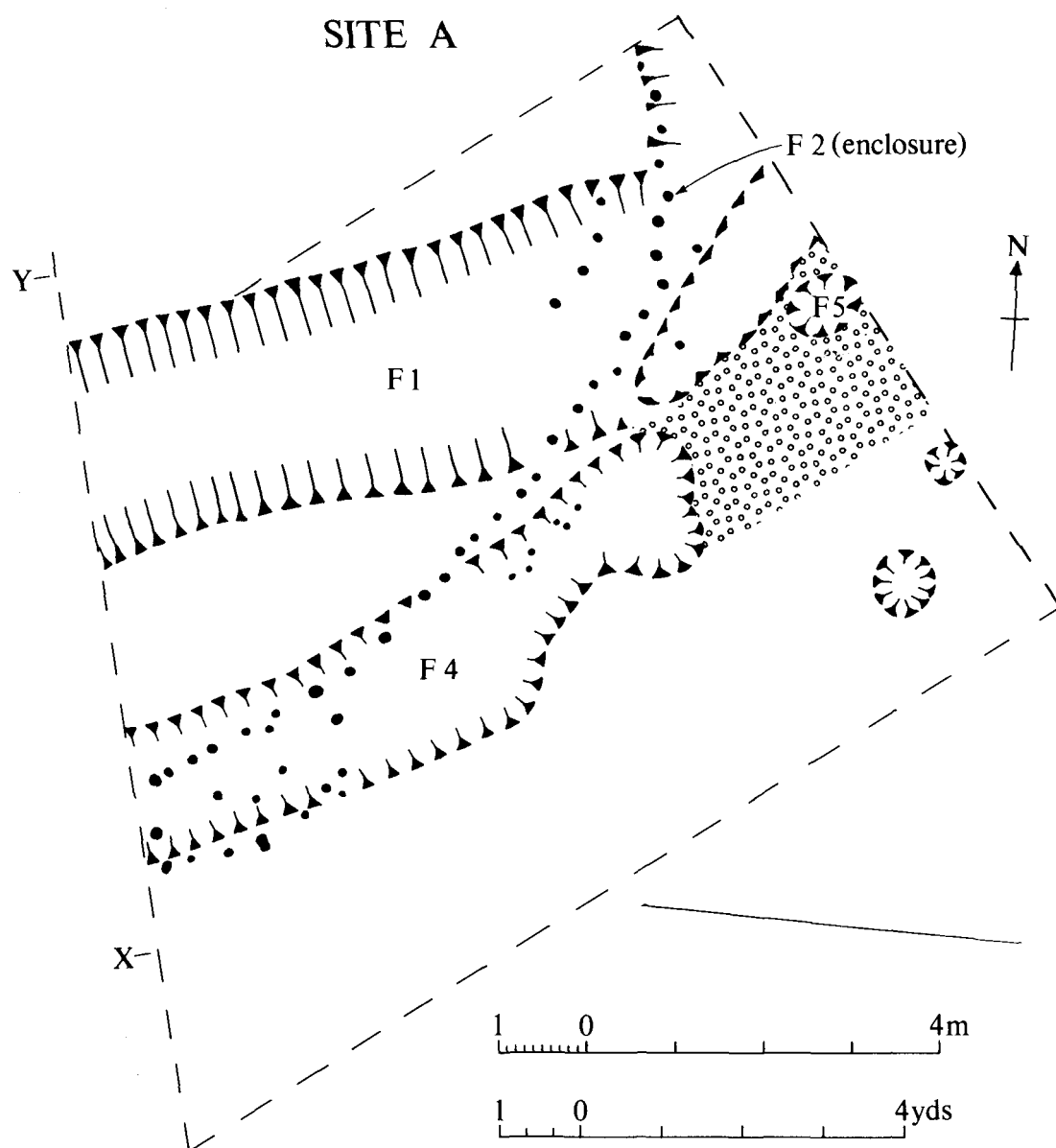


Fig. 3. Northumberland Wharf: plan of Site A.

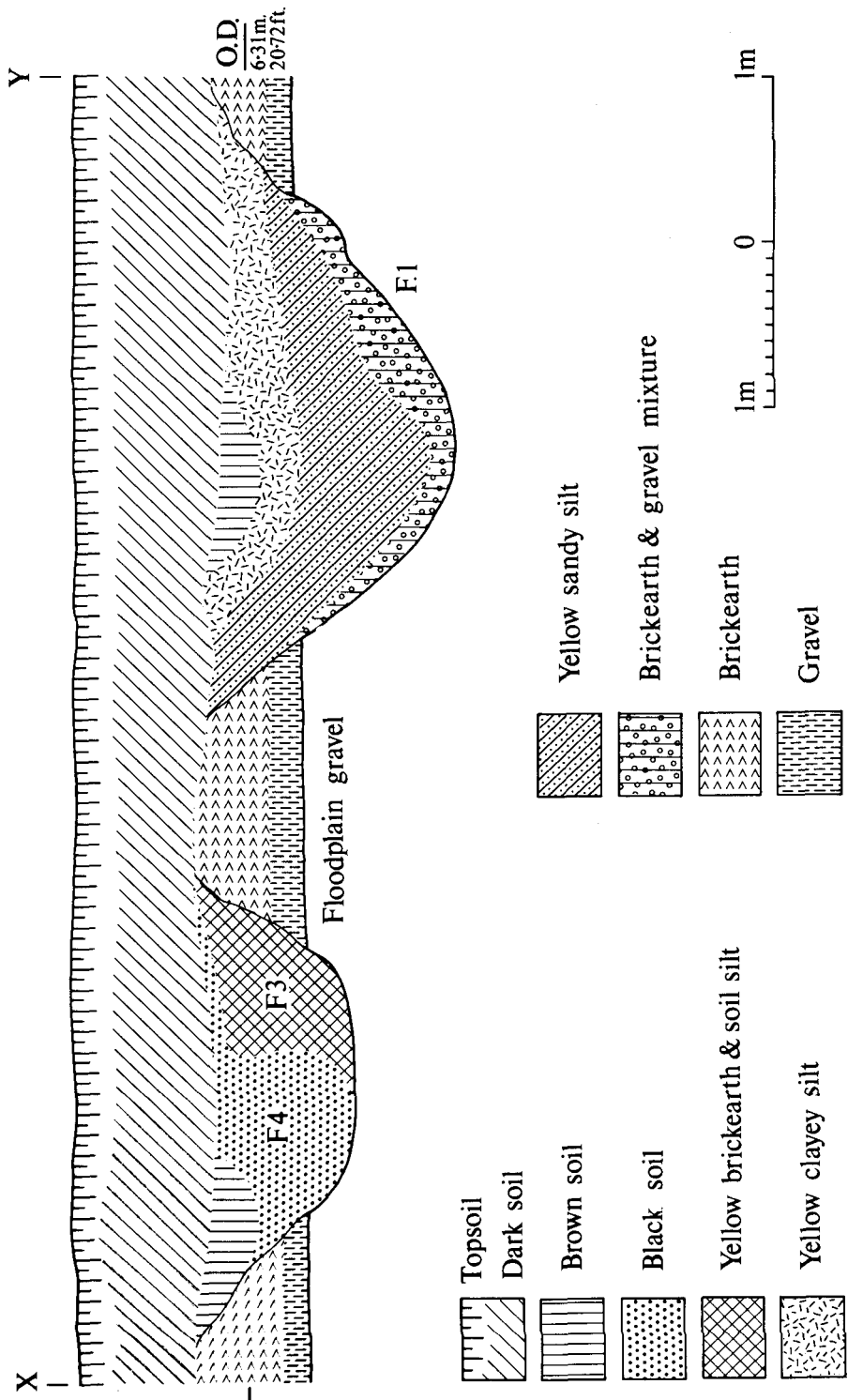


Fig. 4. Northumberland Wharf: section across Site A.

the upper filling. At right angles to the ditch (F6), was a second ditch (F7), which also had a fill of light brown soil. The pottery from both these features appears to belong to the later first or early second centuries (Fig. 10, Nos. 94–104). Cutting the ditch (F7) was a shallow pit (F8) which had a dark brown soil filling and contained pottery dating several decades later than the ditch it cut (Fig. 10, Nos. 108–11). Also dating to the second century was a further large pit (F9) which contained a similar filling to the pit (F8). On the pottery evidence this appears to have been in use in the later first or early second century and to have gone out of use *c.* A.D. 150. A small amount of animal bone was present in these features (p. 203), also fragments of building material.

Phases 2 and 3. Features of the later Roman period (F10, F11)

The later Roman period contemporary with phases 2 and 3 on Site A was represented on Site C by two features. A circular pit (F10) which cut across the southern end of the ditch (F7) contained five coins of third century date (Nos. 12–16, p. 203) and a date in the later part of the third century is probable for the coarse wares (Fig. 11, Nos. 127–143). Building material present in this feature included fragments of *tegulae*, *imbrices* and building bricks.

A deep, square cut pit (F11) contained a loose mid brown soil filling and a considerable quantity of animal bone and third century pottery (Fig. 11, Nos. 119–126). The feature was regularly cut, almost 1m square, and had a depth of *c.* 2.30m. There was no evidence of any lining and, situated so close to the river, it is unlikely to have been a well.

5. Interpretation

Although only a small part of the area of the Northumberland Wharf development was excavated, it is clear that the nature of the settlement in this part of Brentford must relate closely to that found on previous sites in the town. As on other sites in the area there is almost a complete lack of evidence relating to structures and all that survives to be recorded are the pits and ditches of insubstantial settlement.

It has been suggested that the flimsy timber framed structures of a small settlement may well leave little or no trace, especially if constructed on beams which merely rest on the ground.² The 1974 excavations at 232 High Street, Brentford (publication forthcoming) produced the marks of burnt timbers lying *in situ* on the ground surface. These only survived because they were sealed by substantial Roman occupation levels. At Northumberland Wharf, even if features of this nature had survived the post-medieval occupation of the site, they had by the time of the excavation been removed by the contractors and only features actually cutting the brickearth had survived.

Building material was found in almost all the features. On Site A only a small amount of daub and tile was present in the earliest feature (F1) (second century), but a substantial amount (some 44%, 14.45 kg.) of the total found during the excavation was recovered from the fourth century ditch and this must have accumulated as a result of the destruction or demolition of nearby buildings. Post-hole (F5) may well have belonged to such a building. The features on Site C also indicated the close proximity of buildings as the pits contained quantities of domestic rubbish and building material but once again no traces of actual structures survived.

6. Discussion and conclusions

The discovery of Roman material on the site at Northumberland Wharf continues to add to the picture of the Roman settlement at Brentford. This is the first evidence to come to light that the occupation extended onto the west bank of the Brent. It is perhaps significant that the surface of the natural gravel at Northumberland Wharf had a height of 6.21m O.D., some 3.37m higher than the gravel recorded on the Ham site on the other

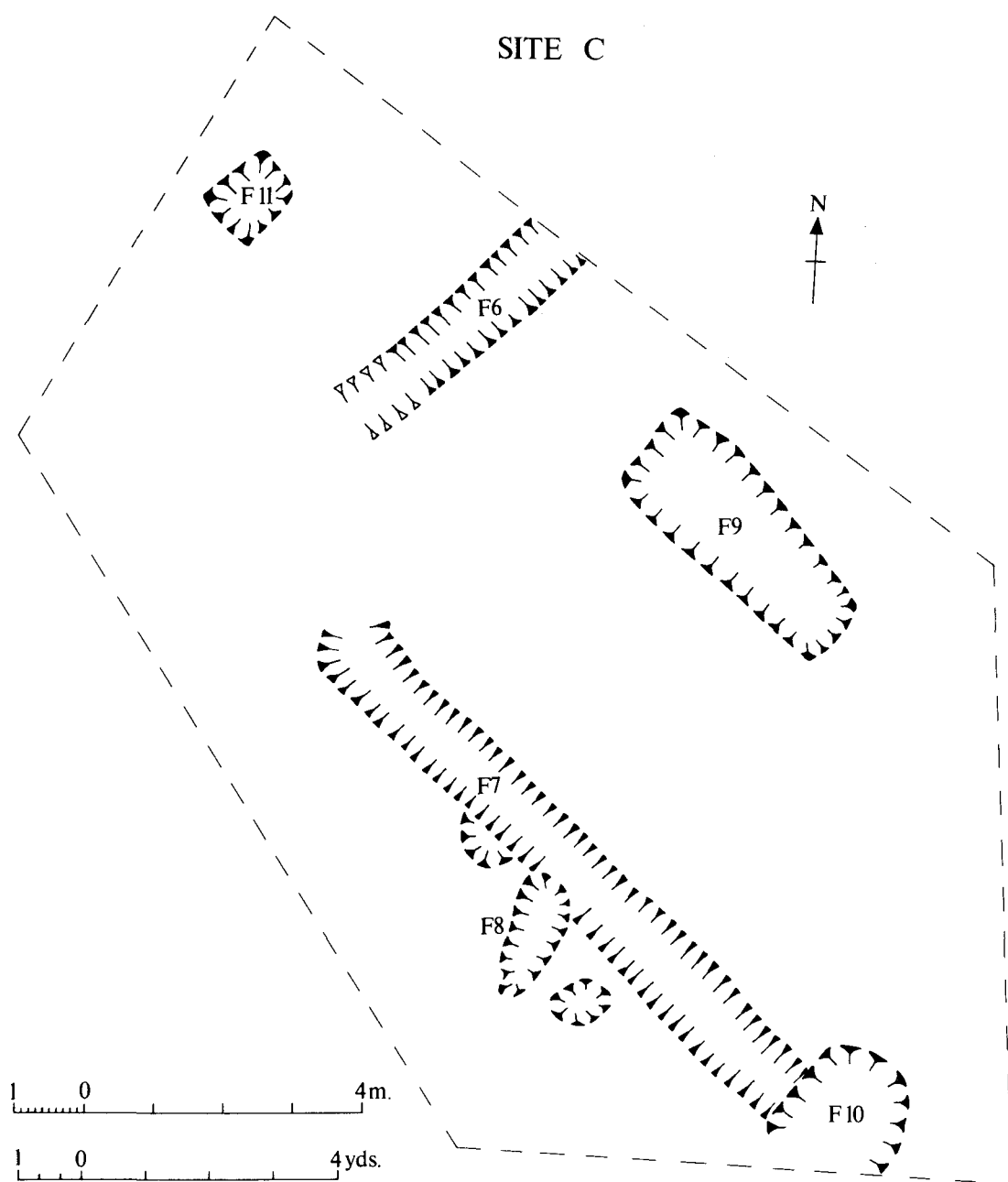


Fig. 5. Northumberland Wharf: plan of Site C.

bank excavated by Roy Canham in 1966. This might account for the preference of this western bank for settlement adjacent to a bridge or ford crossing the Brent where the danger of flooding would be substantially less than on the opposite bank. The material recovered from the site indicates a possible continuity of occupation from the later first century into the fourth century. Its position on the outskirts of the settlement and the presence of the feature thought to be some form of enclosure might perhaps indicate that the area was utilised for stock raising and its peripheral activities.

The origin of the Roman settlement at Brentford is not clear but a tentative hypothesis may be made; that is that it owes its origin to the establishment of an official posting station of the *cursus publicus*. The reasons for suggesting this are as follows: the centre of the settlement at Brentford lies some 10.3 Roman miles from the Roman city of London and 10.2 Roman miles from *Pontes* (Staines) on the main road from the capital city to Silchester and the west of the country. Staines is listed in the seventh journey of the British section of the Antonine Itinerary³ but there is no mention of a stop on the road between *Pontes* and *Londinium*. It is likely that the inclusion of Staines in one of the journeys of the itinerary indicates that it had at least the status of a *mansio*. Brentford, a roadside settlement lying equidistant between *Londinium* and *Pontes* and also at a natural halt, i.e. the river crossing, would have made an ideal place for the establishment of a *mutatio*, a smaller relay station placed between *mansiones*. It would thus have formed part of the system serving official travellers using the road west from London.⁴

If we are correct in this assumption that the Brentford settlement began as an officially planned station, it is likely that this would act as a nucleus for further expansion and the settlement would develop. The easily worked brickearth soils would have been ideal for agricultural purposes and evidence of plough marks of Roman date were recorded on a site at 233–240 High Street by Roy Canham in 1970. The excavation at Northumberland Wharf has revealed evidence of occupation from the later first century on into the fourth century and extended the area of our knowledge of the settlement by over 200m bringing the total length known of the straggling roadside settlement of Brentford to 650m.

NOTES

¹ This site, known as the Ham, was excavated by Roy Canham in 1966 and I am most grateful to Roy Canham for use of this information prior to publication in *Two Thousand Years of Brentford* (H.M.S.O. forthcoming).

² *Ibid.*

³ A. L. F. Rivet 'The British Section of the Antonine Itinerary' *Britannia* 1 (1970) 49–50.

⁴ I am indebted to Hugh Chapman for the views expressed here.

7. The Finds

THE ROMAN POTTERY

The same method for dating the Roman coarse wares has been used as Canham (1976). Due to the lack of published material in the London region and the difficulties involved in attempting to date Roman pottery, a working method was established which it was hoped would minimise the errors incurred in random parallel quoting. A survey was carried out of published pottery groups, mainly from the south-east, where the internal dating evidence was sufficient to justify comparison and only these references are quoted in the following text. The only exception to this are references to the products of a particular kiln. A framework has now been created for the Brentford pottery sequences and further small groups such as those from Northumberland Wharf can be added. References to pottery groups in the forthcoming report on previous Brentford excavations, Canham (1977), quote the relevant stratified group number which is prefixed by the letter Z.

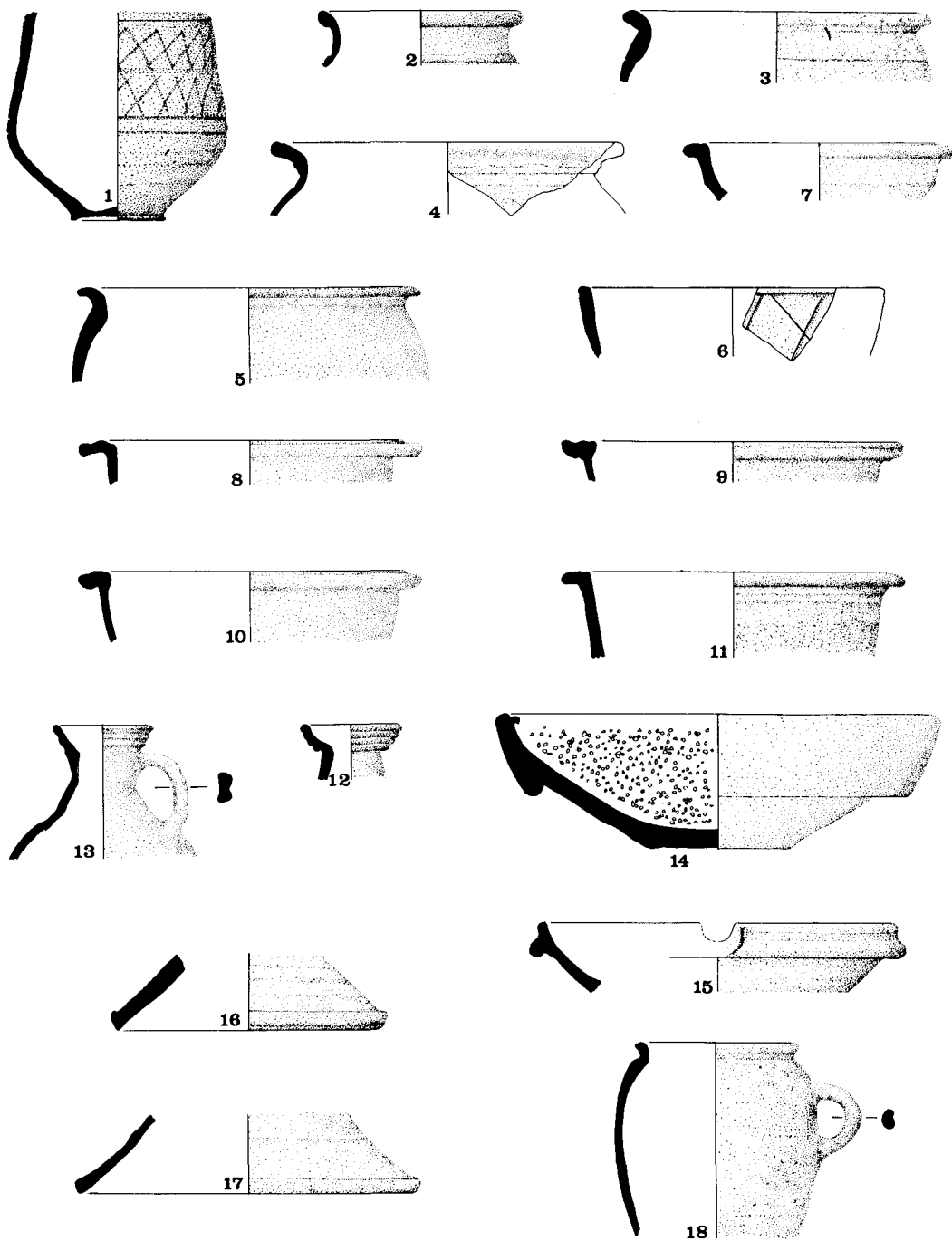


Fig. 6. Northumberland Wharf: The Roman pottery Nos. 1-18 ($\frac{1}{4}$).

(F1) The Phase 1 ditch on Site A (Fig. 6, 1-18)**Coin Evidence** (see no. 2, p. 202)

Barbarous radiate, Tetricus II type, found on the surface of the ditch silt.

Samian

Undecorated: two sherds, Antonine date.

Beaker

1. Fine grey sandy fabric with smoothed grey surface decorated with burnished lattice decoration on body between horizontal incised lines.

Jars

2. Cordoned jar in finely granulated grey-black fabric. At Verulamium, Frere (1972, Fig. 124, No. 865), similar vessels are dated A.D. 150-160. Also cf. vessels from the kiln at Verulamium, Corder (1941, Fig. 6) dated A.D. 120-160.
3. Coarse lumpy grey-black fabric containing flint grit. Smoothed band on inside rim. Also represented in groups of mid second century date at Verulamium, Frere (1972, Fig. 117, No. 626).
4. Fine hard light grey fabric with horizontal lines of burnished decoration on inner rim and curvilinear decoration on body.
5. Coarse light grey fabric containing flint grits. Traces of whitish slip on rim and outer surface.

Dish

6. Bead rimmed dish in grey ware with burnished decoration. At Verulamium, Frere (1972, Fig. 129, No. 999) dated A.D. 150-155/60.

Bowls

7. Smooth grey fabric with dark grey surfaces. At Purberry Shot, Lowther (1949, Fig. 29) these bowls are dated to the first half of the second century.
8. Hard coarse reddish-orange fabric with dark grey

surfaces, grit intrusions. Although originating in the first century, this type is common into the second century.

9. Smooth granular orange fabric similar to No. 15. A similar vessel from Verulamium is dated A.D. 150-155/60, Frere (1972, Fig. 127, No. 936).
10. Light grey fabric with smooth darker grey surfaces.
11. Coarse blackish fabric containing flint grit. Traces of burnishing on rim and inner surface. Although present in first century deposits, Boon (1969, Fig. 11, No. 10) where it is dated to the Flavian/Trajanic period at Silchester, the type does continue into the later second and third centuries.

Flagons

12. Hard grey granular fabric with orange-red surfaces covered in thick cream slip.
13. Smooth finely granulated white ware.

Mortaria

14. Cream ware vessel from the Oxford region. Smooth fabric with traces of brown slip, translucent pink and white grits. Late second to early third century type.
15. Granular orange fabric with thin grey core, heavily tempered with grog, no grits. Reminiscent of Brockley Hill fabric. A.D. 160-230.

Lids

16. Coarse dark grey-black fabric similar to No. 11.
17. Grey-black fabric with finely granulated surface.

Mug

18. Rather coarse dark grey fabric with reddish tinge towards surfaces which are dark grey with traces of burnishing on rim and outer surface. Cf. vessels from Wroxeter, Atkinson (1942, Fig. 46, No. C7) dated c. A.D. 270; and Fishbourne, Cunliffe (1971, Fig. 76, No. 13) dated A.D. 150-280.

Summary

The bowls in this group appear to date to the middle years of the second century. Vessels similar to No. 7 are dated to the first half of the second century at Purberry Shot where they are present in the filling of a pit backfilled c. A.D. 150. Moulded rimmed bowls (No. 11) are common throughout the second century and continue in use into the third century when they develop into the flanged bowl. Two lids are present in this group and evidence from Shakenoak suggests that the type with squared-off rim, dates to the period A.D. 120-250. It is interesting to record the presence of a mug in this group, the first from Brentford. These are common at Wroxeter throughout the period A.D. 150-300 but at Shakenoak are most common during the second century and had gone out of use by the mid third century. Both the mortaria present in this group are given a late second or early third century date by Mrs. Hartley and the two flagons would also appear to date to the later part of the second century. Although an early third century date for the group should not be ruled out, it is more likely that this group dates to the period A.D. 150-200.

(F2) Phase 2: the Enclosure on Site A (Fig. 7, 19-20)**Jars**

19. Hard grey finely granulated ware. At Verulamium, Frere (1972, Fig. 111, No. 390) a similar vessel is dated A.D. 105.
20. Fine smooth buff fabric with burnished outer surface. Cf. a vessel from Dorchester dated A.D. 135-180, Frere (1962, Fig. 16, No. 122).

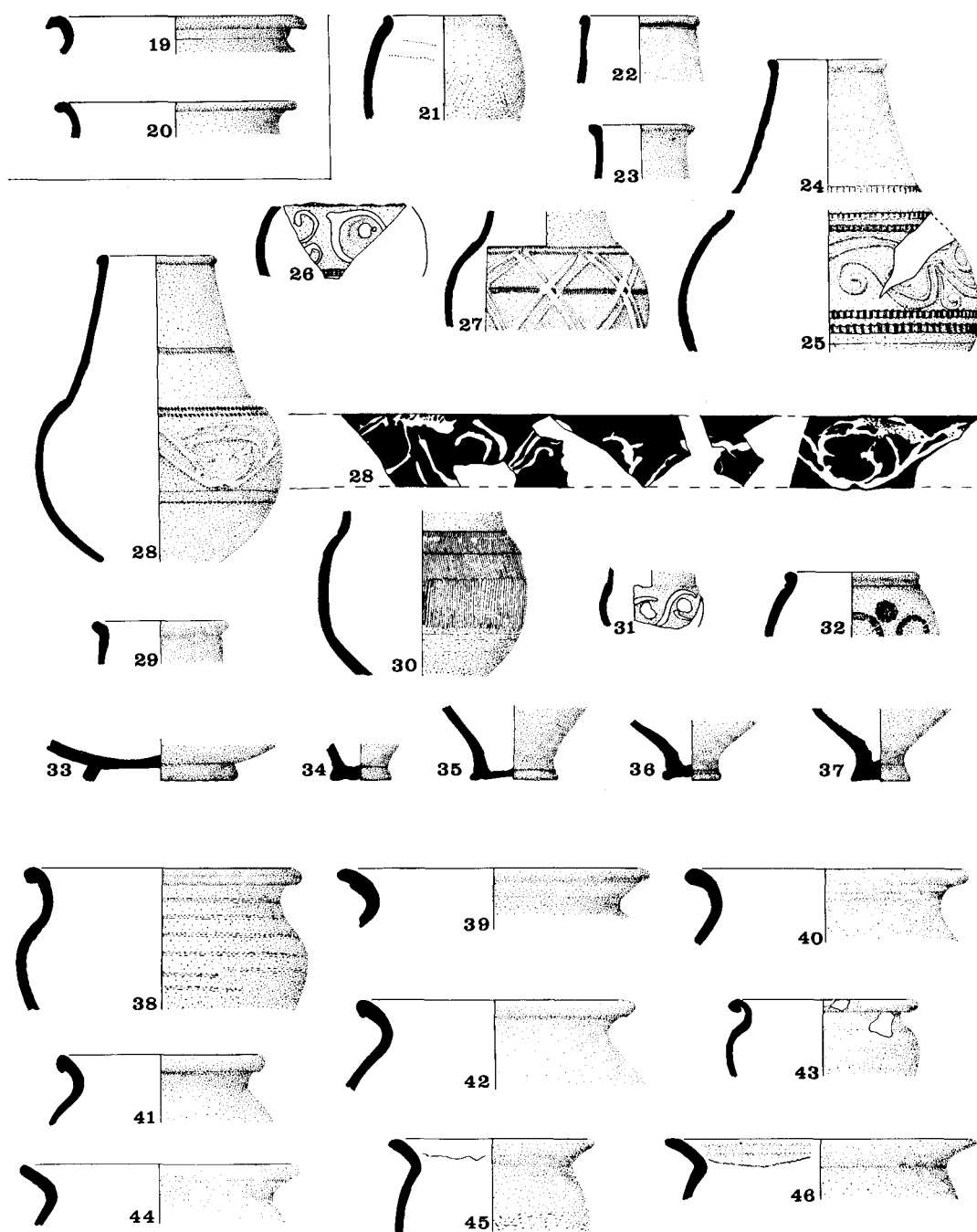


Fig. 7. Northumberland Wharf: The Roman pottery Nos. 19-46 ($\frac{1}{4}$).

Summary

With only two rims present from this series of stake-holes, only a rough estimate of date can be given. The stake-holes must however be contemporary with or later than the third century coin (Tetricus II type) which was dropped on the surface of the ditch (F1), but earlier than the Phase III evidence which dates to the middle years of the fourth century.

(F4) The Phase 3 ditch on Site A (Figs. 7-9, 21-84)**Coin Evidence** (see Nos. 4-9, p. 202)

Two barbarous radiates, one of which is Tetricus II type.

Three illegible coins, one of which is possibly of fourth century date. Constantinopolis, A.D. 335-341.

Samian

Undecorated, one sherd, Antonine.

Beakers

21. Hard grey-black fabric with traces of black burnishing on outer surface and faint burnished lines of decoration.
22. Fine orange fabric, black colour coat.
23. Fine light grey fabric becoming orange towards the surfaces which are covered in smooth black slip, polished on outer surface.
24. Soft orange fabric, smooth chocolate brown slip on both surfaces. Rouletted decoration on outer surface. At Gadebridge, Neal (1974, Fig. 106, No. 306) dated to the late fourth century.
25. Fine grey fabric becoming orange towards the surfaces. Raised barbotine decoration below bands of rouletting. All surfaces and decoration covered in orange-brown slip. A fragment of a similar vessel from Gadebridge, Neal (1974, Fig. 112, No. 410) must date to some time after A.D. 293.
26. Fragment of a beaker in hard cream fabric, orange inner surface, outer surface covered in black slip with raised barbotine decoration. Similar to vessels from the Swanpool kiln in Lincolnshire, Webster and Booth (1972, Fig. 3, No. B6).
27. Fine grey fabric with orange outer surface coated in black slip. Raised white barbotine decoration.
28. Similar vessel to No. 27. Fine grey fabric, orange inner surface, raised pinkish white barbotine decoration. At Old Ford similar vessels are dated to the late fourth century, Sheldon (1972, Fig. 9, Nos. 14 and 15).
29. Fine orange fabric, orange-brown colour coated surface.
30. Rouletted beaker in soft orange fabric, worn orange-brown colour coat on outer surface. At Richborough dated A.D. 260-350, Bushe-Fox (1926, Type 120).
31. Fine orange fabric with black colour coat. White painted decoration.
32. Hard orange fabric with black external colour coat and rosette stamped decoration. M. Fulford writes that only one published parallel is known, this is in Porchester, Fulford (1976, Type 35.11) but is unstratified. The source is as yet unknown but probably British.
33. Soft orange fabric with orange colour coat.
34. Orange fabric with orange colour coat.
35. Orange fabric with brown-orange colour coat.
36. Fine grey fabric, orange surfaces covered in black slip on outer surface. Similar to No. 28.

37. Soft grey fabric with orange surfaces covered in orange-brown slip.

Jars

38. Soft grey fabric with grey burnished slip on outer surface.
39. Reddish-brown fabric with whitish grey slip on rim and outer surface. A similar vessel from Old Ford is dated A.D. 395+, Sheldon (1971, Fig. 8, No. 36).
40. Sandy buff fabric with traces of burning around neck.
41. Hard light grey fabric darkening towards surfaces. At Old Ford dated A.D. 395+, Sheldon (1971, Fig. 9, No. 29).
42. Sandy light grey fabric. Also present at Old Ford where it is dated A.D. 395+.
43. Soft orange fabric with red colour coat on rim and outer surface. A vessel of somewhat similar form is dated A.D. 250-400 at Shakenoak, Brodribb *et al.* (1971, Fig. 36, No. 310).
44. Sandy orange fabric blackened on rim. At Lockleys dated A.D. 300-340, Ward Perkins (1938, Fig. 10, No. 23) and at Old Ford, Sheldon (1971, Fig. 8, No. 39) A.D. 395+.
45. Hard grey fabric with black burnished coating on rim and outer surfaces of shoulder. A similar type is dated A.D. 270-350 at Winchester, Cunliffe (1964, Fig. 19, No. 23).
46. Coarse black-grey fabric with black burnished coating on rim and outer surface of shoulder. A similar type is dated A.D. 300-325 at Leicester, Kenyon (1948, Fig. 52, No. 26) and to the end of the fourth century at Old Ford, Sheldon (1971, Fig. 8, Nos. 37-41).

Storage Jars

47. Reddish brown sandy fabric, thin core which is light grey in colour. Black burnished slip on rim and outer surface, combed decoration on shoulder. At Old Ford the type is present in a group dated A.D. 395+, Sheldon (1971, Fig. 9, No. 10).
48. Sandy grey fabric with black slip coating on rim and outer surface. Similar in fabric to No. 47.
49. Sandy grey-buff fabric, inner surface oxidised orange. At Cobham a similar vessel is dated A.D. 320-360, Frere (1942, Fig. 137, No. 41).

Dishes

50. Hard light grey fabric, dark grey-black smooth surface with traces of burnishing.
51. Smooth buff fabric with creamy pale orange slip on inner surface and rim.
52. Coarse grey fabric, black granular outer surface. Inner surface covered with black burnished slip.
53. Hard reddish-grey fabric with black burnished surfaces, burnished decoration on body.
54. Light grey fabric, black burnished slip on inner surface.

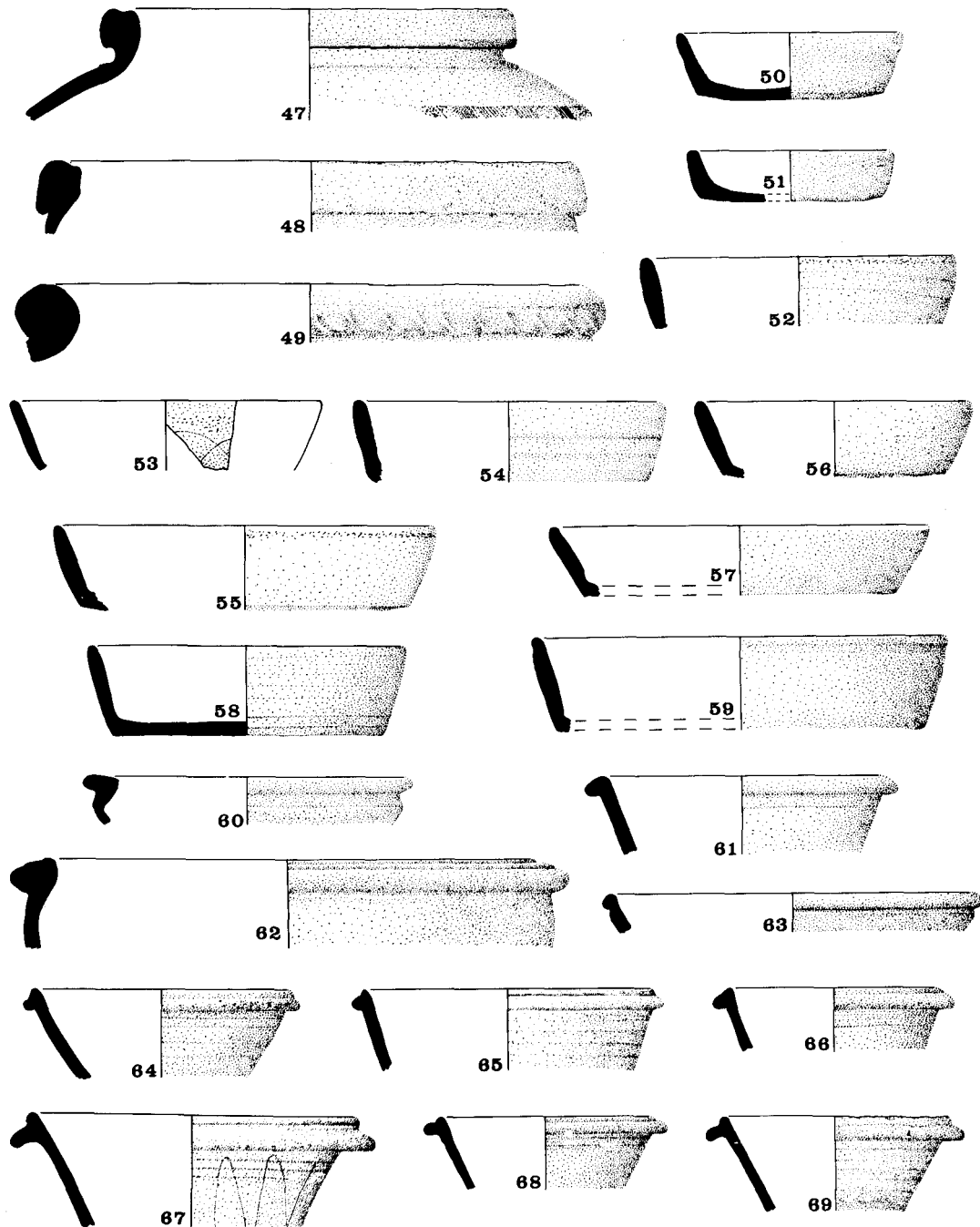


Fig. 8. Northumberland Wharf: The Roman pottery Nos. 47-69 ($\frac{1}{4}$).

55. Reddish-brown fabric, black burnished slip on inner surface.
56. Grey fabric containing quartz grits. Black burnished slip.
57. Brown-grey fabric, black burnished surface inside, smoothed outer surface.
58. Smooth grey fabric, black burnished outer surface. This type is dated A.D. 350+ at Winchester, Cunliffe (1964, Fig. 21, No. 27).
59. Hard grey fabric with black burnished surface on rim and inner surface. At Gadebridge, Neal (1974, Fig. 105, No. 276) dated mid-late fourth century.

Bowls

60. Hard sandy grey ware with smooth black slip burnished on rim.
61. Coarse black fabric with smoothed horizontal band beneath rim on outer surface.
62. Hard grey sandy fabric with smooth dark grey surfaces, black slip on upper part of rim.
63. Hard orange fabric with smoothed outer surface. Similar to a vessel from Shakenoak, Brodribb *et al.* (1973, Fig. 40, No. 727) dated A.D. 365-390.
64. Sandy light grey fabric, white slip on rim and inner surface. Similar vessels present at Verulamium, Frere (1971, Fig. 135) dated A.D. 310-315.
65. Hard grey-brown fabric, black burnished slip on all surfaces. At Darenth, Philp (1973, Fig. 44, No. 400) dated to the end of the fourth century.
66. Hard grey-brown fabric, black burnished slip on all surfaces. Similar fabric to No. 65.
67. Hard grey fabric with dark grey surfaces coated in black slip on rim and inner surface. Traces of burnishing remain on rim. A similar vessel dated A.D. 310-315 at Verulamium, Frere (1972, Fig. 135, No. 1173) and to the late fourth century at Old Ford, Sheldon (1971, Fig. 7, No. 10).
68. Grey fabric, black burnished slip on all surfaces. Similar to Nos. 65 and 66 in fabric. At Latimer dated A.D. 290-310, Branigan (1971, Fig. 29, No. 156).
69. Coarse gritty grey-black fabric with black slip on all surfaces.
70. Sandy grey fabric with smoothed surface finish. At Verulamium, Frere (1972, Fig. 133, No. 1126) dated A.D. 300-315.
71. Hard grey finely granulated fabric with pinkish tinge towards the surface. Black burnished finish on upper part of flange and inner surface.
72. Coarse light grey fabric with whitish-grey slip on upper flange and inner surface. At Old Ford a similar vessel without decoration is dated A.D. 379-408, Sheldon (1971, Fig. 11, No. 3).
73. Coarse grey-brown fabric with black burnished surface.
74. Hard sandy grey fabric darkening towards surfaces. Upper part of rim and inner surface covered in thick white slip. Probably a product of the Farnham kiln.
75. Hard grey fabric with black burnished surface on rim and inside surface.
76. Hard grey fabric with burnished surfaces as above. At Richborough, Bushe-Fox (1928, Type 121) and Winchester, Cunliffe (1964, Fig. 20, Nos. 1 and 16), the type is dated to the mid fourth century.
77. Light grey sandy fabric with whitish-grey slip on upper flange and inside surface. Smoothed lines on outer body.
78. Light grey fabric as above. Black burnished slip on rim and inner surface.
79. Hard dark grey micaceous fabric, whitish-grey slip on rim and inner surface. At Lockleys, Ward Perkins (1938, Fig. 9, Nos. 8, 9 and 11) similar vessels are dated A.D. 300-340.
80. Hard grey fabric, black burnished slip on rim and inner surface.
81. Hard grey ware with black burnished slip on flange and inner surface.
82. Hard grey fabric. Black burnished slip on top of flange and inner surface almost to base. Similar vessels present at Latimer in a group dated A.D. 290-310, Branigan (1971, Fig. 29, No. 161).

Flagon

83. Hard light grey fabric with whitish-grey slip on rim and outer surface.

Mortaria

84. Cream ware mortarium from the Oxford region. Sandy fabric with translucent pink and white grits. A.D. 250-400.

Summary

On coin evidence the group must date to the period A.D. 335+. Only one of the pie dishes present is decorated and it has been noticed that in Brentford as on other sites, the trend for decoration appears to diminish towards the later part of the fourth century. The storage jars were probably made at the Farnham kiln and are of the type being produced by that kiln in the fourth century. The bead rim bowl (No. 63) is similar to vessels from the Much Hadham kiln in Hertfordshire, products which were probably made at this kiln have been recognised in other Brentford groups where they have been dated to the second half of the fourth century. The jars present show many similarities with groups of later fourth century date at Old Ford as do several of the flanged bowls. There are present, however, several bowls with small flanges (notably Nos. 64, 65 and 66), these have been given a third century date in previous Brentford groups. The large reeded rim bowl is of a type found in Brentford before (Z/12) and given a third century date.

The group of beakers shows great variety and probably represents more than one production centre. All the types are of late third or fourth century date and comparison must again be made with the Bow groups of late fourth century date. Comparison with other Brentford groups shows similarities with Z/2, thought to be of mid fourth century date.

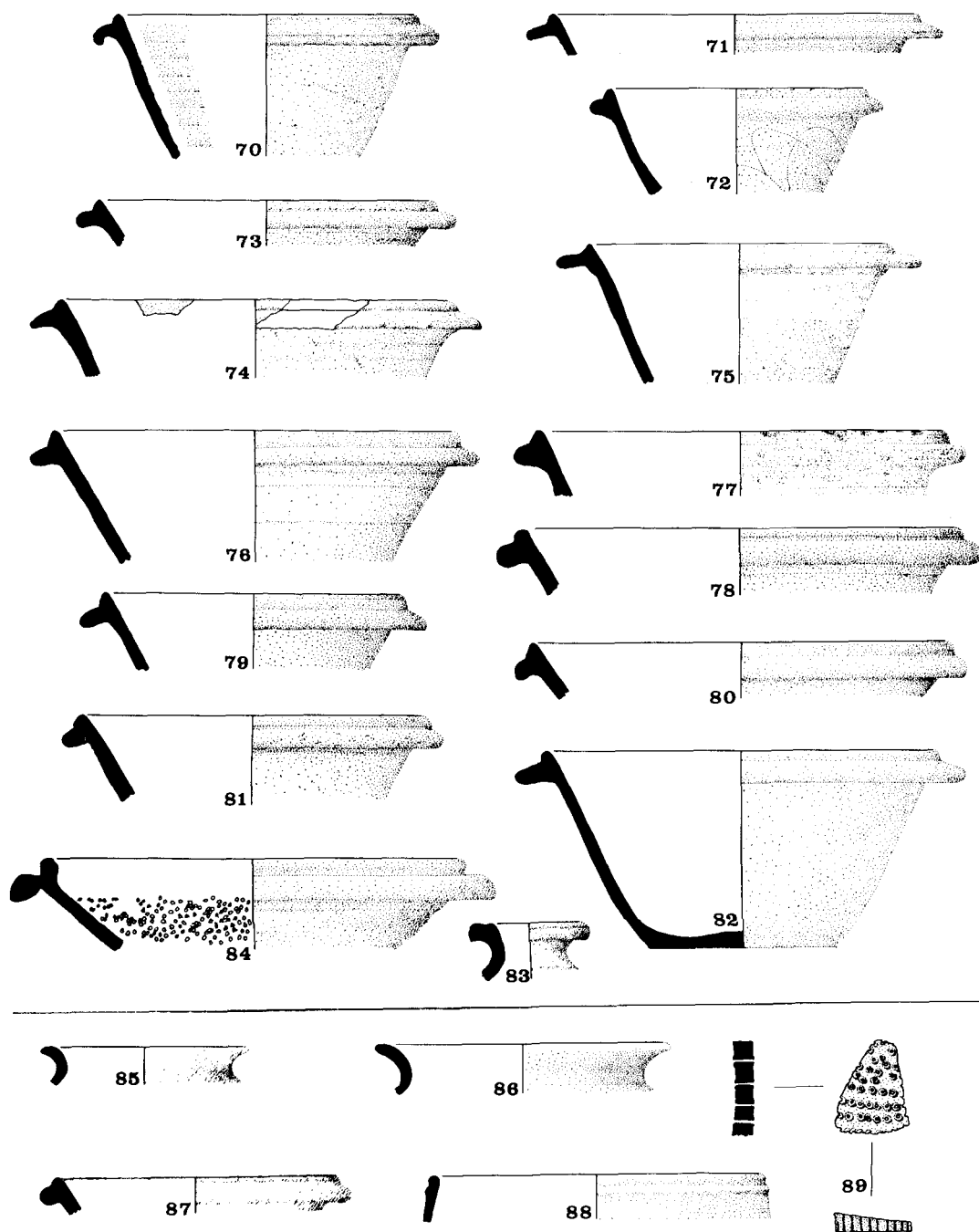


Fig. 9. Northumberland Wharf: The Roman pottery Nos. 70-89 ($\frac{1}{4}$).

Also present in this group was a rim sherd of a flanged mortarium in red colour coated fabric, from the Oxford region, body sherds of Oxfordshire cream ware and a sherd of mortarium from the Mancetter/Hartshill potteries dated to the third or fourth centuries.

(F5) The round pit or post-hole on Site A (Fig. 9, 85–89)

Jars

85. Hard light grey fabric with dark grey burnished outer surface.
86. Hard grey fabric similar to 85. Dark grey matt surface with black burnished finish on inner rim. At Jewry Wall, Leicester, this type appears in the first half of the third century, Kenyon (1948, Fig. 50, No. 32) but continues into the late fourth century, Sheldon (1972, Fig. 11, No. 27) at Old Ford.

black burnished slip on rim and inner surface. Similar vessels present in late fourth century groups at Old Ford, Sheldon (1972, Fig. 5, Nos. 16 and 20).

88. Double bead rim bowl from the Oxford region. Fine pale orange fabric with darker orange colour coat. A.D. 250–350.

Bowls

87. Coarse grey fabric with translucent grit tempering,

Strainer

89. Fragment of a strainer in hard light grey fabric containing holes *c.* 2mm in diameter.

Summary

The presence of a flanged bowl of fourth century type and mortarium body sherds from the Oxford region dated A.D. 250+ indicate a late third or fourth century date for the group. A fragment of a similar strainer was present in another Brentford group—Z/1 which was dated to the mid-late fourth century.

From the base of the topsoil on Site A (Fig. 10, 90–93)

Coin Evidence (see No. 1, p. 202)

Barbarous radiate, third century.

vessels at Latimer, Branigan (1971, Fig. 30, No. 229) dated A.D. 290–310 and at Old Ford, Sheldon (1972, Fig. 11, No. 15) where it is dated A.D. 379–408.

Samian

Undecorated: one sherd, Hadrianic–Antonine.

Jars

90. Hard reddish-brown micaceous fabric, dark grey surfaces with traces of burnishing on inside rim, at Darenth a similar type is dated A.D. 250–300, Philp (1973, Fig. 42, No. 327).
91. Hard grey fabric with matt grey surfaces. Similar to

Bowls

92. Hard grey fabric, black burnished surface on rim and inner surface. Dated A.D. 395+ at Bow, Sheldon (1971, Fig. 7, No. 20).
93. Coarse black fabric, black burnishing on rim and inner surface. At Winchester dated A.D. 270–350, Cunliffe (1964, Fig. 19, Nos. 10–12).

Summary

This small group of sherds was recovered from the base of the topsoil sealing Site A and is likely to be derived from or contemporary with the latest features on the site (F3, F4 and F5).

(F6) Phase 1 ditch on Site C (Fig. 10, 94–96)

Jars

94. Coarse black grass tempered fabric. The body is hand-made and the rim wheel finished. A first century type, comparison may be made with a vessel dated A.D. 60–75 at Verulamium, Frere (1972, Fig. 105, No. 191), and the type was also found in pre-Flavian levels at Silchester, Boon (1969, Fig. 12, Nos. 57–69).

95. Hard grey core with orange surfaces. Brown slip on outer surface.

Dish

96. Hard sandy finely granulated fabric, pale orange in colour. A similar vessel is dated A.D. 85–105 at Verulamium, Frere (1972, Fig. 108, No. 315).

Summary

This group probably dates to the first century. There was present a small fragment of an Oxfordshire rouletted beaker dated A.D. 250+ but as the upper levels of this ditch contained post-medieval disturbance, it is likely that this sherd is not contemporary with the filling of the feature.

(F7) Phase 1 ditch on Site C (Fig. 10, 97–107)

Samian

Undecorated: one sherd, Neronian.

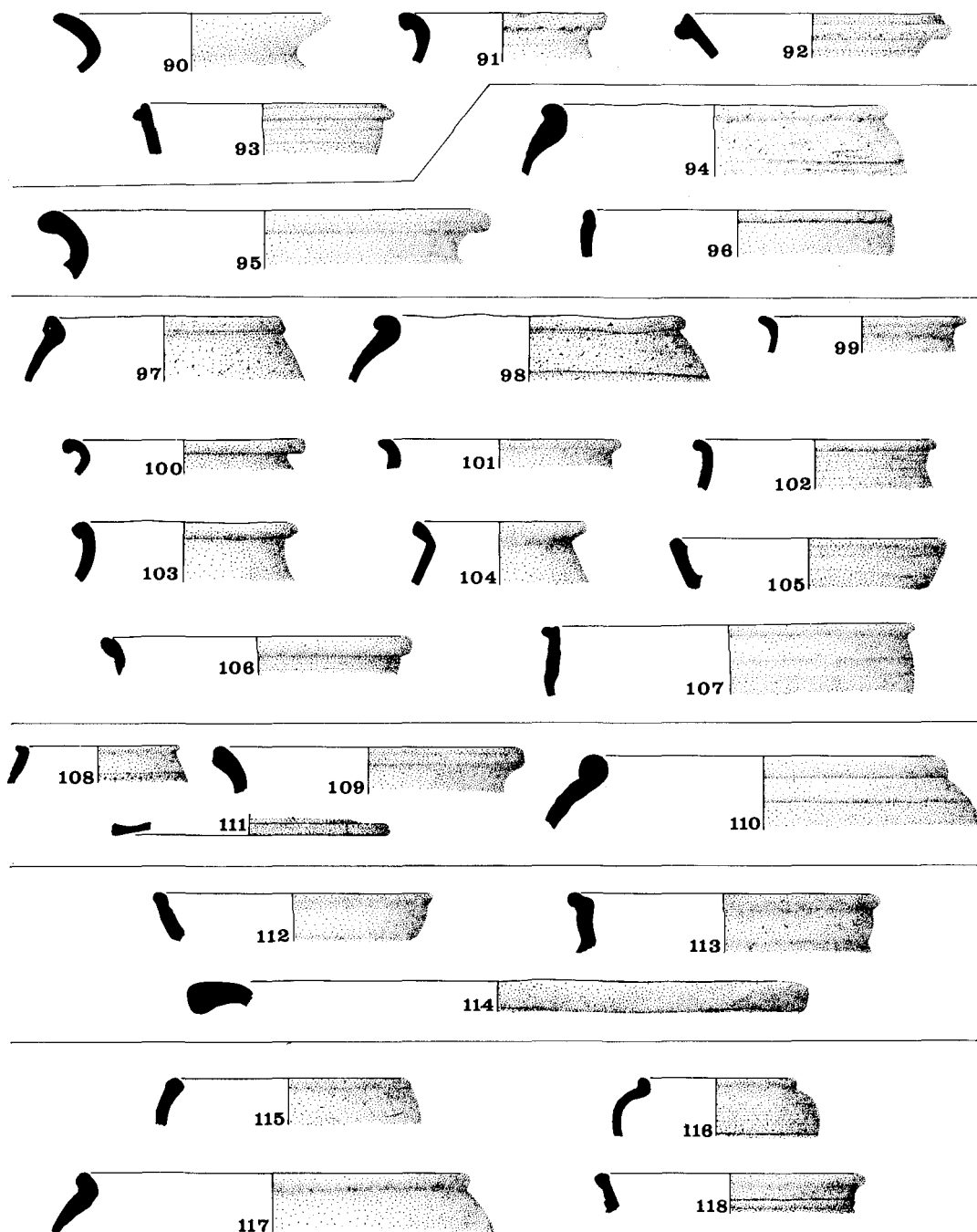


Fig. 10. Northumberland Wharf: The Roman pottery Nos. 90-118 ($\frac{1}{4}$).

Jars

97. Coarse porridge-like grey fabric with black surfaces.
98. Coarse grass tempered ware, blackish-brown in colour. At Eastwood, Philp (1963, Fig. 5, No. 12), a similar vessel is dated to the pre-Flavian period.
99. Fine smooth light grey fabric with dark grey slip coated surfaces. A similar vessel present in a previous Brentford group (Z9B) which was dated to the Flavian period.
100. Granular grey-brown fabric with dark grey surfaces. A similar form is dated A.D. 100–150 at Brentford (Z37).
101. Coarse gritty black fabric with black burnished rim and outer surface.
102. Hard grey fabric with smooth surfaces.
103. Grey sandy fabric with grey-brown surfaces. At Fishbourne dated A.D. 43–75, Cunliffe (1971, Fig.

103, No. 181.6).

104. Smooth reddish sandy fabric with grey surfaces.

Dish

105. Coarse gritty grey fabric with smooth buff coloured surfaces.

Bowls

106. Hard light grey fabric with black surfaces, internal groove on rim. At Chichester a similar form is dated A.D. 80–100, Down and Rule (1971, Fig. 5.20, No. 26C). The form is also present in Z6A, dated to the Flavian–Trajanic period.
107. Hard light grey fabric with smooth dark grey surfaces. Also present in Z6A and dated A.D. 75–105 at Verulamium, Frere (1972, Fig. 109, No. 345).

Summary

This group has many similar traits to other Brentford groups of late first or early second century date. Although some of the types, i.e. the bead rim jar (No. 4) so characteristic of the native forms of the first century, continue in use well into the second century, other forms would appear to continue in use certainly no longer than the Hadrianic period, for example Nos. 106 and 107. Similar vessels to these are present in Z6A which is dated to the late first or early second century.

(F8) Phase 1 pit on Site C (Fig. 10, 108–111).**Beaker**

108. Fine grey-buff fabric with smooth dull grey surfaces. Incised line decoration on shoulder.

110. Hard grey granular fabric with grey-black surfaces. At Purberry Shot a group of similar vessels is dated A.D. 150, Lowther (1949, Fig. 28).

Jar

109. Light grey sandy fabric with darker grey surfaces.

Lid

111. Hard granular orange fabric.

Summary

Vessels similar to No. 108 are found at Verulamium in groups dated A.D. 150–160 and the bead rimmed jars found continue in use throughout the second century on sites in Brentford and compare with other second century jars.

(F9) The lower filling of the second century pit on Site C (Fig. 10, 112–114)**Dish**

112. Coarse grog tempered fabric with smooth grey burnished surfaces. Internal groove below rim.

century, Lowther (1949, Fig. 29, Nos. 1–5).

Bowl

113. Hard granulated whitish-grey fabric. Possibly part of a vessel similar to those found at Purberry Shot in Surrey and dated to the first half of the second

Storage Jar

114. Coarse porridge-like reddish-brown fabric with black surfaces. At Silchester, Boon (1969, Fig. 12, No. 76) dated A.D. 45–65 and at Verulamium, Frere (1972, Fig. 105, No. 201) dated A.D. 60–75.

Summary

These three vessels from the lower filling of pit (F9) are likely to be of late first to early second century date. Similar types have already been found in other Brentford groups of comparable date.

(F9) The upper filling of the second century pit on Site C (Fig. 10, 115–118)**Jars**

115. Hard brown fabric similar to No. 118 with grey-brown surfaces. A similar vessel dated A.D. 130–150 at Verulamium, Frere (1972, Fig. 119, No. 700).
116. Sandy smooth light grey fabric, similar to a group of

bead rim jars found at Winchester dated A.D. 54–79 but the type does continue in use into the second century. At Fishbourne, Cunliffe (1971, Fig. 74, No. 10) dated A.D. 100–200.

117. Coarse grey-brown fabric with grit intrusion, darker grey-brown surfaces. At Chichester a similar type is dated A.D. 43–70, Down and Rule (1971, Fig. 3.7, No. 2) and also to the second half of the first century at Verulamium, Frere (1972, Fig. 108, No. 304).

Summary

The bead rim jar represents a type which is common in the first century but as stated previously does continue well into the second century and the dating of this group must rely on the bowl No. 118. Present in the Flavian period at Verulamium, these open bowls are probably imitations of samian vessels. The closest parallel is however of mid second century date and a similar date is given to this group which is from the upper filling of pit (F9) on that basis, the lower filling, containing sherds of late first to early second century date.

(F11) The square pit on Site C (Fig. 11, 119–126)

Samian

- Undecorated: one sherd, Antonine.
Two sherds, mid-late Antonine (both burnt).

Jars

119. Coarse dark grey-black fabric containing large white flint grits. Black burnished rim and outer surface above shoulder. Burnished lattice work below shoulder.
120. Fine grey fabric with orange core. Probably residual, cf. Hull (1958, Fig. 54) where similar types are dated A.D. 10–65 at Colchester.
121. Hard coarse grey ware with dark grey burnished slip on rim and outer surface of neck.
122. Coarse grey ware with lumpy surface, contains large grits in fabric and incised groove around shoulder.
123. Coarse pinkish buff finely granulated fabric, pale grey at core.

Summary

Although a third century date is likely for some of these vessels (i.e. Nos. 119, 124, 125 and 126) it appears that the material covers a rather wide period of time, vessels 120, 123 and the samian being of early date. This rather wide date range is however, explained by the nature of the feature which was a deep pit in which rubbish deposits appear to have built up over a period of time.

(F10) The circular pit of third century date on Site C (Fig. 11, 127–143)

Coin Evidence (see p. 203)

- Septimius Severus, A.D. 202–210.
Gallienus, A.D. 260–268.
Barbarous radiate, later third century.
Two illegible barbarous radiates, third century.

Samian (see p. 200)

- Undecorated: three sherds, Antonine.
Four sherds, second century.
One sherd, later second century.
Decorated: Form 37, c. A.D. 150–170.

Beakers

127. Pale orange-buff fabric with dark grey-brown metallic coating and barbotine decoration. At Verulamium a similar vessel is present in an early fourth century group, Frere (1972, Fig. 134, No. 1144).
128. Fine hard orange fabric with brown colour coat.

Bowl

118. Hard brown fabric with grey-brown surfaces. Bowls of similar form are present at Verulamium dated A.D. 150–155, Frere (1972, Fig. 127, Nos. 946–950).

Dish

124. Coarse dark grey-black fabric with black burnished rim and interior surface, burnished interlacing arcs on outer surface and on base.

Bowl

125. Hard rather finely granulated buff ware, a type characteristic of the later second and early third centuries. At Latimer the type is present in a group dated A.D. 290–310, Branigan (1971, Fig. 29, Nos. 173, 175 and 177).

Mortaria

126. Hard rather sandy cream ware. Found in third century groups at Verulamium, Frere (1972, Fig. 132, Nos. 1095 and 1098) and at Colchester, Hull (1958, Fig. 66, No. 73) from c. A.D. 190 onwards.

Jars

129. Hard coarse light grey fabric containing a few small grits.
130. Hard sandy light grey ware, matt black slip on top and inside of rim, also around outer surface of neck.
131. Hard finely granulated buff ware with squared-off rim.
132. Fine light grey fabric with dark matt slip on surfaces.

Storage Jar

133. Hard fine pale grey-buff fabric with paler grey core.

Dishes

134. Shallow dish or platter in sandy red-brown fabric with black surfaces. Burnishing on outer surface.
135. Sandy grey-brown fabric. Inner surface and upper part of outer surface coated with burnished grey slip. Traces of burnished linear pattern on outer surface.

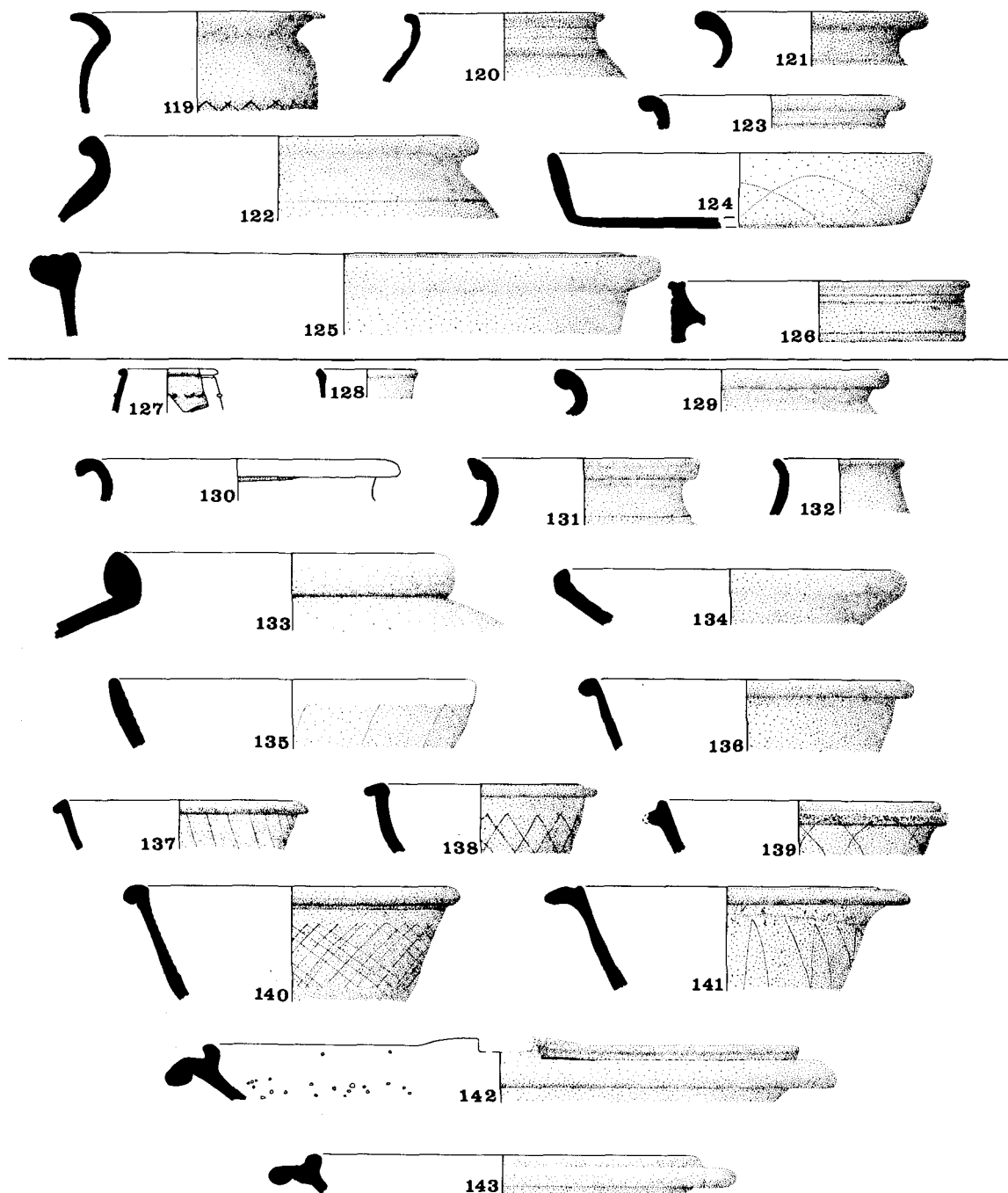


Fig. 11. Northumberland Wharf: The Roman pottery Nos. 119-143 ($\frac{1}{4}$).

Bowls

136. Fine grey fabric with matt dark grey slip coated surfaces. At Darenth, Philp (1973, Fig. 42, No. 336) dated to the late third to fourth century.
137. Fine smooth grey-black fabric covered in cream-red slip. Traces of burnished lines on outer surface.
138. Coarse dark grey-black fabric with burnished lattice work on body. The type is present in a group from Verulamium dated A.D. 150-160, Frere (1972, Fig. 128, No. 976).
139. Coarse dark grey-brown fabric with many small white grits. Burnished on inner and outer surfaces.
140. Hard grey ware with black burnished interior rim and outer body surface. Burnished lattice work on outer surface.

141. Fine hard grey ware with bands of burnishing on interior of rim and outer surface. The type appears in third century groups in Brentford and is also present in a group from Colchester, Hull (1958, Fig. 67, No. 102) dated A.D. 98-217, also at Leicester, Kenyon (1948, Fig. 50, No. 11), a similar type is dated A.D. 200-250.

Mortaria

142. Cream ware mortarium from the Oxford region, translucent pink and white grits.
143. Cream ware mortarium from the Oxford region, fabric as above. Both vessels probably date to the period A.D. 250-350.

Summary

The coin evidence from this pit group indicates a date after *c.* A.D. 260, and the presence of Oxfordshire mortaria dated A.D. 250+ substantiates a date in the later third or fourth centuries for the group. Also present was a sherd of an Oxfordshire red colour coated mortarium and three sherds of Pompeian red-ware. However, certain traits indicate a date no later than A.D. 260-350. The bowl, No. 141 is of a type normally found in third century deposits in Brentford, and four moulded rim bowls, not normally common in fourth century groups are present and unlikely to be derived from the ditch (F7).

THE SAMIAN WARE

by

*Geoff Marsh***The Decorated Samian**

1. Unstratified. This vessel was found in the area between Sites A and C.

Form Drag. 29, South Gaul. The upper frieze consists of pendants and wreaths containing spurred buds. The lower frieze is decorated with a winding scroll ending in frilled leaves and lanceolate buds. A goose, Oswald (1937, No. 2244) has been stamped twice on the scroll. The area beneath the loops of the scroll has been divided horizontally by wavy lines with a griffon, Oswald (1937, No. 881) and a lion, Oswald (1937, No. 1417) above S-shaped gadroons. A close parallel occurs at Fishbourne, Dannell (1971, Fig. 128, No. 20) attributed to Passienus but it is suggested that this design has been 'lifted', Dannell (1971, 269). Passienus also used the lion, Knorr (1952, Taf. 62, 32). The vessel has been mended with a lead rivet. A.D. 65-80.

2. Unstratified, from the surface of Site C. (Nos. 2-4 not illustrated.)

Form Drag. 37, Central Gaul. Abraded sherd with part of a double bordered ovolo ending in a blurred rosette. Below a border of medium sized beads is a demi-medallion containing a rabbit, Oswald (1937, No. 2116) used by many of the Lezoux potters. A.D. 125-150.

3. Pit (F10)

Form Drag. 37, Central Gaul, in the style of Cinnamus. Below his ovolo 3 is a border of medium sized beads and beneath is a typical scroll with a bird, Oswald (1937, No. 2228), cf. Stanfield and Simpson (1958, Pl. 162, No. 57). Burnt. A.D. 150-170.

4. Pit (F10)

Form Drag. 37, Central Gaul, in the style of Cinnamus. This small fragment shows an identical scheme to that above (No. 3), but it is thinner and seems to be from a different vessel. A.D. 150-170.

(The plain samian has been used to date the coarse wares but this information will be found incorporated in the Roman pottery report.)

THE ROMAN SMALL FINDS (Fig. 12)

by

*Hugh Chapman***Copper Alloy**

1. (From the topsoil on Site C.)

Brooch. Camulodunum Type IV. Main head twisted from the bow; pin missing and half of the eight-turn spring (held by a pin through a perforated cast lug) is lacking. Apart from the 'rat-tail' trailing up the bow

from the extension of this lug on the head of the brooch, there is no decoration. The catch-plate is not perforated. Flashing from the casting visible running along the underside of the bow. Second half of the first century A.D.

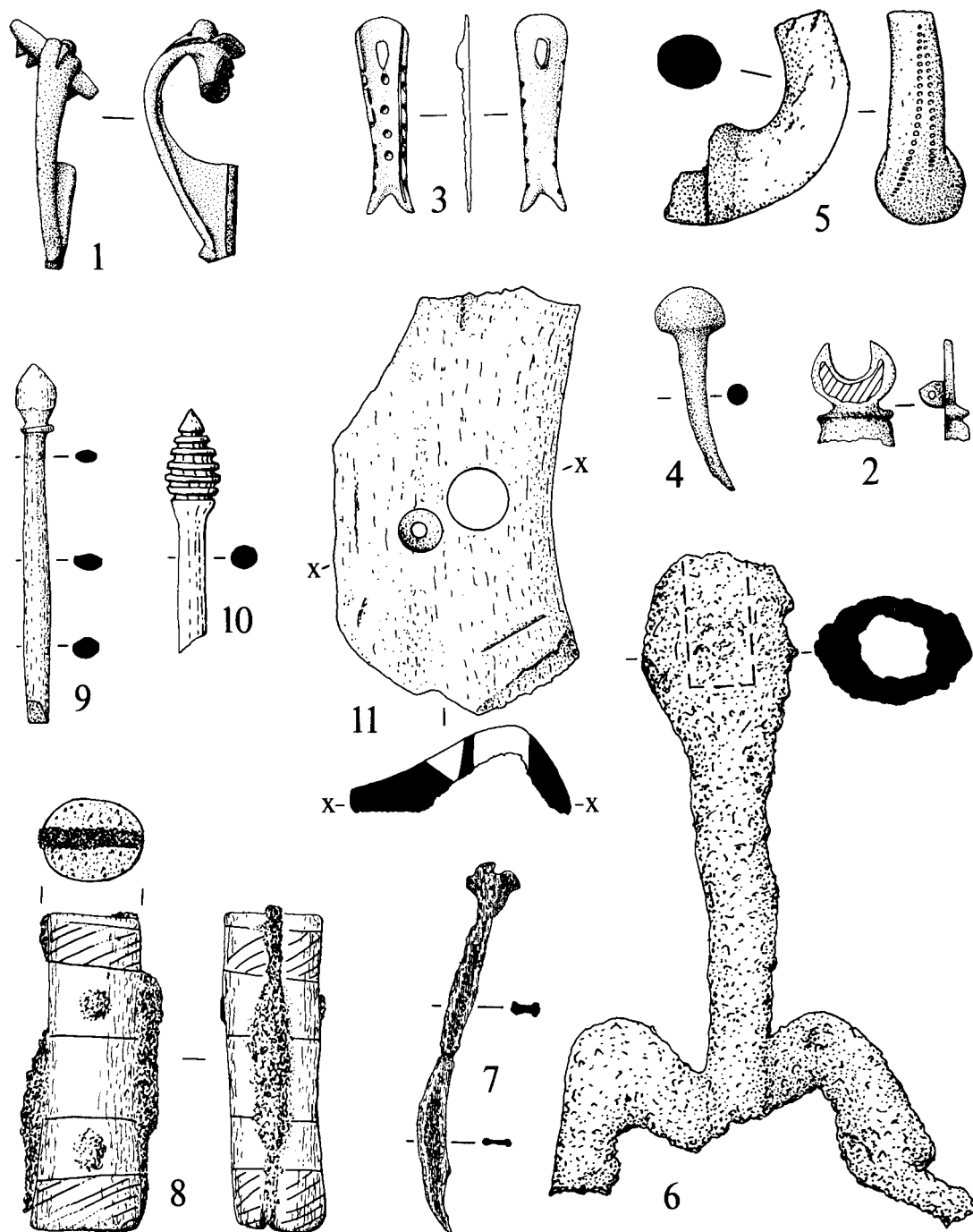


Fig. 12. Northumberland Wharf: The Roman Small Finds ($\frac{1}{4}$).

2. (From the ditch (F7) on Site C. Late first to early second century.)

Mr. Don Mackreth writes:

"Only the head end of this brooch survives, with the mounting for a hinged pin. This is behind a crescent, inlaid with red enamel, which lies above a cross-mounting with a series of cross cuts along it. The rest of the brooch is missing.

Although so little survives, the use of the crescent is not common and parallels for it place the brooch securely in a particular class, v. Cologne (1939, 86, Taf. 5.1.46), Saalburg (1972, 104, Taf. 961 and 962) in which there is a great eclecticism in the use of a relatively narrow range of motifs. It is clear that such brooches were made on the continent and imported into Britain where they are not very common. Dated specimens are rare and those which seem to have relatively reliable contexts suggest that the *floruit* is the second century with, perhaps, an emphasis on the first half; at Camerton before c. A.D. 180, Wedlake (1958, 230, Fig. 53, No. 48); at Verulamium c. A.D. 155-160, Waugh and Goodburn (1972, 118 and Fig. 31, No. 23) and at Winchester (Cathedral Green excavations, unpublished) mid to late second century".

3. (From the ditch (F6) on Site C. Late first century.)
Nail cleaner from pocket toilet instrument set.

4. (From pit (F10) on Site C. Late third century.)
Stud with globular head and round shank.

5. (From pit (F9) on Site C. Late first to early second century.)

Fragment of terret ring; about one quarter of the hoop with moulded oblique collar and one stub end of the bar remains. Two lines of punched dots run along the top of the hoop joining into a single one towards the centre. For a similar terret ring of mid first century A.D. date v. Brailsford (1975, 223, Pl. 17, d and Fig. 4, e).

Iron

6. (From pit (F9) on Site C. Late first to early second century.)

Socketed candlestick, badly corroded; tripod legs, one complete, one and part of the third missing. The 'knees' are typically Roman. For other similar examples, Wheeler (1932, 93 and Fig. 23, Nos. 191 and 192); Richardson (1959, 74 and Fig. 13, No. 4); Manning (1972, 178 and Fig. 65, No. 51). For the characteristic shape of the legs developed from stylised animal legs see the (imported) lamp stand from London, London Museum (1930, 60 and Fig. 12, No. 1).

7. (From pit (F8) on Site C. Second century.)

Small bar, curved, hammered flat; one end pointed, the other splayed. Perhaps tongue of buckle.

Bone

8. (From ditch (F1) on Site A. Second half of the second century.)

Knife handle with incised decoration. The corroded tang of the iron blade and the fixing rivets remain between the bone plates.

9. (From ditch (F4) on Site A. Mid to late fourth century.)

Pin, hand cut shaft and plain cone-shaped head with single collar moulding at base.

10. (From ditch (F4) on Site A. Mid to late fourth century.)

Pin, hand cut shaft and cone-shaped head with transverse grooves.

11. (From ditch (F4) on Site A. Mid to late fourth century.)

Fragment of (animal) bone drilled with two holes, one tapering.

THE COINS

by

Ralph Merrifield

From the base of the topsoil on Site A

1. Barbarous radiate, AE 23mm, oval flan;
O. Garbled inscription, radiate bust r.
R. Garbled inscription. Pax (A) type.

(F1) The early ditch on Site A

2. Barbarous radiate, fragmentary, AE c. 17mm.
Tetricus II type.
O. Radiate bust r., beardless.
R. Garbled inscription. Pontifical instruments.

(F2) The Enclosure on Site A

3. Illegible through corrosion. AE 17mm. Late third to fourth century.

(F4) The Phase 3 ditch on Site A

4. Barbarous radiate, broken, AE c. 18mm.
O. Illegible, radiate bust r.
R. Illegible.

5. Barbarous radiate, Tetricus II type, AE 18mm.

O. [. . .] C. TETRICVS Youthful radiate bust r.
R. PAX[.] Pax (A) type.
Irregular die axis.

6. Illegible through corrosion. AE c. 20mm.

Indeterminate figure on R. in late third century style.

7. Illegible through corrosion. AE c. 19mm.

8. Constantinopolis, AE 12mm.

O. CONSTAN[TINOPOLIS]. Helmeted bust of Constantinople I.

R. Victory standing l. on prow of ship, holding transverse spear and resting on shield.

Mm. illegible. A.D. 335-341.

9. Illegible through corrosion. AE 17mm.

? Fourth century.

From the base of the topsoil on Site C

10. Claudius II, antoninianus, (R.I.C. *Claudius Gothicus* 145-7).

Mint of Mediolanum.

11. Barbarous minim, fourth century. AE 11mm.

O. Diademed bust r.

R. ? type.

(F10) The circular pit on Site C

12. Septimius Severus, forged denarius, cast in AE, (as R.I.C. *Septimius Severus* 266, of A.D. 202-210). No trace of silvering remains.

13. Gallienus, antoninianus, (as R.I.C. *Gallienus, Sole Reign*, 207, but bust r.). Mint of Rome, A.D. 260-268.

14. Barbarous radiate, Tetricus II type, AE 16mm.

O. [. . .]RICVS C. Radiate beardless bust r.

R. [. . .]AVG. Spes type, with drapery in l. hand detached from skirt.

15. Barbarous radiate, AE 15mm.

O. Radiate bust r. Illegible inscription.

R. Pax (A) type with vertical sceptre.

16. Barbarous radiate, AE 17mm.

O. Radiate bust r. Illegible inscription.

R. ? type.

Unstratified

17. Fourth century, illegible, AE 16mm.

O. Diademed bust r.

R. ? Victory advancing l., holding wreath and palm. If so, from size probably an issue of A.D. 337-346, rather than later.

THE ANIMAL BONES

by

Margaret Sutton

FEATURE NUMBER	<i>Bos</i> Cow	<i>Equus</i> Horse	<i>Sus</i> Pig	<i>Ovis</i> Sheep	<i>Oryctolagus</i> <i>Cuniculus</i> Rabbit	<i>Gallus</i> Chicken	<i>Canis</i> Dog
(F1) Site A ditch	1 (3)						
(F4) Site A ditch	4 (15)		2 (4)	2 (4)			
(F7) Site C ditch	1 (4)			1 (1)			
(F9) Site C pit	2 (4)						1 (1)
(F10) Site C pit	2 (6)		1 (1)	1 (1)	1 (3)		1 (1)
(F11) Site C pit	4 (12)	2 (4)		3 (4)		1 (1)	

The animal bones from Northumberland Wharf as represented by the minimum number of animals present within each feature. The figures in brackets represent the total number of bones found.

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ACKNOWLEDGEMENTS

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ROMAN POTTERY FROM BROCKLEY HILL, MIDDLESEX, 1966 and 1972-74

by
Stephen A. Castle

Archaeological excavations at Brockley Hill since 1937 have provided evidence of a flourishing coarse pottery industry there in the first and second centuries A.D. This report has two aims, firstly to describe the pottery and other artifacts found in the grounds of the Royal National Orthopaedic Hospital, on the west side of modern Watling Street, in 1966 and 1972-74 and secondly, to summarize the present knowledge of Roman activity at the site.

Part 1. The Finds from the Royal National Orthopaedic Hospital

Pottery found in 1966 (Figs. 1 and 2)

In 1966 Mr. J. A. Upton, the then hospital engineer, and his son Alan, discovered a quantity of first and second century coarse pottery in a flower bed between Brockley Hill House and the hospital tennis courts (N.G.R. c. TQ: 174941), immediately to the west of the large clay pit and hut (?) excavated by the late Mr. P. G. Suggett in 1953-54.¹ Included amongst this pottery are sherds of stamped mortaria of the potters Arentus (?), Driccius, Lallans or Lallaius, Melus I, Sollus and Videx (?), (Figs. 5, 6 and 8) and ring-necked flagon tops of short-expanding neck type (Fig. 5, 2-4).

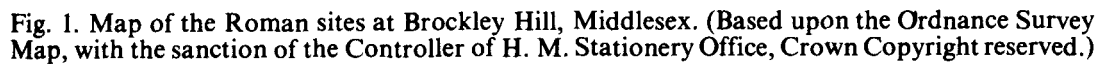
Pottery and other artifacts found in 1972 and 1973-74 (Figs. 1 and 2)

In February, 1971, work was carried out on the rebuilding of the tennis courts which lie on an earthen bank immediately north of Brockley Hill House (c. TQ: 174941). Earth moving on the north-west corner of the bank in connection with gardening brought to light considerable quantities of waste coarse pottery including notably sherds of stamped mortaria of the potters Doccas, Doinus, Lallans or Lallaius, Marinus, Matugenus and Saturninus I.² The tennis courts were erected in c. 1909 and it is evident that the earth forming the bank was obtained from surrounding areas, in particular the south side of the courts, where pottery kilns, pits and waste dumps were situated.

Two further mortarium stamps, one of Matugenus and the other of Saturninus I (Fig. 8), were found on the surface of the bank in 1972.

In September-October, 1973 and March-April, 1974, excavations were conducted on the north-west corner of the modern bank in the hope of recovering further re-deposited mortarium stamps. As expected, many hundredweights of first and second century coarse pottery sherds were recovered, including mortarium stamps of Arentus(?), G. Attius Marinus, Bruccius, Castus, Doccas, Doinus, Driccius, Gissus, Lallans or Lallaius, Marinus, Matugenus, Melus I, Mertucus and Saturninus I (Figs. 5-8).

Other finds include samian ware, in particular sherds of a decorated flagon (Fig. 3), a bronze dolphin-type brooch, a child's bronze bracelet, a graffito (Fig. 4) and an *as* of Antoninus Pius, A.D. 138-161.



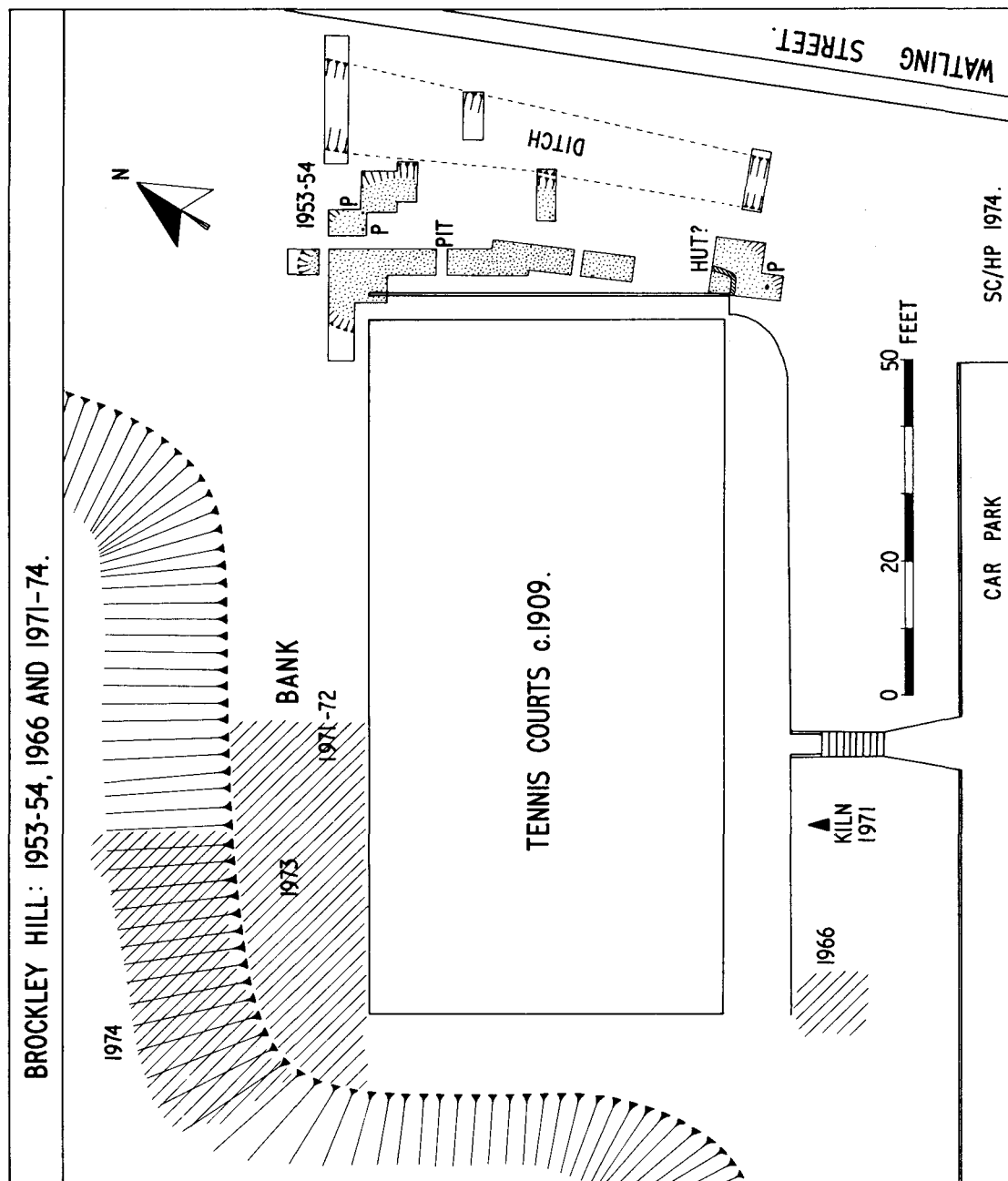


Fig. 2. Brockley Hill: Plan of the sites excavated in 1953-54 and 1971-74.

NOTES

¹ P. G. Suggett 'Excavations at Brockley Hill, Middlesex, August 1953 and 1954' *Trans. London Middlesex Archaeol. Soc.* 19, pt. I (1956) 1-11.

² S. A. Castle 'A kiln of the potter Doinus' *Archaeol. J.* 129 (1972) 69-88.

THE SAMIAN WARE

by

Miss C. Johns

A quantity of samian ware was recovered from the tennis court bank in both 1973 and 1974. Dragendorff forms 18, 18/31, 27, 29, 30, 33, 35 and 37 are well represented, whilst there were also two examples of Curle 11, one of Déchelette 67 and fragments of a decorated flagon. Only the more important fragments are listed below.

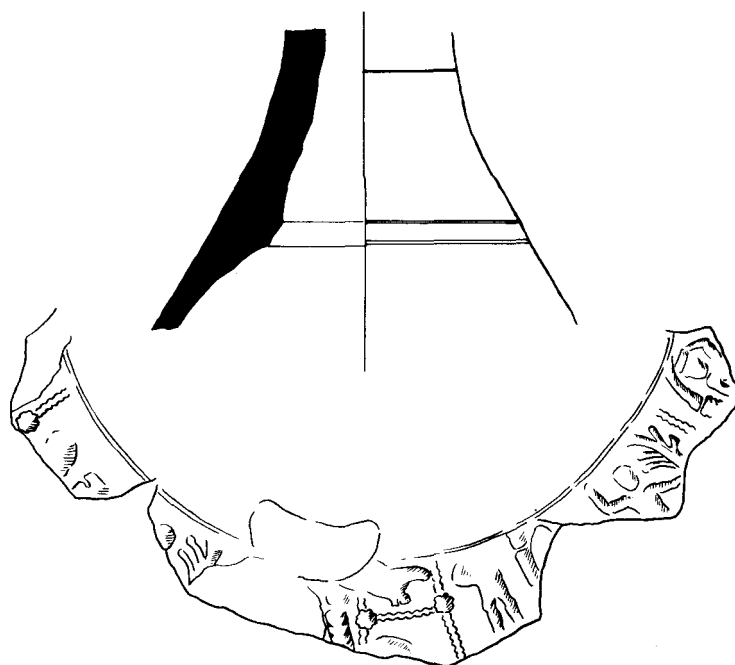


Fig. 3. Brockley Hill: Samian flagon from the Tennis Court Site, 1973 (1/2).

Tennis Court Bank, 1973

1. Curle 11, South Gaulish, probably early Flavian.
2. Curle 11, South Gaulish. Deep, curving flange. Probably Flavian.
3. The neck and upper part of a flagon (Fig. 3), with the broken remains of a handle attachment on the neck. The fabric is very thick on the neck (c. 11-15mm), thinning down to 6mm on the body. The fabric is fine, pink with some flecks of cream, and has a good red slip.

Little of the decoration remains. There is no special upper border, and the small panels are divided by thick wavy lines with large, blurred rosette junctions. Figure-types are blurred and incomplete, and therefore difficult to identify with any certainty. Badly damaged by the handle attachment is a bird figure-type in a small panel, possibly 0. 2293. The upper part of a human figure seems to be 0. 597, while another figure seems closest to 0. 94A, noted by Oswald as a Central Gaulish type.

Though the vessel appears to be South Gaulish, it does not resemble the large flagons already known from La Graufesenque. The decoration would suggest a very late date in South Gaulish production, probably Trajanic rather than late Flavian. The identification of the figure-types is too uncertain to base very much on them, though the copying of Central Gaulish figure-types in the second century at Banassac may be borne in mind.

Tennis Court Bank, 1974

4. Déchelette 67; two sherds, one of which is a rim fragment. Thin light orange micaceous ware; Central Gaulish. Trajanic.
5. Dr. 30; Central Gaulish, Trajanic ware. The fabric is typical of the best products of Les-Martres-de-Veyre.

The panelled decoration is divided by fine wavy lines with 11-pointed rosettes, *C.G.P.* (1958, Fig. 10, 24) at the junctions. The ovolo is the small one commonly used by the IOENALIS and DONNAVCVS groups of potters, *C.G.P.* (Fig. 10, 1) and the basal wreath, the small stylized ram's-horn are also used by both groups, *C.G.P.* (Fig. 10, 3). One of the panels contains an arch (plain double lines) supported on latticed columns *C.G.P.* (Fig. 10, 44) and enclosing a nude female figure holding a narrow piece of drapery across her thighs. The figure appears to be missing from Oswald's Index, but occurs on IOENALIS-group sherds illustrated in *C.G.P.* (e.g. Pl. 36: 426, Pl. 37: 434 and Pl. 37: 433). This latter is close to our piece in its general decorative scheme. Another panel contains the tripod, *C.G.P.* (Fig. 10, 39). The remaining panel, which occurs twice on this sherd, flanking the panel with the figure-type, has an acanthus *C.G.P.* (Fig. 10, 45) surmounting a composite vine-scroll formed of three separate stems. The individual vine motifs are seen on *C.G.P.* (Pl. 37: 430), and are not quite the same as the type illustrated in *C.G.P.* as a DONNAVCVS-group detail. Though the composite scroll is not illustrated in the same form as it takes on our sherd, *C.G.P.* does have examples of it used as a scroll (e.g. Pl. 41: 482 and Pl. 39: 456; the latter is on form Dr. 29/37). The status of the potters IOENALIS and DONNAVCVS is still far from clear, but it is certain that one is dealing with groups of potters rather than individuals, and that there are points at which the styles cannot satisfactorily be defined and separated. As defined in Stanfield's book, the style of this vessel certainly accords better with IONEALIS, but it should be noted that wavy-line borders are infrequent in this style, and that Dr. 30 is not recorded among the forms made. The date of the piece is about A.D. 100–110.

THE GRAFFITO

by

M. Hassall

Tennis Court Bank, 1974 (Fig. 4)

- G1. A graffito, perhaps the number VII, inscribed on a sherd of a roll-rimmed, black-burnished bowl or pie-dish. Alternatively, it could be part of a name (in the genitive) that ended in VIVS. However, it is uncertain from this single sherd whether the graffito is complete. Such roll-rimmed pie-dishes or bowls date from the mid second to fourth centuries. Cf. Castle (1973a, 95, Nos. 14–15) and Castle (1972a, 155, Nos. 22–23 and 156, No. 36).

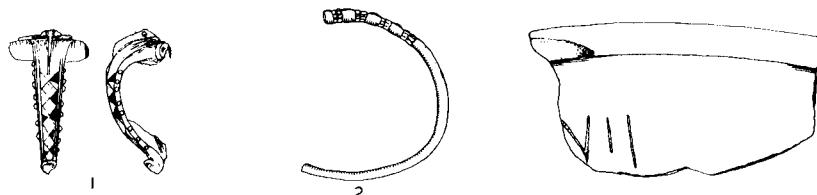


Fig. 4. Brockley Hill: Brooch, bracelet and graffito from the Tennis Court Site, 1973–74 (1/2).

THE SMALL FINDS

Tennis Court Bank, 1973 (Fig. 4)

1. A bronze dolphin-type brooch with red enamel inlay in the triangular panels and traces of orange enamel inlay in the diamond panels. The pin and catch-plate are broken. This type (Collingwood Group H) continued in use from the time of Nero to the mid second century. Cf. *London in Roman Times* (95, 21). Similar examples were found at Brockley Hill in 1968 and 1970 (see relevant reports).

Tennis Court Bank, 1974

2. A child's fragmentary bronze bracelet with ornate beaded decoration. First or second century date is suggested.

Tennis Court Bank, 1973

3. A fragmentary *as* of Antoninus Pius, A.D. 138-161, with reverse depicting Britannia. The lettering on both the obverse and reverse sides is illegible.

THE COARSE POTTERY

Tennis Court Bank, 1973 (Fig. 5)

1. A miniature bowl, possibly a toy, in granular buff ware. First to second century.

Flower Bed to south of the Tennis Courts, 1966

2. Ring-necked flagon with short-expanding neck in granular greyish-buff ware.
3. Ring-necked flagon with short-expanding neck in fine-textured brownish-orange ware with grey core and cream slip. There is an open heat crack on the neck and it is clear that this vessel could not have been used.
4. Ring-necked flagon with short-expanding neck in fine-textured orange ware with cream slip. The top of the neck is buckled and part of the bottom ring is smudged.

Ring-necked flagons of short-expanding neck type, in both granular and fine-textured wares were being produced at Kilns 12-14, on the east side of Watling Street, in c. A.D. 110-160, Castle (1973b, 78-83).

THE MORTARIUM STAMPS

by

Mrs. K. F. Hartley

(Figs. 5-8)

Not all of the mortaria listed below are illustrated.

ARENTVS(?)

Flower Bed south of the Tennis Courts, 1966

MS1. Granular ware overfired to dark grey with black and white flint grit.

Tennis Court Bank, 1973

MS2. Granular buff ware.

Tennis Court Bank, 1974

MS3. Vessel stamped ARENTVS/ARENTVS in granular cream ware.

Four stamps reading ARIINT (?) followed by X as a space-filler, perhaps for Arentus. Nine of his stamps have now been recorded from Brockley Hill, whilst another stamp was found at Radlett in 1959. Clearly he had kilns at both potteries. The rims of his vessels point to activity in c. A.D. 110-140.

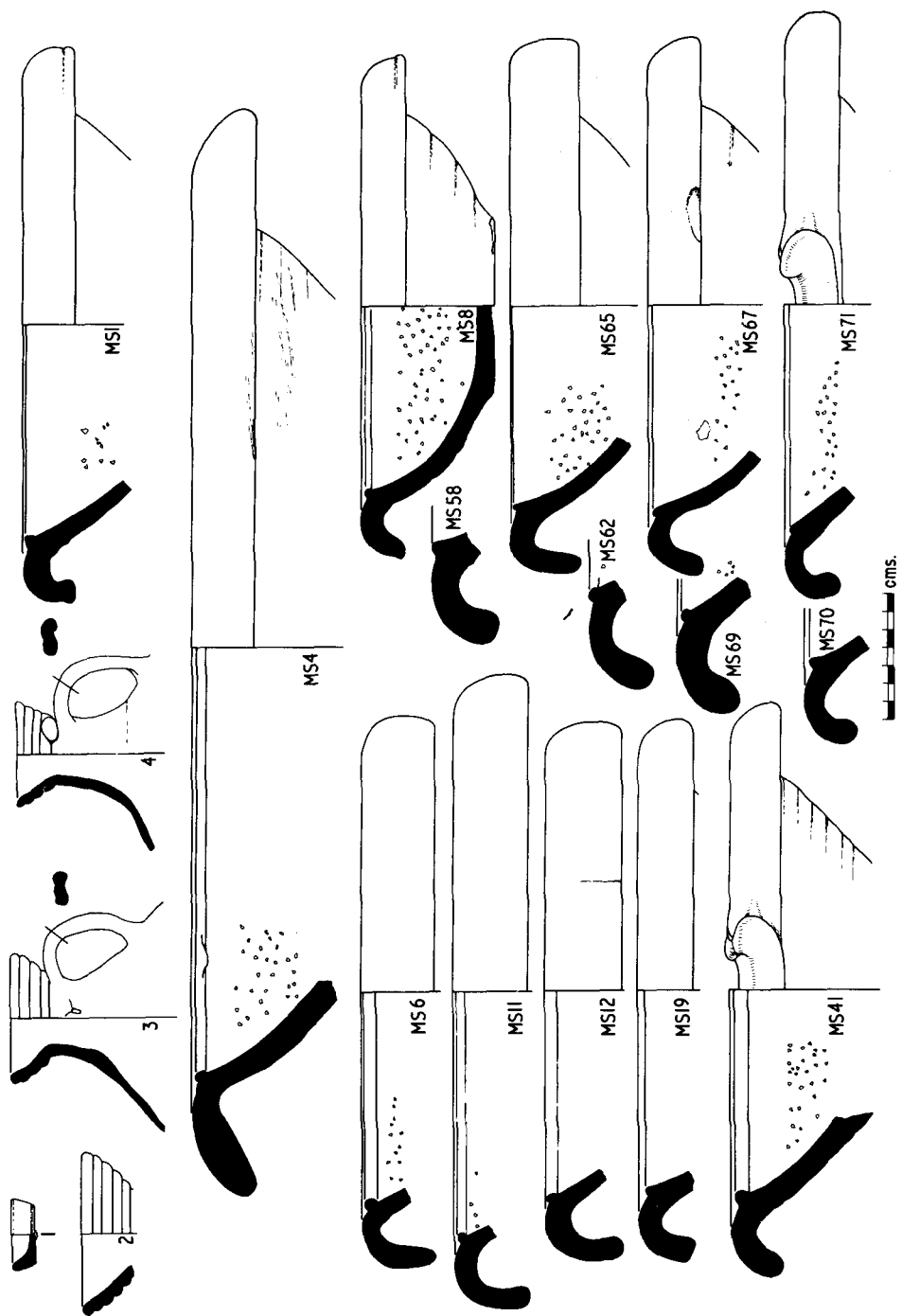


Fig. 5. Brockley Hill: Coarse pottery, including stamped mortaria, found in 1966 and 1973-74 (1/4).

G. ATTIVS MARINVS

Tennis Court Bank, 1973

MS4. An exceptionally large, badly finished mortarium in granular buff ware overfired to light grey and presumably a waster. Black, grey and white flint grit.

This is the second mortarium of G. Attius Marinus to be recorded from Brockley Hill and it seems likely that he used kilns here as well as at Radlett during his brief activity in this region. Cf. Frere (1972, 373, No. 12) *c.* A.D. 95-105.

BRVCCIVS

Tennis Court Bank, 1973

MS5. Granular cream ware.

Tennis Court Bank, 1974

MS6. Granular cream ware with grey, red and white flint grits.

Two stamps of the potter Bruccius probably from the same vessel. Thirteen of his stamps have now been recorded from Brockley Hill. A date in the period *c.* A.D. 85-120 is indicated for his products.

CASTVS

Tennis Court Bank, 1973

MS7. Granular cream ware.

MS8. Granular cream ware with black, grey and white flint grit.

Two stamps probably from the same die and possibly from the same vessel. These stamps can be attributed to Castus though they are probably from an unknown die. Twenty-two of his stamps have been found on a kiln-site at Radlett (Cf. *Proc. Soc. Ant. London* 2nd. ser. 17, 266). Three of his stamps have now been recorded from Brockley Hill. His career can be dated within the period A.D. 95-140 but he was probably not using this rim-profile before A.D. 110. Cf. Frere (1972, 374-75, Nos. 15-16).

DOCCAS

Tennis Court Bank, 1973

MS9. Granular ware overfired to reddish-brown with grey and white flint grit.

MS10. Granular orange-buff ware.

Tennis Court Bank, 1974

MS11. Granular buff ware slightly overfired to grey. A few grey and white flint grits.

MS12. Granular ware severely overfired to greyish-black with heat cracking.

Four stamps used by a potter whose name appears to be Doccas. Ten stamps from the same die have now been noted from Brockley Hill. A date in the period *c.* A.D. 85-110 is indicated for his activity at Brockley Hill.

DOINVS

Die A.

Tennis Court Bank, 1974

MS13. Granular ware overfired to grey.

Die C.

Tennis Court Bank, 1973

MS14. Granular ware severely overfired to dark bluish-grey.

MS15. Granular buff ware with grey and pink core. Black, grey, red and white flint grits.

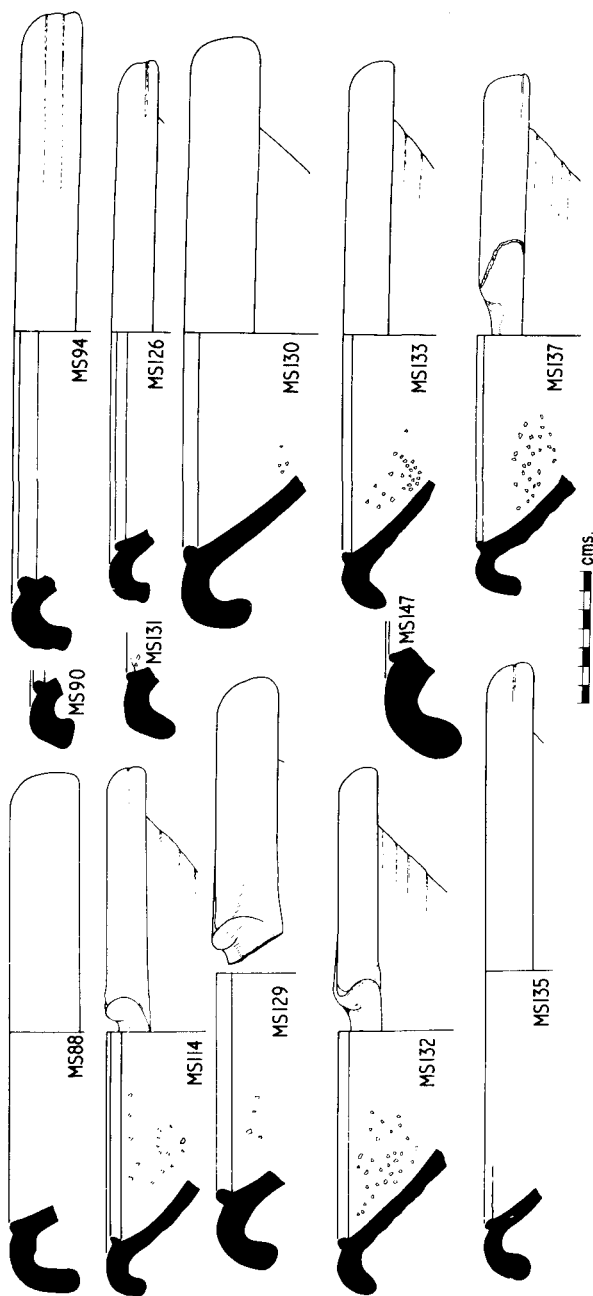


Fig. 6. Brockley Hill: Stamped mortaria found in 1966 and 1972-74 ($\frac{1}{4}$).

Die D.

Tennis Court Bank, 1973

MS16. Granular cream ware with pink core.

MS17. Granular buff ware.

MS18. Granular buff ware.

Tennis Court Bank, 1974

MS19. Granular buff ware partly overfired to grey.

MS20. Granular ware overfired to brown and grey.

MS21. Granular ware overfired to grey.

MS22. Granular ware overfired to grey.

MS23. Granular buff ware.

MS24. Granular buff ware partly overfired to dark grey.

MS25. Granular ware severely overfired to grey.

MS26. Granular cream ware.

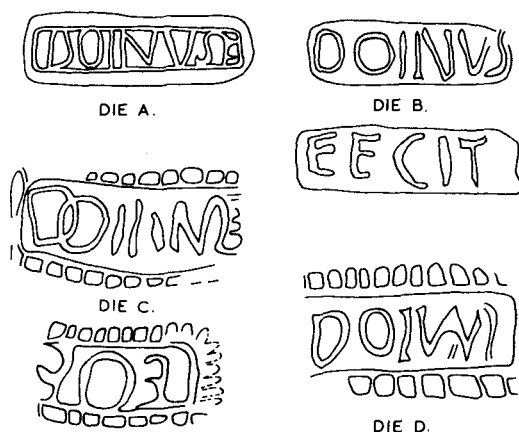


Fig. 7. Brockley Hill: The four namestamps and counterstamps used by the potter Doinus ($\frac{1}{2}$).

One stamp from Doinus's Die A, two from his Die C and eleven from his Die D. Doinus was working at the kiln excavated to the south of Brockley Hill House in 1971. His work has been dealt with in detail elsewhere, Castle (1972b, 69-88). Sixty-six (plus eight?) of his stamps have now been recorded from Brockley Hill.

It is noteworthy that Die C was the most rarely used of his four dies. Only one example of the namestamp has been recorded, appearing with its counterstamp on a mortarium from Malton (Norton) while the counterstamp alone has been noted from Brockley Hill; London; Margidunum; Slack and Southwark.

The mortarium from Slack is complete and has been stamped twice with the counterstamp only. As the two pieces from Southwark are in different parts of the country it is not possible to be certain if they are from the same vessel. However, when name and counterstamp are represented, as now, in the proportion of one to nine, it may be taken to suggest that there was a tendency for counterstamp C to be used alone, perhaps because the namestamp had got damaged. Doinus's career may be dated to c. A.D. 70-110 but Dies C and D are likely to belong to the second half of his period of activity.

DRICCIUS

Flower Bed south of the Tennis Courts, 1966

MS27. Flange fragment in fine-textured red ware.

Tennis Court Bank, 1974

MS28. Granular buff ware.

MS29. Granular white ware with grey and white flint grits.

Three stamps of the potter Driccus who was working at kilns on the east side of Watling Street, Brockley Hill. Cf. Castle (1973b, 78-83).

Twenty of his stamps have now been recorded from Brockley Hill and the rim-forms of his vessels point to activity in the period c. A.D. 110-150. Eleven stamps from the same die were found at Radlett in 1959 (*Hertfordshire Archaeology*, forthcoming) and it is clear that he was working at both potteries.

GISSVS

Tennis Court Bank, 1974

MS30. Granular white ware partly overfired to grey.

Tennis Court Bank, 1973

MS31. Granular ware overfired to grey.

MS30 is a counterstamp of the potter Gissus whilst MS31 is an example of his namestamp. MS30, the retrograde *Fecit* counterstamp can be attributed on account of its cable borders to Gissus, the only potter ever to use this type of border. Recently, however, a mortarium of Lallaius or Lallans has been found in London, carrying the counterstamp attributed to Gissus. Lallaius or Lallans did not normally use a counterstamp but like many other potters stamped his name on both sides of the vessel. They were contemporary potters, both working at Brockley Hill and a possible explanation could be that they were both at sometime active in the same workshop. Thus, whilst most counterstamps from this die will belong to Gissus it must be remembered that Lallaius or Lallans used it on at least one occasion. A date in the period c. A.D. 100-135 is indicated for the mortaria of Gissus nine of whose stamps are now recorded from Brockley Hill.

LALLAIVS or LALLANS

Flower Bed south of the Tennis Court, 1966

MS32. Granular buff ware.

Tennis Court Bank, 1973

MS33. Granular cream ware fired to light grey.

MS34. Granular ware severely overfired to dark bluish-grey.

MS35. Granular buff ware.

MS36. Granular cream ware.

MS37. Granular white ware.

MS38. Granular buff ware partly overfired to grey.

MS39. Granular ware overfired to dark grey.

MS40. Granular buff ware severely overfired to grey and black. Grey and white flint grit.

MS41. Granular buff ware overfired to grey in places, with grey, red and white flint grit.

MS42. Granular buff ware overfired to light grey.

MS43. Vessel stamped LALLAIVS/LALLAIVS in granular ware overfired to bluish-grey.

MS44. Granular light grey ware with grey and white flint grits.

MS45. Granular ware severely overfired to blue and purple.

MS46. Granular ware overfired to black and bluish-grey with black, grey and white grit.

MS47. Granular buff ware severely overfired to greyish-black with excess fired clay adhering to the body. Grey and white flint grit.

Tennis Court Bank, 1974

- MS48. Granular buff ware partly overfired to grey, with grey and white flint grit.
- MS49. Granular ware severely overfired to dark bluish-grey with traces of heat glaze.
- MS50. Granular ware overfired to light grey.
- MS51. Granular cream ware.
- MS52. Granular buff ware.
- MS53. Granular buff ware.
- MS54. Granular buff ware.
- MS55. Granular ware severely overfired to grey with heat glaze.
- MS56. Granular ware overfired to brown and grey.
- MS57. Granular buff ware with grey and white flint grits.
- MS58. Granular buff ware severely overfired to greyish-black.
- MS59. Granular buff ware with black and grey flint grits.
- MS60. Granular buff ware overfired to grey with traces of heat glaze.
- MS61. Granular buff ware.
- MS62. Granular buff ware. A large vessel approximately 1 ft. 4 ins. in diameter.
- MS63. Granular cream ware, burnt grey on flange.
- MS64. Granular ware overfired to red and grey with white flint grit.

Thirty-three stamps of a potter whose name should perhaps be accepted as Lallaius rather than Lallans. Forty-seven plus one? of his stamps are now recorded from Brockley Hill. A stamp of Lallaius or Lallans was found at Verulamium, Frere (1972, 376, No. 24) in a deposit dated to c. A.D. 90–105. The rim-forms of his vessels would fit well with manufacture in the period A.D. 90–105.

MARINVS**Tennis Court Bank, 1973**

- MS65. Granular cream ware overfired in places to light grey. Grey and white flint grits.
- MS66. Granular ware severely overfired to grey.

Tennis Court Bank, 1974

- MS67. Granular buff ware partly overfired to grey. Grey and white grits.
- MS68. Granular buff ware fired grey on the flange.

MS65 is the two-line namestamp of the potter Marinus whilst MS66–68 are examples of his *Fecit* counterstamp. Sixteen plus one? of his stamps have now been recorded from Brockley Hill where Marinus was working in the period c. A.D. 70–100.

MATVGENVS**Tennis Court Bank, 1973**

- MS69. Vessel stamped MATVGIIN/MATVGIIN in granular buff ware overfired to grey and brown with grey and white flint grits.
- MS70. Granular cream ware overfired to buff in places. Black, grey and white flint grits.
- MS71. Granular cream-buff ware with grey and white flint grits.

Tennis Court Bank, 1972

- MS72. Granular buff ware.

Tennis Court Bank, 1973

- MS73. Granular ware overfired to grey and purple with heat cracking and grey and white flint grit.
- MS74. Granular ware overfired to grey.

- MS75. Granular ware overfired to light grey with white flint grits.
- MS76. Granular cream ware.
- MS77. Granular buff ware.
- MS78. Granular ware severely overfired to grey.

Tennis Court Bank, 1974

- MS79. Granular light grey ware.
- MS80. Granular buff ware.
- MS81. Granular orange-buff ware.
- MS82. Granular white ware.
- MS83. Granular buff ware.
- MS84. Granular ware overfired to dark grey.
- MS85. Vessel stamped MATVGEN/MATVGEN in granular ware.
- MS86. Granular buff ware.

Tennis Court Bank, 1973

- MS87. Granular cream ware.
- MS88. Granular ware severely overfired to purple and dark grey.
- MS89. Granular buff ware with pink core and black, grey and white flint grit.

The stamps of Matugenus include four retrograde stamps (MS69-71) reading MATVGIIN; sixteen from a die reading MATVGEN (MS72-86) and three (MS87-89) *Fecit* counterstamps. Fifty-seven plus three? of his stamps are now recorded from Brockley Hill in addition to a die-stamp found in c. 1900. A date of c. A.D. 90-125 is indicated for his products.

MELVS I

Flower Bed south of the Tennis Court, 1966

- MS90. Granular reddish-brown ware slightly overfired to grey.

Tennis Court Bank, 1974

- MS91. Granular buff ware with grey flint grits.

Two stamps of the potter Melus I who worked at Brockley Hill, where twenty-eight of his stamps have now been recorded. His activity can be dated to c. A.D. 95-130/135.

MERTVC (VS) (?)

Tennis Court Bank, 1973

- MS92. Vessel stamped MERTVC/MERTVC in granular cream ware with pink core.

Tennis Court Bank, 1974

- MS93. Granular cream ware.

Three stamps of the potter Mertuc(us). MS92 permits the last letter, C, to be read with certainty and Mertucus (M11/RTVC retrograde) seems to be the name intended, though no example of its use is recorded. Four stamps were found at Radlett in 1959 and there is little doubt that, like Arentus, G. Attius Marinus, Castus and Driccius, he was working at both potteries. There is no site-dating evidence for his date but the rim-profiles he used belong to the first half of the second century, and these examples were probably made in c. A.D. 100-130.

SATVRNINVS I

Tennis Court Bank, 1972

- MS94. Granular ware overfired to dark grey with purple core and tiny white flint grits.

Tennis Court Bank, 1973

- MS95. Granular pink ware.

- MS96. Granular ware overfired to dark grey with red core. Grey and white flint grit.
- MS97. Granular buff ware overfired to bluish-grey. Grey flint grit.
- MS98. Granular cream ware.
- MS99. Granular grey ware.
- MS100. Granular ware overfired to grey with red core.
- MS101. Granular buff ware overfired to light grey in places and with heat cracking.
- MS102. Granular buff ware overfired to grey.
- MS103. Granular ware severely overfired to black and bluish-grey.

Tennis Court Bank, 1974

- MS104. Granular white ware.
- MS105. Granular buff ware with grey flint grit.
- MS106. Granular white ware.
- MS107. Granular cream ware with grey and black flint grit.
- MS108. Granular cream ware burnt grey at the spout.
- MS109. Granular ware overfired to dark grey with red core.
- MS110. Granular cream ware with pink core and grey flint grit.
- MS111. Granular cream ware.
- MS112. Granular ware overfired to bluish-grey.
- MS113. Granular buff ware.
- MS114. Granular buff ware, largely overfired to light grey with black, grey and white flint grit.
- MS115. Granular buff ware, partly overfired to grey.
- MS116. Granular grey ware with black and white flint grit.
- MS117. Granular cream ware with pink core.
- MS118. Granular buff ware with grey flint grit.
- MS119. Granular pink ware with grey, red and white flint grit.
- MS120. Granular light grey ware.
- MS121. Granular cream ware burnt grey on flange.
- MS122. Granular cream ware burnt grey.
- MS123. Granular ware overfired to grey.
- MS124. Granular cream ware.
- MS125. Granular ware severely overfired to grey with white and grey flint grit.
- MS126. Granular cream ware.
- MS127. Granular cream ware.

MS94–125 are namestamps of the potter Saturninus I, whilst MS126–127 are examples of his *Fecit* counterstamp. Forty-four of his stamps have now been recorded from Brockley Hill where Saturninus was active in the period c. A.D. 100–135.

SOLLVS

Flower Bed south of the Tennis Courts, 1966

- MS128. Flange fragment in granular cream ware.

An example of the stamp of Sollus. So far only four of his stamps are recorded from Brockley Hill but the fabric and forms of his mortaria and distribution are typical of the potteries south of Verulamium in the Flavian period and it is likely enough that he had kilns at Brockley Hill in c. A.D. 70–100.

VIDEX

Flower Bed south of the Tennis Courts, 1966

- MS129. Vessel stamped VIDIIIX/VIDIIX in granular cream ware overfired to grey, with white flint grit.

MS130. Vessel stamped VIDIIX/VIDIIX in granular ware overfired to dark blue-grey, with grey and black grit.

MS131. Vessel stamped VIDIIX/VIDIIX in granular orange-brown ware.

MS129-131 are from three different mortaria and all of them have two stamps impressed close together. The stamps read VIDIIX, presumably VIDEX. Incomplete stamps of his have been noted from the Hambleden villa and Sandy, Bedfordshire. It may safely be assumed that Videx was working at Brockley Hill and though there is no site evidence for dating his work, his rim-forms would fit well within the period A.D. 85-140.

Unidentifiable Stamps

Tennis Court Bank, 1973

MS132. Granular orange-buff ware partly overfired to grey on flange. Black, grey and white flint grit.

MS133. Granular buff ware partly overfired to dark grey with black, grey and white flint grit.

These two stamps could well be from the same, somewhat overfired, vessel. Stamps from the same die have been found at Bignor and Verulamium. A certain amount of doubt remains about the potter's name but VORVRC/XENO seems to be most likely; the first R is reversed and the X could perhaps be a space-filler. All the mortaria are entirely consistent with manufacture at Brockley Hill or kilns in this area within the period A.D. 115-145.

MS134. Granular orange-buff ware.

A fragment of a stamp. No other stamp from the same die is known but the border is unusual and would be easy to recognize. The fabric is consistent with manufacture in the Brockley Hill area and a date in the late first or early second century is indicated.

MS135. Granular greyish-buff ware, somewhat overfired.

No other examples of this stamp are known and only further examples of this stamp will elucidate the reading. The unusual combination of borders, however, should make it readily recognizable. The fabric is consistent with manufacture at or near Brockley Hill and a date in the period c. A.D. 115-145 is indicated.

MS136. Granular buff ware.

A fragment of the border of a stamp. No other example of this stamp is known but the border is most unusual and should be readily identifiable. The mortarium is consistent with production in the Brockley Hill area in the late first or early second century.

MS137. Granular buff ware with black, grey and white flint grit.

A stamp on a vessel with detached spout. The stamp cannot at present be read but the rim-form suggests a date in the first half of the second century.

MS138. Granular buff ware.

Apparently from an unknown retrograde *Fecit* counterstamp. The rim-form is consistent with a date in the first half of the second century.

MS139. Granular cream ware partly overfired to grey.

Like MS138, apparently from an unknown *Fecit* counterstamp. A date in the first half of the second century is suggested.

MS140. Granular ware overfired to dark grey with white flint grit.

Border of an unidentifiable stamp. First half of the second century.

MS141. Granular buff ware with traces of heat cracking

Illegible stamp. First half of the second century.

MS142. Granular ware overfired to grey.

Fragmentary unidentifiable stamp. First half of the second century.

MS143. Granular cream ware.

Fragmentary unidentifiable stamp. First half of the second century.

MS144. A spout fragment in granular cream ware with part of an unidentifiable stamp.

MS145. Granular cream ware overfired to grey.

Fragment of the border of an unidentifiable stamp. First half of the second century.

MS146. Granular buff ware overfired to grey.

Unidentifiable stamp. Probably first half of the second century.

Tennis Court Bank, 1974

MS147. Granular greyish-white ware with pink core. A large vessel about 1 ft. 6 ins. in diameter.

Part of an unidentifiable stamp, impressed diagonally on the flange. The absence of border decoration is noteworthy. First century date seems indicated.

MS148. Granular ware overfired to light grey.

Fragmentary stamp possibly of Junius I. First half of the second century.

MS149. Granular cream ware.

Unidentifiable stamp. First half of the second century.

MS150. A large mortarium in granular red ware with grey and white flint grit.

Part of the border of an unidentifiable stamp. First half of the second century.

MS151. Granular buff ware with pink core.

A fragmentary stamp possibly reading *Fecit*. First half of the second century.

MS152. Granular ware overfired to grey.

Unidentifiable fragmentary stamp. First half of the second century.

MS153. Granular cream ware.

Unidentifiable stamp. First half of the second century.

MS154. Granular greyish-white ware.

Fragment of the border of an inidentifiable stamp. First half of the second century.

Comments

The growing number of potters (Arentus, G. Attius Marinus, Castus, Driccius and Mertucus) whose stamps have been found at both Brockley Hill and Radlett suggest that it was not uncommon for potters to have workshops at both sites. This practice is paralleled by some potters in Warwickshire who had kilns at both Mancetter and Hartshill.

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Part II. Summary of Results

Although re-deposited in c. 1909, the stamped mortaria recovered from the hospital grounds in 1966 and 1972-74 have provided additional valuable information about the pottery industry at Brockley Hill and the Verulamium region as a whole, in the first and second centuries A.D. In particular, there is now every likelihood that the potters G. Attius Marinus, Castus and Mertucus were working at Brockley Hill, as well as at Radlett, Hertfordshire. Mortarium wasters of the potters Arentus and Driccius are already attested at both potteries.¹

Excavations from 1937 onwards, have provided a wealth of evidence relating to the history of the site, which at this stage it is felt desirable to review. It is stressed, however, that conclusions are to some extent handicapped by the piecemeal nature of these excavations.

Trenches cut in 1951-52,² 1960-61,³ 1968⁴ and 1970⁵ have provided evidence of an early road on the west side of modern Watling Street, consisting of a gravel capped clay bank with irregular side-ditches, which in places contained first to second and fourth century artifacts in their infill. In Field 157, south of the Royal National Orthopaedic Hospital (1968), its width was found to vary from 13 ft. at Site C to 25 ft. at Site F, over a distance of 250 yards. However, the evidence for its being Roman Watling Street is at present inconclusive. Between this road and modern Watling Street was found the remains of a later, hollow way, which was apparently in use during the middle ages, certainly in use during the eighteenth century but which had been supplanted by 1827 when the present road had come into being. There can be little doubt that Watling Street dates from shortly after the Claudian invasion of A.D. 43, indeed excavations at Verulamium in 1957-60 indicate that construction took place during the period c. A.D. 43-49.⁶ Excavations at Brockley Hill have provided no evidence of Belgic, pre-Roman activity and it is quite possible that Watling Street is the earliest feature on the site. A U-shaped ditch excavated at Site A in 1970,⁷ on the west side of the modern road, is clearly pre-Flavian and appears to represent the original west boundary ditch of the Roman road.

A clay pit disclosed at Site B in 1972, on the east side of Watling Street, contained quantities of waste pottery, potters' clay, kiln debris and other finds datable to c. A.D. 50-60⁸ There can be little doubt that at least one pottery kiln was situated fairly nearby, which was engaged in the production of flagons of Hofheim and ring-necked type, cordoned jars, bowls, mortaria and tazze. Kiln II, was clearly in use during the period c. A.D. 65-100 and was very likely used by the potter Secundus, a contemporary of Ripanus and Sollus, who were probably also working in this area. Doinus was working at Kiln 9, on the west side of Watling Street in c. A.D. 70-110, but it is clear that he also had an earlier kiln on the site. As will be seen from the table of mortarium stamps (Fig. 9), an appreciable number of potters were working at the site.

Pottery manufacture reached its peak during the Flavian-Trajanic period when Kilns 4-5, 8-9 and 11 were in action. Kilns 1-3, 7 and 10 are tentatively assigned to dates within

the period *c.* A.D. 90–160, whilst Kilns 6 and 12–14 date from sometime in the period *c.* A.D. 110–160 and are the latest known at the site. Indeed, there is at present no evidence to suggest pottery manufacture appreciably later than *c.* A.D. 160. Driccius was working at Kilns 12–14, where he appears to have been producing both stamped and unstamped mortaria in the conventional granular ware and a fine-textured red ware, the latter having been introduced in *c.* A.D. 110–120. Driccius, and Arentus, the latter probably his associate, appear to have been the last potters working at the site and it may well be that their activity at Radlett was later than that at Brockley Hill.

Only further excavations will show whether pottery manufacture continued at the site after *c.* A.D. 160. Decline in output by *c.* A.D. 120–130 is apparent and it is clear that the potters of this region were facing the fierce competition offered by those working at the Oxford and Warwickshire potteries. Indeed, two local potters, G. Attius Marinus and Doccas, are known to have moved to Warwickshire,⁹ the former having already migrated from the Colchester region.

Introduction of a new, somewhat inferior, fine-textured fabric in *c.* A.D. 110–120 may well imply that the clay used for the conventional granular wares was becoming scarce by this period. However, it should be stressed that at Kilns 12–14 there was no evidence to suggest that the former had supplanted the latter. Cessation due to a lack of suitable clay would, therefore, seem unlikely, as would a shortage of timber and brushwood for kiln fuel, in this region of heavy forest. Clearly, the clays of the Oxford and Warwickshire regions were considered more suitable for pottery manufacture than those of the Verulamium region, including Brockley Hill, and there became a preference for vessels produced at those potteries.

It seems likely that many more pottery kilns await discovery at Brockley Hill. To date excavations have been limited in size though they have been carried out at various parts of the site. The general picture of Brockley Hill from the mid first to mid second century is one of a hilltop clearing, with springs, and streams on the south-east and north-west sides,¹⁰ in which was a vast industrial complex, consisting of pottery kilns, workshops, hovels, puddling holes and clay pits, straggling an important highway. Moreover, observation and excavation shows that this industrial settlement was in the form of ribbon-development. Excavations carried out in the depth of winter and the height of summer have shown that the local clays, prepared or otherwise, are unworkable in frosty and dry conditions, and it is clear, therefore, that pottery manufacture was a seasonal occupation. Perhaps the potters required no more than temporary huts, hovels or tents during the suitable months, their way of life being not dissimilar to that of twentieth century charcoal-burners. Two second century cremation burials and a scatter of first to second century artifacts, discovered in the field to the north of Pipers Green Lane (*c.* TQ: 180933) in 1954–55, suggest habitation in that area.

Although there is at present no evidence of pottery manufacture after *c.* A.D. 160, it is clear that occupation of a more domestic nature continued into the late second, third and fourth centuries. Evidence of third century activity is meagre and is limited to quantities of black-burnished and colour-coated wares and two worn second century *sestertii* from the upper levels of the well excavated at Site B, in Field 157 during 1968. Levelling of waste dumps and the laying of cobbled floors during the late third to early fourth centuries is attested at the sites excavated in 1950–51, 1953–54 and 1970, on the west side of Watling Street. In addition, worn *sestertii* of Hadrian and Septimius Severus, two *antoniniani*, one of Claudius II, sherds of colour-coated ware and a mortarium sherd

1952.E.	1953-54.W.	1966.W.	1968.W.	1969.W.	1970.W.	1971.W.	19
—	—	—	—	—	—	—	
—	1	1	—	—	—	—	
—	—	—	—	—	—	—	
—	—	—	1	—	—	—	
—	—	—	—	—	—	1	
—	6	—	1	—	1	—	
2	—	—	3	—	—	—	
—	—	—	—	—	—	—	
—	4	—	—	—	—	—	
—	—	—	2	—	—	2	
—	—	—	—	—	1	4	
—	—	—	—	—	—	—	
4	4	—	—	—	—	32(+8?)	
—	3	1	—	—	—	—	
—	—	—	5	—	—	1	
—	—	—	—	—	—	—	
1	3	1	1	—	1	1(+1?)	
—	—	—	—	—	—	—	
—	7	—	(1?)	—	—	—	
18	8(?+3)	—	2	1	—	—	
21	—	1	—	—	—	1	
—	1	—	—	—	—	—	
1	—	—	—	—	—	—	
—	—	—	1	—	—	—	
—	—	—	—	—	—	—	
—	—	—	—	—	—	4	
4	3	—	—	—	—	—	
—	—	—	1	—	—	—	
1	—	1	—	—	—	1	
—	—	6	—	—	—	—	
—	—	—	—	—	—	—	
—	—	—	—	—	—	—	
1	1	—	—	—	—	—	
—	2	—	4	—	2	1	
53	45	11	22	1	5	57	

Fig. 9. Brockley Hill: Mortarium stamps 1937-1974.

from the Oxford region, were recovered from the upper Roman levels excavated at Site A, on the east side of Watling Street in 1972.¹¹

Evidence of fourth century activity includes notably, sherds of black-burnished and colour-coated wares and *folles* of Constantine I from Field 157. At the sites excavated in 1950-51 and 1970, the remains of a hut were excavated, together with a tile platform with rotary querns, post dating the cobbled floors laid down in the late third to early fourth century. Associated with the tile platform were quantities of colour-coated and black-burnished wares, coins of Constantine I, c. A.D. 330-335 and one of Constantius II, A.D. 341-346, a silver-plated brooch, a bronze pin and a disc-headed fastener.¹² A badly worn coin, apparently of Valentinian I, A.D. 364-375, was found resting on the cobbling near the hut in 1950, and implies activity in the third quarter of the fourth century.

A disappointing result of the piecemeal excavations from 1937-74 is that they have failed, firstly to provide evidence to indicate that Brockley Hill is the site of *Sulloniacae* and secondly, to disclose a civil settlement, substantial buildings or a posting station, as suggested by the inclusion of that place-name in the second journey of the British section of the Antonine Itinerary.¹³ *Sulloniacae* is recorded as lying twelve Roman miles from London and nine from Verulamium, which suggests that it was situated somewhere between Canons Corner (c. TQ: 183928) and Elstree Village (c. TQ: 172953), logically alongside Roman Watling Street. Further, large-scale, excavations are therefore clearly desirable, in particular at Field 410 and the enclosure of the now derelict Hilltop Cafe, on the east side of modern Watling Street. However, large-scale excavations on the west side of the road are complicated by the presence of the numerous hospital buildings, roads, sewers, car parks and a tennis court.

ROMAN POTTERY KILNS AT BROCKLEY HILL

(Fig. 1)

Kiln 1, 1950. c. A.D. 100-160.¹⁴

Kiln 2, 1951. Formerly Kiln 1. c. A.D. 90-150.¹⁵

Kiln 3, 1951. Formerly Kiln 2. c. A.D. 100-160.

Kiln 4, 1951. Formerly Kiln 2a, and earlier than Kiln 2. c. A.D. 70-100.

Kiln 5, 1952. c. A.D. 95-135. Probably a kiln of the potter Melus.¹⁶

Kiln 6, 1956. c. A.D. 110-150. Excavations by the late Mr. A.E. Ridley in the south bank of the pond disclosed part of a kiln furnace, constructed of burnt clay reinforced with pottery wasters.¹⁷ Associated with the kiln was a quantity of small jars, sherds of poppy-head beakers and other types of vessels and a multi-coloured glass ring. There are no further details and the finds are lost.

Kiln 7, 1965. A circular structure with walls of burnt clay was revealed during the excavation of a sewer trench immediately south-west of Green Cottage, in the hospital grounds. A quantity of Roman sherds and tile fragments was also found.¹⁸

Kiln 8, 1968. c. A.D. 70-120.¹⁹

Kiln 9, 1971. c. A.D. 70-110. A kiln of the potter Doinus.²⁰

Kiln 10, 1971. First to second century. The fragmentary base of a kiln furnace constructed of burnt clay was revealed on the south side of the hospital tennis courts.

Destroyed before any record could be made. Quantities of first and second century coarse pottery were found above it.²¹

Kiln 11, Site A, 1972. *c.* A.D. 65–100. Possibly a kiln of the potter Secundus.²²

Kiln 12, Site C, 1972. Formerly Kiln 1. *c.* A.D. 110–160.²³

Kiln 13, Site C, 1972. Formerly Kiln 2. *c.* A.D. 110–160.

Kiln 14, Site C, 1972. Formerly Kiln 3. *c.* A.D. 110–160.

A NOTE ON THE SULLONIA STAMPS AT CORBRIDGE

by

Mrs. K. F. Hartley

It has been suggested that a number of mortarium stamps found at Corbridge, Northumberland, record the place-name Sulloniace and that the mortaria were made there.²⁴

At least forty stamps in this class have been found at Corbridge; these are from six different dies, five of which read SVLLON or SVLLONI, the sixth giving (S)VLLONIA. The only other stamps known from any of these dies are two examples at Carlisle (one of unknown provenance). The fabric is rather more like that used by Satu(rinus? III) whose die has been found at Corbridge, than the Brockley Hill fabric. Moreover, several of the Sullonia mortaria have a grey core which is very rare indeed in Brockley Hill mortaria. Furthermore, in over 440 stamps from Corbridge there is only a total of 13 stamped fragments made by potters like Doinus, Marinus, Matugenus etc., whose activity in the Brockley Hill, Radlett and Verulamium region is undoubted. There is also every reason to suppose that a number of kilns exist in the vicinity of Corbridge and the weight of evidence for Sullonia undoubtedly points to manufacture there. In fact, place-names stamped alone are very rare on mortaria and it is far more likely that Sullonia is the potter's name, perhaps complete or perhaps an abbreviation for Sullonianus or Sulloniacus. If the latter, it is still possible for there to be an indirect link with Sulloniace, since peregrine names derived from place-names are not uncommon.

It is perhaps worth noting that a mortarium stamp of another potter, Sepetacus, found at Stoke Orchard,²⁵ almost certainly does record its place of manufacture as SVL?ON. This could be restored as SVLLON, but the fabric of the mortarium could not come from the Brockley Hill region and is likely to be Midland, perhaps from the South or South-West Midlands in the second century.

In effect, in such circumstances as the above it is essential to take every bit of available evidence into consideration before suggesting the place of origin; the more so as relatively few Romano-British place-names are known.

NOTES

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² P. G. Suggett 'Report on the excavations at Brockley Hill, Middlesex, August–September 1951' *Trans. London Middlesex Archaeol. Soc.* II pt. 2 (1953) 173–188 and P. G. Suggett 'Excavations at Brockley Hill, Middlesex, 1952–53' *Trans. London Middlesex Archaeol. Soc.* II pt. 3 (1954) 259–276.

³ *Report of the Excavation carried out in Field 157 to the West of the modern A5 over Brockley Hill, 1960–61.* North Middlesex Archaeological Research Committee (April 1961).

⁴ S. A. Castle and J. H. Warbis 'Excavations on Field No. 157, Brockley Hill (Sulloniace?) Middlesex, February–August 1968' *Trans. London Middlesex Archaeol. Soc.* 24 (1973) 87–90.

- ⁵ S. A. Castle 'Excavations at Brockley Hill, Middlesex, Sulloniaca, 1970' *Trans. London Middlesex Archaeol. Soc.* 23 pt. 2 (1972) 149-150.
- ⁶ S. S. Frere *Verulamium Excavations Vol. I* (Oxford 1972) 13. Rep. Res. Com. Soc. Antiq. No. 28.
- ⁷ Castle *op. cit.* in note 5.
- ⁸ S. A. Castle 'Trial excavations in Field 410, Brockley Hill, 1972, pt. 1' *London Archaeologist* (Spring 1973) 36-39.
- ⁹ S. A. Castle 'A kiln of the potter Doinus' *Archaeol. J.* 129 (1972) 82.
- ¹⁰ Indeed there is every likelihood that the name Brockley Hill is derived from the Old English word *brōc-leah*, which with Hill, means a hilltop clearing in the wood with a stream. Doubtless the clearing corresponded with the Claygate Beds forming the hill. However, we find Brokeley Hill in 1593 and Brockley Hills in 1682. Perhaps the first element of the compound is identical with Brokholes 1277, Brokhole 1307 or le Brocholes by Eggeswere (Edgware) in 1354. This suggests the possibility of 'badger-holes'. Cf. J. E. B. Gover, A. Mawer and F. M. Stenton *The Place-names of Middlesex* (Cambridge 1942) 50.
- ¹¹ S. A. Castle 'Excavations at Brockley Hill, Middlesex, March-May 1972' *Trans. London Middlesex Archaeol. Soc.* 25 (1974) 256, M6.
- ¹² Castle *op. cit.* in note 5, 149-158.
- ¹³ A. L. F. Rivet 'The British Section of the Antonine Itinerary (Appendix by K. Jackson)' *Britannia* 1 (1970) 79.
- ¹⁴ S. Applebaum 'Sulloniaca 1950: Excavations at Brockley Hill' *Trans. London Middlesex Archaeol. Soc.* 10 (1951) 201-228.
- ¹⁵ Suggett *op. cit.* in note 2, 173-188.
- ¹⁶ Suggett *op. cit.* in note 2, 259-276.
- ¹⁷ North Middlesex Archaeological Research Committee: Sundry Correspondence File and Minutes for 1958.
- ¹⁸ Information from Mr. J. A. Upton, formerly hospital engineer.
- ¹⁹ Castle and Warbis *op. cit.* in note 4, 85-110.
- ²⁰ Castle *op. cit.* in note 9, 69-88.
- ²¹ Information from Mr. R. Harris, hospital gardener.
- ²² Castle *op. cit.* in note 11, 251-263.
- ²³ Castle *op. cit.* in note 1.
- ²⁴ *Archaeologia Aeliana* 4th ser. 15 (1938) 278-282; *ibid.* 26 (1948) 191-192; *V.C.H. Middlesex I* (1969) 66.
- ²⁵ *Trans. Bristol Glos. Archaeol. Soc.* 90 (1971) 31, Fig. 3, Nos. 33 and 52.

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The following are thanked for their assistance on these excavations: Mr. K. Bailey, Mr. M. Buck, Mr. L. Gray, Mr. H. W. Hatton, Mr. S. Henderson, Mr. R. Leak, Mr. I. Mackay, Mr. D. Metcalf, Mrs. H. Paterson, Mr. A. Porter, Mr. J. Reeves, Mr. G. W. Robinson, Mr. H. Stirrup, Mrs. M. D. Tisdall and Mr. J. Withers.

Last, but not least, I would like to express appreciation for the helpful advice given by Mr. Philip Suggett, shortly before his tragic death in a motoring accident in November, 1974. Philip Suggett was Director of Excavations of the North Middlesex Archaeological Research Committee from 1951-1959 and was responsible for the excavations carried out at Brockley Hill, Pinner Green and Stanmore during that period. His work aroused considerable interest and encouraged others to foster an interest in the archaeology of Middlesex and elsewhere.

Mr. Ralph Merrifield, F.S.A., kindly read this report in typescript.

ROMAN POTTERY FROM THE CITY OF LONDON

by

Geoff Marsh and Paul Tyers

Summary

Examination of material in the Museum of London (1) indicated kilns in the northern part of the City producing grey wares, mica-dusted wares and 'London ware', and (2) identified a group of pre-Flavian vessels of Rhineland origin.

1. Roman Pottery Production in the Walbrook Valley

(1.1) 1-4 Copthall Close/20-28 Moorgate St. (TQ 3274 8141)¹

Introduction

In 1936 Quintin Waddington recovered a group of Roman wasters during the rebuilding of 1-4 Copthall Close, which lies in the northern part of the City, on rising ground west of the main Walbrook stream (Fig. 1). The material is recorded as coming from layers at the eastern end of the site, overlying the natural brickearth.² Mr. Adrian Oswald prepared the pottery for publication but this was prevented by the war and since then it has received little attention. The group consists of 386 sherds, divided as following:

plain grey wares	—	248	} 335 sherds of kiln ware
mica-dusted wares	—	56	
London ware	—	31	
samian	—	27	
other Roman	—	18	
post-Roman	—	6	

The date of the pottery and its wider significance is discussed below.

Grey Wares: (Figs. 2-3)

These formed the bulk of the surviving kiln material (approximately 85%) and two fabrics have been identified:

Fabric A: Grey granular slightly micaceous fabric, usually with darker surfaces. The external surface is usually rough (A1) but is occasionally smoothed (A2).

Fabric B: Smooth grey fabric with darker surfaces, usually externally smoothed.

The majority of the rims (Nos. 1-25) are from simple necked jars which vary in exact detail. Their bases (Nos. 26-51) have been turned to produce a distinctive domed profile and one has been impressed after finishing with a signet ring (see appendix p. 239). This type of base contrasts strongly with that produced at the Highgate kilns, which is flat with a basal groove, e.g. Brown and Sheldon (1974, Fig. 5, 68, 70). Other forms such as beakers (No. 52), bowls (Nos. 53-56, 60-61), bead rim jars (Nos. 57-59) and lids (Nos. 62-63) were much less common. There were in addition four sherds of poppy beakers, and sherds from a possible pedestal urn decorated with panels of barbotine dots.

Of the Copthall Close material the grey wares were most obviously kiln waste. Much of the pottery was discoloured and distorted, and many sherds had 'carbuncles', which had apparently been caused by the expansion of gases in the clay. In a few cases severe over-firing had turned the pottery to 'clinker'.

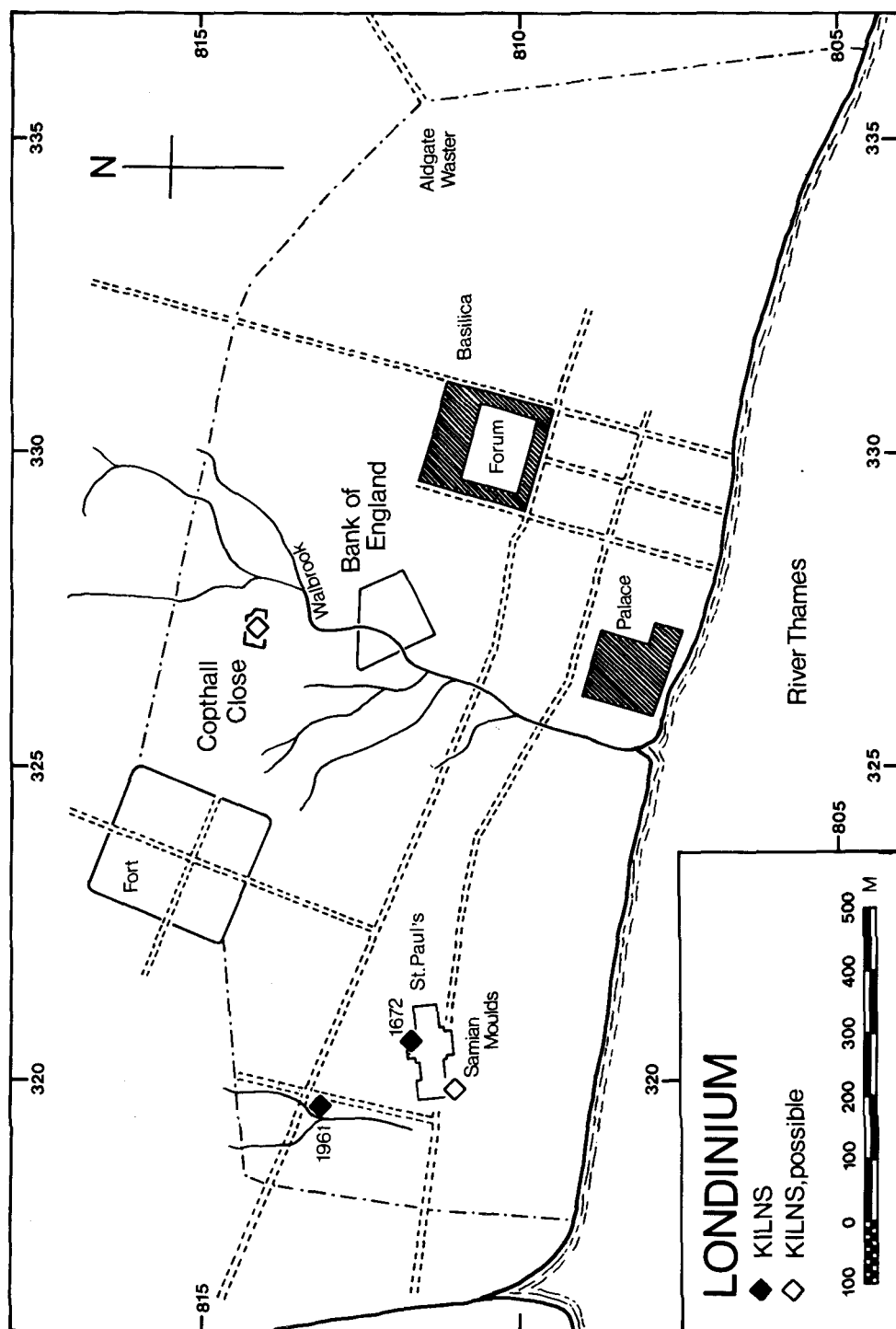


Fig. 1 Roman London; evidence for pottery production.

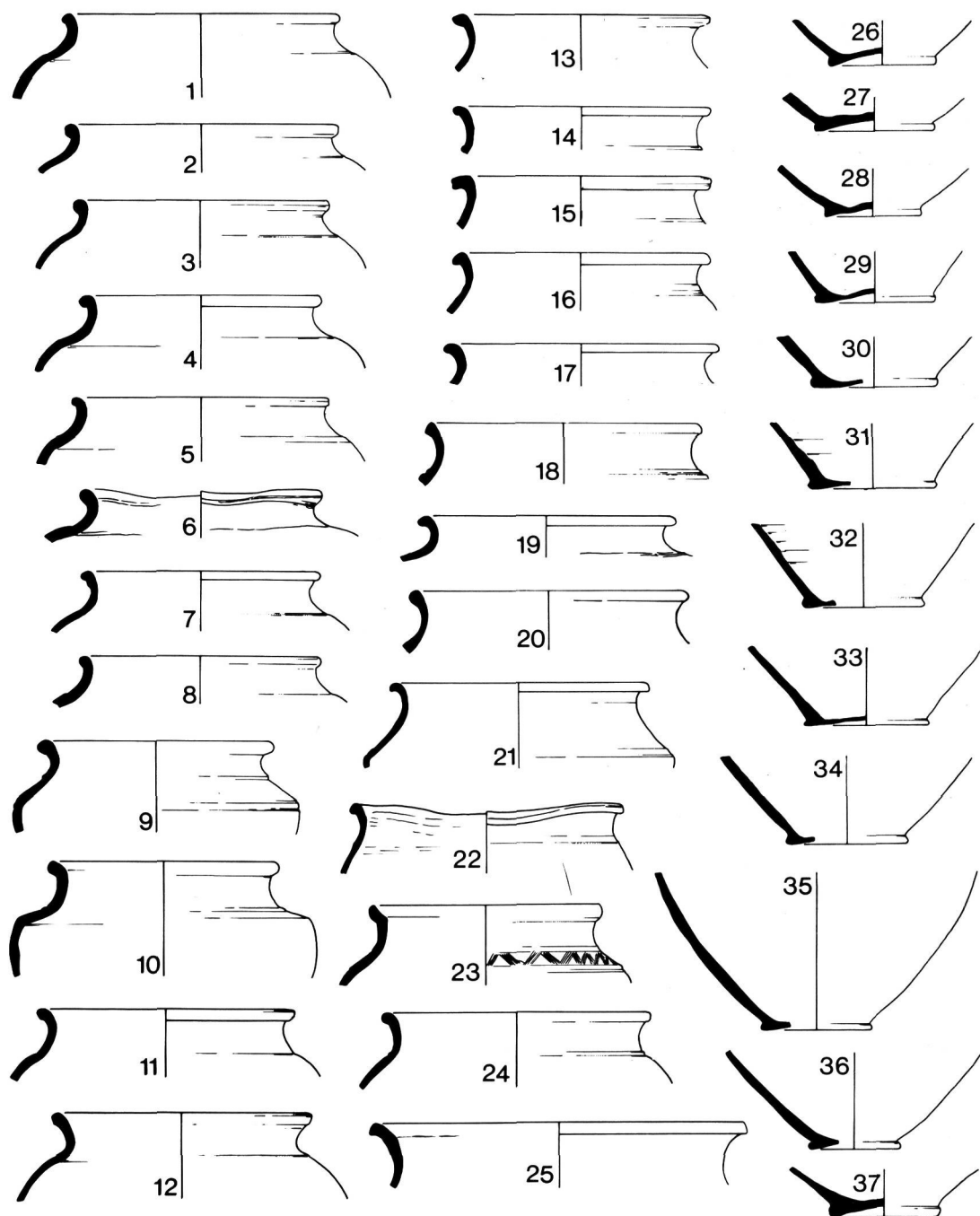


Fig. 2 Copthall Close; grey wares, 1-37 (1/4).

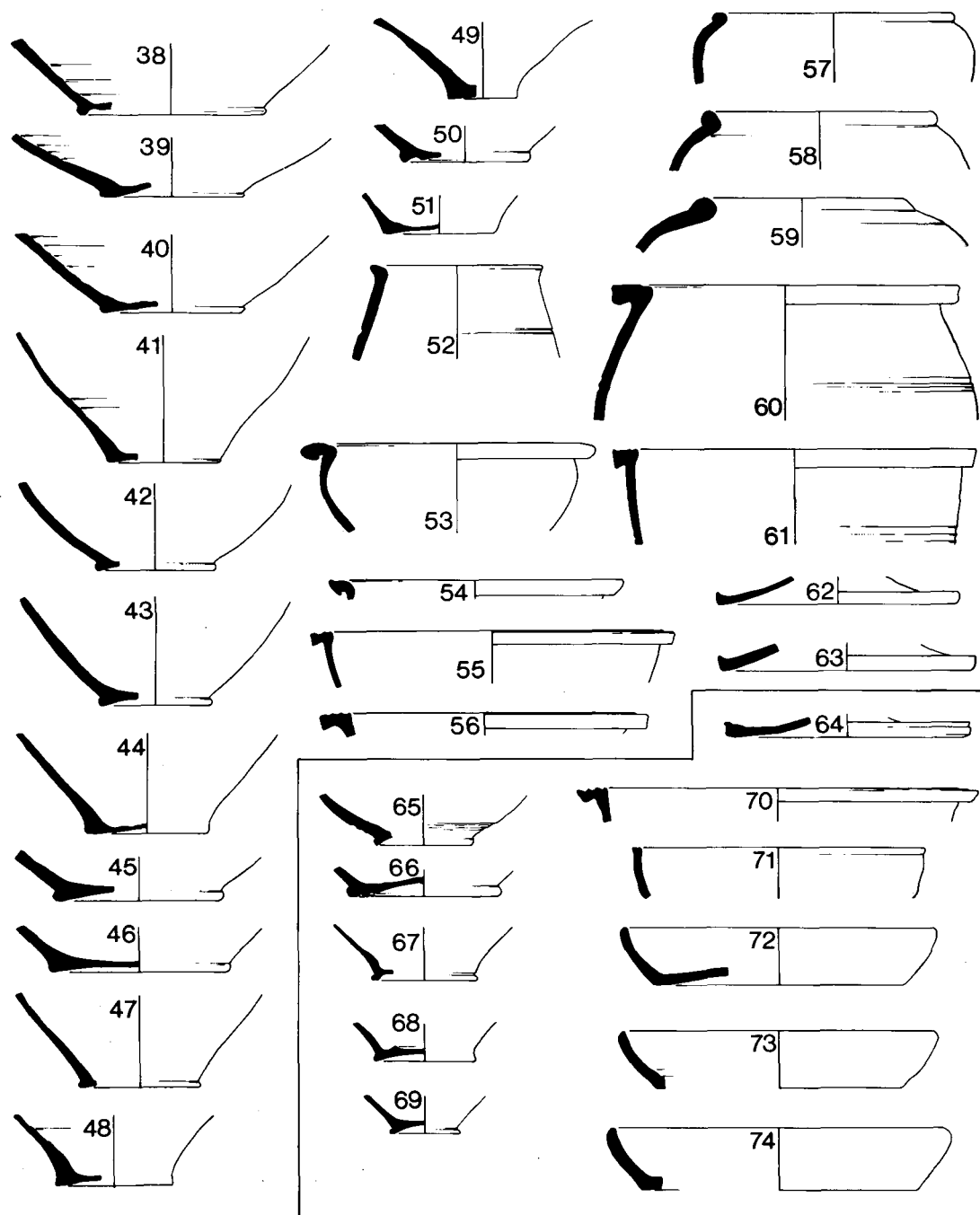


Fig. 3 Cophall Close; grey wares, 38-63: mica-dusted wares, 64-74 ($\frac{1}{4}$).

ILLUSTRATED POTTERY

Necked Jars: Fabric A1: 1, 4, 5, 6, 7, 8, 11, 17, 18, 19, 21, 25, 26, 27, 28, 30, 33, 34, 35, 36, 37, 42, 43, 44, 47, 50.

Fabric A2: 2, 3, 9, 10, 13, 16, 20, 22, 23, 29, 31, 32, 38, 39, 40, 45, 46, 51.

Fabric B: 12, 14, 15, 24, 41, 48, 49.

Beaker: Fabric B: 52. Bowls: Fabric A2: 54. Fabric B: 53. Carinated Bowls: Fabric A1: 55, 60, 61. Fabric A2: 56. Bead Rim Jars: Fabric A1: 57, 58, 59. Lids: Fabric B: 62, 63.

Mica-dusted Pottery: (Figs. 3-4)

There were two fabrics:

Fabric C: Slightly granular with grey core and orange/red surfaces. Some sherds have noticeable red grog inclusions and small 'black holes', possibly due to the burning out of organic material.

Fabric D: Smooth with grey core and orange/red surfaces. Occasional inclusions and 'black holes'.

Dr. David Williams has kindly examined some of the sherds in thin section and a report will be published in the near future.³

The majority of the rims were from simple dishes in fabric C (Nos. 71-95; equivalent to Southwark form IVJ34), and range from 85-170mm in diameter. All the dishes showed evidence of having been turned. The base of one was unique in having an internal red coating rather than mica-dusting; it was perhaps imitating Pompeian red ware. Apart from a reeded rim dish and a lid (Nos. 70, 64), the remainder of the sherds were from flagons, and although only bases have been illustrated (Nos. 65-69) there were several body sherds including two with handle 'scars'.

None of the mica-dusted sherds were distorted but the rising bases of several dishes (Nos. 71, 74, 85 etc.) suggest that they had sagged while being fired upside down. Some sherds also exhibited 'carbuncles' and blistering. These faults and the domed bases of the flagons are in common with the grey wares and suggest that they come from the same source.

ILLUSTRATED POTTERY

Lid: Fabric D: 64. Flagon Bases: Fabric D: 65, 66, 67, 68, and 69, which possibly comes from a beaker rather than a flagon. Reeded Rim Dish: Fabric D: 70. Dishes: Fabric C: 71-95.

London ware: (Fig. 5)

The material is all in the characteristic London ware fabric, but much is soft, underfired and discoloured to light grey, red or brown. On several sherds the decoration is carelessly incised. The forms represented imitations of samian form Drag. 37 (Nos. 96-102), straight-sided bowls (Nos. 103-105), vases (No. 106) and a base of a beaker (No. 107). There were also sherds of a plate and a beaker. These forms are discussed further below.

ILLUSTRATED POTTERY

Imitation Drag. 37: 96 (buff/brown, underfired), 97 (brown, underfired), 99 (black), 100 (black), 101 (brown/grey), 102 (black).

Straight-sided Bowls: 103 (black), 104 (buff/brown, underfired), 105 (buff/brown-red, underfired).

Vases: 106 (buff).

Beaker: 107, hard grey fabric with red surfaces. This sherd is unique in having a white, iron free slip, through which the decoration has been incised producing a *sgraffito* effect.

*(1.2) Bank of England (c. TQ 3270 8122)⁵***Introduction**

A large quantity of London ware in the Museum of London was recovered during the rebuilding of the Bank of England between 1926 and 1934. The site lies across the

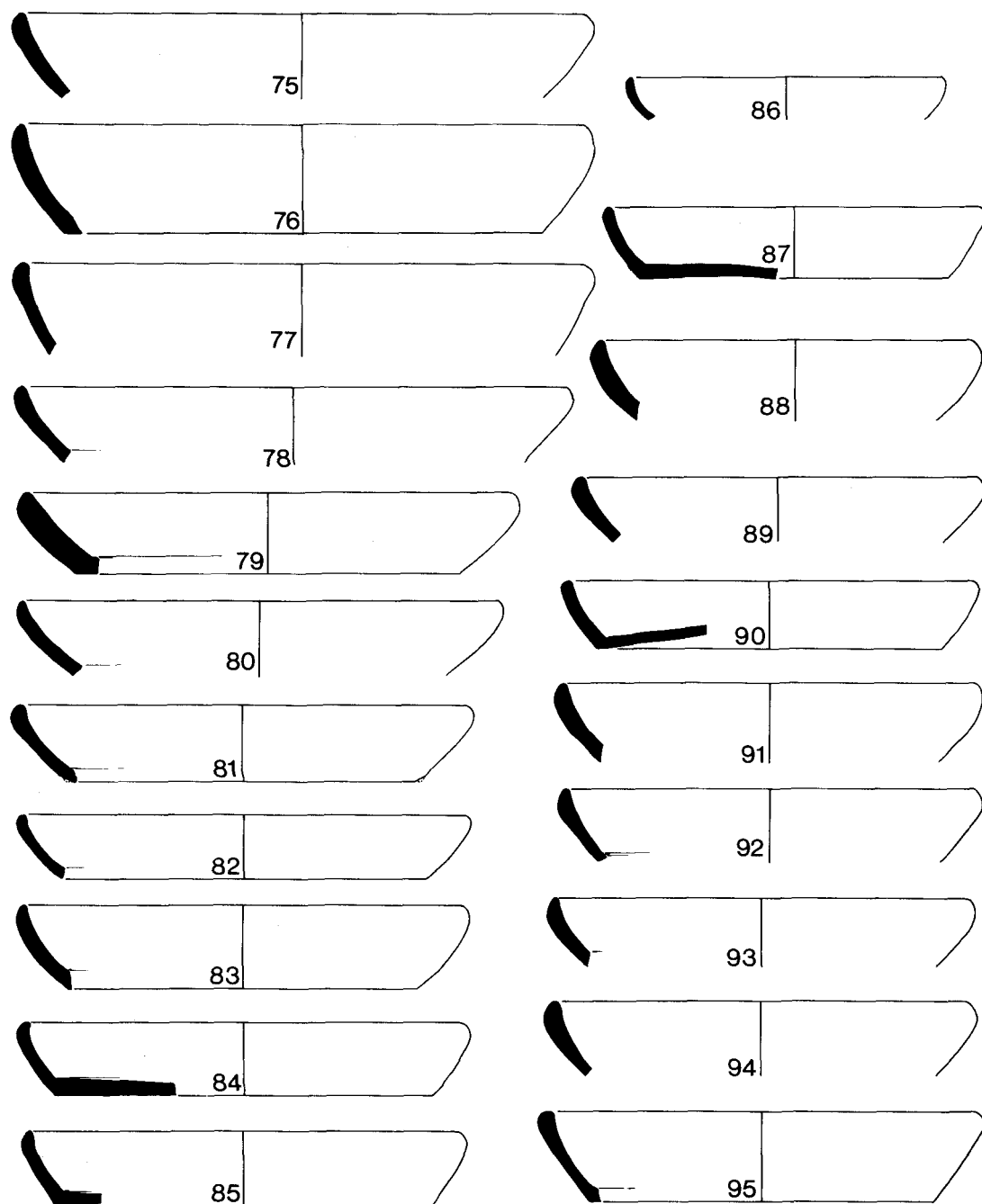


Fig. 4 Copthall Close; mica-dusted wares, 75-95 (1/4).

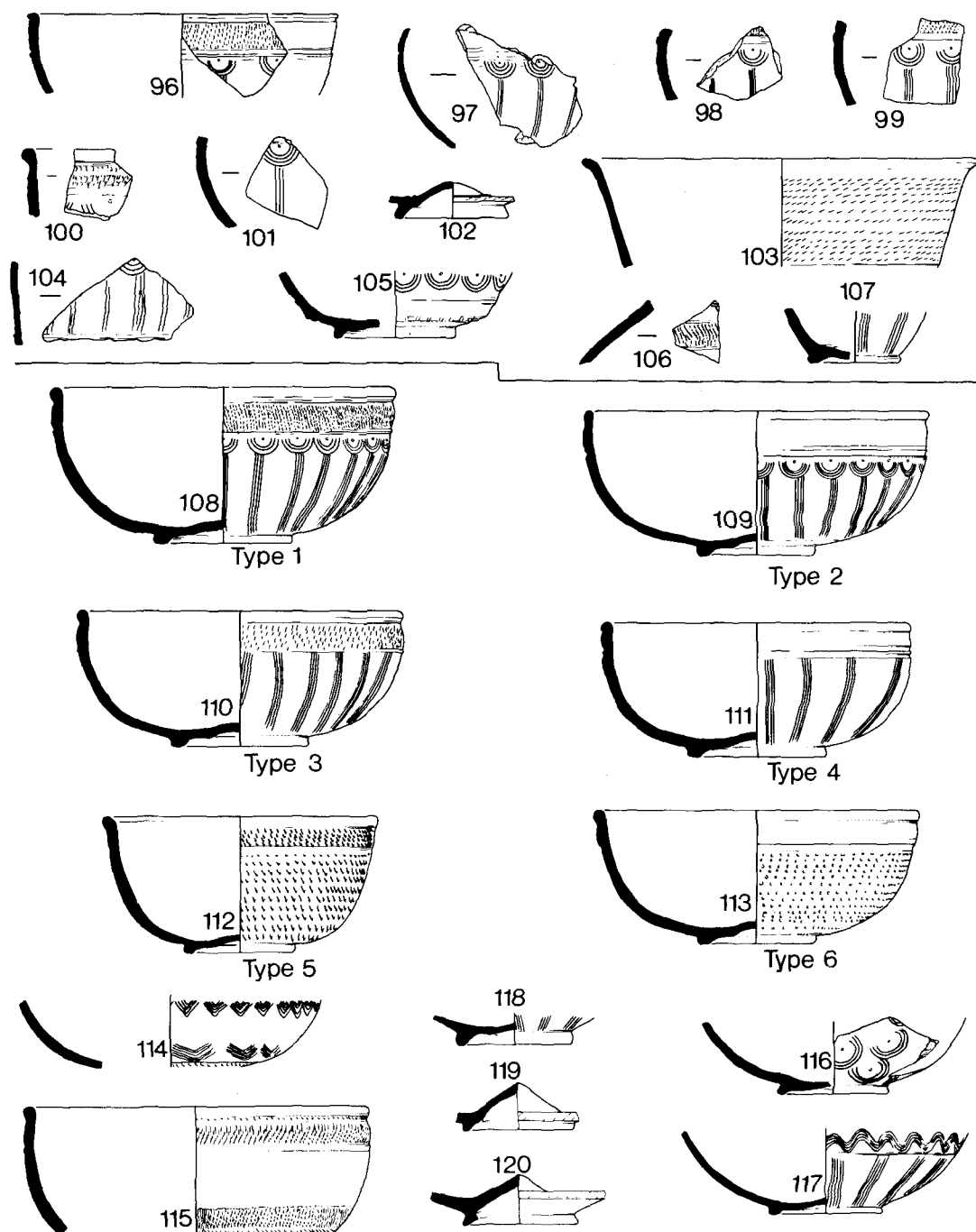


Fig. 5 Cophall Close; London ware, 96-107: Bank of England; London ware, 108-120 (¼).

Walbrook valley some 200m south of Copthall Close (Fig. 1). As some of the motifs are identical to those from Copthall Close, the material almost certainly comes from the same kilns. However, none is obviously misfired and although some pieces are badly finished or marred by 'carbuncles' all were probably saleable. At present it is perhaps best to regard this group as debris from the sales area of the workshops.

Fabric:

The fabric is consistently fine, hard and slightly micaceous with a dark grey core and fine black burnished surfaces. There are occasional inclusions of red grog. A few sherds are fired red-brown near the surfaces or at the core. A comparison of thin sectioned London ware sherds from Copthall Close, the Bank of England and Southwark will be published shortly.

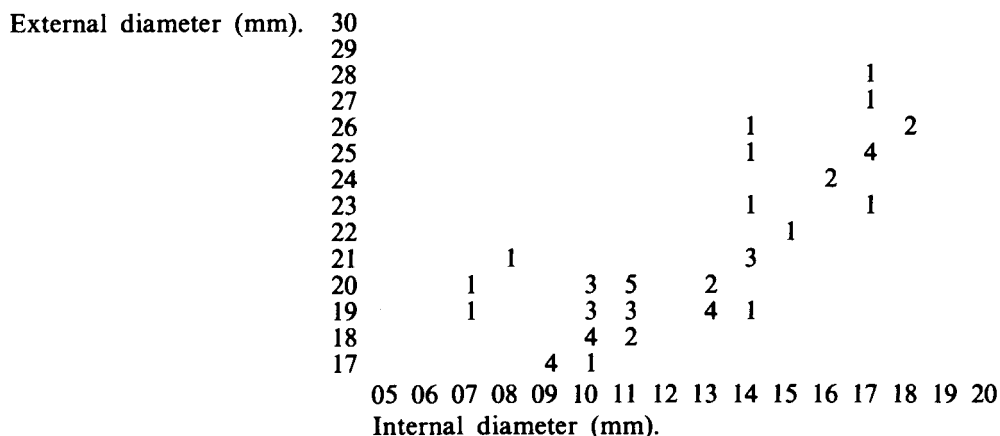


Fig. 6 Size range of three-lined ovolos.

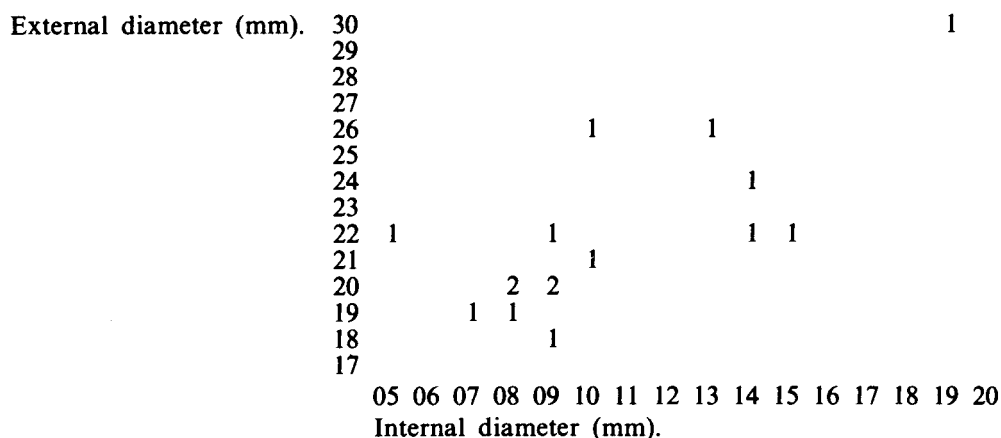


Fig. 7 Size range of four-lined ovolos.

Decoration:

During the early Roman period combed wavy lines and verticals are common on vessels of late La Tène descent in Britain and on the continent, such as girth beakers, e.g. at Neuss, Filtzinger

(1972, Taf. 13, 1-7), at Nijmegen, Holwerda (1941, Nos. 26, 30, 33, 38) and at Camulodunum, Hawkes and Hull (1947, Form 85), or butt-beakers, e.g. at Hofheim, Ritterling (1913, Form 102), at Nijmegen, Holwerda (1941, Nos. 52, 53, 55), and Camulodunum, Forms 91, 116A. Two imitation samian form Drag. 29 are illustrated from Neuss with compass drawn half circles ('ovolos'), Filtzinger (1972, Taf. 31; 6, 7; Form 32b, dated A.D. 25-50). Another example from Okarben, further south in the Taunus, is dated A.D. 85-130, Wolff (1915, Taf. V, 29). Therefore, it seems likely that the decorative technique on London ware originates in the Lower Rhineland area, as do several of the forms.⁶

The distinctive incised ovolo decoration was achieved by means of a compass-like instrument with a toothed end.⁷ No actual tools survive from the Roman period but they were probably made of wood or bone. As each separate implement would have produced a distinctive motif, it was initially hoped that a catalogue of ovolos could be produced in the same manner as for samian. However, although certain types did emerge, distortion, differential depth and other factors such as variable shrinkage, made it impossible to define individual motifs exactly. Examination suggested there were at least fifteen varieties. Moreover, teeth would eventually become worn or broken, resulting in different patterns from the same original tool. Only much larger quantities of material will allow a comprehensive catalogue to be produced. The size distribution of the ovolos is shown in Figs. 6 and 7. The following points can be noted:

1. Ovolos with three lines were commonest, with occasional examples of ones with four or five.
2. Ovolos with four lines were more common on the imitation Drag. 37 Type 2 than Type 1.
3. Only one size ovolo was used on any one vessel.
4. The ovolos on vases were generally larger than those on bowls.

How the smooth surface was achieved on London ware is not yet certain but it was probably produced by burnishing the pottery, some of which had previously been slipped.

Forms:

The 212 sherds consisted of the following forms:

		<i>Number of sherds</i>	<i>%</i>
Imitation Drag. 37	—	114	53
Straight Sided Bowls	—	21	10
Vases	—	53	25
Plates	—	20	10
Other	—	4	2

Imitation Drag. 37 (=Southwark Form IVEI): (Fig. 5)

Due to the large numbers of this form, type vessels and unusual designs only have been illustrated.

- Type 1 (No. 108) Upper Zone: Rouletted.
Lower Zone: Ovolos above combed verticals.
Total: 26.
- Type 2 (No. 109) Upper Zone: Undecorated.
Lower Zone: Ovolos above combed verticals.
Total: 13.
- Type 3 (No. 110) Upper Zone: Rouletted.
Lower Zone: Combed verticals.
Total: 4.
- Type 4 (No. 111) Upper Zone: Undecorated.
Lower Zone: Combed verticals.
Total: 7.
- Type 5 (No. 112) Upper Zone: Open rouletting.
Lower Zone: All over rouletting.
Total: 3.

Type 6 (No. 113) Upper Zone: Undecorated.
 Lower Zone: All over open rouletting.⁸
 Total: 5.

In addition there were some unusual schemes of decoration represented only once (Nos. 114–117) and three bases (Nos. 118–120). The two omphalos bases are similar to one from Copthall Close (No. 102).

Straight Sided Bowls: (Fig. 8)

This group includes a number of variants, some of which seem to be imitations of samian forms Drag. 29 (e.g. No. 132), or Drag. 30 (e.g. No. 134), but others tend more strongly towards *terra nigra* originals (such as Hofheim Form 109A). A wide range of decorative combinations occur.

Vases: (Fig. 9)

These have been divided into two forms on the basis of body profile. Type 1 (e.g. No. 135) has a pronounced shoulder whereas Type 2 (e.g. No. 138) lacks a distinction between neck and body. These forms are equivalent to Southwark Forms 11R1 and 11R2 respectively. There are no bases in this group of Bank of England material but several were found on the site in 1926,⁹ which were taken to be from pedestal urns of Belgic origin and used as evidence for pre or early Roman occupation in London. It however seems likely that these bases, described as 'grey ware with smooth black surface', were from London ware vases.¹⁰ It is significant that the distribution of such pedestal bases in London¹¹ shows a marked concentration in the Copthall Close–Bank of England area. The rims of Nos. 136, 138 and 139 have been reconstructed. Ornamentation on these vases seems to have been restricted to the upper part of the vessel and consists of a variety of decorations.

The origin of Type 1 lies in the Gallo–Belgic vases known from many continental sites e.g. at Nijmegen, Holwerda (1941, Forms 25 and 44) and at Blicquy, De Laet *et al.* (1972, Plate 8, t. 23B, 1; Plate 16, t. 42, 1 etc., dated late first–early second century). Type 2 may be an imitation of samian *lagenae* (Déchelette Form 62).

Plates (=Southwark Form VC1): (Fig. 10, Nos. 141–148)

These are similar in form to continental *terra nigra* types, e.g. at Nijmegen, Holwerda (1941, Forms 77a–d), at Hofheim, Form 97Aa and see also Rigby (1973, Form 21); but these lack the characteristic rouletted decoration of London ware plates.¹²

Carinated Beaker (=Southwark Class 111G): (Fig. 10, No. 149)

This form is represented by only one example and a further sherd from Copthall Close. The form also originates on the continent (Holwerda, 1941, Form 26, Hofheim Form 113 and Camulodunum Form 120) and is widely copied in Britain during the first century A.D.

Others: (Fig. 10, 150–154)

These include two bowls, two rouletted dishes and a lid. The fabric of one of the dishes (No. 153) is different to the normal London ware.³

(I.3) Discussion

The evidence from the Copthall Close and the Bank of England strongly suggests kilns in the Walbrook Valley.¹³ The possibility that the pottery is the result of dumping should not be ignored, but it seems unlikely that it was brought far from its place of manufacture. During the early Roman period the Walbrook Valley seems to have been an industrial area and the undeveloped northern part of Roman London would have been ideal for pottery production, despite being only 350m from the basilica and forum.¹⁴ The dating of London ware from Southwark is c. A.D. 90–130 and there is no reason why the City material should be any different.¹⁵ Such a date would also suit the mica-dusted and grey wares. However none of the grey wares have yet been identified in Southwark and closer dating will depend on analysis of groups from the City.

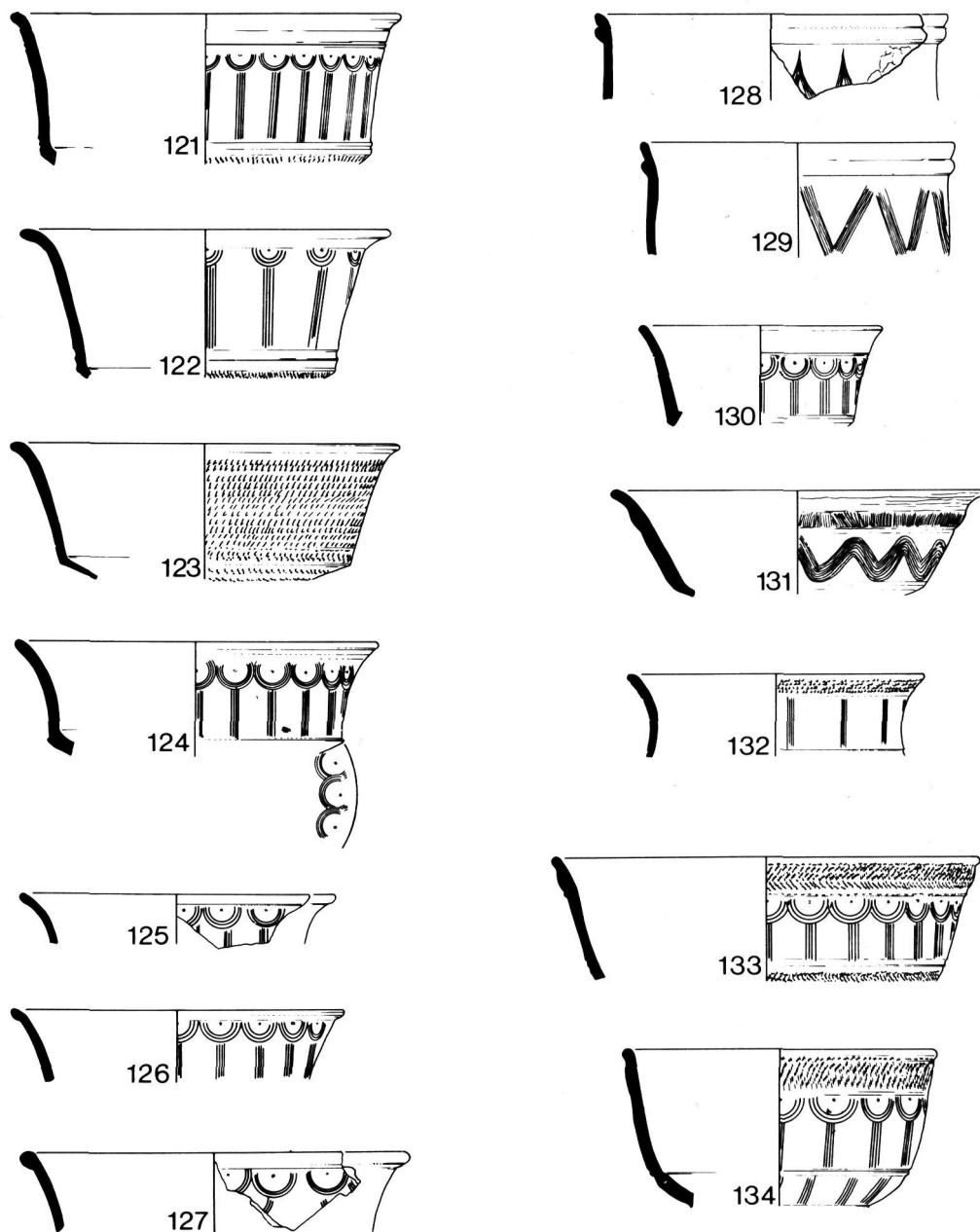


Fig. 8 Bank of England; London ware, 121-134 (¼)

The material from Copthall Close-Bank of England greatly expands the evidence for pottery production in London, which has previously been fragmentary and mostly restricted to the western part of the City (Fig. 1).¹⁶ There is also evidence for samian manufacture later in the second century, supported by the 'Aldgate Waster' and samian moulds recorded from the vicinity of St. Paul's Cathedral.¹⁷ The long suspected samian industry in London can now be seen in the context of earlier fine ware production.

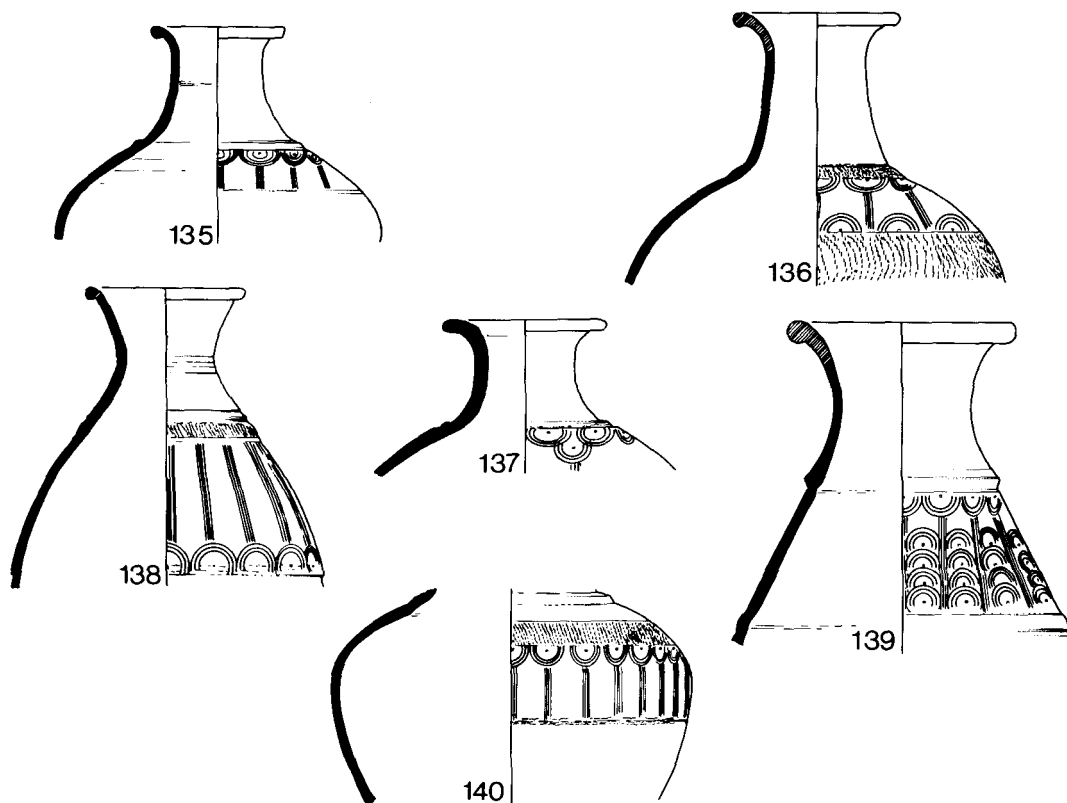


Fig. 9 Bank of England; London ware, 135-140 (¼).

Appendix

A Stamped Sherd from Copthall Close by Dr. Martin Henig

(Fig. 11)

A sherd of micaceous grey ware (No. 31) is stamped on the base with the impression of a signet stone. The use of intaglios in this way is not unique and we may cite a parallel on the base of a Belgic 'egg-shell' beaker from the site of Nos. 55-61 Moorgate Street, in the very near vicinity, Henig (1974, Vol. 2, 103-104, Plate 54, No. 806). The only other example known to me from Britain is the base of another eggshell beaker from Richborough, although a piece of legionary ware from Holt, Denbighshire incorporates a gemstone-sealing as a decorative motif, Henig (1974, Vol. 2, Plate 54, No. 805

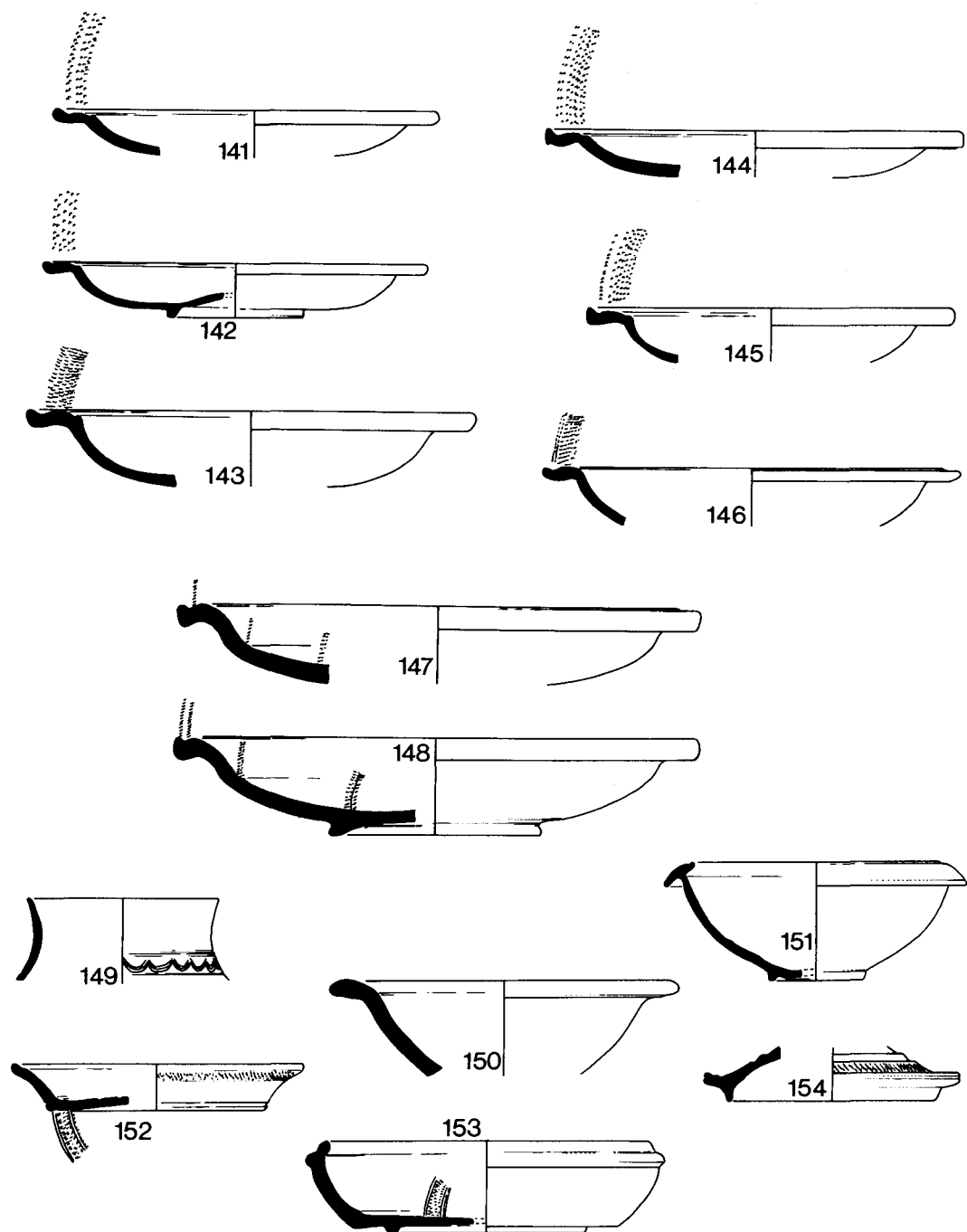


Fig. 10 Bank of England; London ware, 141–152, 154: other, 153 (¼).

[Richborough], No. 804 [Holt]). Several pots from continental sites are also stamped with a signet, Henig (1974, Vol. 1, 26, refs. cited), also Mócsy (1974, 72, Plate 4b). Our sherd seems to be the first unequivocal evidence of a potter owning a signet-ring, with the suggestion this implies of a certain degree of literacy, although we must bear in mind that intaglios have been found on kiln sites, Henig (1974, Vol. 1, 63).

Unfortunately the clay is coarse and the impression of low quality; moreover, the break in the sherd means that only some two thirds of the device survives. It seems to depict a nude male figure who *may* be holding a mask or severed head in front of his face. Is it Perseus with the head of Medusa? (See Furtwängler [1896, 176–177, Plate 32, No. 4243] for type.)

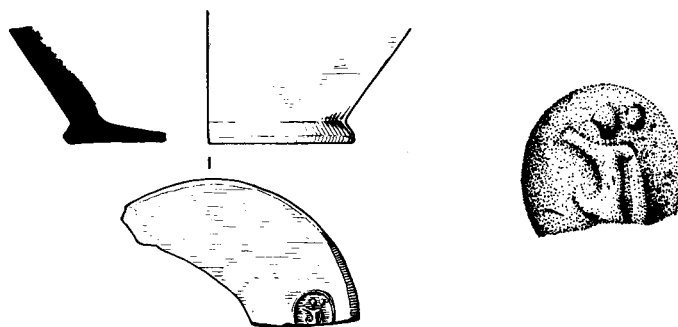


Fig. 11 Copthall Close; stamped grey ware sherd (1/2); detail (2/1).

2. Pre-Flavian Vessels from London

Amongst the early acquisitions of the Museum of London from London are an interesting group of four vessels, distinguished by their unusual form and fabric (Fig. 12, 1–3, 5). A further example in the British Museum also comes from London (Fig. 12, 4).¹⁸ Their precise findspots are unknown, but their undamaged condition suggests that they originally came from graves. The vessels are linked by their exceedingly hard and very granular grey fabric.¹⁹ Despite their coarse fabric, the vessels are well made and the jugs, especially, delicately moulded.

1. Museum of London Acc. No. 2842 (London) small one-handed jug with well defined shoulder. The rim is externally grooved and lid-seated.
2. Museum of London Acc. No. 10458 (Fetter Lane, c. 1894) small one-handed jug with rounded shoulder, decorated with two grooves. Rim as No. 1.
3. Museum of London Acc. No. 419 (Austin Friars, 1889) small beaker with upright rim, grooved externally. Body decorated with two cordons.
4. British Museum Acc. No. p1973, 7–2, 28 (Great St. Helens, 1932) small beaker with cornice rim. Cordon and groove on body.
5. Museum of London Acc. No. 407 (Bishopsgate Street) small squat necked jar with beaded lip. Two coarse girth grooves.

Nos. 1–4 are impossible to parallel in the London area, and elsewhere in Britain only occur on early military sites. Their origins are clearly in the Rhineland where such forms are very common. The one-handed jugs²⁰ can be paralleled by Hofheim Form 89 (Claudian–Neronian), Neuss Form 2 (Tiberio–Claudian) and at Nijmegen, Stuart (1963, Form 213A; A.D. 70–105) and the beakers²¹ by Hofheim Form 85A, Neuss Form 3b and at Nijmegen, Stuart (1963, Form 204A; A.D. 40–80). It is therefore possible that these vessels are imports perhaps even brought over at the conquest in A.D. 43. However, No.

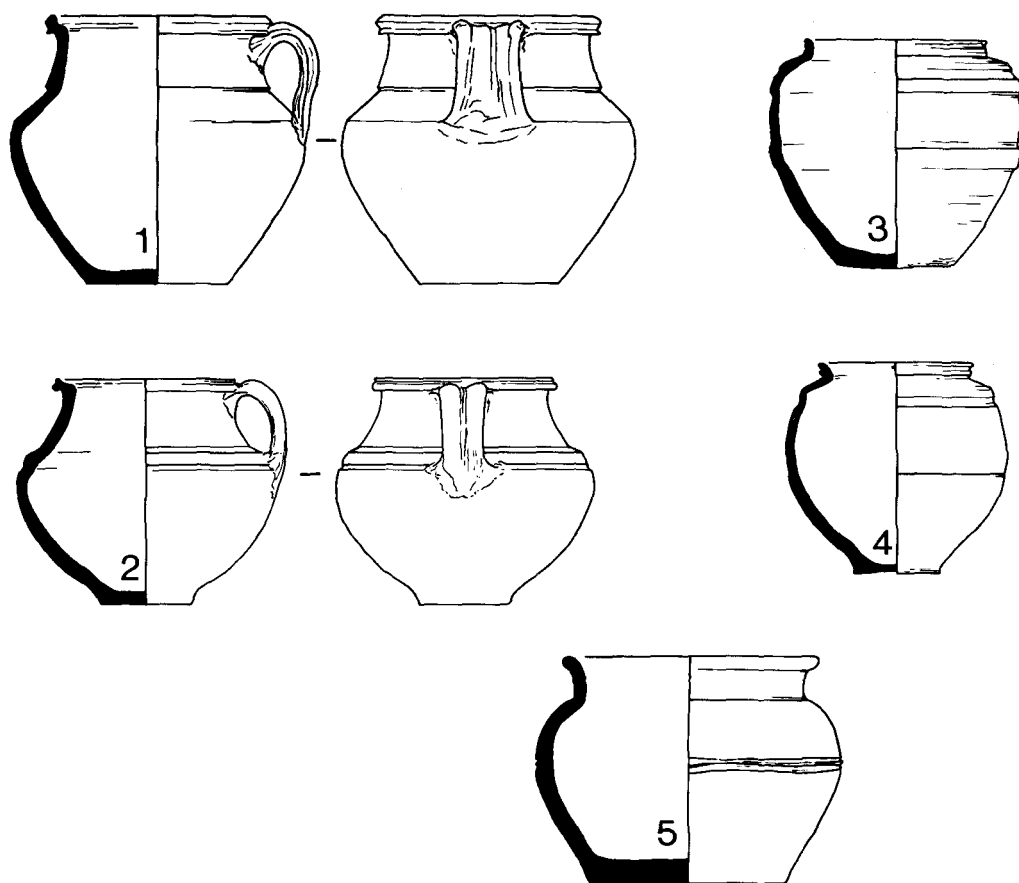


Fig. 12 Pre-Flavian vessels from London, 1–5 (1/3).

5 cannot be directly paralleled on the continent and is more likely to be of Belgic origin, see Swan (1975, Fig. 4, 44 and refs. cited). Continental potters were probably working in the Verulamium region from an early period, Marsh and Tyers (forthcoming), and there is no reason why they should not have worked in the London area as well. Therefore, rather than seeing the vessels as imports, they may be the products of Rhineland potters, associated with the military, working in the vicinity of London.

Whatever their exact origins the vessels are extremely early, probably Claudian, and furnish additional proof of early military activity in London.

NOTES

- ¹ Museum of London Acc. Nos. 14,994/7.
- ² For reports on the discovery, see *J. Roman Stud.* 27 (1937) 241; *Annual Report, Library Committee, Guildhall Library Museum for 1936* (1937) 14–15 and *Trans. London Middlesex Archaeol. Soc.* 7 (1937) 669–670.
- ³ See 'Excavations in Southwark, 1972–74', forthcoming. Six mica-dusted sherds from Copthall Close and fifteen sherds from Southwark were analysed. Half of the Southwark sherds fell into two close groups which also included four of the Copthall Close sherds thin sectioned. The composition of the other two Copthall Close sherds indicated that different clays had been used. It is however uncertain how the physical composition of the brickearth changes in London or whether the Roman potters found it suitable for potting at all. The Southwark sherds confirm a late first–early second century date for the Copthall Close material. Eight London ware sherds were thin sectioned, all from vessels of imitation Drag. 37 form (three from Copthall Close, three from the Bank of England and two from Southwark). Six of these fell into one group with two sherds from the Bank of England having a slightly different composition. In addition sherds from two plates (inc. No. 153), whose fabric differed from the London ware and appeared to be closer to *terra nigra* fabrics, were thin sectioned. The results confirmed that they were not closely related to the other sherds analysed.
- ⁴ For Southwark forms, see Marsh and Tyers (forthcoming).
- ⁵ Museum of London Acc. Nos. 14,297–14,305 and 14,863.
- ⁶ Compare especially the decoration on the carinated beaker (No. 149) with that on vases from Blicquy, De Laet *et al.* (1972, Plate 18, t. 49, 2; Plate 60, t. 212, 2a and Plate 66, t. 228, 1).
- ⁷ A similar motif is known on bone objects, e.g. Frere (1972, Fig. 54, 193) and on shale trenchers, e.g. Biddle (1967, Fig. 6). Three of the latter have been recorded from London, Biddle (1967, appendix, Fig. 10, 11, 19–21).
- ⁸ Compare with a similar bowl from Vindonissa, Ettlinger and Simonett (1952, Taf. 18, 423) where an indigenous La Tène origin is proposed.
- ⁹ See R. C. H. M. (1928, Vol. 3, Fig. 2, 6–8).
- ¹⁰ See Hawkes and Dunning (1931, Fig. 23).
- ¹¹ A London ware vase from Silchester has a base of this form, May (1916, Plate 71, 113).
- ¹² Similar plates with rouletting occur at Chichester but in a different fabric. Information kindly provided by Valery Rigby.
- ¹³ This is supported by finds of 'graphite' coated ware from Founders Court, R. C. H. M. (1928, Vol. 3, 130) and by two complete London ware vases, now in the Museum of London, Home (1926, Plate facing p. 180). There is also a mica-dusted waster in the Museum of London from London, not seen by the writers, but apparently of Drag. 30 form.
- ¹⁴ For evidence of Roman pottery production inside towns, see Wild (1975, 161, footnote 124).
- ¹⁵ London ware was produced at several other sites in southern Britain notably Upchurch, Kent and Ardleigh, Essex.
- ¹⁶ For references, see Marsden (1969) and Marsh and Tyers (forthcoming).
- ¹⁷ See Simpson (1952). The production of the Aldgate-Pulborough potter is currently dated c. A.D. 120–150, Webster (1975, 170). For the moulds, see R. C. H. M., (1928, Vol. 3, 140). Although the kiln discovered at the Paternoster Development Site in 1961 was assumed to produce coarse wares, Marsden (1969), its construction was most unusual. The closest parallels to the published plan are kilns with tubes, Duhamel (1974, Fig. 7C), which were mostly used for firing samian but possibly also mica-dusted wares, e.g. at Gloucester, Rawes (1973).
- ¹⁸ There are four more vessels of similar type from London. They are, a further one-handled jug (Lothbury), a beaker (London), a straight sided beaker with a handle (Southwark) and a simple necked jar (St. George's in the East), all in the Museum of London. It is hoped to publish these in the future as they are unavailable for study at the present. The grouping of several of these pots in the north-eastern part of the City may be significant in relation to the areas of early cemeteries.
- ¹⁹ In appearance the fabric is not dissimilar to late Roman Mayen ware. However, macroscopic examination by Dr. David Peacock indicates that it lacks the volcanic inclusions; quartz being the filler.
- ²⁰ The rim moulding distinguishes these jugs from later varieties of the form, which continue to be produced until the late Roman period.
- ²¹ These beakers are absent from sites on the Germanic Limes, indicating a date prior to c. A.D. 85 for this form.

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NOTES

This series of notes is used to provide a place to publish important individual objects or finds that would otherwise remain unpublished. *Editor.*

A PALIMPSEST BRASS AT THE MUSEUM OF LONDON

by
Robert Hutchinson

The Museum of London has in its possession a fragment of a monumental brass measuring 143mm by 90mm.¹ Broken into three pieces, it forms the upper half of a shield, said by Mill Stephenson² to have been found 'in the City'. The fragment is palimpsest—or used on both sides—the obverse dated *c.* 1550 and the reverse *c.* 1475.

Obverse (Plate 1). Probably from the brass to Sir James Wilford of Hartridge, Cranbrook, Kent, who died 1550 and was buried in the now demolished church of St. Bartholomew-by-the-Exchange,³ in the old Broad Street ward. He married Joyce, daughter of John Barrett, of Aveley, Essex.⁴ The shield shows two coats impaled—that at dexter is certainly Wilford and may be blazoned *Gules a chevron engrailed between three leopards heads Or overall in chief a label ?Azure.*

The impaled coat is, however, difficult to identify and if the whole shield is said to represent the arms of Sir James, then it would be: *Quarterly 1 and 4 Barry of six per pale Argent and Gules counterchanged,*⁵ *2 and 3 Argent three lions rampant 2 and 1 Gules and as many cross crosslets 1 and 2 sable* (Bellhouse).

The Wilford family is recorded in visitations both of Surrey and Essex. It apparently originated in Devon and various branches spread around London, Surrey, Kent and Essex. In Stratford-le-Bow church is an inscription, dated 1551, and two shields in a freestone tablet with crocketed and traceried heads⁶ to Grace, daughter of the merchant tailor John Wylford who was elected a City alderman in 1538 and was the son of James Wilford, Sheriff of the City in the late fifteenth century.⁷ Judging from the competence of the engraving, the Museum of London fragment comes from the same workshop as this memorial. Another indication is the use of a copper rivet, still in its hole (Plate 1) which is one of the hallmarks of what has come to be called the *Fermer* style of brass engraving. (See Appendix.)

Reverse (Plate 2). An inscription:

..... ? Civis et Pu
[ux]or ei(us) qui quid(e)m Ric[us obijt]
[men]tis Septembris Anno [Domini]
[qu]orum a(n)i(m)ab(us) p(ro)piciet(er) d[eus Amen]

(Letters inside brackets omitted in the original by abbreviation. Letters inside square brackets conjectural.)

Translation:

'. . . . citizen and (name)
 his wife, which Richard died
 month of September in the year of our Lord
 on whose souls may God have mercy. Amen'.

Judging from the capitals A, S and R, this inscription is typical London work of *c.* 1475. It apparently commemorates Richard citizen and P his wife. The first line is partially obliterated by the sixteenth century workman's filing down of the plate to enable a lead 'wipe' to join this to another forming the lower half of the shield on the obverse.

It would seem that the plate forms the right hand portion of the original inscription, save for a piece of metal about 25mm in width which has been sliced off the right hand margin edge for some purpose. The complete brass must have measured only about 300mm in width, surely precluding associated figures of a man and his wife.

What is certain is that this fragment forms one tiny part of the vast bulk of plate torn up during the Reformation which found its way back to the brass engravers' workshops for re-use. Unfortunately, this particular palimpsest does not appear to link with any piece or pieces as yet discovered 'behind' any other Fermer-type brasses.

APPENDIX: FERMER BRASSES

Economic factors and the distribution of brasses forms plausible evidence which points quite clearly to London as the main centre of manufacture in England throughout the 400 years 1300–1700 that brasses of the 'medieval tradition' were laid down in the British Isles.

In the middle of the sixteenth century, two main figure styles were produced in London. The first, classified as the Fermer style,⁸ was more prolific and in terms of engineering and artistic merit vastly superior.

Some 59 brasses identified as products of this workshop are listed below. This total indicates a surprisingly high level of productivity for the decade or so that the design flourished—taking into account the limited technology and transportation resources available in the mid sixteenth century. It must be stressed that this total mostly represents only *extant* brasses; it seems a reasonable assumption that some of the memorials dating from this decade which have now disappeared but are mentioned by such writers as Stow could have emanated from this workshop.

LIST OF FERMER BRASSES

Key: P = Palimpsest or reused plates.

SR = Appropriated or reused stonework or slab.

County boundaries take no account of recent municipal changes but follow those used by Mill Stephenson.⁹

No.	Date	Location	Type	Comments
1	1545	Harefield, Middx. ¹⁰	Civilian and wife	P SR
2	1546	Sonning, Berks. ¹¹	Civilian	P
3	1547	Aldenham, Herts.	Shroud	P

<i>No.</i>	<i>Date</i>	<i>Location</i>	<i>Type</i>	<i>Comments</i>
4	1547	Private possession ¹²	Inscription	
5	1548	Greystoke, Cumberland	Girl	P
6	1548	Blewbury, Berks.	Military and wife	P SR
7	1548	Braunton, Devon.	Lady	P SR
8	1550	Sessay, Yorks.	Priest	P
9	1550	Isleham, Cambs.	Inscription	
10	c. 1550	Museum of London	Fragment	P
11	c. 1550	Crowan, Cornwall	Military and wife	P
12	c. 1550	Holdenby, Northants.	Inscription	
13	c. 1550	Holdenby, Northants.	Inscription	
14	c. 1550	Holdenby, Northants.	Inscription	
15	c. 1550	Holdenby, Northants.	Inscription	SR
16	c. 1550	Holdenby, Northants.	Inscription	
17	c. 1550	Swyre, Dorset	Inscription	
18	c. 1550	Swyre, Dorset	Inscription	
19	c. 1550	Acton, Cheshire	Military and wife	Indent
20	c. 1550	British Museum	Fragment	
21	c. 1550	Derelict ¹³	Fragment	P
22	c. 1550	Society of Antiquaries	Lady	
23	1551	Ossington, Notts.	Military and wife	P
24	1551	Winchester St. Cross	Inscription	P
25	1551	Stratford-le-Bow, London	Inscription	
26	1551	Greystoke, Cumberland	Civilian	P
27	1551	Dinton, Bucks.	Military and wife	P
28	1551	Dinton, Bucks.	Military and wife	P
29	1552	Stoke Charity, Hants.	Inscription	P
30	1552	Beckenham, Kent	Military, two wives	
31	1552	Somerton, Oxon.	Military and wife	P
32	1552	Easton Neston, Northants.	Military and wife	P SR
33	c. 1552	Ludford, Salop.	Military and wife	P
34	c. 1552	Horseheath, Cambs.	Civilian	
35	c. 1552	Twyford, Bucks.	Military	P SR
36	c. 1552	Dry Drayton, Cambs.	Military and wife	P
37	c. 1552	All Hallows, Barking, London	Fragment	P
38	1553	Penshurst, Kent	Inscription	
39	1553	Littleton, Middx.	Inscription	
40	1553	Milton, Cambs.	Judge and wife	P
41	1553	Gillingham St. Mary, Norfolk	Inscription	
42	1553	Hainton, Lincs. ¹⁴	Military, two wives	SR
43	1553	Ashby St. Legers, Northants.	Military	P SR
44	1553	Great Hampden, Bucks.	Military, two wives	P
45	1553	Kirtling, Cambs.	Civilian	
46	1553	Halton, Bucks.	Judge and wife	P
47	1553	Shorne, Kent	Inscription	P LOST
48	1553	Northiam, Sussex	Inscription	P
49	c. 1553	Blatherwyck, Northants.	Military and wife	P

No.	Date	Location	Type	Comments
50	c. 1553	Willesdon, Middx.	Lady (Remnant)	
51	c. 1553	St. Mellion, Cornwall	Military and wife	P
52	1554	Chilton, Bucks.	Inscriptions, shields	P
53	1554	Warminghurst, Sussex	Civilian and wife	
54	c. 1554	Banwell, Somerset	Civilian and wife	
55	c. 1554	Charlwood, Surrey	Military and wife	SR
56	c. 1555	Clapham, Sussex	Military and wife	
57	c. 1555	Woodchurch, Kent	Military, two wives	
58	c. 1555	Hitcham, Bucks. ¹⁵	Military, sons only	
59	1555	Chelsea, Middx.	Lady, etc.	

It will be noticed that the great majority of these memorials are made up of reused metal: others have not yet been investigated. Many have palimpsest links and these are discussed in John Page-Phillips' *Macklin's Monumental Brasses* (2nd edition, London 1972).

It is the palimpsest aspect that provides a possible clue to the identity of the craftsmen who may have been responsible for this class of memorial. Churchwardens' accounts for St. Faith's for 1553 state:¹⁶

'Item the twentyth of ffebruarye solde to Roger Syluester and Aleyne Gaulyn, marblers, seven score pounds of olde and broken lattyn for syxe and fortie shillinges and eight pence.

Item. Lykewyse solde a lytle awterstone for three shillunges and fower pence.

Item solde the tenth daye of ffebruarye aforesayde to Mistress Crooke wydowe a marbell stone for a tomble for tenne shillinges'.

The theory that Syluester and Gaulyn were responsible for the Fermer series (marbler = brass engraver) is lent some weight by the fact that an inscription to Richard Tabbe, 1490, found 'behind' a Fermer brass at Great Hampden (No. 44) is traceable back to St. Faith's and the year of the memorial is the same as the sale of metal (1553). Unfortunately the reference to 'Mistress Crooke' in the same month cannot apply to the brass to John Croke at Chilton (No. 52) as his death post-dates the sale of the 'marbell stone for a tomble' by a year.

Points of comparison for identifying a Fermer brass are the curious 'bulging' eyes shown on all the effigies, a peculiar and somewhat graceful attention to detail and a conservative approach to design; for example, the figure of John Latton at Blewbury (No. 6) stands on a lion which one would normally expect to find on brass of the first half of the fifteenth century.¹⁷

Interestingly, in several cases the script normally associated with this figure style is dropped and that found with the workshop's contemporary rival substituted. Examples of this practice (perhaps a case of sub-contracting) are found at Blatherwyck and Charlwood (Nos. 49 and 55).

This second workshop produced rather primitive and naive figures with the armoured

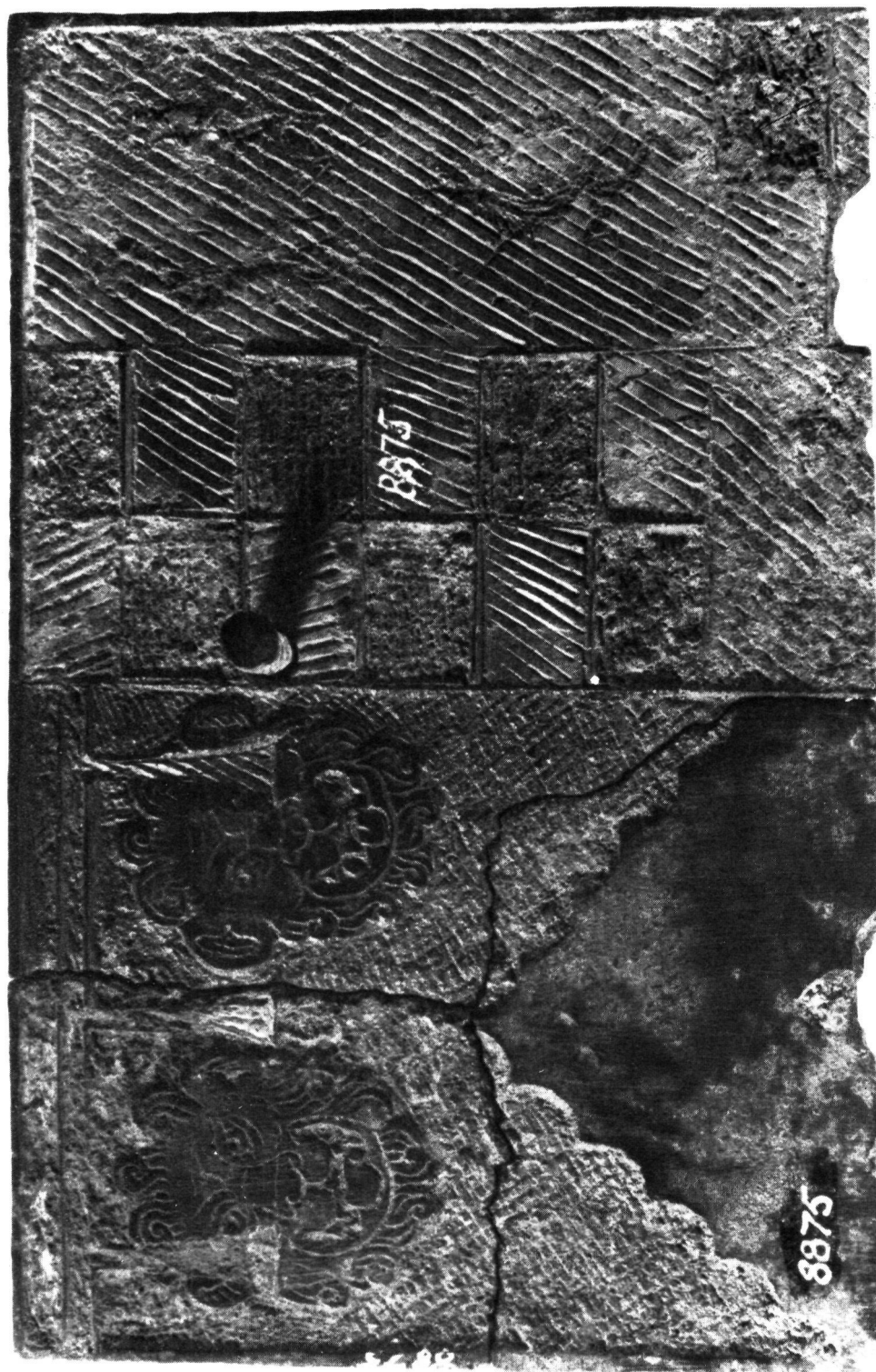


Plate 1. Palimpsest Brass, obverse. Fragment of a shield belonging to the lost brass of Sir James Wilford, died 1550, St. Bartholomew-by-the-Exchange, London.



Plate 2. Palimpsest Brass, reverse. Portion of an inscription, c. 1475.

effigies wearing heavily seriffed harnesses and cod-pieces. Examples are at:

Cobham, Surrey	c. 1560	P
Isfield, Sussex	1558	P
Willingdon, Sussex	1558	
Margaretting, Essex	c. 1550	?P
Standon, Herts.	1557	

The script is easily distinguished from that of the Fermer, having a capital S bearing a double-bar similar to the American dollar symbol.

NOTES

¹ Accession No. 8875.

² Mill Stephenson *A List of Monumental Brasses in the British Isles* (London 1926) 578. *Catalogue of the Collection of London Antiquities in the Guildhall Museum* (London 1908) 336, No. 220 gives no details of provenance.

³ John Stow *A Survey of London*, ed. C. L. Kingsford (Oxford 1908) I, 185. The Wren church was demolished in 1891.

⁴ Stephenson op. cit. 578.

⁵ Barrett is normally *Barry of four per pale Argent and Gules counter-changed*. My thanks to A. Colin Cole, B.C.L., M.A., F.S.A., *Windsor Herald*, for his invaluable help for heraldry.

⁶ Illustrated: H. K. Cameron 'Brasses of Middlesex' *Trans. London Middlesex Archaeol. Soc.*, NS II, Pt. 3 (1954) 48 and in Royal Commission on Historical Monuments, *East London*, Pl. 103.

⁷ Stow records the burial in St. Bartholomew-by-the-Exchange of James Wilford, tailor 'one of the sheriffs, 1499, appointed by his testament a doctor of divinity, every Good Friday for ever to preach there a sermon of Christ's Passion from six of the clock till eight before noon in the said church'. Stow also mentions the burial of John Wilford, merchant-tailor, alderman, 1544.

⁸ Named after the brothers whose brasses are at Easton Neston, Northants., and Somerton, Oxon. In the past, some writers have referred to the figure style as Fermour—although at Somerton, the name is *Fermour* and at Easton Neston, *Fermer*.

⁹ Stephenson op. cit.

¹⁰ Illustrated: Cameron op. cit. 21, Pl. 4. (facing p. 105). John and Anne Newdegate are interesting examples of a transition between two figure styles. The female effigy clearly belongs to the Fermer designs which at this time were superseding an earlier style which had originated c. 1525–30. Dr. Cameron draws attention to noticeable contrasts in the two figures of this brass (*ibid.* 103). I have noted this memorial as palimpsest

(although the reverse has not yet been examined) because of evidence of incised lines on the back of the figures.

¹¹ In the process of being repaired at the time of writing. (April 1976.) During a visit to the church, I noted that the inscription was loose and had a portion of another inscription ? c. 1450 on the reverse.

¹² This is the only example of a secular brass produced by the Fermer workshop so far noticed. The Society of Antiquaries has in its collection of rubbings one of an inscription measuring 295mm by 107mm recording the erection of a 'brygg' by Humfrey Pakyngton Esquier in 1547. The rubbing is endorsed 'Brass plate in the possession of Sir Thomas Winnington Bart, Stamford Court, Worcester'. I am now informed by Sir Thomas' descendants that the plate was probably destroyed in a fire which burnt Stamford Court to the ground in about 1890.

¹³ This fragment, thought by some to be from Quarrendon, Bucks., has on its reverse, a 'link' with the reverse of one of the Dinton brasses. It may possibly belong to this brass.

¹⁴ Upper half of Sir Thomas Henneage is a passable restoration of the original design. Other parts of the brass have also been restored.

¹⁵ The effigy of Nicholas Clarke (which I have redated from 1551 to c. 1555) belongs more probably to what John Page-Phillips terms the *Lytkott* figure style which superseded the Fermers. *Macklin's Monumental Brasses* (2nd Edition, London, 1972). I have classified it as a Fermer product as the sons are clearly on this design.

¹⁶ H. B. Walters *London Churches at the Reformation* (London 1939) 277. My thanks to John Page-Phillips for drawing this reference and its implications to my attention.

¹⁷ Illustrated: R. Hutchinson and B. S. H. Egan 'A Palimpsest Find at Blewbury, Berks', *Trans. Mon. Brass Soc.* XI (June 1975) 414.

ROMAN FOLDING SPOONS

by
David Sherlock

There is a small class of spoons from Roman Britain which may be called folding spoons, since they either folded in half or had attachments which unfolded from the ends of the handles. Only ten from Roman Britain, and an eleventh from France, are known to the writer. Less than half of these have been adequately published, and the group as a whole has not been discussed.

The spoons may be divided by their shapes into two basic types, here called A and B, and a third, a hybrid C. As far as is known from ordinary spoons with comparable shapes, this typological order seems to be roughly chronological, so it is convenient to consider the types in that order. The spoons will first be listed under types and then discussed.

Type A (Fig. 1)

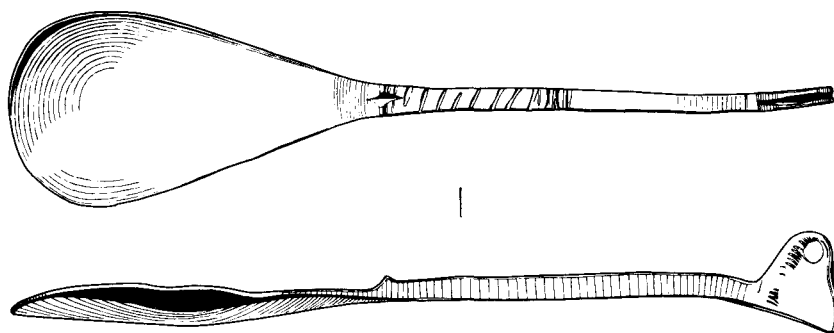
1. Bronze. Length 108mm. From the Walbrook stream-bed, Bucklersbury House site, London, 1956. Date range A.D. 50-150. (Museum of London Acc. No. 20086.) Unpublished.
2. Bronze with iron blade. Length 119mm. From silt fill of a Walbrook tributary, Angel Court, London, 1974. Not later than A.D. 180. (Museum of London ACW 74, Registration No. 61.) Excavation report in preparation.¹
3. Iron. Length 104mm. From Cow Roast Inn (Herts. SP/197103), Romano-British settlement. 1974 excavations. (Small find No. 294.) From a pit with coins of c. A.D. 222-273.² Almost identical to No. 2, but less complete.

In this type the handle is not hinged to the bowl, but has a hinge for a blade at the other end. The bowls are an elongated shape with a raised notch where they meet the handles. The three examples are not quite the same because the first has a hinge at right angles to the bowl, while on the other two it is on the same plane. On the recently discovered example from Angel Court (No. 2) a fragment of the iron blade survives, about 35mm long and 14mm wide. There is a bulge half way along the handle which X-ray photography has shown to be a repair where the handle broke in two.

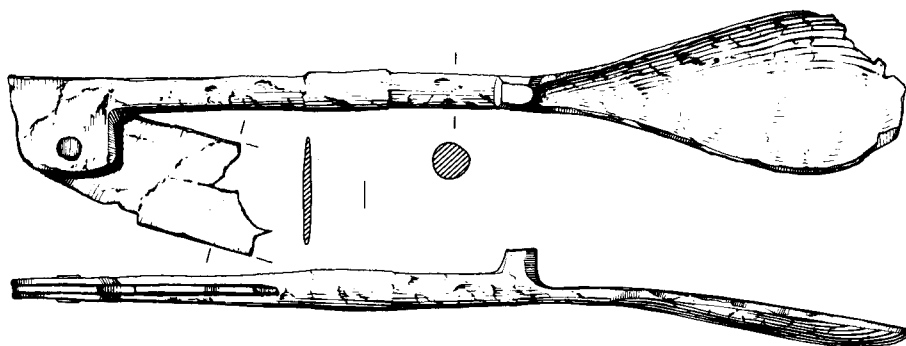
These spoons are plainer and more crude than those of Type B. The only decoration is on No. 1 which has small engravings running half the length of the top side of its handle.

Type B (Fig. 2)

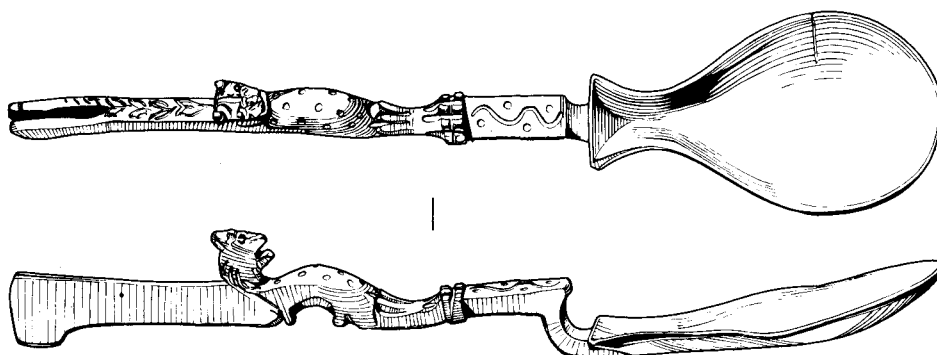
1. Bronze. Bowl only. Length 48mm. From Richborough. (Now Cambridge, Museum of Archaeology and Ethnology, Trinity College Loan Collection No. 1914.) Published.³
2. Bronze, tinned. Bowl only. Length 46mm. Unprovenanced but thought to come from a villa site near Chepstow (Monmouthshire). (Birmingham City Museum, Acc. No. 232.69.) Unpublished.
3. Bronze, silvered. Bowl only. Length 49mm. From Shakenoak (Oxon.) villa. Published.⁴ Excavated from a late third century, but unsealed, deposit.
4. Bronze. Length 106mm. From Traprain Law (E. Lothian). (Now Edinburgh, National Museum of Antiquities.) Published.⁵ From a third or fourth century A.D. context.
5. Bronze. Length 106mm approximately. From Hockwold-cum-Wilton (Norfolk). (Norwich



TYPE A.1



TYPE A.2



TYPE C.1

Fig. 1 Roman folding spoons: Type A, 1. Bucklersbury House, London. 2. Angel Court, London. Type C, 1. Northern France. (all $\frac{1}{1}$)

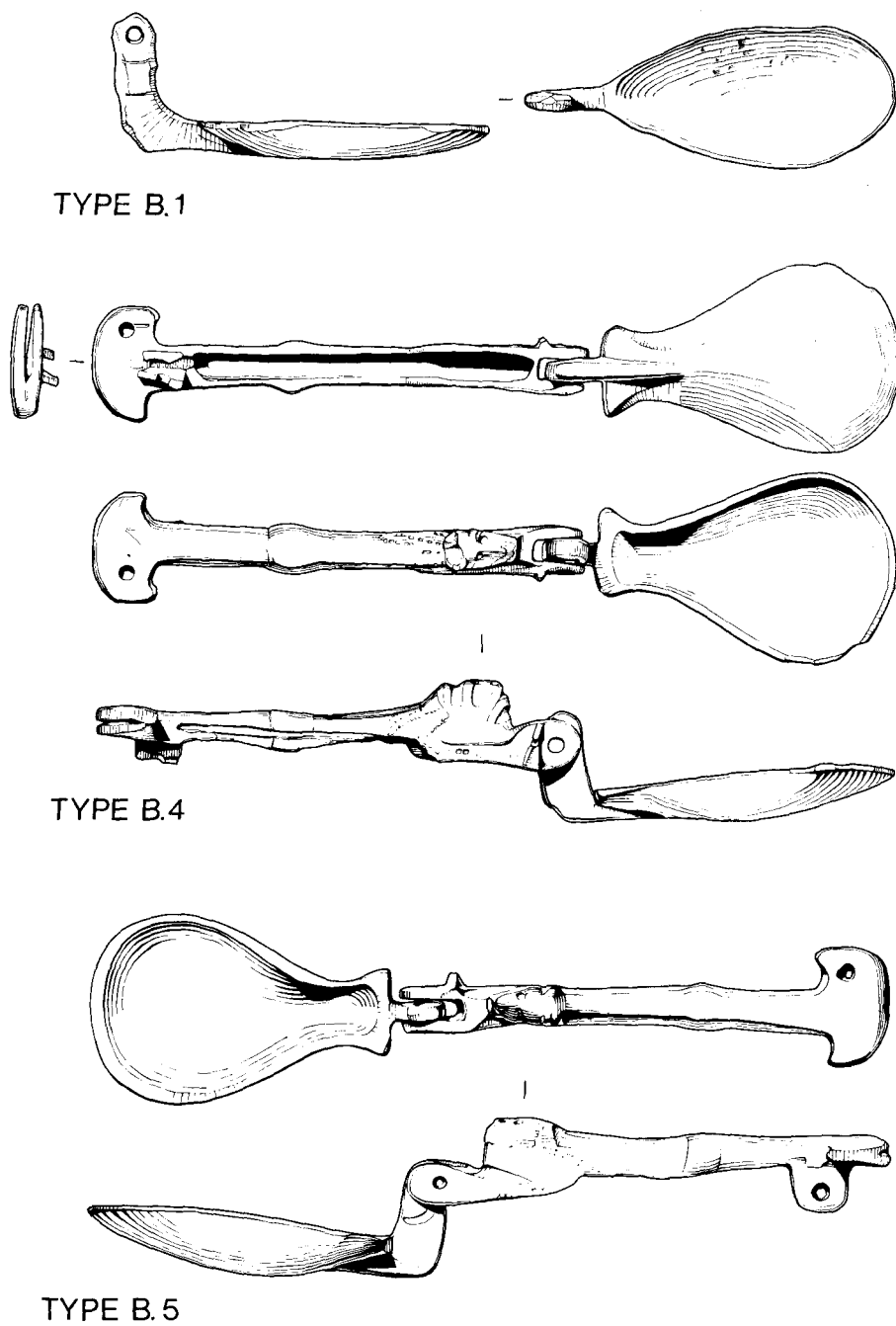


Fig. 2 Roman folding spoons: Type B, 1. Richborough. 4. Traprain Law. 5. Hockwold-cum-Wilton, Norfolk. (all 1/1)

Castle Museum, Acc. No. 396.962.71.) Unpublished.⁶ Almost identical to No. 4, but more worn.

6. Bronze. Handle incomplete; bowl half missing. Length 85mm. From London. (British Museum, Acc. No. 1856 7-1, 1152.) Published.⁷

7. Bronze. Handle only. Length 55mm. From Wroxeter, unstratified. Published.⁸

The bowls of the spoons in this group are all so-called fiddle-shaped, except for that of the first which is leaf-shaped. The end of each bowl has an L-shaped projection onto which the handle was hinged.

While the bowls are plain and like those of ordinary spoons, the handles are elaborate, both decoratively and technically. Their lower half is in the form of a lion's or leopard's head, and the bowl may be considered as being held between the animal's front legs. The underside of the head is hollow and the handle is U-shaped in section. Half-way along the handle is a bulge representing the animal's hind quarters and legs. The other end of the handle flattens into a curved piece like a double-headed axe. One half of this piece is sliced and pierced for a hinge for an implement which would have folded along the side of the handle and been fitted between two notches near the animal's front right paw. Underneath, and slightly to one side, is another smaller hinge—perhaps for another attachment which folded underneath the handle.

None of the implements that fitted onto the handles have survived. As the handles of ordinary spoons nearly always ended in a spike, which it has been suggested was used for extracting the flesh from snails and other small shell foods, it is a reasonable guess that one of the folding implements was a spike.⁹ This could have fitted conveniently along the side of the handle and been held in place by the notches. The implement underneath might have been a narrow-bladed knife for which the hollow handle would have formed a sheath, or a spatula for extracting bone marrow. The curved blade of such a spatula when folded out of use would have completed the round section of the handle.¹⁰ The end of the handle is not symmetrical and the half of the end which is not pierced has no obvious purpose.

The hinges have not survived, so one cannot be certain which way the handles were supposed to lie when the bowls were unfolded. It seems likely that the animal's head was intended to be seen when the spoon was in use, and would have folded more compactly into the bowl than if it had been facing the other way up.

Type C (Fig. 1)

1. Bronze, silvered. Length 122mm. From Northern France. (Now New York, Metropolitan Museum, Department of Medieval Art 17.192.254.) Published.¹¹

This is really a hybrid between types A and B. The bowl is the same shape as in B, 2-6, but there is a hinge, like Type A, on the other end for a blade to fold underneath. The middle of the handle is composed of a leopard's head with spotted chest and stylised feet. The flat part of the handle immediately above the bowl is decorated with a snake and four spots.

Although the component parts of this spoon are familiar on various other spoons, their combination is most unusual. Because of the vague provenance of the spoon its authenticity must be doubted until it has been analysed or other examples discovered.

Discussion.

The archaeological dates, where recorded, are vague. They relate to when particular examples of the types were lost or deposited, not to their date of manufacture, nor do they tell us the date-range of the type as a whole. With that caution, we might conclude that Type A is earlier than Type B. It has two bronze examples from first or second century contexts and a third, a crude one of iron, from the second or third quarters of the third century. On the other hand, of only two dated examples in Type B, No. 3 is also third century and No. 4 is from a late hoard of metalwork, and could be much earlier. They may all be approximately dated to the second or third centuries A.D.

No closer dates can be reached by comparing the shapes of the bowls with those of ordinary spoons. Several other spoons with leaf-shaped bowls come from Roman London, and some of these from early contexts. One from Verulamium came from a deposit of A.D. 135–145.¹² So-called fiddle-shaped bowls of silver spoons are dated to the second or third century A.D.¹³ The dating of similar bronze spoons does not seem to be different. Bronze spoons which have a coating of tin or silver (as here B 2 and 3; C 1) may have a date that is comparable with that of the debasement of Roman coinage in the later third century.

Stylistically, the lion's head at the junction of the handles and bowls in Type B is similar to others which are common on ordinary spoons.¹⁴ The leopard's head and feet on the example of Type C is a very familiar treatment in classical art.¹⁵ The flat-sided piece joining the bowl to the leopard's feet is also common on Roman spoons of the second and third centuries.

Nothing definite can be said about why the folding spoons were made. The fact that they folded and combined other implements obviously suggests that they were made for travelling as a kind of convenient picnic set, like a modern pocket knife or a soldier's knife fork and spoon that clip together.¹⁶ If they were indeed 'military issue', then we have no documentary or literary evidence to support this, and the provenance of the spoons such as they are known do not suggest that they were left behind by soldiers. Three are from London, and those from Richborough and Wroxeter *could* also be military; but the other four from known provenances are from rural sites with no obvious connection with the army. The spoons of Type B are so similar to one another as to suggest a single source of manufacture; the same might be said about those of Type A. Folding spoons represent about one per cent of the surviving spoons from Roman Britain. They were a small proportion and can never have been popular.

NOTES

¹ I am grateful to Michael Rhodes of the Department of Urban Archaeology, Museum of London, for supplying me with details of this spoon and allowing me to include it prior to the publication of the site. I must also thank Hugh Chapman of the Department of Prehistoric and Roman Antiquities, Museum of London, for details of the Bucklersbury House spoon. For drawing the spoons I am grateful to Miss Judith Dobie.

² I am grateful to Mr. Eric Holland, Field Officer, Berkhamstead and District Archaeological Society, for supplying me with details of this spoon and allowing me to examine it. (Excavation report in preparation.)

³ John Battely, *Antiquitates Rutupiensis* (1745) 113, Fig. 2.

⁴ A. C. C. Brodrick *et al.*, *Excavations at Shakenoak* 2 (1971) 108 and Fig. 46, No. 62.

⁵ A. S. Robertson 'Roman Finds from Non-Roman Sites in Scotland', *Britannia* I (1970) 226 and Fig. 9, No. 4.

⁶ I am grateful to Mr. Tony Gregory, Assistant Keeper of Archaeology, Castle Museum, Norwich, for supplying photographs.

⁷ C. Roach Smith, *Illustrations of Roman London* (London 1859) Plate 37, No. 13.

⁸ J. P. Bushe-Fox, *Second Report on the Excavations . . . Wroxeter, Shropshire 1913* Rep. Res. Com. Soc. Antiq. No. 11 (London 1914) 14 and Fig. 5, No. 19. A similar handle (inscribed FECIT) in Shrewsbury Museum is also illustrated, Fig. 6.

⁹ There is also the superstition related by Pliny that the spike on the end of the spoon was used for piercing an empty egg-shell to prevent an evil spirit occupying it (*Nat. Hist.* 18.2).

¹⁰ My search in a number of museums with quantities of unsorted or miscellaneous Romano-British metalwork has not so far produced a piece that might have belonged to one of these handles, but one might easily be recognised, and if so I would be glad to be told of it.

¹¹ S. Foltiny in *Situla* 14-15 (1974) Fig. 21, No. 4. I am grateful to Dr. Margaret Frazer, Associate Curator, Department of Medieval Art, Metropolitan Museum, New York, for supplying me with details and photographs of this spoon.

¹² E.g. British Museum (71. 7-14.30) from the Thames at Southwark, 1865; Museum of London (19381) from the Walbrook stream-bed; *Ibid.* (59.94-2) from

Copthall Court, 1911 (this bowl is quite similar to those of Type A); Verulamium v. S. S. Frere *Verulamium Excavations I* Rep. Res. Com. Soc. Antiq. No. 28 (London 1972) 124 and Fig. 35, No. 14.

¹³ D. E. Strong, *Greek and Roman Gold and Silver Plate* (London 1955) 117.

¹⁴ There are several of these unpublished in Cologne Museum. Published examples from Cologne are in *Germania* 11 (1927) 39, Fig. 3; and from Preuseville in Seine-Inferior; *Comm. des Antiq. Bull.*, Vol. 7, 352.

¹⁵ Cf. the shale table-legs from Dorset or more closely the marble legs of a table from Pompeii, published in A. L. F. Rivet (ed.), *The Roman Villa in Britain* (London 1969) Plate 4, 24-26 and Fig. 4, 14.

¹⁶ Mr. G. Boon has suggested that guests may have been expected to bring their own knives and spoons to dinner, and that the folding types were for this purpose, v. G. C. Boon, *Silchester, The Roman Town of Calleva* (1974) 228. For an example of a folding knife see British Museum, *A guide to the exhibition illustrating Greek and Roman Life* (1920) 149 and Fig. 183d.

A SILVER FINGER-RING FROM WINCHESTER WHARF, SOUTHWARK

by
Martin Henig

The ring came to light in 1972 on the Thames foreshore at Winchester Wharf, on the south side of the Thames between London Bridge and Southwark Bridge.¹

Although there are no stratigraphical indications of date, the form of the piece and the device engraved on its bezel are characteristic of the Roman period. A band of silver expands from c. 3mm at the narrowest point to 8mm at the shoulders. These are not very pronounced and the form of the ring is basically that of a circle, slightly flattened (internal measurements, width 18mm; height 16mm; external measurements, width 21mm; height 19mm). Simple rings of this type are not likely to be later than the middle of the second century A.D.²

A stylised branch is engraved in intaglio on the flat, ovoid bezel (dimensions, 11mm by 8mm). This would have been identified as a palm-spray if it were not for the pellets (perhaps representing fruit or berries) at the ends of the projections.³ A number of rings are published which depict virtually identical branches.⁴

It should be pointed out that the exact type, at least as a signet-device, has not previously been recorded from Britain. A gold ring found near the church of All Hallows, Lombard Street, bears an incised palm of normal type, and other palms are recorded from elsewhere in Britain.⁵

In these cases the motif must signify success and victory in some enterprise, and it is tempting to invoke the same quasi-amuletic function here, even if the plant may be a bay or an olive rather than a palm.⁶

NOTES

¹ The ring is in private possession. I am most grateful to Mr. Hugh Chapman and the owner for bringing the ring to my attention and to the Museum of London for the photograph.

² For the type, cf. J. P. Bushe-Fox *Excavations on the Site of the Roman Town at Wroxeter, Shropshire III* Society of Antiquaries Reports No. 4 (London 1916) 30, Plate 18, No. 29 (early second century context). M. Henig *A Corpus of Roman Engraved Gemstones from British Sites* British Archaeological Reports 8 (1974) Part 1 Fig. 1, ring type III, cf. 47 f.

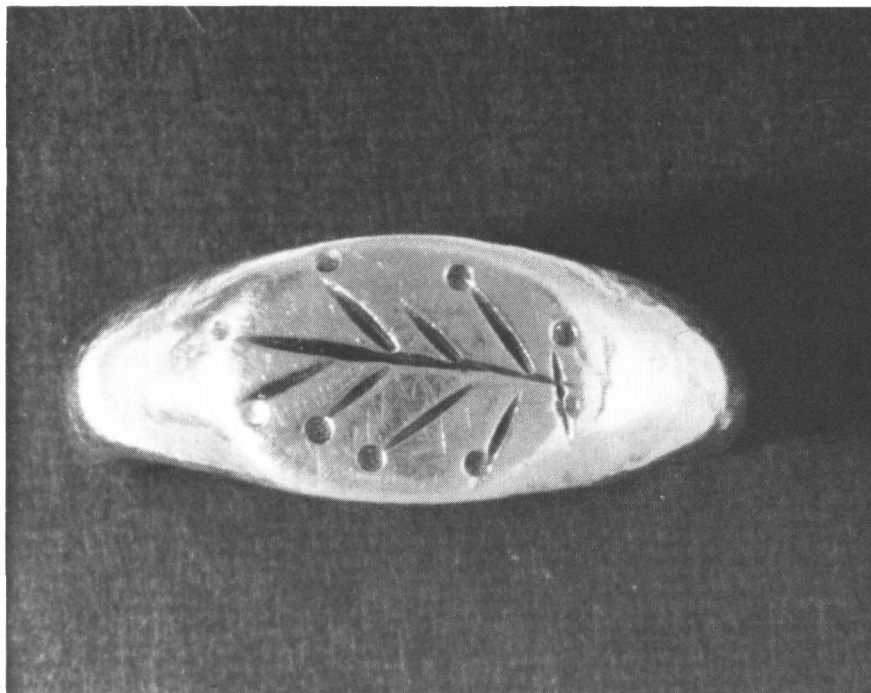
³ A very similar motif is found in ancient British coins of the Dobunni, cf. R. P. Mack *The Coinage of Ancient Britain* (London 1953) 111 Plate 23 ff., Nos. 385-393. The pellets can, presumably, be explained as a deliberate ornamentation (of a debased laurel wreath as worn by Apollo on the prototype coins) by means of the point of the drill. It is not clear whether the die-

cutter attached any especial significance to this and we may doubt whether there is any *real* connexion between these coins and our ring.

⁴ A de Ridder *Collection de Clercq. vii (II). Pierres Gravées* (Paris 1911) 752 ff. and Plate 28 Nos. 3398, 3402, 3408 f. H. Hoffmann and V. von Claer *Museum für Kunst und Gewerbe, Hamburg. Antiker Gold- und Silberschmuck* (Mainz 1968) 184 No. 124. F. Henkel *Die Römischen Fingerringe der Rheinlande* (Berlin 1913) 49 Plate 18 No. 352 (Vandoeuvres, Geneva).

⁵ Henig *op. cit.* Part II, 100 and Plate 22 No. 768 ff. (Slay Hill Saltings) are especially relevant as silver rings approximating to Type III. The London ring, No. 770, is illustrated in *London in Roman Times*, London Museum Catalogue No. 3 (London 1930) Fig. 30, No. 2.

⁶ Henig *op. cit.* No. 772, for example, is surely a love-charm.



Roman silver finger-ring from Winchester Wharf, Southwark. (See text for measurements.)

THE BRASSES OF MIDDLESEX

PART 17: HILLINGDON

by

H. K. Cameron, M.A., Ph.D., F.S.A.

- I. John, Lord Strange, *ob.* 1479, wife Jacquetta (Woodville; sister to Elizabeth Woodville, Queen of England) and only child Joan, who caused the memorial to be made in 1509. Mural, S. aisle.

This must be accounted one of the finest brasses in Middlesex and is certainly one of great historic interest. It represents John, eighth Lord Strange of Knockin and fourth Lord Mohun de Dunster with his first wife Jacquetta, fourth daughter of Richard Woodville, first Earl Rivers. Her sister Elizabeth was the Queen Consort of Edward IV. The two very splendid figures are each 44½ in. tall and are well engraved specimens of the first decade of the sixteenth century. He is shown bare-headed and in armour which in style is contemporary with the date of engraving and unlike anything he is likely to have possessed. The elbow pieces are modest in size, well-jointed and practical in appearance. The shoulders are well protected and the *haute pieces* high, particularly on the left side. The *sabatons* are rounded (as they would not have been at the time of his death). The whole figure is somewhat elongated, this being particularly noticeable in the hands which are uncovered. The body from the waist downward is too long and has to be covered by a long skirt of mail and large tassets. There is decoration on the pommel of his sword and dagger, the sword lying at a curious angle on his left side, probably to permit the engraver to join the guard to the elbow, without projecting metal. The figure stands on a grassy mound with a flower between the feet.

Lady Strange is dressed in a waisted costume with fur cuffs; around the waist is a loosely-hanging decorated girdle with a chain of rectangular links suspended in front. An outer gown, open in front, is fastened across the chest by a band decorated with roses. Over her head is a plain covering and not the currently fashionable pedimental headdress. The effigy, like that of her husband, is shown standing on a grassy mound. Between these two figures and low down just above their feet is a small effigy, 8½ in. high, of their one and only child, the daughter Joan who had the brass prepared.

Below the main figures is the base of a canopy incorporating a panel decorated with quatrefoils and four star-petalled flowers alternately, in square frames. At either end rise the main pillars supporting a double canopy over the effigies with three extending pinnacles to support a super-canopy, no doubt of rectangular shape. The super-canopy has long since been missing. Part of the dexter column supporting the canopy, between the elbow and ankle of the armoured figure is also missing as is a small piece from the bottom of the lady's figure on the sinister side.

What is left of this brass now measures overall 5 ft. 11½ in. high by 31 in. wide and is on a marble slab which is 79 in. long, 34½ in. wide and 4 in. thick. There is no indication of other indents on this stone, but there was a marginal inscription on the chamfered edge of the stone: the indent may still be seen along the upper edge. The slab was originally on a

chest tomb in the old chancel until the restoration of the church by Gilbert Scott in 1847–48. That there was originally an inscription is known from Weever¹ who mentions this brass at Hillingdon and who quotes the inscription as follows:

Sub hac Tumba iacet nobilis Iohannes Dominus le
Strange, Dominus de Knocking, Mohun, Wasset,
Warnell et Lacy, et Dominus de Colham, una
cum pictura Iagnette, quondam uxoris sue, que
quidem Iagnetta fuit soror Elizabethe Regine Anglie,
Johannes obiit 15 die Octobris, Anno regni Regis
Ed. quarti 17. quam quidem Tumbam Johanna
Domina le Strange, una cum pictura Jagnette
exisumptibus suis propriis fieri fecit 1509.

Whether due to Weever, who is not always exact in recording inscriptions, or because the monument, being made thirty years after the death of Lord le Strange, was itself inaccurate, the date of death recorded as 1477 by Weever from the tomb is incorrect; contemporary record gives: 16 October, 19 Edward IV, i.e. 1479. The inscription has a curious double insistence that the mother's picture is on the brass, unusual on an actual inscription on a brass. It also provides evidence that the daughter caused the brass to be made in 1509, thus explaining the style of armour worn.

John le Strange was born in 1444 and, at the age of five, succeeded his father as eighth Lord Strange of Knockin and fourth Lord Mohun de Dunster. In 1462 a licence was issued for him 'nearly of full age, to enter into all his possessions in England and Wales and the Marches of Wales'. He had in the previous year been knighted at the coronation of Edward IV and his allegiance was to that dynasty. He was married by 27 March 1450 to Jacquetta, fourth daughter of Richard Woodville, first Earl Rivers and Jacquetta, Dowager Duchess of Bedford and daughter of Peter de Luxembourg, Count of St. Pol and Conversan. An elder sister, Elizabeth, was the wife and Queen consort of Edward IV.

Throughout his brief life Lord Strange was engaged on numerous Commissions of the Peace, of Array, and of Oyer and Terminer for the counties of Shropshire, Warwick, Middlesex and Oxford. He was one of 16 commissioners appointed in 1477 to inquire into the capture of swans and cygnets on the Thames from Cirencester to its mouth, 'by hooks, nets, lyme strynges and other engines, the alteration and deletion of the marks of swans, and the taking of swans' eggs'. Of his many possessions the manor of Colham must have been an important residence, near to London and covering a considerable area. The manor was granted to Eubulo le Strange and his heirs in 1331. According to Lysons it extended over almost the whole of the parishes of Hillingdon, Cowley and Ickenham. The house which was near to the Colne river was pulled down long before Lyson's time.

John Lord Strange died without male issue on 16th October, 1479, leaving as heir his only daughter Jane, then aged sixteen. She was married within two years as a licence dated February 26, 1481 allows George Stanley, Knight, and Joan his wife, daughter and heiress of John Lestrangle Knight, late Lord Lestrangle, to enter freely into all castles, manors and other possessions in England, Wales and the Marches of Wales, late of the said John which should descend to her after his death.³ Sir George Stanley was the son and heir of Thomas, Lord Stanley who had been created Earl of Derby by Henry VII. This George predeceased his father, dying in 1497.⁴ His widow Joan, Baroness Strange, survived until 1514, whereupon her Baronies of Strange of Knockin and Mohun de Dunster went to her son Thomas who had succeeded his grandfather as Earl of Derby in

1504. The only memorial to this eminent and rich lady is the tomb she caused to be prepared in 1509, herself already a widow, for her parents, upon which she is portrayed as a small child, though in adult costume with belt and chain not unlike that of her mother, and wearing the fashionable pedimental headdress. In her will she expressed the 'desire to be buried at Hillingdon church by my Lord my Father, in the same tomb'.

Lady Jane's insistence that this brass at Hillingdon should portray her mother Jacquetta can be explained by the existence of a second wife. John Lestrangle's marriage to Jacquetta occurred when he was very young. An entry in the Patent Rolls dated 27 March 1450⁵ records that 'a licence for 4 marks was paid in the hanaper for Elizabeth, late the wife of Richard Lestrangle Knight deceased to enfeof (a number of named persons) . . . of the manor of Midlyngton, co. Oxford, held in chief; and for them to grant the same to John Lestrangle and Jacquetta his wife and the heirs of their bodies . . . '.

However in the Patent Rolls of date 26 February 1480–81⁶ the statement allowing George Stanley and Jane Lestrangle his wife to enter into the property late of the said John, quoted above, continues: 'which should descend to her (i.e. Jane) on his death, and after the death of Anne, late the wife of the said John, and of Roger Kynaston Knight to enter upon the lands of the inheritance of the same John which these hold in dower or for life, saving to the King homage and fealty'. The interest of Roger Kynaston can be explained because he had married John Lestrangle's mother Elizabeth, mentioned above as widow of Richard Lestrangle⁷, but of Anne we know nothing more.

Summary of Will of Jane Stanley le Straunge. P.C.C. 32 Fetiplace.

Made 6 July 1513.

Probate granted 3 May (1514).

Executors: Richard Sutton Esq.; John Morton Esq.; servant and officer Thomas Stanley of the Flync, each to have 100/- for their labour.

Instructions on where to be buried according to where she dies; probably buried in Hillingdon church 'by my lorde my ffader in the same Tombe'.

1. To my welbeloved daughter Margaret the manor of Wemyngton in Co. Bedford as 'by a dede thereof made more playnly appereth'. She shall have and enjoy the same 'without interruption, disturbance or vexation of any man'.
2. To my daughter Jane to her marriage from my lands the sum of 20 marks p.a. for five years.
3. There shall be 3 priests to 'sing rede and pray in the parish church of Hillingdon to maintain godsservice and to pray for the souls of my lord and father, my lady my mother, my lorde my husband and for me' for 20 years and each of them to have for salary 10 marks.
4. My feoffs shall stande and be seased of all premises to the use of my trusty old servant Thomas Stanley for his life, that is he shall receive all revenues and profite from the same. They are listed as: The manor of Colham, Co. Middlesex (to be recovered by Richard Bishop of Winchester), the manors of Bicester & Gidlington, Co. Oxford, the manors of Whichford and Langompton, Co. Warwicks, and 'the moyte' of the Manor of Milton (otherwise called Middleton), Co. Cambridgeshire.
Out of which he shall pay the 3 priests and daughter Jane.
5. To the Greyfriars of London 20/- yearly for 20 years to buy them bread and wine to sing mass 'that I may be prayed for there'.
6. To the four orders of friars in London, 40/- among them 'to pray for me'.

The Thomas Stanley to whom she leaves the revenue from her Lestrangle manors is not her son who was Earl of Derby, but as she describes—her trusty old servant whom she also appoints as one of her executors—'servant and officer Thomas Stanley of the Flync'. Among the Inquisitiones post mortem for London⁸ is the following concerning

Thomas, Earl of Derby taken at Guildhall 28 January, 13 Henry VIII (1522).

Long before the death of Thomas, Earl of Derby, Joan Stanley Lady Lestrage, his mother, was seised of the manor of Holbourne and of 12 messuages, 40 gardens and 1 acre of land in Holbourn and Fleet Street. By charter dated 26 May 21 Henry VII (1506) she granted all the said premises in London to Robert Brudnell, William Grevyll, William Fayrefax serjeant-at-law, Richard Sutton, Thomas Pygott, John Cheyne, Richard Croke, Anthony Fitzherbert, Thomas Stanley, and George Herberne and their heirs, to the uses specified in indentures of the same date made between Lady Lestrage and John Pynner and his wife Parme. The said Robert Brudnell and the other cofeoffees being so seised by charter, granted to John Pynner and his wife an annuity of 10 marks issuing out of the said premises for the term of 20 years. Afterwards the said Lady Lestrage by charter dated 20 October 2 Henry VIII (1510) granted to Thomas Stanley, one of the sons of Peter Stanley esq. and Margery his wife formerly of Ewlowe in the county of Flint, all the said manor of Holborn and other premises for his life.

By bill indented dated 6 November 8 Henry VIII (1516) (after the death of Jane Lestrage) made between the said late Earl and the said Thomas Stanley it was agreed between them that before Easter the next following the Earl should demise to Thomas Stanley all the rents and profits of the courts of his manors of Milton, co. Cambs. and Sturminster Marshall co. Dorset, reserving the advowson of the Church of Milton to the Earl and his heirs. In exchange Thomas Stanley should release to the Earl such right and title as he had in the manor of Holborn. All the said premises are held of the King in free burgage and are worth p.a., clear, £10.

II. Henry Stanley, in armour, *ob.* 1528, with two shields; inscription lost. Mural, S. wall of chancel.

The original composition of this brass is revealed in a rubbing by the late Rev. H. Haines now in the library of the Society of Antiquaries. It shows an armed figure with rectangular inscription plate in the usual place below the feet of the figure and four shields of arms, two above and two below at the corners of the stone. The inscription and two lower shields are outlined but were missing when the rubbing was made (*c.* 1840–50).

It was no doubt at the rebuilding of the chancel by Gilbert Scott in 1847–48 that the slab on which this brass was laid was lifted from the floor of the chancel and mounted against the south wall. The lower part of the stone with the indents of the missing pieces was broken off and is now missing. There remain on the four foot high stone the figure of a man in armour, 26 in. high, the bottom of which is now at ground level, two shields at the top corners each 6½ in. high and 6 in. wide. Lysons⁹ writes that 'on the floor (of the chancel) is the effigies, in brass, of a man in armour, with the arms and quarterings of Stanley', but does not quote or mention an inscription, while in Weever there is no mention whatever of this brass.

The figure is in armour typical of the period and not of particular merit. The head, and hands, are uncovered, the hair being worn long. The sword and dagger are slung diagonally behind the body and no belt or other fastening is shown. He stands upon a grassy mound with flowers. An unusual feature is the Tau-cross on his chest hung from a linked chain around his neck. At some time a severe indentation has been made in the brass at his neck.

The two shields are identical and though now lacking colour, are of interest: The arms borne are *quarterly, 1, quarterly 1 and 4 argent on a bend azure three-stags' heads cabossed or*, for Stanley; *2 or on a chief indented azure three plates*, for Latham; *3 chequy or and azure* for Warren; *2 and 3, gules three legs conjoined in the fesse point in armour proper* (shown as argent), *garnished and spurred or*, for the Isle of Man; *4, (according to Lysons) quarterly 1 and 4 gules two lions passant argent*, for Strange; *2 argent a fess and*

canton conjoined gules, for Woodvile; 3 or a cross engrailed sable, for Moyne; overall an inescutcheon with a lion rampant(?) argent(?).

III. Two groups of children, c. 1560. Mural, W. wall of nave.

A group of six boys all dressed alike in gowns with false sleeves and with lace at the neck, facing to the sinister are on one plate, 7 in. high and with a maximum width of $8\frac{3}{4}$ in. On the other plate, 7 in. high and $4\frac{1}{2}$ in. wide, are three daughters all wearing Queen Mary bonnets, small neck ruffs, and long gowns drawn in with simple girdles at the waist. These face to the dexter and it is evident that the two groups would once have been below the figures of the parents who would similarly have been facing towards one another, as on the Saunders brass.

An old and faint dabbing or rubbing in the Society of Antiquaries' library shows in association with these children evidence of a missing rectangular plate $8\frac{3}{4}$ in. by $1\frac{5}{8}$ in. On this rubbing is also a blackletter inscription with 'Church wardens John Rayner and William Flye', though what this has to do with the brass is not clear.

Another rubbing has on it: 'relaid in S. aisle 1897'. It is now moved yet again onto a stone mounted at the W. end of the nave on a respond of the tower arch, on which stone is also set No. IV.

The older rubbing has been made on early (Georgian) watermarked paper, the different pieces lightly stuck on to a larger piece of paper. Lifting one of these up gently a drawing on the reverse side was revealed. This showed the rectangular outline of a stone (marked 'grey'), outlines of a man's and a woman's figure (each marked lost), and beneath them a rectangular outline for inscription (marked lost); below this again the inscription about the churchwardens and at the bottom the two plates one with six boys and one with three girls. The outline of the drawing indicates that the woman was wearing a broad-brimmed hat, suggesting a rather later date for this brass than 1560.

IV. Rebus and shields to John Marsh, ob. 1561. Mural, W. wall of nave.

All that we have of this memorial, remounted on new stone so that the original composition cannot be determined, is one plate with the initials I M on it, engraved as trefoil-headed pilasters, the frame of the plate being two intertwining squares or an eight-pointed star, and three shields. The shields are all of the same size, 6 in. high and $5\frac{1}{4}$ in. wide at the top, and all are made up from two pieces of metal. That by the side of the rebus has upon it the arms of the Mercers Company—*Gules a demi-virgin couped below the shoulders, issuing from clouds all proper vested and crowned with an Eastern crown or, her hair dishevelled and wreathed round the temples with roses, all within an orle of clouds proper.*

Below this is a shield bearing the arms of the Merchant Adventurers: *Barry nebulée of six argent and azure a chief quarterly 1 and 4 gules a lion passant guardant or, 2 and 3 or two roses gules barbed vert.* The lower dexter shield bears the arms of Marsh: *Sable a cross argent fretty of the first between four lion's heads erased of the second.*

There is no earlier description of this brass in Weever or Lysons, but there are earlier rubbings at the Society of Antiquaries. One marks the edge of the stone indicating that it was 7 ft. 2 in. long and 3 ft. wide. A second, showing the shields all complete has upon it in writing: 'brass plate on an ancient tomb in the pavement of the middle aisle near the chancel'. A third rubbing, showing the lower part of the Merchant Adventurers shield

already missing, has on it: 'relaid S. aisle 1897'. Since then it has been mounted on two pieces of new stone (with No. III) and put against the wall at the W. end of the nave. On the back of the earliest rubbing is a drawing showing in outline the four shields and a thin rectangular plate on which could have been not more than two lines of inscription.

If this is indeed all of the original composition it was a remarkably modest memorial for a merchant of considerable wealth and property as the following extract from his will indicates.¹⁰

Will of John Marsh the elder, Mercer. P.C.C. 16 Loftes made 7 July 1557; Codicil 20 April 1561.

Probate granted 7 May 1561.

Executrix: Margaret Marsh, wife.

Overseers: John Marsh, cousin, and Thomas Webster, servant.

1. All my debts and duties owed, of right or in conscience, to be truly paid.
2. All remaining goods, chattells, plate, debts and merchandise to be fairly priced and divided into 2 equal parts.
3. One part to Margaret my wife.
4. The second part to myself and my executor for the following legacies.
5. To the wardens and Company of the mystery or fellowship of the mercery of the City of London £200 'to the use and occupying of young men and edifying the poor people' to endure for ever. To be put in the hands of 5 poor young men of the fellowship, they putting in sureties for the same and paying annually xii pence for every pound. The return on £200 is therefore £10 annually.

No one in the livery of the said fellowship shall have any of this money (unless they 'by misfortune be fallen in decay').

6. The wardens of the said fellowship will dispose of the £10 as follows:
 - i. To the curate and churchwardens of the chapel at Uxbridge annually the sum of £5 6s. 8d. to be paid in 4 equal portions. The curate and churchwardens to give on every Sunday in the year to 28 poor people of the parish good and sweet bread to the value of 2s. which amounts to £5 4s. in the year.¹¹ The remaining 2s. 8d. for the curate and churchwardens 'towards their pains taking to see this yearly discreetly and well done'.
 - ii. If at any time this is neglected and not done then the wardens and fellowship shall pay the £5 6s. 8d. to the hospital of St. Bartholomew by Smithfield for the relief of the poor in that house.
 - iii. Also out of the £10 the wardens and fellowship to give at appropriate times, 10s. to the poor prisoners of Newgate in the City of London; 5s. to the prisoners of Ludgate; 5s. each to both Counter pryson houses in London; and to the poor prisoners of the Kings Bench and Marshalsey in Southwark 40s. (i.e. 20s. each).
 - iv. To the poorest of householders in the parish of St. Lawrence Jewry in coal or otherwise 15d. at the discretion of the wardens.
 - v. For the residue of the £10, which is 13s. 4d., 10s. to the wardens and 3s. 4d. to the parties assigned to distributing the money as above.
7. If at any time item 5 above cannot be executed because of 'the Kinges and the Queens Majesties laws or their successors' then the occupying by the young men is to cease and the bequest under 6 shall be paid by the wardens and fellowship who shall invest the £200 in tenements or land.
8. As soon as possible after my decease my executor shall pay the curate and churchwardens of Uxbridge every quarter 26s. 8d. for the relief of the poor there until such time as they have made payment of the £200 to the wardens and fellowship of the mercers company.
9. To my cousin John Marsh and his wife a ring of gold of the value of 40s. to each of them.
10. To my cousin Warner and his wife a ring each likewise of 40s.
11. To Edward Elmer grocer and his wife a gown cloth to each.
12. To the marriage of 30 poor maidens £10; that is 6s. 8d. to each.

13. To my sister Agnes Kempe £10
14. To Thomas Harris her son £10 when he comes of age.
15. To my sister's children which she has or shall have by . . . Kempe, now her husband, 40s. each. If any die before coming of age, the bequest to be shared with the remaining children.
16. To the Universities of Oxford and Cambridge £4 each.
17. To the poor of the hospital of St. Bartholomew by Smithfield £20, to be given them in wool or linen, and to the other two hospitals £10, that is £5 each to be given also as wool or linen.
18. To the poor of the householders of Pinner in the parish of Harrow-on-the-Hill 40s. to be distributed at the discretion of my executors.
19. To the poor householders of Bromley-by-Bow, also 40s.
20. To 12 poor men and 12 poor women a gown of good fryse (Frisian cloth?) or other at executors' discretion.
21. To every servant in employ at my death 40s. p.a. provided they continue true and faithful service to my wife during their apprenticeship.
22. To Thomas Webster my servant, to be diligent in collecting my debts, £5 and my 2 'ware chests in the greate shoppe'.
23. To Margaret my wife all tenements in Grub Street with shops, cellars etc. and my house and lands at Adymers and all other lands and leases 'that I have or ought to have' during her lifetime.
24. After her decease all the freehold to Thomas Marsh, son of my brother Henry Marsh, and his heirs.
25. If Thomas Marsh dies without heirs then the freehold to go to John Marsh son of my cousin John Marsh. Should he have no heirs then to the next heirs 'being of the name of Marsh'.
26. Copyhold lands remain to the order of the Courts.
27. If it shall please God not to permit the name of the Marshes to inherit for lack of issue then they go to the fellowship of the Mercers Company to be sold. Half the money to be given to the hospitals in London and the other half to the 'mending of the hyghe wayes' within 20 miles compass of London.
28. Any residue after all the above to my wife Margaret; appointed the executrix. The two overseers each to have a gown.

Codicil. 20 April 1561.

21. To Margaret my wife and to her heirs all lands and tenements in the parish of Dagenham, Co. Essex, called Addins now being in the occupation of one Lambe.
22. To Margaret my wife the lease of the parsonage in Hillingdon and all other leases.

V. Inscription to Anne Wilson, *ob.* 1569, relaid mural on W. wall of S. aisle.

This inscription is on rather thin and corroded plate. It is in English verse in ten lines of blackletter on a rectangular plate 22 in. wide and 10½ in. high. In addition there is a small rectangular piece 3¼ in. high and 4 in. wide placed immediately above and at the middle of the main plate on which, in three lines of blackletter is:

Epitaphium
Anne Wilson
Quae

Immediately below the centre of the main plate is a stepped rectangular piece 2 in. high and 5⅛ in. and 2⅛ in. wide on which, in blackletter, follows:

Obiit 13 Novēber
1569

The main part of the inscription, which is surrounded by a decorated border, and which is an acrostic, reads:

An erthly lyffe wyth erth, on erth, nott ledd in erthly wyse
 Now erth, in erth doth lye asleape, tyll erth frome erth aryse.
 Nott soule but corps Dyd yeld to Death: now deadly fury past,
 Eternall lyffe the sowle enioyes, and fame in Death doth laste.
 What parent^s or what place of byrth, Myles Wilson: Brystow Towne
 In plesaunt place from Worships race Descend^s the Daughter downe
 Lett place gyve place let parent^s passe: go fame whilest brute is riffe
 Sownd once agayne thy troumpe of prayse: cōmend her godly lyffe.
 Oh prayses yeld for Death and lyffe of her that lyves by fame.
 Now skyes the soule the grave y^e corps, this stone conteyns her name.

VI. Drew Saunders, *ob.* 1579 and wife. Mural, W. end of nave.

This well-engraved brass retains the figures of Drew Saunders and his wife, an inscription and a lozenge with monogram and merchant mark. Indents for the missing figures of one son and one daughter are still to be seen, one at the foot and behind each parent. Rubbings of these two still exist in the Library of the Society of Antiquaries; that of the daughter has the head already missing, in which mutilated condition it was recorded as still present by Mill Stephenson in 1926. The illustration shows also the indent of a shield, apparently inverted and from its shape likely to have been a century earlier in date than the brass of Drew Saunders. There is also evidence that the present inscription was fitted to an indent of larger size. The stone in which this brass was set has therefore been adapted (inverted) from earlier use, the earlier brass consisting of an inscription and a shield spaced some way below the inscription.

The two main figures are turned slightly towards one another, the man on the dexter side. He wears a beard and the hair is very neatly crimped. His garment has lace at the neck and wrists and over this he wears a full-length gown with puffed shoulders and false sleeves. This figure is 20½ in. high, that of the wife is 1½ in. shorter. Her costume is simple and plain, but rich in edging, also with lace at neck and wrists, and with puffed shoulders. She wears the 'Queen Mary' bonnet.

The inscription below is in English in four lines of blackletter. It is on a rectangular plate 4 in. high and 17¼ in. wide. It reads:

Here lyeth Drew Saunders Gentleman sumtyme
 of the right wourshipfull companye of the merch=
 aunes of the Estaple of England, and was
 buried the 4 of Aprill Anno domini, 1579:

The lozenge above the two main figures has a side measuring 5½ in. Around the merchant's mark on which the initials D and S are entwined is a border lightly engraved with foliage and five-petalled flowers at the four corners.

Here too is a memorial to a successful London merchant who, as can be seen from the will extract that follows, had acquired a new dwelling for his family in Hillingdon. He is far less elaborate in his legacies than John Marsh who appears to have been childless. The male child on this brass, if a son, is not mentioned and presumably died young. His daughter's family appear to have been young when the will was drawn up and one may surmise that Drew Saunders was not old and was just achieving commercial success when he died, evidently very much a 'family man' and entrusting the future to his son-in-law. No mention is made on the inscription of his wife, whose name, as the will shows,



Fig. 1. John, Lord Strange *ob.* 1479 and wife Jacquetta, Engraved 1509.

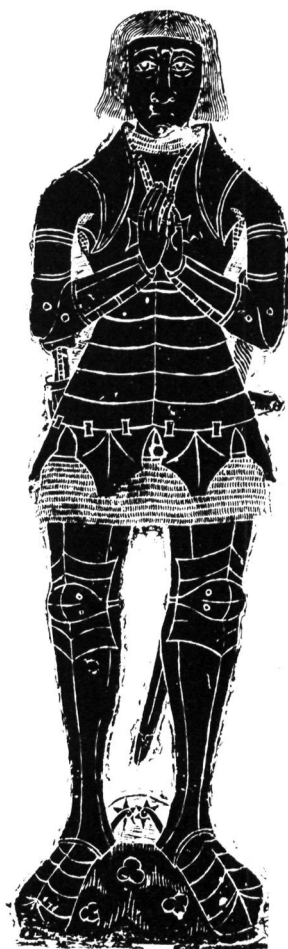
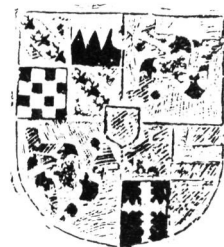


Fig. 2. Henry Stanley, 1528.

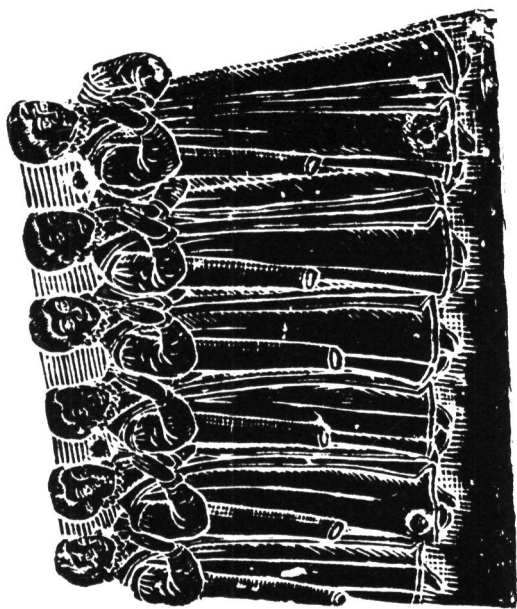
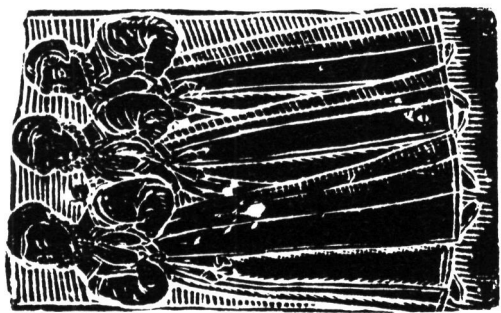


Fig. 3. Two groups of children. Late sixteenth century.

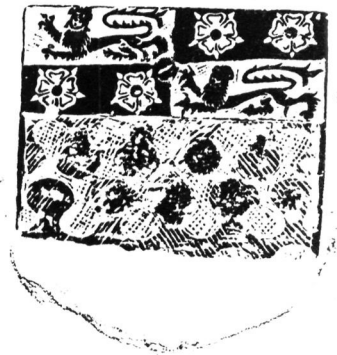
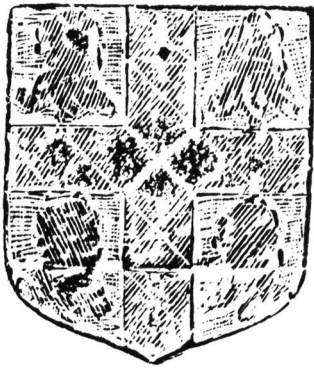


Fig. 4. Remains of Brass to John Marsh, 1561.

Stephenson
Anne Wilson
Esq

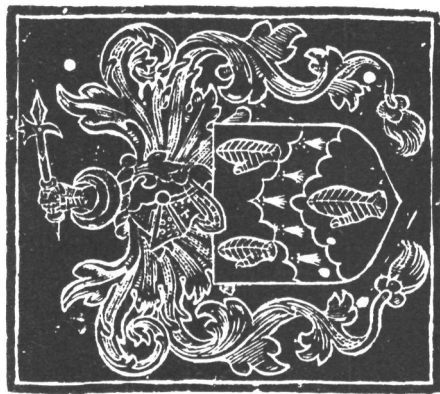
An certain huse with erth on erth, nitt ledd in certen unile
Nold erth in erth doth hie a leape, till erth troure erth ayle
A off saule, but corpe and yeld to death: with deadly ture pale,
Erre nall huse the souldr r'wome, and faine in death doth laste,
Desert parente or what place of birth, semles willon: to nold doine,
In pleasant place from darthips rart, dert ride the daughter doine,
Let place ynd place let parente yelle: go faine doth it beut is rite,
Souldr once againe thy troupe of prauile: round her yddly huse,
Oh prauile yeld for death and laste of her that hies by faine,
Nold skues the soule the greay, y corpe: this soule conuene her name.

Obit 12 October
1569

Fig. 5. Anne Wilson, 1569.



Fig. 6. Drew Saunders, ob. 1579 and wife Anne.



HERE LYETH BVRIED THE BODIE OF WILLIAM GOMSALE
LATE CITIZEN AND IRE-MONGER OF LONDON WHOE.
CHANGED THIS MORTALL LYFE THE FIRST DAY OF IVLIE
IN THE YERE OF OVR LORD GOD 1597. IN FVLL AND PFEET
HOPE OF A IOYFVLL RESVRRECTION. AND LEFT BEHINDE
HIM ONE SONNE AND TWO DAUGHTERS.

Fig. 7. William Gomersall, 1597.



HERE LIETH BVRIED THE BODY OF JOHN ATLEE WHO
WAS IN OFFICE OF THE HIGH CONSTABLE OF ELTHORNE
HVNDRED 36 YEARES AND DECEASED THE LAST DAY
OF NOVEMBER ANO 1599. IN THE FAITH OF IESV CHRIST
BY WHOSE BLOOD AND PASSION I HOPE TO BE SAVED.

Fig. 8. John Atlee, 1599.

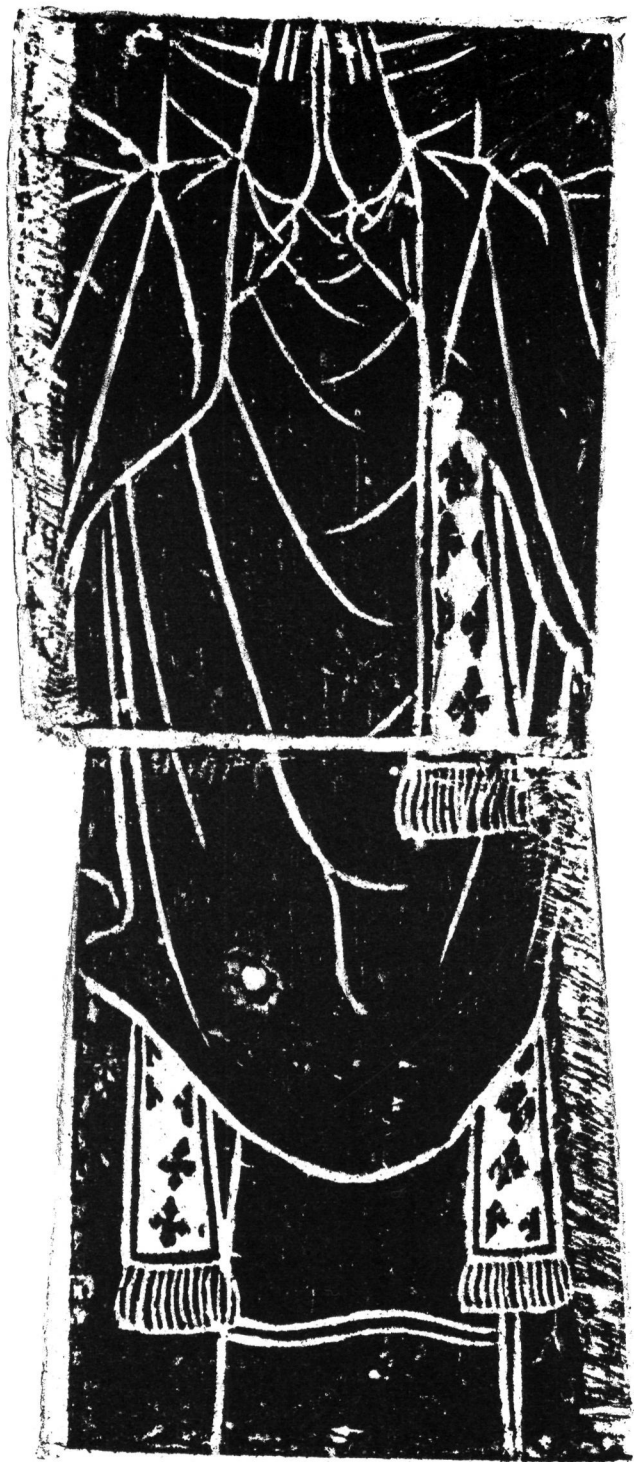


Fig. 9. Priest in mass vestments, c. 1450. (Reverse of two pieces of the Marsh Brass.)

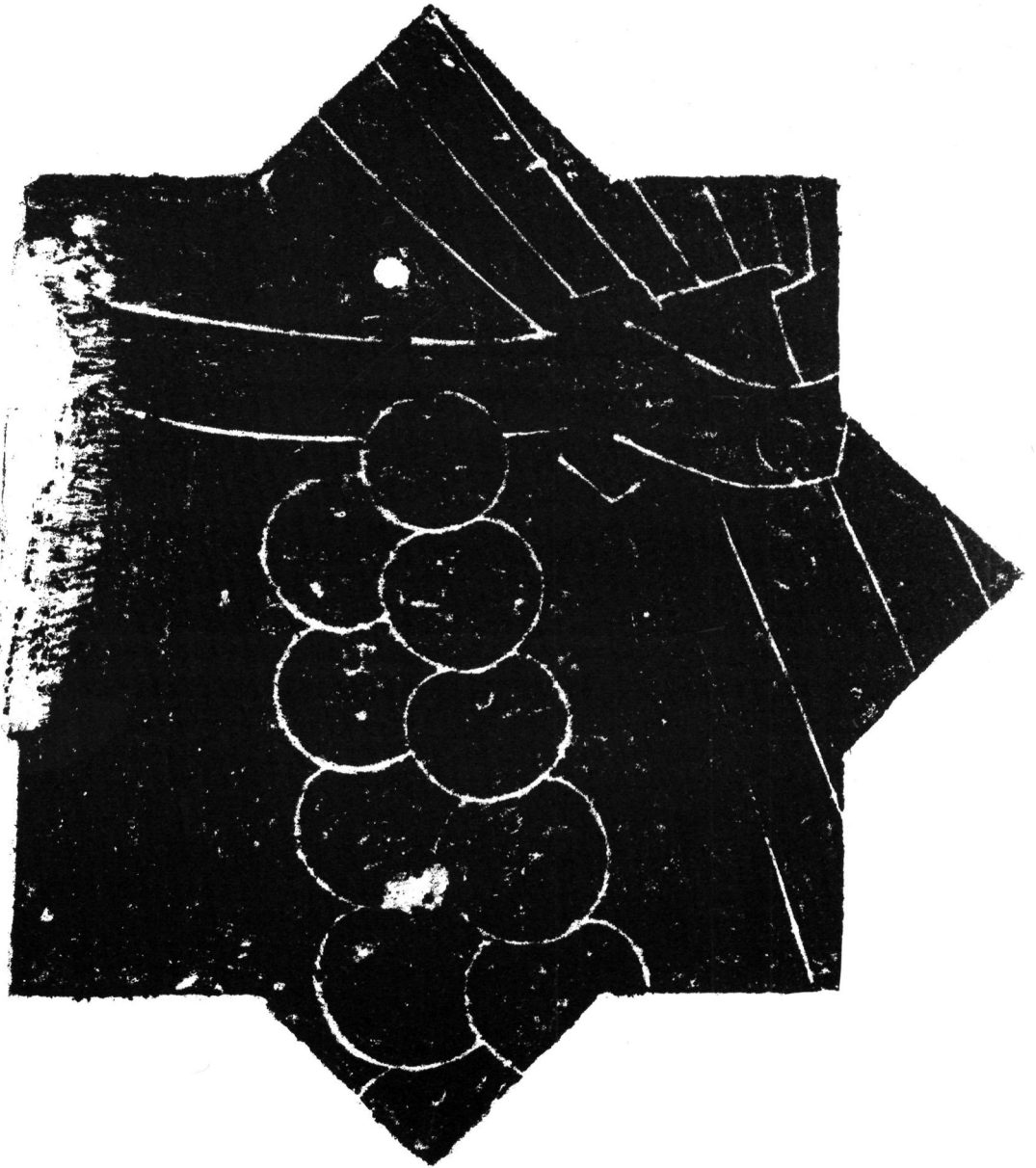


Fig. 10. Reverse of rebus from Marsh Brass.

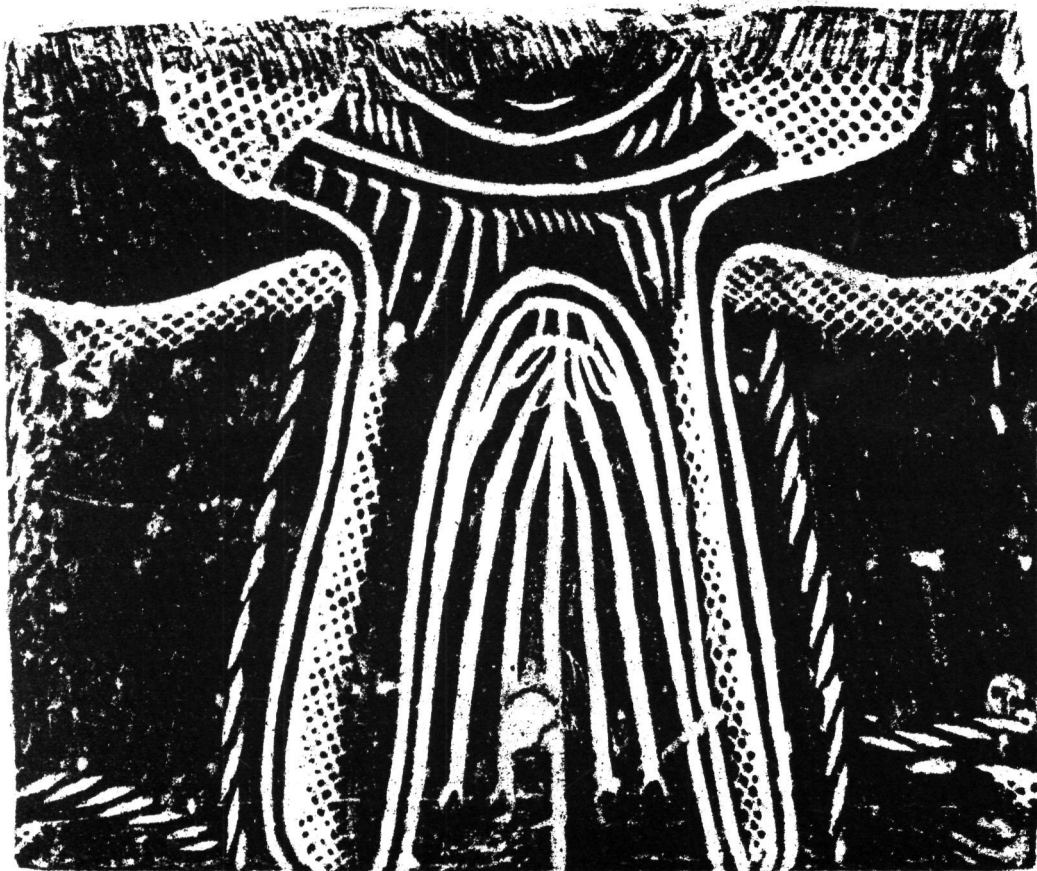


Fig. 11. Reverse of shield with Marsh arms.

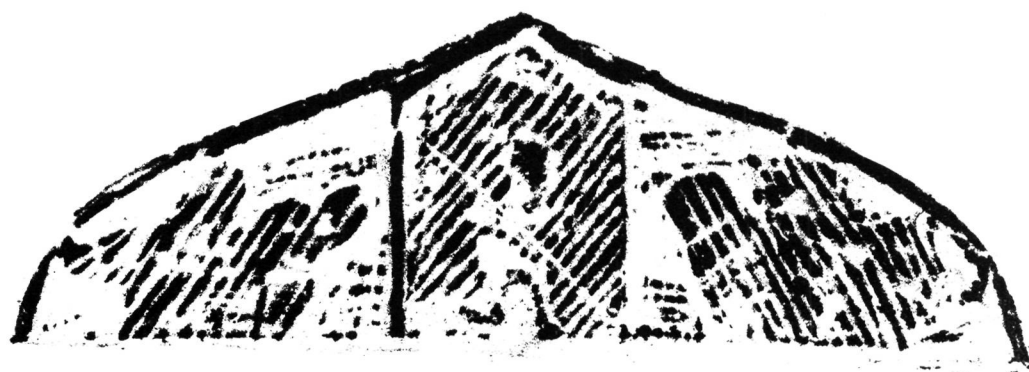
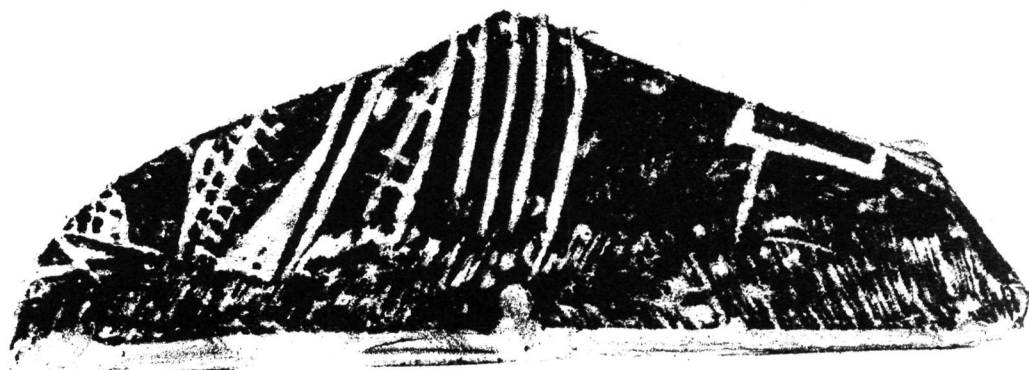


Fig. 12. Bottom piece of Marsh arms, with engraving on reverse.



Fig. 13. Bottom piece of Mercers' arms, with engraving on reverse.



Fig. 14. The larger part of the Saunders' inscription.



Fig. 15. Smaller part of the Saunders' inscription.



Fig. 16. Hunting scene from brass at Ringsted, Denmark, c. 1320.



Fig. 17. Reverse of merchant's mark from Saunders' brass.

was Anne. There is record in Chesters Marriage Licences in London of a marriage between 'Druyone' Saunders and Anne Hatton of St. Pancras on 15 December, 1546.

Will of Drew Saunders. P.C.C. 26 Bakon.

Made 21 June (19 Elizabeth or 1577).

Probate granted 23 June 1579.

Executor: Henry Chapman, son-in-law.

1. To my wife Anne Saunders 100 marks to be paid within half a year of decease by my executor at or in my new dwelling house called Moorecrofts in Hillingdon.
2. To my wife all her Jewels with such furniture for her chamber as I shall allocate.
3. My executor shall 'suffer and permit without interruption' my wife to have during her widowhood those rooms which she and I now have and usually occupy, i.e. the little parlour, the little buttery, the stair and the little kitchen. And to have the reasonable use of such other rooms for her solace and pleasure; also free use of the gardens, orchards and grounds about and belonging to the house during her widowhood at all reasonable times.
4. My executor or his assigns at their cost shall provide and freely prepare for the said Anne and one maid or woman servant attending upon her sufficient meat, drink and fuel and necessary diet in all things during her widowhood at Moorecrofts.
5. If during her widowhood my wife shall be disposed or desirous to ride and travel amongst or to any of her friends for her recreation then my executor shall, given reasonable warning, furnish her with horse and man for these journeys; i.e. 2 horses and one man if she wishes to ride single or if she prefers to ride double, then two horses and 2 men at her own cost for travelling during her absence from Moorecrofts. Neither horses nor men shall be thus used or kept from home for more than 40 days in any one year.
6. The legacy of 100 marks to my wife shall be null and void if she does not within 5 months of my decease and before payment of the money surrender and yield up all rights title and interest in my mansion house called Moorecrofts within the manor of Colham, which are held by me of the Earl of Derby, before the steward of the said manor at a court held there or otherwise as thought best by my executor his heirs executors or assigns or his or their learned counsel in the law at the cost and charge of Henry Chapman provided that my wife is not obliged to travel out of the parish of Hillingdon to perform this act.
7. To my servant and kinsman John Saunders 40s.
8. To all my other servants 10s. apiece provided they serve out their terms and years honestly and truly with my executor as they should have done with me.
9. To Drew Chapman my nephew and godson a plain standing cup of silver with a cover all gilt.
10. To every one of the residue of his brethren and sisters, being the children of my daughter one piece of silver plate for remembrance, chosen by their parents.
11. My funeral and debts being duly paid, the residue of my goods, movable and unmoveable, to my son-in-law Henry Chapman for the use of him and his wife Sara, my only daughter.

VII. Inscription and achievement for William Gomersall, *ob.* 1597. Mural, W. wall of S. aisle.

On a rectangular plate 20³/₄ in. wide and 5¹/₈ in. high is the following inscription in six lines of Roman capitals:

HERE LYETH BVRIED THE BODIE OF WILLIAM GOMSALL
LATE CITIZEN AND IREMONGER OF LONDON WHOE
CHANGED THIS MORTALL LYFE THE FIRST DAY OF IVLIE
IN THE YERE OF OVR LORD GOD 1597. IN FULL AND PFECT
HOPE OF A IOYFULL RESVRRECTION. AND LEFT BEHINDE
HIM ONE SONNE AND TWO DAUGHTERS.

Central with this plate and immediately above it is apother rectangular plate 8¹/₂ in. high and 7⁵/₈ in. wide, on which is engraved a shield with helmet, crest and mantling. The

arms and crest are those of Gomersall of London recorded by Dethick, Garter, in 1568: *Sable, a chevron engrailed ermine between three dexter gauntlets argent*, and the crest: *On a crescent or, a dexter gauntlet argent grasping a battle axe gules pointed and headed of the second*.

This brass without figures is well engraved and a good example of its kind. It is a modest memorial for another successful merchant and liveryman of the City of London, with property on Deptford Strand as well as in Hillingdon. Extracts from his will follow.

It is stated on the brass that William Gomsall died on the first day of July 1597 and in the Burial Register is the record in September 1597: 'William Gomersill the thyrde day'. Probate on the will states 4 July 1596, but immediately above this statement he set his seal to the will on a day never filled in in the 39th year of Elizabeth, i.e. 1597. The will opens by stating that it is made on the twoe and twentieth of May 1597 so it seems without doubt that 1597 is the correct year.

Will of William Gomersall. P.C.C. 66 Cobham.

Made 22 May 1597.

Probate granted 4 July 39 Elizabeth (= 1597, but will shows 1596!).

Executors: Robert Gomersall, son.

Overseer: Christopher Aclye.

1. All lands and tenements in Uxbridge and in Edmonton to son Robert Gomersall &, after his decease to Robert's son William & his heirs upon condition that R. G. shall pay my wife Anne¹² £20 p.a. at the feasts of St. Michael and the Annunciation (or within 30 days), to be paid at the house of my son-in-law George Lee in King Street, Westminster. If at any time Robert shall fail to pay then Anne shall distrain for the sum of £30 (Nomine pena).
2. Robert shall pay his mother £20 within one month of my death at George Lee's home in Westminster.
3. These legacies to my wife are in full discharge of any claims she may make against my property.
4. To Marye Lee daughter of George Lee & her heirs my house at Deptford Strand now in the tenure of the Lord High Admiral of England.
If she has no heir then it is to go to her brother Thomas Lee and his heirs.
If he has no heirs then the house and wharf to come to my son and heir Robert.
5. Whoever receives the benefit of 4 must pay £10 to Thomas Nune Clerke late of Deptford until a certain Ammytie be run out.
6. Excepted from the legacy to Robert G. are two tenements under one roof next to the new churchyard at Uxbridge, with their gardens and orchards, as now divided. The one occupied by 'one Goodden' is to be given to Margaret More the wife of John More for her lifetime at an annual rent of one peppercorn (if legally demanded).
The other tenement with the 'backsyde' to Annys Clye daughter of Lawrence Aclye of Uxbridge, at the same rent.
7. To Margaret More £10 to be paid by Christopher Aclye of Cowley within 14 days of my decease.
8. To Annys Aclye £10 to be paid by Christopher Aclye her uncle within 1 month of my decease.
9. To John Aclye now my servant 5 marks to be paid by Chistopher Aclye within 6 weeks of my decease.
10. To William Smith my servant 5 marks to be paid by Christopher Aclye within 4 months.
11. 7-10 to be paid by a Statute of James Matthews of Iver for recovering debts of £100.
The surplus and all other debts owed me by Christopher Aclye to Christopher Aclye and his heirs.
12. To Jonas Arnall my servant £5 to be paid within 1 month by Robert Gomersall from debts

owed under a Statute by William Roberts of Feltham of £120.

13. To my daughter Elizabeth 300 marks to be paid by my son Robert within 4 months from such goods as he shall receive from Thomas Lawrence of Bray, the sum of £105 to be paid by a statute of £200 for the payment of £105. Also a statute of William Roberts of £100 for the payment of £42; and by 2 bonds on William Redinge and Richard Redinge in £40 for the payment of £20 15s.; also a bond of Henry Ponde and John Clarke in £50 for the payment of £26 odd and one other bond on George Gib and William Wodon in £26 for the payment of 20 marks.
14. To the poor people of Hillingdon £5.
15. To Christopher Aclye a silver spoon double-gilt weighing 2 oz. and similar spoon to his wife.
16. To Margaret Moore the wife of John Moore a wool bed with a whole and sound coverlet and 3 pairs of whole and sound flaxen sheets.
17. To Annys Aclye a wool bed and a good and sound coverlet and a pair of flaxen sheets.
18. To John Heager of Harwill [*sic*] £120 I do owe him by means of £115 remaining in the hands of Thomas Nedes of Ruislip and £5 remaining in the hands of John Heager.
19. But if Anne my wife dislike or refuse my legacy to her then she shall take a third of my lands and goodes without further claim or demand, my debts funeral & legacies being first paid & deducted.
20. And provided also that if my son Robert puts in sureties to the Chamber of London to pay William his son £500 as a legacye from me his grandfather to be paid when he reaches the age of 24 within 3 months of the decease of the said Robert then I give Robert full authority to sell and take to his use all lands and tenements.
21. I make Robert sole executor and Christopher Aclye Overseer for which my executor shall pay him 20s.

VIII. John Atlee, *ob.* 1599. Mural S. wall, S. aisle.

The figure of a man, 19½ in. high, is shown facing partly to his right. He is in civilian dress of the period, a garment buttoned on the chest and with ruff around his neck. Overall he wears a long gown with false sleeves reaching to the ankles. His feet are shown in shoes; standing on a plain floor. The face, with moustache and beard, could well be an attempt at portraiture. The engraving, though with much cross-hatching, is carefully engraved and in good proportion.

Below, on a rectangular plate 5¾ in. high and 20½ in. wide is the following inscription in five lines of Roman capitals:

HERE LIETH BVRIED THE BODY OF IOHN ATLEE WHO
WAS IN OFFICE OF THE HIGH CONSTABLE OF ELTHORNE
HVNDRED 36 YEARES AND DECEASED THE LAST DAY
OF NOVEMBER ANO 1599. IN THE FAITH OF IESV CHRIST
BY WHOSE BLOOD AND PASSION I HOPE TO BE SAVED

The burial register has the entry 'Decemb. 3 John Acelye Snior'. Such variability of spelling was in those days common and it suggests that the many references to the name Aclye in the will of William Gomersall (No. 7) may be to this same family.

A Discovery of palimpsests

When taking rubbings in 1975, two of these brasses were found to be palimpsest. Two of the shields of the Marsh brass were found to be very loose. The rivet holding one was punched and made to hold tight, if only temporarily. The other came away. This was the Merchant Adventurer's shield, of which the lower portion was already missing. Examination showed engraving on the reverse. It was curious that the three shields

associated with the John Marsh brass, of modest size, are all made from two pieces of metal. As one was now seen to be re-used metal there was reasonable expectation that all these pieces would prove palimpsest. At this same time it was observed that parts of the Drew Saunders brass were likely to be palimpsest also. The inscription was made of two pieces of metal the smaller of which had half a hollow rivet hole at its edge, obviously from earlier use. A similar half-circle at one edge was seen on the merchant mark plate. With the authority of the P.C.C. and the interested encouragement of the vicar, the Revd. Prebendary F.C. Tyler, these plates were removed on 1st December 1975.

As expected all the pieces were found to have engraving on the reverse side.

Engraving on the reverse of the brass to John Marsh, 1561

At the dissolution of monastic foundations many churches were destroyed or allowed to decay. The fittings were removed and many thousands of brasses must have been cast out. Some of the plate came to be re-used, either at once or during the early years of Elizabeth's reign. It is therefore likely that the brass used for the memorial to Marsh was residual spoil from monastic churches. The four small plates of his monument were all fabricated from two pieces, chamfered at one edge and soldered together. Of the eight original pieces two of the smaller pieces are now missing; the remaining six are portions of not less than three earlier brasses. The best engraved—or preserved—is the small figure of a priest in mass vestments of date about, or a little earlier than, 1450, shown in Fig. 9. The upper part, showing hands joined in prayer, the undecorated sleeves of the alb, a major part of the plain chasuble and the maniple hanging from the left wrist—patterned with rows of quatrefoils—is on the reverse of the major (and only remaining) piece of the shield with the arms of the Merchant Adventurers. The lower piece which is obviously contiguous with the other, and is on the back of the main piece of the arms of the Mercers Company, shows the lower part of the chasuble, with the fringe of the maniple, the alb almost to the feet, and the two ends of the stole, fringed and patterned like the maniple.

The rebus with I M on it was also made from two pieces of metal, the lesser of which is now missing and as can be seen was very small, with one point only of the frame. The reverse of the larger piece is worn and was at best only lightly engraved. It is the middle portion of a quite large fifteenth century figure, probably male and a civilian. The most prominent feature is part of a belt around the waist with buckle and holes in the free end which is looped in a half hitch. From the belt hangs a rosary with beads about an inch in diameter, suggesting a figure at least four feet in height. It is curious that from so large a figure it was not possible to find a piece of metal sufficient in size to produce the whole rebus plate. The missing piece is only about 3 in. by 1½ in. in size!

The other larger piece, from the shield with Marsh's own arms, has on the reverse part of yet a third brass, tantalising in that there is all too little to be conclusive on what it represents. From the extent of cross hatching it would seem to be of later date than the other two brasses described. A chin and neck are clearly seen and there is no beard. A garment close fitting around the neck could be a cassock. Hands joined in prayer appear to support material of some kind, but this is not at all clear. An outer garment with a very large hood or cowl is shown; the costume may be academic or monastic.

The small lower piece of the Marsh shield has been made from another piece of this same earlier brass—from the style of engraving and cross-hatching. Another pair of

hands is drawn, not of a full face figure as on the other piece, but slightly turned to dexter. Cross-hatching and other definite lines are there, but interpretation is difficult. The last small piece, from the bottom of the Mercers Company arms is perhaps contemporary with the above two, but also insufficient to allow definite conclusions. It is evidently from the bottom of a figure with cross-hatched drapery folds; but what appears to be a sabaton or armed foot is also there and part of a tiled pavement beneath the foot. A gowned military figure is unusual. If it were intended as a knight with robes of chivalry, e.g. K.G., a larger effigy would be expected. On the same piece of metal is part of a blackletter inscription of at least two lines. On the first line a part of one word is shown '? andon', and on the line below 'm (?) sectt'. This is not much to go on, but it has been suggested to me that it might be from a brass to Sir Thomas Brandon, K.G. who died in 1509.

Engraving on the reverse of Drew Saunders' brass, 1579

The outburst of religious fanaticism in the Low Countries in the year 1566 caused iconoclasm on a large scale. Many of the brasses that were thrown out of the churches found their way to the London market where the metal was turned over, cut up and re-used. Many brasses in this country in the following decade and more have been found to be palimpsest with portions of Flemish work on the reverse side. The brass of Drew Saunders proved to be one of these. As mentioned above evidence of earlier use was apparent from empty rivet holes at the edge of the plates as re-used. The thick and dark quality of the metal used for the inscription and for the rebus plate—in contrast to the thinner and lighter coloured plates used for the two main figures—is also suggestive of earlier use.

The larger piece of inscription showed evidence of engraving on the reverse, but this had been much worn. It appears to have been part of a border inscription, possibly with letters in Lombardic script, and some canopy work. It is too worn to decipher anything or even to be sure of dating.

An interesting technical feature is that a small rectangular piece of the metal was either missing or had to be replaced when the inscription was cut. This occurs immediately above the 'A' of 'Anno' in the last line and is a piece no more than $\frac{1}{2}$ in. by $\frac{3}{8}$ in. It is secured in place by a large amount of solder on the reverse side. The reverse also shows doodling marks or practising by, probably, an apprentice, which include circles and a trefoil with tail that has been cross-hatched.

The smaller piece of the inscription, which has the tell-tale half hole of an earlier rivet at one edge, has on the reverse part of a hunting scene that can be immediately recognised as work of that magnificent fourteenth century school of Flemish engraving described elsewhere.¹³ A hound is depicted in pursuit of its prey with trees in the background—one appears to bear a holly leaf. Just not shown is the huntsman, but his right hand can be seen holding a staff and in the top left corner his other arm holding to his mouth a hunting horn. At the right hand side can be seen the marks caused by filing and chamfering this edge to be joined by solder to the other plate. Such a hunting scene would have formed a long panel across the lower part of a large brass, below the feet of the person commemorated.

A similar scene is on the great brass to King Eric Menved and Queen Ingeborg of Denmark, of date c. 1320 at Ringsted in that country. Beneath his feet is a boar hunt while under the Queen the chase is after deer.

This splendid brass in Denmark is of rectangular shape, measuring 9 ft. 4 in. by 5 ft. 6 in. The hunting scenes, of which an excerpt is shown in Figure 16, for comparison, is only 1½ in. high. This small piece of a similar scene now found at Hillingdon is more than 3 in. high. It must have been part of a very large brass of the middle of the fourteenth century, of Flemish engraving and in a church in Flanders robbed of its monuments in the middle of the sixteenth century.

The reverse side of the rebus plate with the initials D. S incorporated in a merchant's mark also shows part of a fourteenth century Flemish brass of this outstanding school. It is less spectacular than the dog running in the forest, showing just two forked lines representing folds in the drapery of the costume of a civilian or a lady. In contrast to English or other engraving of the period these lines are wide and shallow. The major line is 7/16 in. wide, more than twice that found in contemporary work in this country. That there could be so little engraving on this plate, some 5½ in. square, indicates that it is from a large figure, probably life size. It could well be from the same original brass as the hunting scene though there is no proof. What this piece also shows, in common with many other palimpsest pieces of about this date (the later 1570's) is prolific doodling by, presumably, apprentices in the London workshop. They bear close resemblance from piece to piece, with concentric circles, trefoils, leaves, parallel lines, sometimes with hatching. What is curious and leads to the assumption that beginners were practising, is that these lines and patterns are scratched rather than engraved; they are very shallow and thin and not practices of the engraving technique. At best they represent the use of a scribe with which the design of a brass memorial may first have been scratched on the metal plate for the engraver to follow. This present example has the added interest that, within five concentric circles, the letters I B with linking knots have been scratched:—an up and coming John Brown of the engravers trade?

These newly found palimpsest pieces are of unusual interest and add to the considerable number of those found in the London area among, mainly, sixteenth century brasses.

NOTES

- ¹ Weever, *Ancient Funerall Monuments* (1631), p. 530.
- ² *Inquisitiones Post Mortem Chancery Inq.*, Edw. IV, File 70, No. 39.
- ³ *Pat. Rolls*, Edw. IV, No. 27.
- ⁴ Weever (*loc. cit.*) says: 'For Sir George Stanley, sonne and heire of Thomas, Lord Stanley, Earle of Darby, the first of that name, married Joane, the sole daughter and heire of the aforesaid John Lord Strange, here mentioned, who to her fathers memory, made this monument, with whom he had both her fathers honours, and ample inheritance; of which, Thomas Stanley, sometime Lord Bishop of Man, in his pedigree of the Stanleyes, speaking of Thomas, the first Earle, thus makes his rime, a MSS: 'He married his first sonne George, to no Ferme, nor Grange But honourably to the heire of the Lord Strange: Who lived in such love, as no man els had: For at the death of him, divars went almost madd; At an ungodly banquet (alas) he was poysoned, And at London in Saint James Garlikhith lyes buried.' (Stow/Strype, Edition 1720; B3, p. 10, confirms a monument to him in this church.)
- ⁵ *Cal. Pat. Rolls* 1446–52, p. 311, membrane 5.
- ⁶ *Cal. Pat. Rolls* 1476–85, p. 218, membrane 27.
- ⁷ *Harl. Soc.* XXVIII, p. 294. Roger Kynaston de Midleat Hordley, Co. Salop, miles, 4 filius Griffini (Knighted 8 Edw. IV, Sheriff of Salop. 1461 and 1470. *ob.* 1495–96.
- ⁸ m. (1) Elizabeth, d. Lord Cobham de Sterbergh relicta Dni Strange. (2) Elizabeth soror Richard Grey Dni Powis.
- ⁹ *Inquisitiones post mortem* for London, British Record Society, (1896), p. 34.
- ¹⁰ Lysons, *Historical account of those parishes in the County of Middlesex not described in the Environs of London* (1800), p. 159. Lysons also writes that 'in the north east corner of the nave (over the manor pew) is a circular brass plate (fixed to the wall) with the arms and quarterings of Stanley, surrounded by the order of the garter—and on an escutcheon of pretence, a lion rampant.' This has long since gone, no doubt at the rebuilding of this part of the church.
- ¹¹ Although mentioned as a benefactor to the Mercers Company on the list of some 90 benefactors printed in Stow/Strype (1720 ed. B.5, p. 55) he is not among the asterisked half of that number described as the largest benefactors.
- ¹² This is the earliest known Uxbridge charity (see *V. C. H. Middlesex*, Vol. 4, p. 98). In 1908 Marsh's gift comprised an annuity of £5 and the interest on £113 stock (M.R.O. Acc. 538/8).
- ¹³ In *Chesters London Marriage Licences*: William Gomersall and Anne Gardiner spinster of the City of London; at St. Clement Danes, 13 April 1577.
- ¹⁴ H. K. Cameron, *Trans. M.B.S.* XI, pp. 50–81. (1970).

THE EARLY CUSTOMS AND CUSTOM HOUSES IN THE PORT OF LONDON

by

Rupert C. Jarvis, I.S.O., F.S.A.

The old Custom House site in Lower Thames Street was excavated in 1973 and an excavation report appeared in the last volume of these *Transactions*.¹ That report contained also a fully documented account of the site as a piece of real estate; this paper is a documented account of the *administration* associated with that site, with particular historical reference to those times that seem archaeologically significant.

In the early bronze age the Thames was a natural *export* route, for example, for Cornish tin and Welsh and Irish copper to the near Continent; in the middle bronze age it was the natural *import* route, for example, for the newer type of implement from the upper Rhine valley and Switzerland. Already before the Roman period Britain was also exporting cattle and grain, and although the export of grain may have ceased in Roman times—because of the maintenance of the Roman garrison—there were hunting dogs and slaves, against the imports of wine, oil, pottery, jewellery and other luxuries. Tacitus says that already by A.D. 60 the port of London was a great centre of commerce and crowded with merchants (*copia negotiatorum et commeatum maxime celebre*),² yet there was likely to have been an unfavourable balance of trade during the whole of the Roman period. Thus, although Rome may have been responsible for *Londinium*, it was not responsible for the Thames. In other words, London owed more to the port than it did to the City—a fact not usually emphasised by London's historians.

The 1973 excavation disclosed a Roman quay overlying a thick layer of sandy gravel above the natural clay. There is, however, neither evidence nor conjecture that this is the site of the administrative headquarters of the Roman *portorium*. Thus, although the fine—and very prompt—excavation report is of considerable interest on other accounts, it has provided no additional information about the Roman customs system in Britain nor much that is new about the river frontage. As regards the Roman customs, the 'incised slab' displayed in the Museum at Colchester depicting the custom house there (with a Mediterranean ship alongside—much reminding one of the Phoenician vessel on a sarcophagus at Tyre, now in the museum at Beirut) is, of course, simulated only. What *portorium* control was in fact exercised in Britain (or in the corresponding ports in Gaul) is not clear. As regards Roman taxation more generally, no trace of *curatores*, (with special reference to more direct taxation) has as yet been found in Britain. In London we seem still to be left with the alternatives of a continuous river frontage (e.g. of quays) itself forming an actual or potential defensive line, or a defensive wall along an alignment farther to the south than has yet been identified, overborne towards the close of the period (and destroyed by later flood water) by a general tidal rise (entirely overcoming the older shore-line) which can be evidenced in certain other coastal sites in Britain.³

The 1973 excavation report remarks upon the river erosion of the Roman levels and the hypothetical early Saxon levels, but notes 'a few small sherds of Saxo-Norman . . .

pottery'.⁴ If this is the only archaeological evidence for the period, the historical evidence is almost as scant. As regards the latter, it has to be realized that governmental procedures at that period did not rest upon a written basis. Although, in this respect, the Anglo-Saxon practice was in advance of the Norman—for example, Edward the Confessor has a seal; William the Conqueror had not—yet 'office copies' of outward missives were not as yet kept 'for the record'. Therefore, writs or charters of this early period cannot now be known except from the chance survivals at the receiving end, often in ecclesiastical repositories. That there was, however, a customs administration operating in London in the mid-eighth century is evidenced by a document the text of which survives among the fragmentary extracts of the Saxon charters of St. Pauls,⁵ the earliest evidence of English native customs. The cartulary text refers to an exemption from customs duties—*vectigal atque tributum* (it is not clear exactly what distinction between them, if any, was intended)—granted by Ethelbert, king of Mercia in A.D. 742, to the then Bishop of London in respect of cargoes unladen in the port, the exemption being granted on account of their being used or consumed in a religious house. The reference to customs *quae mihi antea jure competebant* clearly implies a continuing administration. The building, however, from which such an administration might have been directed seems to have had, by Mr. Tatton-Brown's estimates, a river frontage somewhat farther inshore than the earlier Roman waterfront, and now archaeologically inaccessible under the public roadway.

There are references in the excavation report to a little twelfth century pottery. Although there may be little archaeologically between the mid eighth and early thirteenth century levels, there is, certainly a very great deal historically. By about 1200 archives were springing up in England in very rich profusion. That remarkable series of administrative reforms, the re-scheme of the system of naval supplies, the reconstruction of the Royal Navy generally, the transfer from feudal levies to mercenary land forces, the organisation of certain ports for fiscal and naval needs, the control of castles (particularly the castles of the West), the rationalisation of the Cornish tin mines, the departmentalisation of the Exchequer, and most of all, the development of the Chancery, all almost certainly owed something to what V. H. Galbraith—a great archivist—has called 'the fierce energy of King John'. In any case, it is all of a piece that an entirely new structuring of the customs service was instituted at the turn of the century, for already before 1200, to Fitzstephen's London *ex omni natione quae sub coelo est, navalia gaudent institores habere commercia*.⁶ This customs system of John may very well have been the earliest completely national system in this country and hence the first to produce anything like a systematic archive.

A very detailed account of the administrative system in 1203 has survived in the Chancery,⁷ and the detailed figures of the yield from the ports (from the Border east-and-south-about to Cornwall) has survived in the Exchequer.⁸ From this it is clear that notwithstanding the importance of the ports of the Humber and the Wash, Norman London still retained something of the preponderance it had achieved in Roman days. The Cinque ports, for example, from Sandwich through Dover, Rye, Pevensey, Seaford and Shoreham, even as far as Chichester, except for Winchelsea (on account of the wine trade), were relatively unimportant, at least as regards commerce. Although Boston, Lincoln and Lynn closely approached London, yet one sixth of the total revenue of England was collected from the port of London.⁹ To see Norman London in perspective, however, one must realize that almost all the leading ports were situated on the East

coast—Lincoln being among the principal; all the ports on the south coast, except Southampton, were relatively insignificant; and no port whatsoever was returned for the west coast. But although London had established something of a superiority over other East coast ports it was not by any pronounced margin.¹⁰ The Thames did not command the main volume even of the near-continental trade; it had to share a considerable portion of it with Southampton. As regards the near-continental and northern trade, the Thames could claim only a relatively minor portion of the whole, nearly four-fifths of it passing through the ports of the Humber and the Wash.

A scheme of considerable administrative sophistication¹¹ was worked out in much detail for the assessment collection and accounting of the customs duties. This scheme provided not only the essential foundation for all medieval customs administration but it contained, furthermore, all the characteristic elements of assessing, collecting and accounting control today. Dutiable transactions were required to be enrolled and assessed for the *quindecima* (bonds being taken in respect of contingent liability); duties due were to be paid to the collector who was to enter the duty paid upon a roll and keep the proceeds under lock and key (*in una salva arca under tres claves vel quatuor*) until returned to the 'head collectors' (*donec redatur capitalibus custodibus per cirographa contra baillivos*). Another official was appointed to the port to keep a 'counter roll' (*rotulos contra eos facient*), an independent record of all moneys received, but should not himself receive any. The particular significance of this form of control was that London (in common with all other ports) was, at least for this purpose, taken out of the ambit of the sheriff, to account direct to the Exchequer. Thus the Crown, by its own officers, assumed a direct control of all the ports of England. It is perfectly clear, therefore, that the systematic exaction of royal customs in England was established at least by 1203.¹²

It is commonly held that the *magna custuma* of 1275¹³ (variously referred to as *nova* or *antiqua*) was the first systematic and permanent system. Apart altogether, however, from John's *quindecima*, because the 'grant' of 1275 is recorded as having been instituted at the instance and request of the merchants in parliament, the inherent likelihood may very well be—unless the phrase were an idle formula—that even in 1275 what the merchants 'instanced and requested' was an existing system to be made more satisfactory—to the merchants. In 1275 John's administrative scheme was improved in certain details, for example, two halves of the cocket¹⁴ seal of the port were to be held by the collector and comptroller respectively, but in the case of London the Lord Mayor and sheriffs were bidden to 'elect by the oath of good and lawful men thereof two men of the City who shall keep one part of the seal' as joint-comptrollers, the other half of the port seal to be held by the merchants of Lucca, to whom Edward I had farmed the revenue. Richer de Refham and Hugh Porter were accordingly appointed to collect the customs in the port of London and the Lord Mayor was bidden to assist in the assessment and collection.¹⁵

In 1303, by the *carta mercatoria*, Edward I¹⁶ (operating through the Exchequer and not through Parliament) agreed with the alien merchants—who shipped, for example, about 65 per cent of the wool concerned—a *nova custuma*, a complete system of increased customs duties, to be charged upon commodities shipped by alien merchants into and out of the realm. It was, incidentally, a clause in this charter that extended the function of the troneurs in the sense of setting up the king's beam not only in every port, but also 'in each market town and fair of our realm'.¹⁷ One would naturally expect that

the general development of the customs service towards the end of the thirteenth and beginning of the fourteenth centuries would reflect in extended physical space. Certainly the 1973 excavation provided evidence in relation to the earlier medieval buildings on the site, pointing to an enclosure of the foreshore overlying well-washed Roman levels, the construction of an entirely new river frontage (east–west) and a timber north–south structure going out into the river ('that could only partly be examined') but was probably the main jetty—all 'some time in the fourteenth century (or possibly the late thirteenth)'.¹⁸ It would make a neat package if, with reasonable approximation in dating, these two sets of circumstances could be evidentially related. Mr. Tatton-Brown, however suggests, on the contrary, that the east–west structure (apart from the north–south jetty) may have been built in 1339 as part of a military defence rather than as a piece of harbour work.

Documentary references to the late fourteenth century custom house have been well milled over, if only on account of Geoffrey Chaucer who was appointed a comptroller in the port of London,¹⁹ and presumably worked there. That there was a custom house on the Wool Quay, however, before John Churchman acquired it in 1378, seems evidenced by a patent reference already in 1377 to 'the house appertaining to the Great Customs upon le Woole Key'.²⁰ Also, there has been confusion about Churchman's functions in connection with the tronage. The fact that in the house he built 'for the quiet of merchants', it was the Crown that took an easement for the balance and the weights, a compt for the comptroller's clerks and other officers of the tronage,²¹ indicates clearly that that tronage related to the Crown. The particular office that upon his death was made over to the Grocer's Company²² was not a Crown but a City function. The former related to the king's beam itself, the latter to 'the common beam, commonly known as "the king's beam".' The former related to weighing between the Crown and the subject for purposes of the king's customs; the latter related to weighing *versus mercatores et mercatores* in the common way of trade,²³ it being not at all uncommon for two such offices to be filled by a single person. Shortly afterwards, Churchman was granted, by patent (per privy seal), an additional rent for a small chamber 'for a latrene and a soller over the counting house (*computatorium*) containing two chambers and a garret'.²⁴ In the 1973 excavation the chalk and ragstone frontage of the fourteenth century custom house, going down to Roman timbers (although yielding few dateable objects) could be conjectured immediately below the modern basement floor.

In general, the assessment, collection and accounting of the customs duties was becoming more complicated. Certain classes of merchandise, wool, woolens and woolfels, leather, tin, wax, and wines were dutiable by description; all other dutiable commodities were liable *ad valorem*. In John's *quindecima* it is not quite clear how exactly the fifteenth was assessed, but a later effort to determine the relationship between price and value²⁵ appears to have failed owing to an inadequacy of commercial documentation. In the result, the *ad valorem* duty came to be based upon notional values only. Professor Gras discovered (and printed in 1918)²⁶ a table of notional values: 'A Rate made of the Pr[i]cys of all manner of warys' (issued in 1509 and re-issued in 1532). Because these prices had been fixed by the Council with the advice of the surveyors, comptrollers and the collector of the Port of London it is at least likely that they were valid in London only. A somewhat earlier (pre-1503) list of prices Gras declared to be a crudely edited 'Book of Rates' whose 'whole make-up is crudely indicative of a pioneer invention'.²⁷ (In this latter respect he was completely mistaken.) He therefore declared

'Books of Rates' to consist essentially of tables of notional values only and the 1509/32 document to be the earliest Book of Rates. This has gone unchallenged for well over half a century. I have, however, recently discovered, from an hitherto unrecognised recording of it in 'Arnold's Chronicle', an earlier true Book of Rates, 'The Rate of the Kynges Custum . . . regestred in the Eschequer'.²⁸ In this, in modern parlance, the tariff categories and the tariff rates, without any notional values—are clearly laid down, for native, Hanseatic, Spanish and other merchants.

The combined effect of the *quindecima* of 1203 and the *antiqua custuma* of 1275 was to limit oversea trade to those places where proper officials had been appointed by patent. During the ensuing three centuries trade tended to fall away from certain ports (sometimes on account of silting and other physical features) and favour other places. Because oversea trade at such latter places was not, in strictness lawful, certain of the local patent officials would appoint their own 'deputies', by their own warrant, to control such trade. The practice, although not exactly *illegal*, was certainly *extra*-statutory. The local officials felt that in the interests of trade they were merely easing the law to meet the actual circumstances. They were not of their own authority *permitting* such trade; they were merely *suffering* it—without specifically authorising it.

By mid Tudor times it was desired to bring the system into a more orderly form and William Paulet (now created Earl of Winchester) took the organisation of the customs in hand. Although an able administrator, trained in the school of Thomas Cromwell, he was no financier. Being something of a politician, however, he introduced a package deal, the Crown would provide statutory support for those extra-statutory practices already countenanced, but would tighten up other procedures in the interest of the Crown.²⁹ For example, for the future it would not be lawful to lade or unlade any merchandise in the foreign trade save at such places where a patent or warranted official had, 'by the space of ten years last past, been customably resident' (even at fully authorised ports), except at such berths, quays or other places as the Crown should assign and appoint for that purpose, by virtue of a commission out of the Court of Exchequer.³⁰ The earlier places were now to be known as 'legal quays'; the newer places where oversea trade might be 'suffered' were to be known as 'sufferance wharves'; all other places were 'unapproved places'. These differences came to be very important in the port of London. All the legal quays were located on the north side of the Upper Pool, from the Tower westwards, that is, they were all within the limits of the City. All sufferances were either down-stream or on the Borough side. As trade on the Thames gradually moved downstream, particularly during the eighteenth and nineteenth centuries, unapproved places were continuously pressing for sufferance status, but all sorts of conditions could be imposed by the Customs upon sufferance wharves that could not be imposed upon legal quays. The jealousy of the City faction in this respect occasioned very considerable friction between the parties. In any case, it is not surprising in the general increase in maritime trade by the mid Tudor period, the greater reliance of the Crown upon the customs revenue, and the general restructuring of the Customs service in consequence, that the medieval custom house in London became altogether inadequate to current needs. As might be expected, it was Winchester of the 1558 reforms who was to 'forward the building of the new Custom House and wharves' in the port of London.³¹

Written sources for the Tudor custom house are extremely scarce and the graphic

sources are extremely confusing. The illustrations of Agas (1592?), Norden (1593), Visscher (1616), Gottfried of Frankfurt (1638), Hollar (1647) and Howlett (1663) cannot be reconciled. Ralph Agas—with or without George Vertue—and Norden are not very helpful. Visscher's custom house has a main range of uniform height but without any staircase-tower and with no clear arcading, but has flanking buildings east and west. Matthew Meriam's reproduction, published in the mid-seventeenth century, purports to derive from Gottfried's drawing of 1638. Here the custom house—not specifically designated,—shows a three storey main range with east and west ranges more or less at right angles and arcading in the centre range. The buildings stand round an open quay with vessels alongside. Wenceslaus Hollar's engraving of 1647 depicts a custom house with a main range with a western turret and an arch towards the west end, with an east wing one storey less and a flanking building to the east leading down to the river frontage. The view 'engraved from a scarce print' by Bartholomew Howlett shows a three-storey brick building with octagonal staircase-towers at the angles and at the mid front. In this south front the fenestration is regular, the eastern half being pierced by an archway and there is possibly an arcade in the centre range. To the east is a flanking building and presumably a warehouse. On the open quay are items of merchandise and a wagon and shipping alongside. All this is very confusing, but Bowles, relying on an early drawing of the general ruins on the site just after the Great Fire, shows three towers still standing—which inclines one towards Howlett's 'View'. It was, of course, this custom house that was destroyed in the Great Fire.

Notwithstanding such loss, however, the official business of the port, the report and clearance of ships and the collection of the revenue, had to be carried on. A 'house in Mark Lane heretofore called by the name of Lord Baunis House, [was] now appointed to be the Custom House'.³² This house, however, needed to be equipped and fitted as an office but, because the 'late ruin of howses in the Citty of London by the late conflagration gives so much imployment to carpenters bricklayers and masons', the necessary labour could not be procured 'but by some special warrant'. Because, however, the work at the custom house was seen as 'service for the publique trade of the citty and so consequently for the advantage of the whole body', the Crown authorised the 'press' of 'as many men as they have present occasion of' to bring the new building 'into that forme as may answer that use'.³³ The house in Mark Lane was later referred to, not as 'the Custom House', but as 'the present house where the Customs are managed'.

There appeared to have been moves by the Whitehall faction to take the opportunity of the Fire to remove the administrative headquarters of the customs service to some other site more convenient to the court than to trade and shipping, that is to say, nearer to Whitehall than to Billingsgate.³⁴ Nevertheless, common sense prevailed. It was decided eventually therefore to 'rebuild our Custome-house in the place where it formerly stood' and, furthermore, to enlarge it 'to the use of our merchants'.³⁵ In the result, an elaborate survey of all the legal quays between the Tower and London Bridge was undertaken and 'a draught or modell of a new Custom House was produced' and an order given 'to build it after Mr. Wrenn's Modell',³⁶ the commencement of the work being authorised in the June of 1669.³⁷ By the time the building was complete not all was well between the officers of the Crown and the King's farmers. Eventually it was settled that the new building should be divided 'to the convenience' of both, 'according to a copy of a certificate from Dr. Christopher Wren', the Crown officers to have the east end, the farmers the west, 'the Great Long Room to be in common'.³⁸ So far as is known, this is

the first use of the term 'Long Room' to designate that part of any custom house where the public business of the port is transacted. The term has spread from the port of London, not only all over the country, but all over the world. The building was completed in 1671, at a cost of £10,252 6s. 8¼d.—but by this time the Crown had become insolvent.³⁹

Already by the time of the Long Parliament the customs had become a constitutional issue between the Crown and Parliament. By ordinance of 21 January 1643 Parliament took the customs out of the control of the Crown, to administer them—together with the new excises—by a parliamentary commission.⁴⁰ Thus, the Customs at last came 'out of court' and was 'departmentalised', as the administrative historians say. At the general reaction of 1660, even the Cavalier Parliament laid it down that the customs were a statutory tax and not a prerogative impost—but returned them into farm, where all was not well. When, after the Great Fire, money was urgently required to rebuild London, the King was content that Parliament should slip away without making any provision. The City, however, proposed a customs duty upon coal brought coastwise into the port of London and insisted, furthermore, that the money yield should not be handled either by the King's Customs or the King's farmers. Even the royalist Parliament had perforce to agree that the customs duty should be paid into the hands of the City Chamberlain—which directly implied the severest criticism of the executive in the whole of Stuart history. The records, therefore, relating to the customs duty for the rebuilding of the City, St. Pauls and the City churches are now not to be found among the Customs or Treasury records in the Custom House or the Public Record Office, but among the City records in the Corporation Record Office.⁴¹ At the time of the opening of Wren's new Custom House negotiations for a new farm of the customs broke down and, in the result, the Crown and Parliament had to revert to the old Commonwealth method of parliamentary commission, the commission then appointed (by royal letter patent) being constitutionally the same as that in office today.⁴² Where earlier customs records had been returned into the Exchequer, from 1671 they now commenced to form a departmental archive and it is immensely to be regretted that the fire of 1715 destroyed the greater part of that early archive.

The Wren custom house of 1671 has been said to have been 'one of his most perfect buildings'.⁴³ On the contrary, it seems to have been a rather cobbled job. In January 1715 'the accidental blowing up of a house where gun-powder was sold' (presumably for the use of shipping) fired two houses next to it. The wind carried the fire to other houses and warehouses on both sides of Thames Street and, in the result, the west end of Wren's custom house was damaged beyond repair. It was now found that the ends of the timbers supporting the Long Room were rotten, that its windows were beyond repair, that the pilasters and stone ornaments would all have to come down and that the wall on the south front, which had been cased with rubbed and gauged brickwork, was only four inches thick. It seems likely, furthermore, that the frontage level had originally been raised with made earth merely, altogether inadequate for foundations—which would now require strengthening. In the 1973 excavation of the site Wren's foundations could be identified, but the excavation report provided no evidence as to their adequacy or otherwise. In any case, both Wren and Vanburgh concurred at the time that the building would now have to be completely rebuilt and that a further extension eastwards was now necessary. Thomas Ripley, master-carpenter to the Customs (and later Controller of the

Works and builder of the Admiralty, 1724–26), commenced a new custom house and completed it in 1725.

T. F. Reddaway observed, in relation to custom house space, that the Customs, apart from having to 'deal (*inter alios*) with many rogues', is 'plagued with the necessity to keep many records' and hence suffer 'the age-old need of administrators',⁴⁴ the need for more space. He might have added that the industrial revolution not only made England the principal industrial country in the world, it also made the port of London the world's principal port. The London Custom House administered not only the shipping of the port of London, but the shipping also of England, and after 1707 the shipping of Great Britain, and later the shipping of all the oversea territories. During the *eighty* years following the building of Wren's Custom House, England's imports (between 1670 and 1750) showed relatively modest fluctuations. In the *thirty* years between 1760 and 1790 imports doubled, and doubled again in the *twenty* years between then and 1810. Maitland looked at the port of London's eighteenth century shipping—and outstripped Fitzstephen's paean of praise six centuries earlier. This vast increase in shipping and the commerce and trade that issued from it made his London 'the most populous and opulent that is or . . . ever was, on Earth'.⁴⁵

All this quite vast increase in shipping and commodities could not be accommodated in the legal quays in the City or in the sufferance wharves in the other parts of the Upper Pool. In 1799 the West India Dock Company was statutorily authorised and the docks opened in 1802. In 1800 the London Dock Bill was produced and the docks opened in 1805. In 1803 the East India Dock Company was formed and the East India Docks opened in 1806. In 1801 the Grand Surrey Canal Company was formed and in 1807 Commercial Dock Company instituted. The London Custom House, altogether apart from the Reddaway/Parkinson factor, was inadequate by any standard. It had become 'for some time . . . inadequate to the accommodation of the trade of the port', to say nothing about the maritime and fiscal administration of the oversea territories in North America, the West and East Indies, Africa, India and (later) Australia. Furthermore, by 1810 it had become 'ruinous and dilapidated' beyond practical repair.⁴⁶

The problem now with any rebuilding was not only not to create 'a chasm in the despatch of commercial business which would be destructive to the merchants of Great Britain' but, having regard to the war, how to do so 'without creating an expense which could not be justified'. It was sensibly decided to acquire the site immediately westwards of the then present building, to build a new and enlarged structure, and to transfer the work from one building to the other on a convenient day. The Treasury agreed in the May of 1812 and on the 25th of the following October the first stone of the new building was laid. The later story of this 1813–17 Custom House, and its partial rebuilding in 1825–26, has already been told in these *Transactions*.⁴⁷ When the Customs again left the site, on account of another great fire—they were bombed out in 1940–41—they again migrated to Mark Lane. This time they named the building 'King's Beam House' after their historic weighing devise, referred to earlier in this paper.

NOTES

¹ Vol. 25, 1974, pp. 117–219.

² *Annals*, XIV, 33.

³ J. Wachter, *The Towns of Roman Britain*, 1975, pp. 95–7 and 176.

⁴ *Transactions*, vol. 25, p. 128.

⁵ M. Gibbs, *Early Charters of the Cathedral of St. Paul* (Camden Third Series, LVIII, 1939), p. 6.

⁶ '*Descriptio Nobilissimae Ciuitatis Londoniae*' (J. Stow, *Survey of London*, Kingsford edition [1908]), vol. II, p. 224.

- ⁷ *Rotuli Litterarum Patentium* . . . 1201–1216, pp. 42–3.
- ⁸ P.R.O. Lord Treasurer's Remembrancer, pipe roll 50, mem. 16B.
- ⁹ Pipe Roll Society LIV (NS XII), pp. xliii–lx. Although there are a number of errors in the *amounts* at the ports, the ports themselves are briefly discussed.
- ¹⁰ Carson (*The Ancient and Rightful Customs* [1972], p. 16) much exaggerates the importance of London, merely by mistaking the latin 'D' (500) for a thousand ('M').
- ¹¹ R. C. Jarvis, 'The Archival History of the Customs Records', *Journal of the Society of Archivists*, vol. I (1959), pp. 240–1; and F. Ranger (ed.) *Prisca Munimenta* (1973), pp. 203–4.
- ¹² There have been variant translations of clause 41 of Magna Carta.
- ¹³ *Parliamentary Writs*, I, pp. 1–2.
- ¹⁴ Cocket = *quo quietus est*.
- ¹⁵ *Calendar Letter Book C*, p. 117.
- ¹⁶ It may be significant that this charter was not entered upon the charter roll of Edward I. It is usually quoted from the *confirmatio* of Edward III (2 Edw. III, mem. 11, no. 37). But see Rymer, *Foedera*, II, pp. 747–8 and *Munimenta Gildhallae*, II, *Liber Custumarum*, i, p. 208.
- ¹⁷ R. C. Jarvis, 'The King's Beam', these *Transactions*, vol. 19, 1956–58, pp. 128–37.
- ¹⁸ These *Transactions*, vol. 25, p. 138.
- ¹⁹ Patent roll, C66/290 (48 Edw. III) mem. 13, and C66/296 (51 Edw. III) mem. 14; *Calendar Patent Rolls* (C.P.R. hereunder) 1370–4, p. 449. As to authority to appoint a deputy, see C.P.R. 1374–7, p. 462. As to Chaucer's 'control' of the customs accounts when John Philpot ('of Philpot Lane'—Lord Mayor) was collector, see P.R.O., L.T.R. enrolled accounts, customs, E 356/14, mem. 16(2).
- ²⁰ C.P.R. 1377–81, p. 36.
- ²¹ *Ibid.*, 1381–5, p. 149.
- ²² *Ibid.*, p. 299.
- ²³ These *Transactions*, 25, p. 131.
- ²⁴ C.P.R. 1381–85, p. 299.
- ²⁵ 1 Hen. VIII, cap. 20.
- ²⁶ *Early English Customs System* (Harvard), pp. 694–706.
- ²⁷ *Ibid.*, p. 121.
- ²⁸ 'Arnold's Chronicle', . . . *The Names of the Bailiffs* (? 1503), lxxiiij–liiiij.
- ²⁹ i Eliz. I, cap. 11.
- ³⁰ Memoranda roll, 7 Eliz. I. Hilary, rot 319; printed in B.Y. *Modern Practice of the Court of Exchequer* (1730), pp. 431ff.
- ³¹ *Calendar State Papers, Domestic* (C.S.P.D. hereunder), vol. I, p. 105.
- ³² *Calendar Treasury Books* (C.T.B. hereunder), vol. I, 1660–67, p. 728.
- ³³ C.S.P.D., vol. VII, 1667, p. 138.
- ³⁴ Pepys, *Diary*, 7 September 1666.
- ³⁵ P.R.O. State papers domestic, 29, 171 (94).
- ³⁶ C.S.P.D., vol. VI, 1666–67, p. 56.
- ³⁷ P.R.O. Treasury Board minutes, T29, iii, p. 103.
- ³⁸ C.T.B., vol. III, 1669–72, ii, p. 797.
- ³⁹ P.R.O. Declared accounts, AO I, bundle 2492, rolls 397–8 and C.S.P.D., 1671–72, pp. 68 and 87.
- ⁴⁰ Grand Remonstrance, clauses 18–19; *Lords Journals* vol. V, p. 567; C. H. Firth and R. S. Rait, *Acts and Ordinances of the Interregnum, 1642–1660*, vol. I, p. 203.
- ⁴¹ 18–19 Car. II, cap. 8; P. E. Jones and R. Smith, *A Guide to the Records at Guildhall London*, 1950, pp. 73–6.
- ⁴² C. C. Crews, 'Last Period of the Great Farm of the English Customs' (unpublished thesis, University of London); P.R.O. Patent roll, 23 Car. II, p. 2, no. 1, dorsa (27 September 1671); T/51/15A, p. 219.
- ⁴³ *Survey of London*, vol. XV (1934), p. 40.
- ⁴⁴ T. F. Reddaway, 'The London Custom House 1666–1740', *London Topographical Record*, vol. XXI (1958), p. 25.
- ⁴⁵ *History of London* (1756), vol. II, p. 1258.
- ⁴⁶ 39–40 Geo. III, cap. xlvii and 52 Geo. III, cap. 49.
- ⁴⁷ These *Transactions*, vol. 20, pp. 198–213.

SIGNS OF CHANGE IN A MEDIEVAL VILLAGE COMMUNITY

by

Douglas Moss and Ian Murray

In medieval society one essential difference between the freeholder and the villein was the right of the free man to alienate his land at will, something supposedly denied to the serf. A free tenant 'enjoyed a large power of disposing of his tenement by act *inter vivos*, though this was subject to some restraint in favour of his lord'.¹ Alienation by a villein 'certainly could not be effected without the lord's leave'.²

Yet in practice, by the fourteenth century, a flourishing market in land occupied by unfree tenants seems to have come into being. The licence of the lord had, indeed, first to be obtained but, from the frequency with which this took place, it would appear to have been little more than a formality. By the device of surrendering the land in question to the lord, to be followed by the admittance of the new tenant, who in reality was the purchaser, the transfer was accomplished.

We felt that an examination of land transfers in a particular village could well be of value to students of medieval agrarian history. For this purpose a study has been made of the court rolls of the three manors in the Middlesex vill of Tottenham.³ Land transfers have been tabulated and those which would appear to have been genuine sales, made to purchasers not of the family of the original occupier, have been recorded separately. The changing level of activity of the land market, if such it may be called, has thus been made clear, and this over a period of thirty years during which a fairly complete run of court records has been preserved.

I

This Middlesex township appears to have had an economy based on arable cultivation combined with animal husbandry, in particular the rearing of sheep. In an earlier paper⁴ we have sought to establish that there were twenty-four arable fields and that the economy was similar to the one Dr. D. Roden found existing in the Chiltern Hills region, and in some adjacent areas, such as north-west Essex.⁵

During the fourteenth and early fifteenth centuries Tottenham was divided into three manors, Bruce, Daubeney and Pembroke, Bruce being sometimes referred to as Fawkoner and Daubeney as Balliol.⁶ The courts of the Bruce and Daubeney manors generally met twice yearly, those of the Pembroke manor met more frequently, three or even four times, and, too, were recorded in greater detail. Occasional court proceedings have been preserved from the year 1318, most of the early ones in a rather rudimentary manner. It is not till after 1375 that we have a fairly continuous run and a full and complete series only exists for the years between 1392 and 1409.

Table 1. Court records in existence from 1375.
Bruce manor. All courts between 1375 and 1413.
Daubeney manor. 1375, 1377-1381, 1383, 1390-1409.
Pembroke manor. 1377, 1381, 1384, 1392-1413.

Between the years 1375 and 1413 mention is made of 269 transfers of land, a figure which includes those taking place on the death of the tenant and those occurring during the tenant's lifetime. In some recordings the details are incomplete; the area, and/or the fine, is not stated. There is a generous proportion, 231 instances, where all particulars have been preserved and these have been arranged in the accompanying series of tables. These have been sub-divided into four periods. The first covers the years 1375 to 1391, in which a full record only exists for the Bruce manor. The three sub-divisions which follow, 1391-1399, 1399-1405 and 1406-1413, would appear to demonstrate that certain significant changes were taking place in the manorial economy, a particular example, in fact, of changes in agrarian society which were occurring in many parts of England at the time. In each division, as already stated, a separation has been effected between the sum total of 231 transfers and the 147 which appear to be genuine sales.

It will be seen from the tables that more transfers per year were made during the last ten years of the reign of Richard II, but that where sales were concerned there was a gradual increase in activity which was at its peak in the years 1406-1413.

Table 2A. 1375-1391.

<i>Area</i>	<i>All transfers</i>		<i>Actual sales</i>	
0- 1 acres	20	83%	14	88%
1- 2 acres	10		5	
2- 4 acres	14		10	
4- 6 acres	3	11.5%	2	9%
6-10 acres	3		1	
10-15 acres	1	5.5%	1	3%
Over 15 acres	2		0	
No area given	8		6	
Messuages	9	(4 separately)	6	(3 separately)
Total transfers	65	(53 areas stated)	42	(33 areas stated)

Table 2B. 1391-1399.

<i>Area</i>	<i>All transfers</i>		<i>Actual sales</i>	
0- 1 acres	22	59%	16	73%
1- 2 acres	11		4	
2- 4 acres	9		4	
4- 6 acres	7	25%	2	18%
6-10 acres	11		4	
10-15 acres	5	16%	2	9%
Over 15 acres	6		1	
No area given	12		6	
Messuages	21	(3 separately)	6	(1 separately)
Total transfers	86	(71 areas stated)	40	(33 areas stated)
Yearly average	10.75		5	

Table 2C. 1399-1405.

<i>Area</i>	<i>All transfers</i>		<i>Actual sales</i>	
0- 1 acres	11	69%	9	80%
1- 2 acres	11		8	
2- 4 acres	5		4	
4- 6 acres	2	25.5%	2	20%
6-10 acres	8		3	
10-15 acres	0	5.5%	0	
Over 15 acres	2		0	
No area given	6		5	
Messuages	4	(1 separately)	3	(1 separately)
Total transfers	46	(39 areas stated)	32	(26 areas stated)
Yearly average	7.75		5.3	

Table 2D. 1406-1413.

<i>Area</i>	<i>All transfers</i>		<i>Actual sales</i>	
0- 1 acres	15	63%	13	63.6%
1- 2 acres	11		10	
2- 4 acres	17		12	
4- 6 acres	4	12%	3	12.7%
6-10 acres	4		4	
10-15 acres	12	25%	8	23.7%
Over 15 acres	5		5	
No area given	3		2	
Messuages	10	(1 separately)	4	
Total transfers	72	(68 areas stated)	57	(55 areas stated)
Yearly average	9		7	

In almost all cases where no area was given, this appears to have been small.

The amounts of land transferred were, generally, small, though, as the period advanced, increasing in size, especially in the last years of Henry IV. The reasons for this increase, and the greater activity of these last years, will be adequately explained. Before this is attempted it can be said that, in relation to the size of the holdings of the Tottenham peasants, perhaps the areas involved were not so small. A Pembroke rental of 1368 showed that, while one tenant, Thomas Harding, held 54¾ acres, the average holding was only of seven acres.⁷ So far as can be ascertained from the area of land held by villagers at time of death, there would not appear to have been any great change since 1368. A John Greneford rented over 50 acres but he, again, was an exception. Hence if, in the latter part of the rule of Richard there were seven sales of over six acres, in the early part of Henry's reign only three, yet in the latter years of Henry IV these increased to seventeen, by then, at least, quite considerable areas were involved for a peasantry of the type living in the village. Of course, even then 63.6% of sales were of four acres or less, yet four acres could represent half the size of the typical holding.

II

Some interesting facts emerge from the Tottenham rolls which will be commented upon before entering on the task of seeking an explanation for the increased number of larger sales towards the end of the period being examined. In seven instances the actual prices paid for the land were given and are set out below.

Table 3.

- i. 15 Richard II, BRUCE MANOR, Messuage, 11½ acres land, 2 acres meadow⁸
Price £5.16.8. Entry fine 13/4.
- ii. 16 Richard II, PEMBROKE ½ acre meadow, Price £1, Entry fine 1/-
- iii. 19 Richard II, BRUCE MANOR⁹ Messuage, 8 acres land, 1 acre meadow
Price £3.13.4. Entry fine 10/-
- iv. 4 Henry IV, BRUCE-PEMBROKE combined court¹⁰ Messuage, 4 acres land, ½ rod meadow
Price £6.6.8. Entry fine 5/-
- v. 3 acres land¹⁰ Price £1.1.8. Entry fine 2/-
- vi. 5 Henry IV, BRUCE MANOR¹¹ 2 acres land, Price £1. Entry fine 1/6.
- vii. 6 Henry IV, PEMBROKE MANOR¹² 1½ acres land, Price 12/- Entry fine 1/6.

No consistent pattern as to the price of the land emerges, nor as to the ratio between price and the entry fine paid. As the value of land in different parts of the township must have varied it could not be expected that there would be a uniform value. There is an approach to uniformity in the last three sales quoted, where a price of from 7/- to 10/- an acre is found. Even here there is a considerable divergence. Most surprising at first glance is the payment of a pound for half an acre of meadow, yet this is not so surprising when one remembers the comparative scarcity of meadow in Tottenham. In early fourteenth century extents meadow was valued at 2/- or 2/6 an acre,¹³ when the total value of rent and services per acre of arable was about 4½d. In the year 1407, in Bruce Manor, an agreement was made between the lord and the customary tenants whereby most services were commuted and a new overall rent of sevenpence an acre fixed for the future. If, as has been asserted, the normal value of land at the time was twelve to fifteen times the annual rent, Tottenham values do seem to bear some relation to this ratio.

Another interesting feature is the number of tenants who on their death left their land 'to be sold at the best price obtainable so that the money could be distributed for the benefit of the soul of the deceased'. Two tenants left such instructions in Richard II's time, but in the last few years of Henry IV five individuals were sufficiently concerned for the welfare of their souls to desire such action to be taken.¹⁴ Maybe this was a manifestation of that greater concern with man's mortality so prevalent in the late Middle Ages. In a time of war, pestilence and famine, when the four horses of the Apocalypse seemed to have been let loose, all ranks of society were very conscious of the transience of human life. This has been so vividly depicted by J. Huizinga in his masterly book *The Waning of the Middle Ages*.

III

The court rolls of the three manors show that over the years 1375 to 1413 92 individuals sold, 94 bought, land. Of the sellers 62 appear once only, of the buyers 64. Until 1405 there are no signs of particular accumulation in the hands of any single person and the areas involved were not large, generally of four acres or less. A few of the more substantial peasants, those who appeared regularly serving on juries or as tithing men, as reeves, woodwards and so on, were found more than most as purchasers in these transactions. Of them Thomas Fynch was most prominent, acquiring in all $17\frac{3}{4}$ acres of arable and 2 acres of pasture in seven purchases during the period. At his death Fynch held 29 acres of land. Of the sellers the most regular was Cristina Edes who, after the death of her husband in 1394, would appear to have obtained the wherewithal to live by selling small portions of her inheritance at brief intervals. She figures on ten occasions between 1394 and 1409, selling half an acre here, three quarters of an acre there, and finally a messuage, two acres of arable and one of meadow. The largest single purchase was of a messuage, $23\frac{1}{2}$ acres of land and 3 acres of meadow in 1394 by Thomas Pernell, 'gundeler' of London, this a hint of things to come.¹⁵

In 1409, when Thomas Fynch died, his land passed into the hands of one John Drayton, clerk to Roger Walden, the lord of the Pembroke manor. Walden had been in the entourage of the late king and had been imprisoned after the triumph of Henry Bolingbroke, but released a few years later. Drayton was the most active of a number of men specified as 'servants of the lord' who, in the latter years of Henry's reign, bought on a larger scale. This, together with the intrusion in the same period of many more London citizens, must be assumed to have formed a disturbing outside influence.

Buying of Tottenham land, free and customary, by Londoners had occurred from time to time in the fourteenth century. The ease with which villein land could be bought and sold no doubt facilitated the process. In 1392 the lordship of the Daubeney manor passed to John of Northampton, a prominent figure in the internecine disputes which troubled London during the last quarter of the century. Sir Nicholas Twyford, a goldsmith and alderman, became lord of a Bruce sub-manor, named Twyford, after him. Adam Bamme, another alderman and goldsmith and a number of lesser men appeared in the records during Richard's reign. They included Thomas, Duk, John Kynge, John Arnold 'coriour', Walter Savage 'scriptor', Alan Frampton 'cordwainer' and the aforementioned Thomas Pernell. During the rule of Henry IV they were joined by many more; Henry Cook 'bocher', William Lambard 'pouchmaker', Thomas Brydlington 'draper', Alan Everard 'mercier', John Shalynsford, John Balshin, John Walpole, Fremyngham, all described as 'of London'. Cook acquired in all two messuages and twelve acres and, from the frequency with which he was charged with trespassing in the lord's meadow and wood with numerous bullocks, would appear to have been already engaged in the trade of supplying London with its beef. In the Tudor period this became a principal Tottenham occupation and Cook seems to have been a pioneer therein.

But it was the activities of Drayton and, to a smaller extent, William Misterton and William Lovelane, fellow 'servants' of Roger Walden, which chiefly accounted for the upsurge of larger sales in the years after 1405. In that brief span of years Misterton purchased 19 acres of arable and one acre of meadow, Lovelane $12\frac{3}{4}$ acres of arable and a quarter acre of meadow, Drayton, in eight transactions, $73\frac{1}{4}$ acres of arable and $3\frac{3}{4}$ acres of meadow.¹⁶ Some of Drayton's purchases would appear to have been complete

holdings, 12 acres in 1406, 19 acres and 14 acres in 1408, 17¼ acres in 1409. Such a rapid accumulation in the hands of one person was quite unprecedented.*

Perhaps too much should not be made of all this. After all, the total area of villein arable was some 1,100 acres, so that even Drayton had bought only a small proportion of the whole. Yet the sudden increase in the number of London citizens entering the area, this coinciding with the appearance of Drayton and his two fellow officials, does indicate a striking change in the old pattern of land transfers. In an earlier paper dealing with the 1459 Tottenham terrier¹⁷ it has been noted that most of the old families whose names recur again and again in the fourteenth century records had by then disappeared. John Drayton himself figured as tenant of 181¾ acres of customary and 4 acres of free land. That the upheaval which resulted in the departure of the old families had its beginnings in the events of the reign of Henry IV seems very probable and, if so, these events would well merit the application of that over-used word significant.

IV

In many respects the economic development of Tottenham in the fifteenth century did not follow the normal pattern. At a time when most manors had entered on a period of economic decline the position in our manor was very much the reverse of this. The decisive change took place somewhat later than the court rolls which we have been investigating yet it would appear to have been part of the same process, one by which a more economically advanced society was eroding the traditional nature of the village. This fundamental event was the re-union of the three manors, in 1427, by one John Gedeney, yet another London alderman, this time a member of the Drapers' Company. Important changes quickly followed.

Few accounts for the manors have survived for the early years of the century. Two Fawkoner accounts for 7/8 Henry IV and 12/13 Henry IV show surpluses of £20.12.4 and £15.2.6 respectively. A Daubeney account for 4/5 Henry V gives £13.6.5½ as the surplus.¹⁸ The manorial surpluses given in a succession of account rolls following on Gedeney's entrance on the scene are set out below.

Table 4.¹⁹

<i>Year</i>	<i>Surplus of united manors</i>
5/ 6 Henry VI	£94. 17. 8
7/ 8 ,,	£88. 16. 1½
8/ 9 ,,	£83. 9. 4
9/10 ,,	£126. 12. 8
10/11 ,,	£116. 12. 11
11/12 ,,	£118. 7. 10
12/13 ,,	£123. 6. 11½
15/16 ,,	£118. 11. 5
16/17 ,,	£103. 1. 2½
17/18 ,,	£125. 10. 2½

* In almost every one of Drayton's purchases either no fine was imposed (this was rare) or pardoned in whole or part, because the purchaser was 'a servant of the lord'.

The substantial rise, after the initial fall, in the income of the manor was achieved in various ways. Rents were raised. The demesne, formerly leased in small parcels, was, in 7/8 Henry VI, farmed out as a whole for £40 per annum, which was a very large increase indeed. The rents of the mill also rose and in 7/8 Henry VI there was the first reference to the farm of a fulling mill. In the year 16/17 Henry VI a sale of 22,000 'breeks' appeared, a figure which rose to 52,000 in the following year. Most illuminating of all, perhaps, was the elimination of arrears by the baliff from 8/9 Henry VI onwards. This would appear to be a sure sign that the estate was being managed much more efficiently; with almost everything farmed out, in essence it might be said to have been a business run for profit.

It is suggested that in the first decade of the century changes which moved in this direction were already becoming evident. So many London burgesses, officers of the lord too, were buying land, presumably as an investment, not as a source of food and other necessities for the occupier. This process was occurring in the neighbourhood of most large towns during the late medieval period, particularly so near London, the largest of them all.

The 1459 terrier tells a story²⁰ which implies that subsequent to 1413 further changes working in the same direction had taken place. In 1459 51 out of 120 tenants had less than five acres of land, 24 of these no land in the fields at all, nothing but a cottage plus, perhaps, a garden. No doubt these were employed at fulling, at brick manufacture, or as servants for richer tenants. Ten of these latter held between them 555 acres of customary land, 55% of the total recorded acreage. And of these John Drayton, in his final years, was the largest. (Unfortunately, it is not possible to tell from the terrier whether any of the ten were London burgesses.)

Can it be said that by the mid fifteenth century the manor of Tottenham was being run as a capitalist business enterprise? Undoubtedly such an assertion would go beyond what is warranted by the facts. There is no evidence of large scale enclosure. Admittedly, in the previous century the courts occasionally referred to various small pieces of land as being enclosed; and there were a few attempts to enclose common land, but these were thwarted. The terrier shows that, with few exceptions, each of the larger tenants had his holdings mainly concentrated in one area and had his house therein. But even though these groups of holdings almost took the form of a more or less compact farm, there is no suggestion that they were enclosed.

In the fifteenth century tenants' services, apart from haymaking, had been commuted, naturally so, as the demesne lands were leased. Yet a *customal*²¹ which is of about the same date as the terrier makes it clear that they were still regarded as customary tenants. The feudal framework was still in being.

Nevertheless, great changes had taken place, having their beginnings in the incursion of so many citizens of London in the opening years of the century, simultaneously with the purchase of land on quite a large scale by officers of a manorial lord. In this essay it is suggested that the Tottenham documents reveal in some detail the process by which a traditional village community could be undermined through contact with a more developed commercial society. Eventually this process was to accelerate so much that by 1619, the year of the making of the Dorset survey,²² Tottenham fields were almost completely enclosed, while in the nearby vills of Edmonton, Enfield and Walthamstow much common cultivation still went on.²³ No doubt many other areas were having similar experiences to those of Tottenham. This study may perhaps have shed light on the

actual mechanism by which rural communities were being transformed in the fifteenth century. The more records from manors in other parts of the country can be examined in minute detail, as has been done by Andrew Jones in his essay on Leighton Buzzard,²⁴ the greater will be the clarification of the factors which led to the disintegration of feudal society.

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NOTES

- ¹ Pollock and Maitland, *History of English Law*, Cambridge 1895, I, p. 310.
- ² *Ibid.* I, p. 365.
- ³ The court rolls for the fourteenth century have been published in *Tottenham Manorial Rolls* I, 1318-1377 (Borough of Tottenham, Libraries and Museum, 1956) and *Tottenham Manorial Rolls* II, 1377-1399 (Borough of Tottenham, Libraries and Museum, 1961). Those for the years 1399-1413 are contained in *Bruce Castle Museum Archives* M.R.26, 1-14 and M.R.27, 1-47.
- ⁴ D. Moss and I. Murray, 'A Fifteenth Century Middlesex Terrier', in *Trans. London Middlesex Archaeol. Soc.*, 1974, XXV, pp. 287-8.
- ⁵ D. Roden, 'Field Systems of the Chiltern Hills and Their Environs', in *Studies of Field Systems of the British Isles*, (Cambridge, 1973).
- ⁶ D. Moss and I. Murray, 'Land and Labour in Fourteenth Century Tottenham' in *Trans. London Middlesex Archaeol. Soc.*, 1973, XXIV, p. 199.
- ⁷ *Ibid.* p. 201.
- ⁸ T. M. R. II, op. cit., pp. 60-61.
- ⁹ *Ibid.* p. 79.
- ¹⁰ *Bruce Castle* op. cit. M.R.27, mem 38.
- ¹¹ *Ibid.* M.R.27, mem. 33.
- ¹² *Ibid.* M.R.27, mem. 28a.
- ¹³ D. Moss and I. Murray, op. cit., p. 200.
- ¹⁴ T. M. R. II, op. cit., p. 261. *Ibid.* p. 313. *Bruce Castle*, op. cit. M.R.26, mem. 3. *Ibid.* M.R.27, mem. 18. *Ibid.* M.R.27, mem. 11. *Ibid.* M.R.27, mem. 8.
- ¹⁵ The earliest instance known of a London burgess acquiring land in Tottenham is found in a mid twelfth century charter (Middlesex County Record Office Archives XVIII, 46) where we read that Henry the Earl, son of the King of Scots, grants seven score acres in the Hanger to Uchred of London, with sac and soc, toll and team and all liberties.
- ¹⁶ *Bruce Castle*, op. cit. M.R.27, mem. 25, 18, 14, 12, 9.
- ¹⁷ D. Moss and I. Murray, 'A Fifteenth Century Middlesex Terrier', op. cit. p. 293.
- ¹⁸ *Bruce Castle*, op. cit. M.R.10, mems. 15-13.
- ¹⁹ *Ibid.* M.R.10, mems. 12-2.
- ²⁰ D. Moss and I. Murray, 'A Fifteenth Century Middlesex Terrier', op. cit. *passim*.
- ²¹ *Bruce Castle*, op. cit. M.R.36.
- ²² *The Dorset Survey Field Book*, Greater London Record Office (Middlesex Records), Accession 695/9.
- ²³ Mr. D. O. Pam has drawn our attention to the many attempts made, from the late fifteenth century onwards, to enclose the village fields in the other two townships of the Edmonton Hundred, Edmonton and Enfield. In those villages the enclosure on the whole was prevented. In Tottenham the attempts began earlier and, unsuccessful at first, triumphed completely in the course of the Tudor period. Was this due to the closer proximity of London? The events in Edmonton and Enfield have been ably described by Mr. Pam in *The Fight for Common Rights in Enfield and Edmonton* (Edmonton Hundred Historical Society Occasional Paper, New Series No. 27).
- ²⁴ Andrew Jones, *Land and People at Leighton Buzzard in the Later Fifteenth Century*, in *Economic History Review* Second Series, XXV, 1972, pp. 18-27.

THE LONDON MAKERS OF OPUS ANGLICANUM

by

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The purpose of the present paper is to offer confirmatory evidence that there existed a group of craftsmen in London who were makers of *Opus Anglicanum* and also to identify some of them, at any rate, by their occupational names, derivative from their craft and; finally, to site some of their workshops.

In the London of the late thirteenth and early fourteenth centuries there existed a number of men who bore what are clearly occupational surnames or bye-names the meaning of which, however, has hitherto remained obscure. Amongst them is a group who bore the names of 'le Seur', 'le Asseur' and 'le Setter', all three variants being applied at different times to the same individual; this fact has, inevitably, not simplified the question of the nature of their occupation. Though a considerable literature exists dealing with *Opus Anglicanum* itself, there is only occasional speculation as to the makers of this remarkable English achievement and as to where some of them, at any rate, worked. Hitherto only the name 'Setter' seems to have exercised the minds of scholars and it may, therefore, be as well to establish its meaning before relating it to the other variants.

Riley, the first to raise the question of the meaning of 'Setter', postulated an 'arrow-smith'.¹

Sharpe concurred, deriving the name from OF *sete*, an 'arrow'.²

Fransson suggested a 'silk-weaver' from OF *saietier*.³

Ekwall, citing a London example, decided, undoubtedly correctly, that the name derives from 'set', ME *setten* and hence an 'embroiderer'. He finds in OED the nearest meanings to this, under 'set', are Nos. 15: 'to put (an ornament, fitting, piece of furniture, etc.) in a place allotted or adapted to receive it; to fit, fix' and 63: 'to fix (a stone or gem) in a surface of metal as an ornament; formerly on a garment'.⁴ It may be noted that none of the quotations in OED under 15 have any reference to embroidery, although the first is dated 'c. 1205'. It would, however, be unwise to draw conclusions from this since it is generally accepted that the great period of *Opus Anglicanum* is covered by the century 1250–1350 and the time of perfected development could well have spread over the greater part of the first half of the century. As regards 63 although no specific date is assigned to the period when 'to set' meant the fixing of stones or gems on a garment it is clear that the potential for the creation of an occupational name existed. Kendrick considered that what he called 'The Great Period of English Embroidery' was limited to 'c. 1270–1330' and though such constriction is not altogether acceptable today, the dates are not irrelevant to the fact that 'setters' do not appear to be heard of either before or after.⁵

As a name 'Setter' is rare, occurring in London in the later thirteenth and early fourteenth centuries; in all fewer than a dozen individuals are recorded as bearing it. Of these, one, Clement le Settere, was also known as Clement le Seur and two, both called John, had even a third alternative, namely 'le Asseur' or 'le Asseyur'. All three will be dealt with below.



The Incredulity of St. Thomas, detail from the Syon Cope. Embroidered in silver and gilt thread and coloured silks. Probably London work, about 1300–1320.

(Reproduced by permission of the Victoria and Albert Museum.)

While no substantive from the verb 'to sew' is listed in OED before 1399 the verb is recorded in a quotation of 1300 as 'seu' and in the thirteenth century as 'seouwen', sufficient authority, it would seem, to postulate an occupational name such as 'le Seur' or 'le Seour', both of which exist, (e.g. Ralph le Seur⁶ and William le Seour⁷).

It can, therefore, be held that 'le Seur' implies a 'sewer', working with needle and thread, which identifies well with 'le Setter' as an embroiderer, especially of ecclesiastical vestments requiring the fixing of stones or gems. However the word, in medieval times, had another meaning, namely that of 'an attendant at a meal who superintended the arrangement of the table, the seating of the guests and the tasting and serving of the dishes'.⁸ OED records the word only in modern spelling, 'sewer(e)' and from the fourteenth century, but notes that this is an aphetic adaptation from Anglo-French *asseour*, the latter, curiously, not having been recorded as early as the aphetic form. Coincidence alone can account for this absence, particularly as with a meaning cognate to embroider, it most certainly existed as an occupational name.

In any case it is clear that as occupational names 'Asseour' and 'Seour' as well as 'Seur' could and, in fact, did exist coevally; this is sufficient to account for the identity of Ralph son of John le Seur of St. Mary-at-Hill of 1288⁹ with Ralph son of John le Asseur of the same parish in 1291.¹⁰

Even though, it seems, there are two meanings of the name, i.e. embroiderers and meal superintendents, the latter certainly would be even less numerous than the former. The product of the embroiderer, however exclusive, was bound to be in greater demand than the services of a specialist steward. Indeed there is no record of such an official in the City before the end of the fourteenth century.

The form 'asseyur' adds another element to the puzzle, as OED notes under 'Assewer'. It is suggestive of the assay of metals which, in a thirteenth century context, could only mean gold or silver. Anyone whose occupation this was might reasonably have been expected to be resident in or near the main colony of goldsmiths on the north side of Cheap and in the region of Wood Street, but none have so far been found and it may be that, in fact, their occupation never gave rise to a name.

Both the Johns mentioned above, who were sometimes known by this as a third variant to 'Setter' and 'Seur', are found on the south side of Cheap in adjacent parishes, All Hallows, Bread Street and St. Mary le Bow, the very district with which, as Ekwall noted, 'setters' are mostly associated.¹¹

Dealing now with individuals:

(i) Clement first appears in the record as 'le Seur' in 1285 and as a creditor of Nicholas le Seur.¹² Again as Clement le Seur he is named as one of the representatives for Lime Street Ward in 1298.¹³ The following year, as Clement le Settere, he appears as witness to a transfer of property on Cornhill by Ralph de Alegate to his son Walter de Gloucester.¹⁴ This property was very considerable and its position is worth outlining approximately as being part of the argument that, as a neighbour, Clement le Seur, the Lime Street representative, was identical with Clement le Settere who witnessed the transfer. In 1299 Ralph de Alegate refers to it as 'my principal dwelling house on Cornhill with houses and rents adjoining in the parish of St. Peter and St. Michael, Cornhill, St. Benet Fink and St. Martin Outwich . . .'.¹⁵

The boundaries of Cornhill and Lime Street Wards are contiguous at the crossing of Cornhill and Bishopsgate but 'as late as the sixteenth century Cornhill (the street) seems

to have extended further east and to have included part of Leadenhall Street to Lime Street and St. Andrew Undershaft church'.¹⁶

As Clement le Settere he was witness to a deed relating to other property in the parish of St. Peter, Cornhill in 1300.¹⁷

In 1309 Clement le Settere witnessed an agreement with regard to rents from tenements in St. Mary le Bow in company with John Hayroun who was also a 'setter'.¹⁸ As previously remarked it was in this parish that the 'setters' seem, in general, to have congregated and Clement, although living elsewhere, may well have been called upon as witness being, perhaps, the foremost and most senior citizen of his occupation.

The tenement 'lately belonging to Clement le Settere' in the parish of St. Andrew, Cornhill is given as an abutment in a property transfer of 1313.¹⁹

Finally, and conclusively for the identification of Clement le Seur with Clement le Settere, is the will of Clement le Seur bequeathing to his wife Cecily a tenement in the parish of St. Andrew, Cornhill.²⁰

(ii) A number of transactions in All Hallows, Bread Street dealing with the same or adjacent properties remove any doubt that 'Setter', 'Seur' and 'Asseur (Asseyur)' may be used to describe the same man.

Shorn of detail unnecessary to the present argument they are as follows:

A quitrent is cited in 1281 from the tenement of John le Asseur in All Hallows, Bread Street whose abutments were, on the east, a tenement once of John Pas and, on the west, the tenement of Walter de Bradstrette, cordwainer:²¹

Walter de Bradstrette		John le Asseur		formerly of John Pas
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The same year, 1281, a quitrent is cited from the tenement of John le Asseyur which lay between that of Walter le Cordwaner on the west and that formerly of John Pas on the east:²²

Walter le Cordwaner		John le Asseyur		formerly of John Pas
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Again in 1281 there is a grant of quitrent from the tenement in which Walter de Bredstrate, cordwainer lives and which lies between the tenement of Henry the Welshman on the west and that of John le Setter on the east:²³

Henry the Welshman		Walter de Bredstrate		John le Setter
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In 1293 the will of Peter, son of John le Long was enrolled;²⁴ Peter bequeathed a tenement he had had by grant of his father between that of Henry le Waleys on the west and that formerly of John le Seur on the east in the parish of All Hallows, Bread Street; Peter, it should be explained, was the stepson of Walter de Bredstrete, his mother, Margery, having married Walter sometime after 1275 when the will of John le Long, 'frueter' was enrolled:²⁵

Henry le Waleys		Peter, son of John le Long		formerly of John le Seur
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Nine years later, in 1302, the executors of the will of Henry le Waleys sold a quitrent deriving from a tenement which William le Settere held in Watlingestrete in the parish of All Hallows, Bread Street, between the tenement late of John Pas on the east and the

tenement of Walter de Bredstrate on the west:²⁶

Walter de Bredstrate	William le Settere	formerly of John Pas
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It will be noted that John's former premises were occupied by William le Setter who may be identical with a man of this name who acted with John Heyroun, *settere* in 1314 (see below).

(iii) Another John figures in a grant of 1285 when Lucy, daughter of John le Seur, leased the tenement she inherited from her father in St. Mary le Bow to Nicholas le Seur; the abutments of the property are given as the tenement of Adam Broc on the south and the lane leading to the church of St. Mary le Bow on the north, Cordwanerstrate (now Bow Lane) on the east and the cemetery of the church on the west:²⁷

lane leading to St. Mary le Bow

Cemetery of St. Mary le Bow	Lucy, dau. of John le Seur	Cordwanerstrate
	Adam Broc	

In 1286 the will (n.d.) of Adam Brock was enrolled in which he bequeathed to his wife his house near the cemetery of St. Mary le Bow, lying between the house of Robert de Kidemenstre on the south and the tenement late of John le Settere on the north:²⁸

formerly of John le Settere
Adam le Brock
Robert de Kidemenstre

The same year a grant was made by Robert de Wlvenwyke and his wife Lucy, daughter of John le Asseyor, citizen deceased, of a quitrent from their tenement in St. Mary le Bow between the lane which goes to the said church on the north, the tenement once of Adam Brok on the south, an empty place belonging to the said church on the west and Cordiwanerstret on the east:²⁹

lane leading to St. Mary le Bow

empty place belonging to St. Mary le Bow	Robert de Wlvenwyke and his wife Lucy, daughter of John le Asseyor, deceased	Cordiwanerstret
	formerly of Adam Brok	

The above examples are sufficient proof of the interchangeability of the names Se(o)ur, Asse(y)ur and Setter(e).

While scribal error must always be taken into account the number of examples of interchangeability given above would impute an unreasonable degree of confusion to the scribes and it is fairer to them and more sensible to suppose that those men whose name

was susceptible to the three variants were, in fact, embroiderers: Se(o)ur and Asse(y)ur being treated as variants and descriptive of sewing; Setter(e) being an extension of the same occupation whereby stones or gems were fixed to a garment.

Nicholas le Seur, for instance, has only been noted twice in the record, on both occasions as 'le Seur'. Nevertheless, it is clear that he was an embroiderer since each time he was associated with men of the craft, in the first instance as debtor to Clement le Seur/Setter,³⁰ and then as lessee of the former premises of John le Seur/Settere.³¹

Doubt must exist as regards Ralph, son of John le Seur/Asseur, firstly as to whether Ralph was known by his father's name or not and, secondly whether he followed his father's occupation whatever this may have been. The fact that he is not known in association with other members of the craft and that his place of residence in St. Mary-at-Hill was far removed from the group in Cordwaner Ward is negative evidence from which nothing can be deduced. It is, of course, true that Clement, the most prominent member of the craft at the turn of the thirteenth and fourteenth centuries, was established on Cornhill, also well away from Cordwaner Ward.

Thus far the philological evidence; the practical evidence of identity between those bearing the name variants just discussed with the craft with which they are associated, though no more prolific, is quite as conclusive.

The clearest connection of the name with the craft occurs in 1307 when Alexander le Settere received payment of £10 'from Sir Poncius Roandi chaplain to Master William Testa . . . in part payment of £40 for an embroidered choir cope bought of the said Alexander, who will well and befittingly complete it of the same breadth around as a certain cord, sealed with the seal of the said Sir Poncius at both ends'.³²

A few years later, in 1314, John Heyroun, settere, and William le Settere were called upon to make a valuation of a silk-embroidered cope.³³

A cope that could cost so large a sum as £40 at the beginning of the fourteenth century could only have been a vestment of extreme magnificence (and it may be noted that the purchaser was an Italian cleric), the sort of product that was so highly esteemed by continental prelates, in quality apparently unobtainable elsewhere, that it became known by the country of its origin—*Opus Anglicanum*.

If this conclusion has not been previously arrived at it is principally because of the lasting influence of two of the pioneer historians of London. When Riley postulated 'arrow-smith' as being the meaning of 'setter',³⁴ and Sharpe, in 1900, concurred, deriving the name from OF *sete*, an arrow,³⁵ their authority was such that more than a quarter of a century elapsed before any different theory was put forward. Sharpe had, indeed, repeated his belief when recording the incident relating to Alexander le Settere and Sir Poncius Roandi above; this really made nonsense, for why should an arrow-smith be thought to be the maker of an embroidered cope?

Lethaby, writing in 1928, shrewdly observed that ' . . . the most remarkable embroideries, wrought from say 1250 to 1350, would best be accounted for by the supposition that they were, for the most part, produced by a group of London workers who at some (possibly later) time formed the Gild or Mistery of the Broiderers'.³⁶

Ekwall first recognised that Alexander le Settere was being paid for his own work, but being primarily a philologist he did not follow up the implications.³⁷

In 1938 Mrs. Christie in her monumental work dealing almost entirely with the

technique of English medieval embroidery and the description and whereabouts of surviving examples, quoted Matthew Paris in her short historical section: 'When in 1246 Innocent IV ordered English vestments, this command of my Lord Pope did not displease the London merchants who traded in embroideries'. However, she ignores Lethaby's far-seeing statement when she says '... practically nothing is known about the designers of medieval embroideries or about where they were made'.³⁸ It is true no tangible evidence is available as regards designers unless it can be supposed that the makers, themselves, fulfilled this function to a large extent. However, she continues '... about the middle of the thirteenth century the demand had become so great that while at first mainly in the hands of individual workers, scattered in different places it became an organised commercial activity in definite centres.'³⁹ Such organisation must surely imply the employment of a designer, even if he was not the principal himself.

Margaret Rickert, in 1954, effectively placed 'the flowering of English embroidery' in the late thirteenth and the first half of the fourteenth century,⁴⁰ and felt able to date the making of the Ascoli Cope between 1275 and 1280,⁴¹ one of the few closely fixed dates available for an individual piece of embroidery. Since the great Vatican inventory of 1295 mentions *Opus Anglicanum* 113 times⁴² it may be taken as certain that English work had reached a degree of such unsurpassed magnificence and desirability only after a number of decades of development. Miss Rickert goes on to remark that 'although no known centre has been established for the production of *Opus Anglicanum* London has been suggested as the most likely'.⁴³

Finally Donald King, in his Introduction to the Catalogue of the *Opus Anglicanum* exhibition at the Victoria and Albert Museum in 1963 writes categorically that 'the bulk of the work was produced in professional workshops, most of them in the City of London'.⁴⁴ He continues 'the international reputation of English embroidery grew rapidly during the reign of Henry III'⁴⁵ and, in summing up, 'the Black Death, the prolonged foreign and civil wars of the later fourteenth and fifteenth centuries and the social and economic stresses consequent on these events, tended to depress the standards of the arts in England, including embroidery'.⁴⁶

It may be added that although secular clothing of an ornamental character was being made in England during the thirteenth and fourteenth centuries the country 'had a lower standard of luxury (than France), and the life of its upper classes was based rather on the castles and manors than on Windsor and Westminster'.⁴⁷ In relation to English secular clothing Miss Staniland has pointed out that there is 'evidence of extensive production of embroidery for secular use at, e.g. Rotherhithe ...' and asks pertinently, 'what, when not employed at Court were all these people doing?'.⁴⁸ It may, indeed, be that the Master craftsmen of London employed, from time to time, embroiderers from the Surrey bank when pressure of work demanded. Any attempt at a solution to the interesting problem as to what constituted a London 'workshop' at the period is fraught, through lack of evidence at the present time, with hazardous assumptions. (See Appendix for a tentative suggestion.)

At the luxury end of the market France and England pursued different ends; the former producing richly embroidered clothing for the nobility while the best of English production was destined for the Church whose prelates, far and wide in Europe, appreciated its superb qualities and were prepared to pay for articles not, evidently, to be found elsewhere. In France, consequent upon a 'period of pure fashion'⁴⁹ the *Livre des Métiers* of 1260 recognised various guilds of textile workers and by the end of the century

that of the embroiderers had been incorporated. The lower standards of luxury in English secular dress, combined with the concentration of brilliant craftsmanship on ecclesiastical vestments would go some way to accounting for the delay in the incorporation of the 'broderers' of England until three-quarters of a century later. From what has so far come to light it seems unlikely that the workshops of London exceeded half-a-dozen in number at any given time during the period. It is significant that the very word 'broderer' is an adaptation from French and, as a description of the craft, completely supplanted the ME words so that even the meaning of the latter was lost for centuries.

ACKNOWLEDGEMENTS

I am indebted to Miss Betty Masters, B.A., F.S.A., Deputy Keeper of the Records, Corporation of London Records Office, to Dr. Peter Spufford, M.A., Department of History, Keele University for both kindly reading this article in draft and making valuable suggestions and to Miss Kay Staniland, Curator of Costume, Museum of London who has drawn my attention to several publications, evidence from which has strengthened the arguments used. My thanks are also due to Dr. Francis Steer, M.A., F.S.A., Maltravers Herald Extraordinary for much good advice at an earlier stage.

NOTES

- ¹ Riley p. 60.
- ² L.B.B. p. 23n.
- ³ Quoted by Ekwall p. 358.
- ⁴ *Ibid.* and O.E.D.
- ⁵ Kendrick Chapter IV.
- ⁶ H.R. 18/59, 1288.
- ⁷ H.R. 24/39, 1295.
- ⁸ O.E.D.
- ⁹ H.R. 18/59, 1288.
- ¹⁰ H.R. 20/80, 1291.
- ¹¹ Ekwall p. 358.
- ¹² L.B.A. p. 89.
- ¹³ L.B.B. p. 246.
- ¹⁴ H.R. 28/49, 1299.
- ¹⁵ H.R. 28/48, 1299.
- ¹⁶ Harben p. 173.
- ¹⁷ L.B.B. p. 183-4.
- ¹⁸ L.B.D. p. 213.
- ¹⁹ H.R. 41/78, 1313.
- ²⁰ Will (n.d.) enrolled H.R. 43/22, 1314.
- ²¹ H.R. 12/28, 1281.
- ²² H.R. 12/33, 1281.
- ²³ H.R. 13/16, 1281.
- ²⁴ H.R. 22/52, 1293.
- ²⁵ Will (n.d.) enrolled H.R. 7/67, 1275.
- ²⁶ H.R. 31/4, 1302.
- ²⁷ H.R. 16/31, 1285.
- ²⁸ H.R. 16/41, 1286.
- ²⁹ H.R. 16/59, 1286.
- ³⁰ L.B.A. p. 89.
- ³¹ H.R. 16/31, 1286.
- ³² L.B.B. p. 191.
- ³³ L.B.E. p. 50.
- ³⁴ Riley p. 60.
- ³⁵ L.B.B. p. 23n.
- ³⁶ B.M. Vol. 53 (1928) p. 173.
- ³⁷ Ekwall p. 358.
- ³⁸ Christie p. 17.
- ³⁹ *Ibid.* p. 18.
- ⁴⁰ Rickert p. 151.
- ⁴¹ *Ibid.* p. 152.
- ⁴² *Ibid.* p. 153.
- ⁴³ *Ibid.* p. 153.
- ⁴⁴ King p. 5.
- ⁴⁵ *Ibid.* p. 6.
- ⁴⁶ Evans p. 79.
- ⁴⁷ Miss Kay Staniland, Curator of Costume, Museum of London; private communication.
- ⁴⁸ As note 47.
- ⁴⁹ Evans p. 26.

APPENDIX

Note: Hitherto it has never been remotely possible to make any assesment of an *opus anglicanum* workshop. Indeed, the conception of an organised, professional group dates only from 1963 (v. Donald King above). An analysis, however, of Hustings Rolls entries with fairly full, though sometimes confusing, property descriptions has made this first attempt an irresistible temptation.

The block of inhabited property of which that of John le Seur (iii above) formed the northern part was bounded on the east by Cordwanerstrate (Bow Lane), on the south by an, at that date, apparently unnamed lane (later Twelve Bell Court), on the west by Goselane (later Goose Alley) and on the north by 'the lane by which one goes to the church of St. Mary Bow' as well as by the cemetery of the said church. The measurements of this block today (omitting for the moment the actual property of John le Seur for reasons that are given below) are approximately 50 ft. from east to west and something over 65 ft. from north to south.

From north to south on the east, with frontages on Cordwanerstrate, the owners or occupiers at dates roughly between 1280 and 1300 were John le Seur, Adam Broc and Robert de Kidemenstre; on the west with frontages on Goselane, again from north to south they were Maud, widow of William de Holeburn (HR 29/33), Robert de Hockelee and Hawise his wife and Robert de Kidemenstre (HR 28/55).

The northern abutment of Maud's property on the occasion of its sale to Richard de Welleforde (HR 29/33, 1300) is given as 'the cemetery of St. Mary Bow' without mention of John le Seur, although that on the east was 'the tenement late of Adam Brokes'. From this it may be deduced that John le Seur's property did not stretch as far west as Goselane and if it is assumed, therefore, that its west side coincided longitudinally approximately with the eastern boundary of Maud's property which may be thought to have occupied about half of the width of the block, then John le Seur held property measuring some 25 ft. from east to west.

The property immediately to the south of Maud's was sold by Robert de Hockelee and his wife to Henry de Guldeford called le Mareschal (HR 28/55, 1299). In this case detailed measurements are given from which it emerges that the frontage on Goselane was $6\frac{1}{2}$ ells (24 ft. $4\frac{1}{2}$ ins.) while the width to the boundary with Robert de Kidemenstre was 8 ells (30 ft.); thus Robert's property would have been 20 ft. wide to Cordewanerstrate, some 5 ft. less than half the total width of the block. It is, of course, debatable whether this longitudinal line continued north as Maud's eastern boundary and so, by extension, the western boundary of John le Seur; it certainly did not continue southwards since Robert de Kidemenstre's holding formed both the eastern and southern abutments of Henry de Guldeford's purchase. Robert's property was, therefore in the shape of a reversed letter L, stretching in the southern part from Cordwanerstrate to Goselane and northwards on the Cordwanerstrate frontage to that of Adam Broc.

As it would seem from paragraph three above that Maud's northern boundary was a continuation westward of that of Adam Broc then all the odd 65 ft. of the block's eastern frontage was divided between Adam and Robert; John le Seur's property would have been a northern extension on the eastern side, the north-south width of which can only be guessed at although clearly there must have been enough space between its northern line and the southern line of the block to the north for 'the lane by which one goes to the church of St. Mary Bow' to have existed. It is unlikely that John's property exceeded 25 ft. from north to south or less than 20 ft. If, therefore, 22 ft. is assumed for this then what may be called John le Seur's workshop measured 25 ft. by 22 ft. or 550 sq. ft. If a third to half of this area was occupied by craftsmen sitting cross-legged at work and requiring some 12 sq. ft. of space each, then John employed between 15 and 20 workers. It must not be forgotten that, although nowhere mentioned there may have been a solar over the whole or part of the workshop but this may have been used as accommodation by John, his wife and daughter.

At the present time no estimate at all can be made for the size of the other John's workshop (ii). As for Clement le Setter his workshop has not yet been identified but from the greater importance of the man it may well have been on a larger scale. If John (iii) employed 15 to 20, John (ii) 10 to 15 and Clement 20 to 25 with possibly several smaller undertakings the total of persons employed on making *opus anglicanum* in the City might be estimated as between 70 and 80.

ABBREVIATIONS AND SOURCES

MS:

HR = Hustings Rolls, Corporation of London, Records Office.

Printed:

BM = W. R. Lethaby, in the *Burlington Magazine*.

Christie = (Mrs.) A. G. L. Christie, *English Medieval Embroidery*, Oxford, Clarendon Press, 1938.

Evans = (Dame) Joan Evans, *Dress in Medieval France*, Oxford, Clarendon Press, 1952.

Ekwall = Eilert Ekwall, *Two Early London Subsidy Rolls*, Lund, 1938.

Harben = Henry A. Harben, *A Dictionary of London*, Jenkins, 1918.
 Kendrick = A. F. Kendrick, *English Embroidery*, London, 1904.
 King = Donald King, *Catalogue of Opus Anglicanum Exhibition at the Victoria and Albert Museum*, The Arts Council, 1963.

Marc Fitch, D.Litt., F.S.A., F.R.Hist.S.

LBA, LBB, etc. = R. R. Sharpe, *Calendar of Letter Books of the City of London*, 1899 et seq.
 Rickert = Margaret Rickert, *Painting in Britain, The Middle Ages*; The Pelican History of Art, 1954.
 Riley = H. T. Riley, *Memorials of London Life*, London 1868.

PEPYS AND MONEY

by

F. E. Cleary, M.B.E., F.R.I.C.S.

There are many aspects in the life of Samuel Pepys that repay investigation—his education, his relationship with his wife, his diversions, his friendships, his ambitions, his career, his rehabilitation of the Navy, to mention but a few.

Today, however, I propose to confine my remarks to the Diarist's attitude towards and manipulation of money. As the Treasurer of the Pepys Club, it is only natural that I should interest myself in those qualities in Pepys that enabled him to increase a modest £40 in 1660 to a princely £9,000 in 1669.

Before examining in some detail this spectacular advance from rags to riches, I should first like to remind you of certain facets of Pepys's undoubtedly fascinating character. The inconsistencies in his make-up are most revealing. As the son of a humble tailor, he was brought up with a healthy respect for the value of money. Consequently at the beginning of his career as a naval administrator, we find him practising thrift, but as he became more prosperous, he proved he could be a lavish spender.

He was a physical coward, yet had an abundance of moral courage. He made vows to curb his self-indulgence and just as quickly broke them. He condemned his colleagues for accepting bribes, but calmly pocketed them himself. He was serious where business was concerned, but had a boyish capacity for enjoying life.

He had a modest disposition, but occasionally displayed his little vanities. Nevertheless, in spite of all these contradictions, Samuel Pepys became the Father, Oracle and Saviour of the Navy. Macaulay described him to be 'the ablest man in the Admiralty'. According to the Dublin University Magazine, he was 'the best man of business of his time'.

Tracing Pepys's progress through the Diary he so meticulously kept for a decade, one cannot fail to be impressed by the fundamental honesty of the man. His daily revelations are not coloured by the imagination of someone looking back on the past twenty-four hours and recording what *nearly* happened or what *ought* to have happened.

In a simple effortless style, not only in his Diary but also in his correspondence, he reveals with disarming candour the motives that lay behind his dealings with other people. If he sometimes emerges as one who is pompous, or unattractive, or faintly ridiculous, or even dishonest, it is because, as far as the Diary was concerned, he insisted on telling the truth, the whole truth, and nothing but the truth.

Whether or not he wrote with a view to subsequent publication is irrelevant. As he sat there penning his accounts of each day's events, Pepys was perforce writing for a reader who was not to be fooled—himself.

Those of you who share my admiration for this seventeenth century notability will readily appreciate why, for the purposes of this address, I have chosen to concentrate on those years in the life of Samuel Pepys that are covered by the Diary. I feel strongly that it is with the Diary that Pepys 'unlocked his heart'. Whatever we glean from those immortal pages bears the stamp of authenticity.

My story, then, of Pepys and money begins very fittingly on Sunday, January 29th, 1660, when he writes, 'Casting up my accounts, I do find myself to be worth £40 and more, which I did not think, but I am afraid that I have forgot something'.¹

On Shrove Tuesday, 6th March, 1660, shortly after accepting the invitation of his kinsman, Admiral Sir Edward Montagu, (later Earl of Sandwich), to go to sea with him as his Secretary, Pepys was already conniving in what would appear to be a minor spot of bribery. A certain Mr. Hawley, he writes, 'brought me a seaman that had promised £10 to him if he get him a purser's place, which I think I endeavour to do'.²

Then again, only two days later he was being advised at the Dog Tavern by Captain Philip Holland how to take advantage of his position as an Admiral's secretary. The ingenious captain proposed that Pepys should have five or six servants entered on board as dead men, give them what wages he pleased, and pocket their pay.³ There is nothing in the Diary to suggest that Samuel rejected the notion.

Ten days later, with the perquisites of office still coming in, Pepys recorded, 'I gave Captain Williamson his commission to be Captain of the Harp, and he gave me a piece of gold, and twenty shillings in silver'.⁴

Within a week Pepys received his warrant to be Secretary to the two Generals of the Fleet and on the same day he offered further evidence that the *quid pro quo* system was fully operational.

'Strange', he writes, 'how these people do now promise me anything; one a rapier, the other a vessel of wine, or a gun, and one offered me a silver hatband to do him a courtesy'.⁵

Later, on March 30th, he naively admitted, 'I was saluted in the morning with two letters, from some that I had done a favour to, which brought me in each a piece of gold'.⁶

Then, on April 1st he picked up another thirty shillings for services rendered to Captain Wilgness of the 'Bear', whilst a few weeks later Captain Cowes of the 'Paragon' paid Pepys forty shillings for some unspecified favour.

But these were only the beginnings. After a little over three months with the Navy, Pepys again cast up his accounts only to find that he had still no more than forty pounds in his purse. On the other hand, he had cleared all his debts.

May, however, must have been a good month for Pepys, for when he again worked out his financial position on the 30th, he found that he was then worth about £80, at which, as he piously adds, his 'heart was glad and blessed God'.⁷ A mere five days later he had occasion to bless his Maker once more. His savings had increased to one hundred pounds.⁸

The month of June continued financially favourable for Pepys, for in the space of a few days he was given a piece of gold by Major Holmes,⁹ five pieces by a Mr. Murford, five pounds in silver by Lady Pickering, (discreetly wrapped up in paper), and five pieces of gold and a silver can by Captain Curle of the 'Maria'.¹⁰

Towards the end of the same month he was even offered £500 by a merchant for his place as Clerk of the Acts,¹¹ a proposition which Pepys wisely refused, for within a fortnight his salary was raised to £350 per annum.

There can be no doubt that as the months passed by, Pepys was learning to appreciate the real value of his position as Clerk of the Acts. An offer of £1,000 for the post certainly made his mouth water, but the wily Samuel was not to be tempted.

At the end of the year his financial situation had improved to such an extent that he could write, 'I do live in one of the houses belonging to the Navy Office, as one of the principal officers and have done now about half a year . . . I take myself now to be worth £300 clear in money, and all my goods, and all manner of debts paid, which are none at all'.¹²

He cast up his accounts in September of the following year and to his delight discovered he was worth £600. By the end of the year this amount had dropped to £500 and Pepys was reproaching himself for his lack of thrift and his extravagance.¹³

It was at this time that he made a solemn vow to abstain from plays and wine. Although he tells us in the Diary that he was resolved to keep his oath, on the very next day he attended the Duke's Theatre where he saw a performance of Fletcher's 'The Spanish Curate'.¹⁴

It was perhaps this chronic inability to lead a more abstemious life that accounts for the fact that by the end of May 1662, he was worth only £530. Besides, as he tells us himself, he was spending a lot of money on clothes.¹⁵

Yet these proved only temporary setbacks, for he was able to record on June 29th that his credit balance stood at £650.¹⁶ By the end of August he praised God that he was worth £686.19s.2½d.¹⁷

Meanwhile bribes were still flowing into the Pepys account. On April 3rd, 1663, Captain Grove gave him a letter. Describing the incident, Pepys observed artlessly, 'I discerned money to be in it, and took it, knowing as I found it to be, the taking up of vessels for Tangier. But I did not open it till I come home—not looking into it till all the money was out, that I might say I saw no money in the paper, if ever I should be questioned about it. There was a piece in gold and £4 in silver'.¹⁸

It is not altogether surprising that the next time Pepys cast up his accounts, (on May 31st, 1663), he found himself worth £726.¹⁹ By the end of the year he had more than £800.²⁰

It must have been a great day for Pepys when he was able to record, on July 28th of the following year that he was worth £1,000 in cash.²¹ By the end of September this amount had increased by over two hundred pounds, notwithstanding, as the Diarist says, 'great layings-out, and preparations for laying-out'.²² At the end of the year he was worth £1,349. Pepys comments piously, 'by the great blessing of God'.²³

It is not surprising that, with so much money in the house, Pepys was frequently in a state of acute apprehension. His Diary entry for January 30th, 1665, is particularly illuminating.

'Now knowing', he writes, 'that I have a great sum of money in my house, this puts me into a most mighty affright . . . The truth is, my house is mighty dangerous, having so many ways to be come to; and at my windows, over the stairs, to see who goes up and down; but, if I escape tonight, I will remedy it. God preserve us this night safe! So, at almost two o'clock, I home to my house, and, in great fear, to bed, thinking every running of a mouse really a thief; and so to sleep, very brokenly, all night long, and found all safe in the morning'.²⁴

No wonder he was nervous. After all, on April 30th, 1665, Pepys declared he was worth £1,400.²⁵

On August 2nd Pepys records, 'Up, it being a public fast, as being the first Wednesday

of the month, for the plague; within doors all day, and upon my monthly accounts late. I did find myself really worth £1,900, for which the great God of Heaven and Earth be praised!"²⁶

It is only fair to point out that at times Pepys turned down attractive offers. For instance, on August 7th, 1665, he refused to accept a piece of plate from Rayner, the boat-maker, and later he would not touch twenty pieces in gold offered by a man called Luellin in connection with supplies of planking.²⁷

Moreover, as with all recorded instances of Pepys being offered money or gifts, it should be remembered that at that time bribery was condoned by many eminent persons. Pepys shared the popular notion that services performed for others deserved some form of recognition. Besides, in Pepys's case, he very rarely accepted a bribe as a condition precedent to doing anyone a favour. If he did, then he would somehow fool himself that whoever gave him the bribe was merely expressing his admiration or acknowledging a past kindness.

In any event, as he took pains to point out, in all his transactions, dubious or legitimate, he invariably ensured that the King benefited first. For example, when he was paid £105, his profit on the victualling of Tangier, he estimated he had saved the King £5,000.

And so his little profits still poured in to such an extent that on August 13th he was worth £2,164.²⁸ Then, on December 30th, he was able to write in his Diary, 'I find myself, to my great joy, a great deal worth, above £4,000.' In fact, as he tells us on the following day, he raised his estate in that year, 1665, from £1,300 to £4,400.²⁹

In spite of heavy expenses, on April 30th, 1666, Pepys found he was worth £5,200, for which, as usual, he asked God to make him thankful.³⁰

The next significant entry in the Diary is for December 31st, 1666, when Pepys writes, 'To my accounts, wherein, at last, I find them clear and right; but, to my great discontent, do find that my gettings this year have been £573 less than my last: it being this year in all but £2,986; whereas, the last, I got £3,560. And then again my spendings this year have exceeded my spendings the last by £644: my whole spendings last year being but £509; whereas this year, it appears, I have spent £1,154, which is a sum not fit to be said that ever I should spend in one year, before I am master of a better estate than I am. Yet, blessed be God! and I pray God make me thankful for it, I do find myself worth in money, all good, above £6,200; which is above £1,800 more than I was the last year'.³¹

Five months later Pepys was worth £6,900, for which, as he reverently says, 'the Lord of Heaven be praised'.³²

It was only eight days afterwards that the disturbing news came through that the Dutch fleet was approaching Harwich. The situation rapidly deteriorated and with enemy ships in the Medway, it looked as if invasion was imminent. Pepys decided to take evasive action, at least as far as his worldly wealth was concerned.

He sent his wife and his father to his country house at Brampton. They took with them in their night-bag £1,300 in gold pieces which they were instructed to hide. At noon on the same day Pepys arranged to add a further thousand gold pieces to his rural reserves. As an extra precaution, as he himself tells us, 'I have also had made a girdle, by which, with some trouble, I do carry about me £300 in gold about my body'.³³

After Peace was signed at Breda on July 31st, Pepys was again soon busy building up

his fortunes. In the Diary entry for August 2nd, he tells us that Mr. Gauden, Victualler to the Navy, visited him. 'I received my profits for Tangier of him', Pepys writes, 'and £250 on my victualling score. He is a most noble-minded man as ever I met with, and seems to own himself much obliged to me . . . I had much matter of joy by this morning's work, receiving about £400 of him, on one account or other'.³⁴ A mere twelve days later our Diarist was paid the sum of £666.13s.4d., his share of a rich Canary prize lying at Hull.

As might have been expected, when Pepys thought it expedient, he went to Brampton to dig up his buried treasure. The disinterment of the gold, carried out at night by Pepys, his wife and his father, proved a far from easy task. Pepys, *armed with a dark lantern*, grew steadily angrier as the diggers failed at first to locate the spot in the garden where the gold pieces had been hidden.

By the time they *did* strike lucky, the Diarist's temper must have been badly frayed, especially when he discovered that the gold lay less than six inches below the surface. But the scene is best presented by Pepys himself who writes, 'I was out of my wits almost . . . I perceived the earth was got among the gold, and wet, so that the bags were all rotten . . . I was forced to take up the head-pieces, dirt and all, and as many of the scattered pieces as I could with the dirt discern by candle-light, and carry them up into my brother's chamber and there lock them up till I had eat a little supper'.

Even then Pepys's trials and tribulations were not yet over. When he had cleaned and counted the gold pieces, there were more than a hundred missing, a circumstance which, as Pepys writes, 'did make me mad'. Fortunately subsequent excavations unearthed a further seventy-nine pieces and Pepys pronounced himself 'pretty well satisfied'.³⁵

Among the numerous references to money in the rest of the Diary, perhaps the following are worthy of mention. On November 26th a Mr. Warren rewarded Pepys's co-operation in connection with a ship, presenting Samuel with fifty gold pieces.³⁶

Less than a year later Pepys bought a coach for £53 and eventually 'a fine pair of black horses'. At the beginning of 1669 he delighted his wife by agreeing that henceforward she would receive thirty pounds per annum to meet her personal expenses.³⁷

It is significant that towards the end of the Diary Pepys's periodic totting up of his accounts no longer figures among the daily entries. Indeed, after May 31st, 1667, right through to the end of the Diary two years later, we never again see the familiar words, 'cast up my accounts', although on January 23rd, 1669, Pepys says he is resolved 'to look into my accounts and see how they stand'.³⁸

Six or seven months previously he records a spate of minor expenses, including such items as milk, 6d; dinner at Stevenage, 5s.6d.; payment to guide at Oxford, £1.2s.6d.; barber, 2s.6d.; strawberries, 1s.2d.; bottle of sack for landlord, 2s.

There is, however, no indication how his account stood as a whole. Perhaps he had reached that stage in his life when he was taking care of the pence, secure in the belief that the pounds would take care of themselves.

Finally, according to the terms of his will, Pepys died believing the Government to be in his debt to the tune of over £28,000. In a codicil to his will he stipulated that his housekeeper, Mrs. Mary Skinner, should receive an annuity of £200. In a subsequent addition to the codicil Pepys left Mrs. Skinner £5,000, to be taken from the Crown money. Perhaps it is typical of the age in which he lived that the Crown declined to accept its responsibilities.

NOTES

All notes refer to: *Diary of Samuel Pepys*, ed, J. Warrington, 1966.

Vol. 1.	Vol. 2.
¹ p. 14.	²¹ p. 37.
² p. 30.	²² p. 54.
³ p. 31.	²³ p. 77.
⁴ p. 34.	²⁴ p. 87-88.
⁵ p. 35.	²⁵ p. 112.
⁶ p. 38.	²⁶ p. 146.
⁷ p. 68.	²⁷ p. 149.
⁸ p. 69.	²⁸ p. 151.
⁹ p. 71.	²⁹ p. 206.
¹⁰ p. 73.	³⁰ p. 251.
¹¹ p. 75.	³¹ p. 384-5.
¹² p. 124.	³² p. 474.
¹³ p. 220-1.	³³ p. 481-2.
¹⁴ p. 221.	Vol. 3.
¹⁵ p. 259.	³⁴ p. 30.
¹⁶ p. 269.	³⁵ p. 80-81.
¹⁷ p. 291.	³⁶ p. 115.
¹⁸ p. 371.	³⁷ p. 329.
¹⁹ p. 394.	³⁸ p. 340.
²⁰ p. 472.	

LONDON BRIDGE: A REASONABLE DOUBT?

by
David Hill

In any discussion of late Saxon London the earliest documentary source for the existence of London Bridge must appear. Modern opinion is summarised by Biddle 'The earliest written evidence for a post-Roman bridge at London dates from between 963 and 984' (Biddle 1973, 23).¹

The relevant portion of the charter is a short aside in a longer document which recounts an exchange between Æthelwold, Bishop of Winchester and Wulfstan Ucca, by whom land at Washington, Sussex, was exchanged for an estate at Yaxley, Huntingdonshire, given to Thorney, and an estate at Ailsworth, Northamptonshire, given to Peterborough. The exchange can be dated 963–975 and is found in a later cartulary of Peterborough² (Sawyer No. 1377).

The entry referring to London Bridge has been translated:

Then the bishop gave the land at Yaxley to Thorney and that at Ailsworth to Peterborough. And a widow and her son had previously forfeited the land at Ailsworth because they drove iron (?) pins into Wulfstan's father, Ælfsige. And it was detected and the murderous instrument dragged from her chamber; and the woman was seized, and drowned at London Bridge, *adrencie hi aet Lundene brige*, and her son escaped and became an outlaw. And the land came into the king's possession, and the king gave it to Ælfsige, and his son Wulfstan gave it to Bishop Æthelwold.³ (Whitelock, 1955, 519.)

Can we take the matter further? Has the reference any other significance apart from the existence of London Bridge in a period immediately before 948 (the date at which Ælfsige received Ailsworth, Sawyer No. 533).⁴ It may indeed have more. The text tells us that the widow was seized after evidence of witchcraft had been found in her chamber. There can be little doubt that this bower was at Ailsworth in Northamptonshire and it is here that the widow was seized. It seems strange then to the point of inveracity that a woman taken for witchcraft in northern Northamptonshire should be dragged the eighty-two miles to London to be drowned. Witchcraft usually engenders an hysterical reaction and it would seem unlikely that the widow's execution was not at the hands of her rustic neighbours. Why was she taken to London? It could not be that there was some sort of supreme court of appeal in London, although there is a possibility that King Eadred was at London at the time and the widow was taken to him for judgement. In a period when the Danelaw was still responsible for much of its own law, for a case which does not appear to be regalian and in a case which one would expect the church to be active we are free to discount this.

Why then London Bridge, *Lundene brige*? Many Anglo-Saxon Charters refer to roads, streets and ways by names which indicate their destinations, generally these destinations being only defined as *Port*, or *Wic* thus giving rise to *Portweg* and *Wicweg*. More infrequent are combinations such as *ceaster herpad*, apparently the road leading

from Enford, Hampshire, to the ceaster, Winchester⁵ (Sawyer No. 427). In Sawyer⁶ No. 692 the bounds for Evesty on the Cam brook in Somerset tell us of *pone bæp herpad*, the Bath army path, and the bounds of Damerham, Hampshire, have a *wilteneweie*, Wilton Way⁷ (Sawyer No. 513), while the bounds of the charter⁸ (Sawyer No. 695), dated 961, for Easton near Winchester has a *lunden Weg*, a 'London Way'. The many bridges in Charter bounds have descriptive names as well; 'Wood', 'Black', 'Plank', 'Stone', 'Woodford Bridge', 'Ælflæd's Bridge' and 'Ealmund's Bridge'. To this day roads, streets, lanes and bridges are to be found in many of the towns and villages named after London, the great terminus to which they lead.

Is it not probable then that the widow was dragged from her bower at Ailsworth not the eighty-two miles to London Bridge, but to the River Nene, which forms part of the bounds of the estate at Ailsworth, or to a place of some importance as a law centre at the period? For example the borough of Stamford was a centre of major importance at this period, with judicial functions. It is eight miles from Ailsworth and stands astride the medieval route from the North to London, and it is probable that Edward the Elder in his campaign of 918 when he constructed a southern, twin, fortification on the south side of Stamford, built a bridge to join them, and here, on the road to London, the river Welland is a major river and quite deep enough in its pools and deeps to provide a miserable end for the widow of Ailsworth. Four miles to the east of Ailsworth there stands another, less likely, candidate, Peterborough on the river Nene, crossed now by the Fitzwilliam Bridge which leads onto 'London Road'.

NOTES

¹ M. Biddle, D. Hudson and C. Heighway, *The Future of London's Past*, 1973, p. 23.

² P. H. Sawyer, *Anglo-Saxon Charters*, an annotated list and Bibliography, 1968, No. 1377

³ D. Whitelock, *English Historical Documents c. 500-1042*, 1955, p. 519.

⁴ P. H. Sawyer, op. cit. No. 533.

⁵ *Ibid.* No. 427.

⁶ *Ibid.* No. 692.

⁷ *Ibid.* No. 513.

⁸ *Ibid.* No. 695.

THE EDWARDIAN INVENTORIES OF MIDDLESEX

by

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Continued from Volume 26 (1975) pp. 331–333.

The Certificate and presentment of the jury of all the goods, plate, ornamentes, Jewelles and Belles belonging and app'teyning to the church of Hendon wthin the countie of Myddx aswell conteyned wthin the Inventory taken by the Kynges maties Commyssyon' as also other goodes belonging to the same church at this present third daye of August in the vjth yere of the reigne of our Sovereynge Lorde kyng Edward the vj by the grace of god kyng of England, ffraunce and Ireland, Defender of the faith and in earth of the church of England and also of Ireland the supreme heade.

Hendon

Imprimis a cope, a vestymēt, a subdeacon of blewē velvet and all thinges to the same belonging.

Itm a vestymēt and a cope of redde velvet with all that belongeth therunto.

Itm a cope of whytte satten.

Itm a vestymēt of that sute w^{ch} was comonly worne was stowlen out of the church when the churches wyndowes were broken.

Itm a black cope of satten of Brydges, a vestement of the same.

Itm a whyte taffatay vestment.

Itm v grete Belles and a lytyll bell.

Itm ij challasses of sylver and gilt whyte wth there coverages weyng xliij ounces di di qtr.

Itm a payer of sencers of latten.

Itm ij candlestykes.

other ij were stowlen when the wyndowes were broken.

Itm ij Awlterclothes and ij frutes of red and grene sercennett.

Itm curtaynes iiij of greene sercennett.

Itm a canape clothe of Redde and Blewe damaske.

Itm one howselyng clothe thother is a cover for the communion table.

Itm a corse clothe of blewē sylke.

Itm x pere of whyte lynnyn clothes and theleventh pere is paynted wth the kynges armes uppon yt.

Itm one sepulcher clothe.

Itm iiij stremers and iiij banner clothes the surplices were stowlen when the church was broken.

Itm one basen and an ewer of pewter.

Itm a crosse of copper and gilte with the foote.

Itm a crosse of latten.

To be continued

BOOK REVIEW

Save the City: A Conservation Study of the City of London, ed. David Lloyd, Society for the Protection of Ancient Buildings, the Georgian Group, the Victorian Society and the Civic Trust, 1976, 191 pp, £3.00.

This report has been prepared by the Joint Committee of the publishing societies which are greatly alarmed at the scale and pace of recent redevelopment in the City, and the steady erosion of its very special architectural and historical character. It is presented both to the City Corporation and to a wider public as a basis for conserving the City's unique character. It includes a historical introduction; a detailed Townscape Analysis, area by area, covering the visual and historical character of street scenes and of individual buildings in relation to one another; and a number of chapters on special subjects, including City Churches, Open Spaces and Landscape, Living in the City, the Waterfront, Pubs and Restaurants, Archaeology, and the Economics of Conservation. Other contributors include Peter Burman, John Chesshyre, Roger France, Roderick Gradidge, Anthony Henfrey, Art Kutcher, Charles McKean, Ralph Merrifield, Sir Nikolaus Pevsner, Andrew Renton, Anthony Richardson, and Robert Stokes.

This is a very worthwhile publication, attractively produced and illustrated with line drawings, maps and 78 photographs. There is a Foreword by the Duke of Grafton, Chairman of the Joint Committee.

L.S.S.

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