

EXCAVATIONS AT THE CUSTOM HOUSE SITE, CITY OF LONDON, 1973

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INTRODUCTION

During the summer and autumn of 1973 large-scale excavations were carried out on the Old Custom House site. The site (Fig. 1), which is about a hundred metres west of the modern entrance to the Tower of London, forms a rectangular area between Lower Thames Street and the river approximately 50 metres north-south by 75 metres east-west. To the east stands a modern office block on the "Three Quays" site, while to the west is the small lane called The Watergate and the present Custom House, which dates from the early nineteenth century. In area the site is about 0.375 hectares (just less than an acre) and though an extremely large area, it was known that the southern third of the site (Fig. 2) consisted of massive post-medieval stone, brick and concrete waterfronts with rubble fillings behind them.¹ It was also known that the north-western basement had a mass of piles underneath and, from the borehole survey, the upper levels between basements consisted mainly of brick rubble of a recent date. In the short time available for excavation (just over three months) it was decided therefore to excavate in the central and north-eastern basements. The boreholes also indicated that natural clay was -2 metres O.D. on the north side of the site falling to -4 metres O.D. in the middle of the site, and eventually to -7 metres O.D. on the southern side of the site (under the modern waterfront) (Fig. 2). With the floor of the central basement at +2 metres O.D. one could expect to excavate trenches at least 4 metres (13 feet) deep in waterlogged conditions if natural clay was to be reached. Thanks to a dry summer and sustained hard work by the excavators this was achieved in several large areas as some of the sections show.

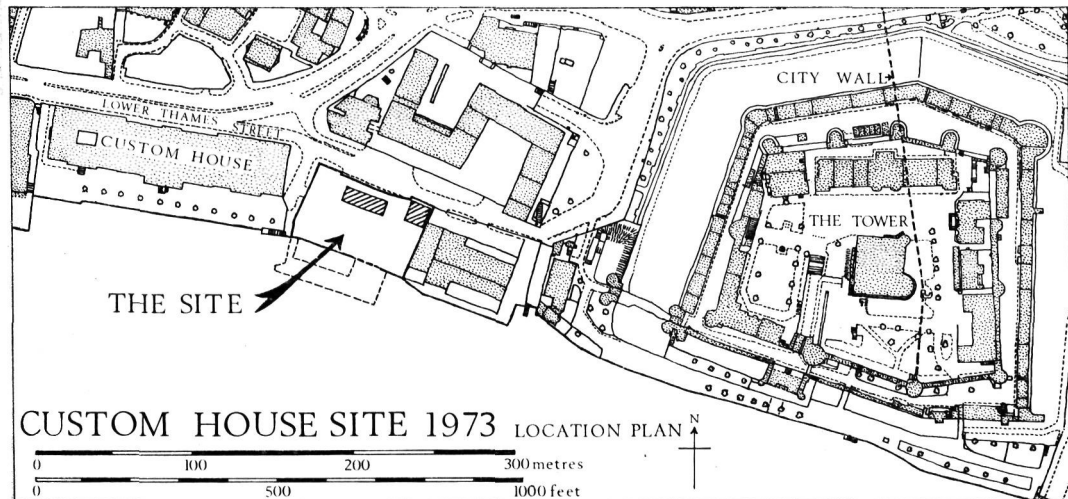


Fig. 1.—Custom House site; location plan (*Crown Copyright reserved*)

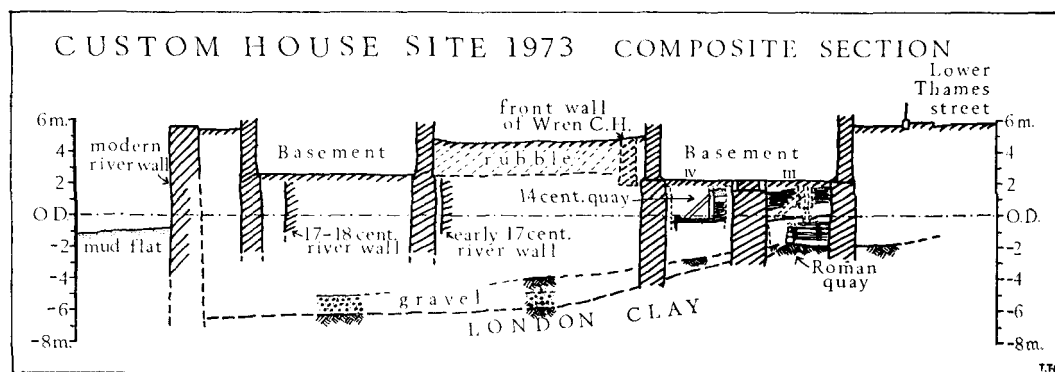


Fig. 2.—Custom House site; composite section

Work started in the central basement on 30th July, only a few days after the existing building had been demolished, and continued without a break, seven days a week, until 17th November, when piling began. Throughout the excavation work took place alongside the demolition contractors, Messrs. Henry & Co.² and later the main contractor and piling firm.

The excavations fell naturally into two parts (Fig. 3): (a) in the central basement (trenches I–VII), which lasted for eleven weeks and was carried out by a volunteer force of up to 25 people,³ and (b) in the northern part of the east basement (trenches VIII–XV), which lasted for five weeks after the end of the summer vacation and was carried out by a small group of paid diggers.

The following is the first and most substantial part of a full report⁴ of the excavations which were organized by the Guildhall Museum of the Corporation of London, aided by a grant from the Department of the Environment. The report was prepared at the Guildhall Museum by the writer in between full-time studies at the Institute of Archaeology, London, and is an attempt to publish, as soon as possible, the results of the excavation. Some background research has naturally been carried out but it was felt that this should in no way delay the publication of the report and I make no apologies for presenting the report in this form without detailed discussion of all the results. The finds and records of the excavation have been placed in the Museum of London, which incorporates the Guildhall Museum on 1st December, 1974.

THE SITE

The old Custom House site (N.G.R. TQ3329 8050) lies almost totally in the pre-second century river Thames (see Fig. 2). The undisturbed natural is London Clay with some pre-Roman sandy gravel layers on top. These clean sandy gravel layers are much thicker in the western part of the site where observation of mechanically excavated holes showed the Roman quay lying on a thick layer of sandy gravel well above natural clay. Along the northern half of the site the London clay rises steeply from –4 metres O.D. to –1.5 metres O.D. or even higher, which is almost definitely where the pre-Roman river bank ran and where the Roman timber waterfronts were built. A similar slope in the London Clay has been noticed at various points along the northern bank of the Thames in the City area (e.g. W. F. Grimes, *The Excavation of Roman and Medieval London* (1968), 58, and *Archaeologia* 71 (1921), 65, Fig. 9). The gravel layers are also much thicker in the southern part of the

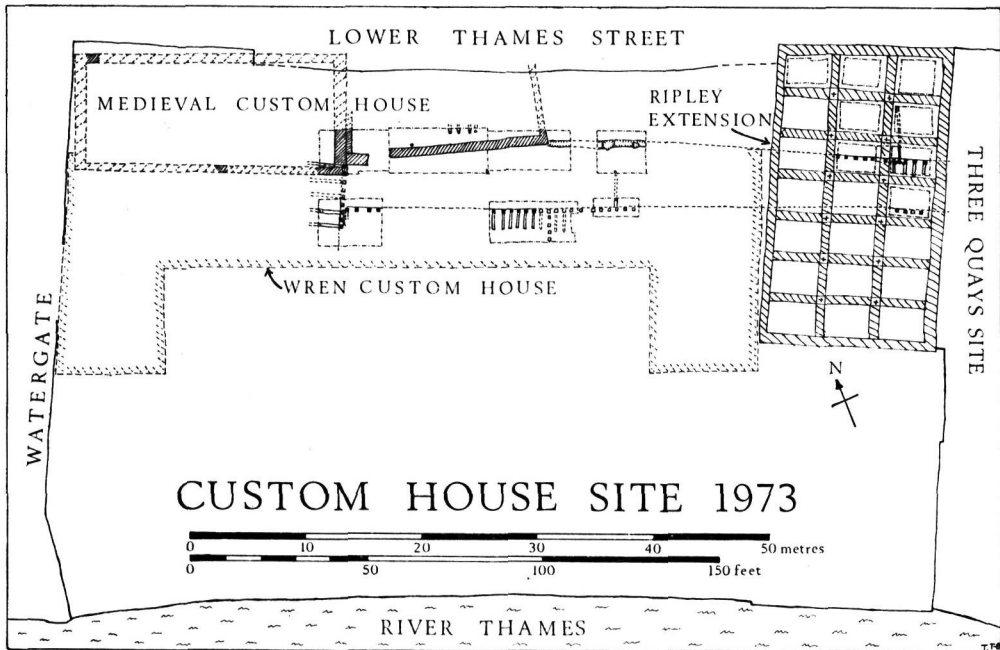


Fig. 3.—Custom House site; plan of post-Roman features

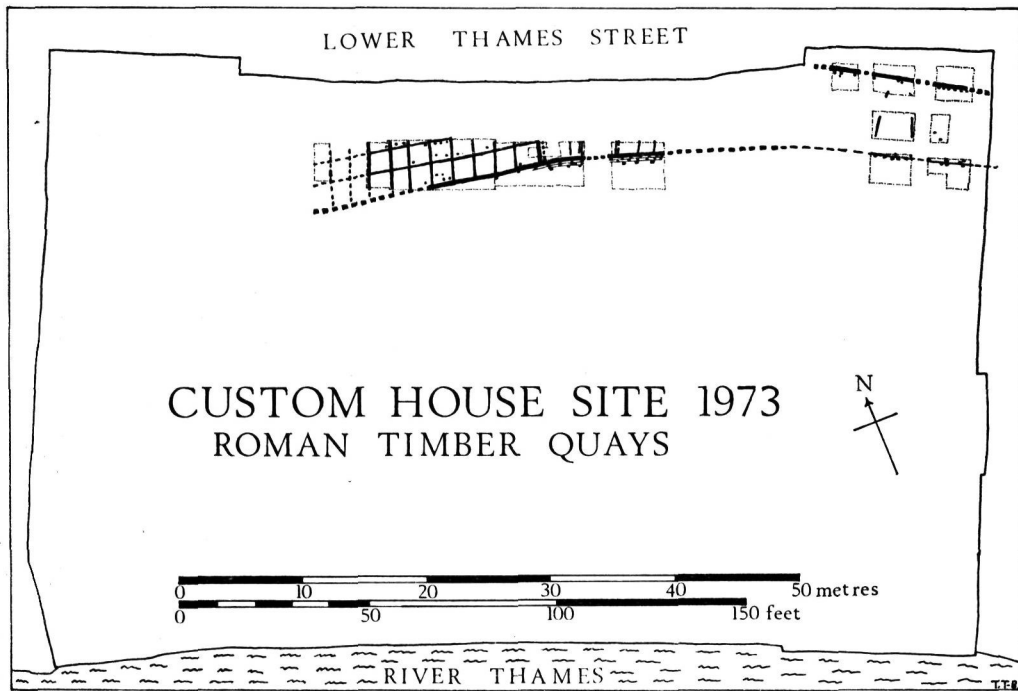


Fig. 4.—Custom House site; plan of Roman quays

site and the bed of the early Roman river Thames may have been at -7 metres O.D. or possibly at a higher level between -4 and -6 metres O.D. The gravel layer shown on the composite section (Fig. 2) may represent pre-Roman gravel. The river Thames in this area (the Pool of London) is today roughly 250 metres wide as opposed to at least 350 metres in the pre-Roman period.⁵ Once a wide shallow river, the Thames is now narrow and very

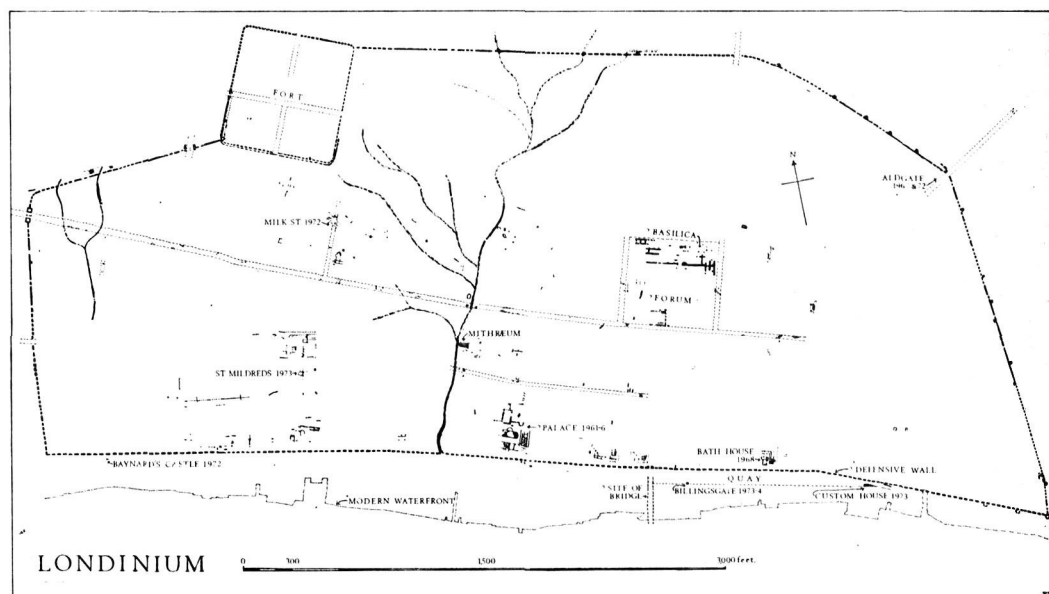


Fig. 5.—Custom House site; Roman London

deep due to the rise in sea level and dredging in the last hundred or so years.

The difference between high and low tide today can often be as much as 7.6 metres (*i.e.* between approximately -3.4 metres O.D. and $+4.2$ metres O.D.) but how this compares with pre-Roman times is still unknown. However, a clear picture of a considerable rise in sea level comes from the present site. It is likely, but not certain, that the Thames was tidal as far as the Pool of London in the pre-Roman or early Roman periods, even though the environmental evidence points to fresh water in the river here. The exact level of the river in the Roman period is also difficult to determine but the early Roman high-water mark cannot have been any higher than Ordnance Datum. Low water must have been below -1.6 metres O.D.

Much has been written on the subject of the late Roman marine transgression in the Thames estuary⁶ and the present site appears to give incontrovertible evidence for just such a transgression. One of the most surprising things about the excavation was the almost complete absence of any layers between the late Roman and the late thirteenth century.⁷ The break was marked by a series of very fine well-sorted sandy gravels containing only well-worn late Roman sherds. The only conclusion that can be reached is that the second century Roman quay became submerged in the late Roman period and the action of the river removed the upper levels. Some robbing of the larger timbers also occurred. All the waterfronts dating from between the fourth and thirteenth centuries must lie further north (*i.e.* under Lower Thames Street). The two most important pointers to a substantial marine

transgression are: first, the position of the late thirteenth century quay well above the Roman quay; and, second, the large quantities of water-laid gravel with peat above overlying the Roman timbers and extending to the northern limits of the site. These gravel and water logged peat layers are at least two metres thick (waterlogging occurs at least as high as +2.1 metres O.D.).

Both the Roman and early medieval waterfronts have a slight change in direction between the alignments of the east and western parts (Fig. 3 and 4). This may possibly be caused by a small stream entering the Thames at this point, which is roughly under the eastern end of the Wren Custom House (Fig. 3). This seems quite possible because a later medieval drain and then a brick-built nineteenth-century sewer ran here. However, it may simply be caused by a change in the natural course of the river (Fig. 5) before embankment.

NOTES

- ¹ The author was lucky in having beforehand a summary of the site and its history, including borehole sections, prepared by Mr. Richard Hughes of Messrs. Ove Arup and Partners, the consulting engineers.
- ² Special thanks must go to Messrs. Henry and Co. who often put their very expensive heavy machinery at our disposal to break up concrete floors and clear dumps from the basements.
- ³ Andy Cauldwell, Gerald Clewley, Brian Yule and Gil Burleigh were the main supervisors.
- ⁴ Interim reports were published in *The London Archaeologist* 1974, Spring and Summer issues.
- ⁵ Harvey Sheldon's recent excavations in Southwark have established the rough position of the southern waterfront.
- ⁶ The best summary is A. V. Akeroyd, "Archaeological and historical evidence for subsidence in southern Britain", *Phil. Trans. R. Soc. Lond.* 272 (1972), 151-169.
- ⁷ A similar sequence was briefly noted in 1959 at the Public Cleansing Depot (just west of Cannon Street Station). See R. Merrifield, *The Roman City of London* (1965), No. 262 (Gazetteer) and G. C. Dunning's Appendix in C.B.A. Research Report 4, *Anglo-Saxon Pottery: a symposium*.

THE EXCAVATIONS

Fifteen trenches were excavated on the site and these were numbered in the order they were started with Roman figures; trenches I to VII being in the central basement, and VIII to XV in the east basement (see Figs. 14 and 23). Within each trench a straightforward sequence of layers was followed and a summary of all the layers will be found below (p. 147). For brevity III-24, for example, means trench III layer 24.

During analysis of the stratification which took place after the excavation the medieval layers were arranged together in several groups. These were:

Group A Layers associated with the Custom House and quay surfaces. They were subdivided into:

- Group A1 - Custom House foundation trenches.
- Group A1/A2 - Timber drain construction trench.
- Group A2 - Custom House extension foundation trench.
- Group A3 - Trodden gravel layers of quay.
- Group A4 - Custom House cellar fill.

Group B Tips into the area of robbed medieval timbers (Trenches II and IV).

Group C1 Fill south of second period medieval timbers.

Group C2 Thick peat and organic layers north of second period medieval timbers and immediately post-dating these timbers.

Group D Earliest medieval foreshore gravels below the medieval timbers and above the late Roman destruction levels. This group was sometimes roughly divided into two sub-groups:

- Group D1 - the upper/later gravels.
- Group D2 - the lower/earlier gravels.

The Roman layers were not treated in this way.

The various features excavated on the site can be divided as follows:

- (a) Earlier Roman waterfront in the north-east corner of the site (Fig. 4). Early second century.
- (b) Later Roman waterfront with box-staging on the west. Late second century (Fig. 4).

- (c) Destruction of Roman waterfronts with some robbing. Rise in sea-level and erosion along the northern foreshore of the Thames. Fourth century onwards.
- (d) Construction of first medieval waterfront on the foreshore, re-using old timbers. Also construction of (?) jetty in the western part of the site with internal scissor brace (Fig. 3).
- (e) Collapse and partial removal of first medieval waterfront and replacement by a new well-built timber waterfront (Fig. 3). Earliest jetty still standing. (?) Late thirteenth-mid-fourteenth century.
- (f) Filling in of the area south of the Medieval timbers, presumably to move the waterfront forward. Robbing of some of the posts, braces and planks. Building of the chalk and ragstone foundations of the Custom House. *c.* later fourteenth century (perhaps Churchman's Custom House of 1382).
- (g) A few wall foundations survive of seventeenth and eighteenth century buildings, otherwise deep nineteenth and twentieth century basements have removed all the upper levels.

The following is a description of the various structures in chronological order. No detailed description or measurements are given, except when it is not clear from the plans or sections.

(a) EARLIER ROMAN WATERFRONT

In trenches VIII, IX and X in the north-east corner of the site was found the line of an early Roman waterfront (see Figs. 4 and 6). As this was very near to the Lower Thames Street frontage it was not possible to excavate the structure fully. However, the line of the waterfront was fully established and in the western part of trench X one small area of deep excavation was carried out.

The waterfront appears to consist of a series of horizontal east-west beams with a series of posts and planks in front. Clay with some mortar and chalk was then packed behind the waterfront. The pottery found in these layers dated from the later first century or the first quarter of the second century, so it seems likely that this waterfront had been built by the early part of Hadrian's reign. This is of particular interest as it shows that the northern shore of the Thames had been embanked by this time for more than half a mile east of the mouth of the Walbrook (Fig. 5).

The planking from this waterfront was later robbed out, but perhaps not until the later Roman period, and the robbing lines show clearly on the section (Fig. 26). The posts, on the other hand, were left after having been pulled forward during the robbing of the planks. A few planks still remained in trench X. In the eastern part of trench X were found three rectangular Roman posts which have sharpened ends and were clearly driven in later. They are possibly piles for a wall, though only a few loose chalk blocks survived. The tops of all these timbers were eroded and covered by river gravel which contained worn later Roman pottery.

(b) LATER ROMAN WATERFRONT

Sometime in the last quarter of the second century a new timber quay was built. The front of this was about 6 metres (*c.* 20 ft.) south of the earlier waterfront in the eastern part of the site. In the western part of the site this new waterfront was of an entirely different construction and consisted of a series of timber boxes (Figs. 7 and 8, and Pl. 1 and 2). These were presumably built as a timber staging with planks on top. No planks survived but planking similar to that on the Roman quay at Xanten¹ is probable. The nearest parallel to

this structure is the mole found at Dover in 1855 and illustrated by Mr. S. E. Rigold in a recent article.² The base of the piers of the Roman bridge at Mainz also had a comparable form of construction. The structure is also similar to Roman timbers found in London in the 1920's on either side of King William Street and just north of Upper and Lower Thames Streets.³

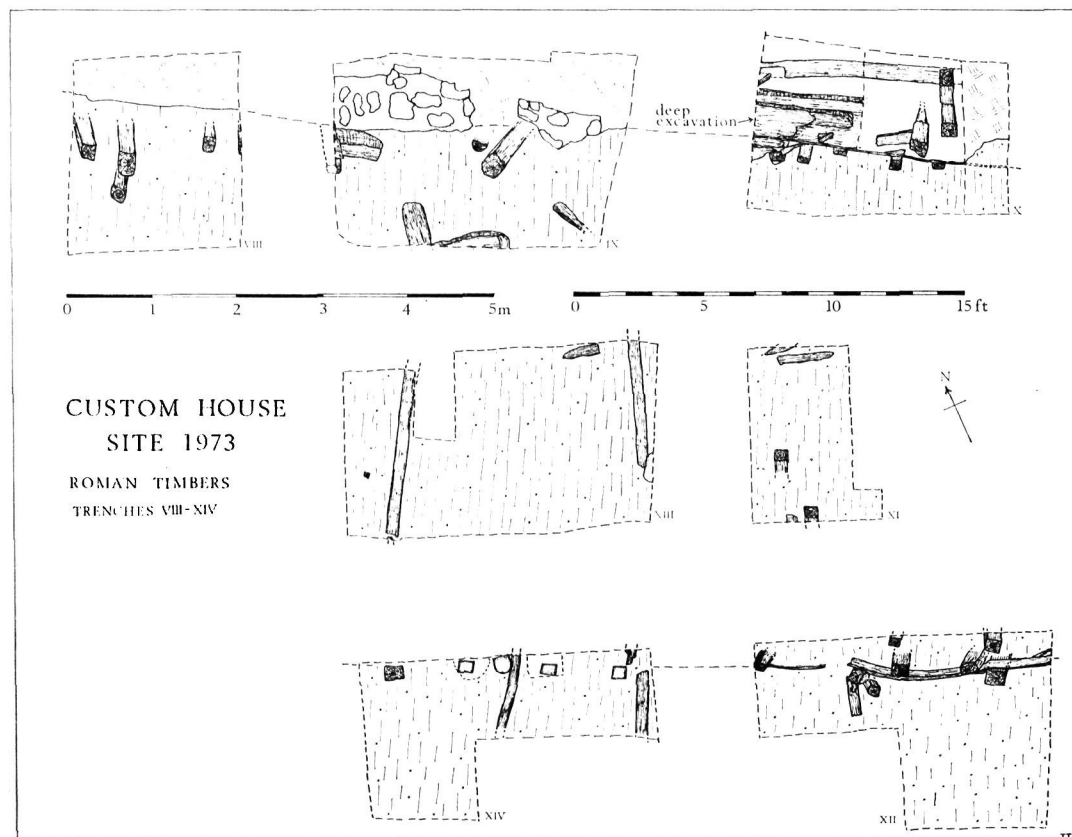


Fig. 6.—Custom House site; plan of Roman timbers in Trenches VIII – XIV

The timber staging was built with a series of at least four (probably five) tiers of massive oak baulks. These become progressively smaller as they rise and are joined vertically with small rectangular pegs (or false tenons) which are spaced at regular intervals along the beams (for joints see exploded view in Fig. 9). The cross-sections of these baulks are: 46 x 31 cm. (c. $1\frac{1}{2} \times 1\frac{1}{8}$ Roman feet), 38 x 33 cm. (c. $1\frac{1}{4} \times 1\frac{1}{8}$ Roman feet), 32 x 32 cm. ($1\frac{1}{8} \times 1\frac{1}{8}$ Roman feet), and 22 x 34 cm. (c. $\frac{3}{4} \times 1\frac{1}{8}$ Roman feet).⁴ It is interesting that the vertical measurements are all slightly more than a Roman foot. This contrasts strongly with the Xanten cross-sections⁵ where they are all just less than a Roman foot. Perhaps the London beams were planed down from $1\frac{1}{4}$ Roman feet. The massive beams of the quay front were joined perpendicularly at regular intervals (c. 1.66 metres) to a series of lesser beams by a half-dovetail joint. These beams, which were at least 4 m. long, were either 19 cm. square or 16 x 19 cm. in cross-section. There was a vertical gap between each beam of c. 19 cm. and to take the strain off the dovetails more beams (c. 19 cm. square in cross-section) ran east-west

immediately behind the main wall of beams. Then *c.* 1.6 m. and 3.2 m. further north ran two more east-west series of vertical baulks; where these met the other beams at right-angles there were half-lap joints. No gaps existed vertically between these east-west baulks and up to nine beams were piled one on top of the other. No vertical joints were found and they must have been kept in place just by their own weight and by the false tenons of the quay front. The structure resembled a whole series of boxes at least three deep by more than ten longways (several additional boxes on the west were observed after excavation had ceased and piling was taking place). Within the boxes were several lines of vertical posts which were not connected to the horizontal beams in any way. There was also a series of posts and planks in front of the quay (perhaps added later). These vertical posts must have been to keep the timber staging in position on the ground, though they may also be the foundations of quayside buildings; they were all approximately 20 x 15 cm. in cross-section and had sharpened ends.

Only one of the boxes was fully excavated down to natural London clay at -1.5 metres O.D. (the one in trench III, Fig. 8, and Pl. 1). All the other boxes in trench V were uncovered very hurriedly after the upper levels had been removed by machine and only the tops of the timbers were drawn. We were thus not able to examine in every detail the construction of the Roman quay. A few additional observations were made during the digging of a pile hole (Fig. 7) and this enabled the composite section to be made (Fig. 8 inset).

What is of great importance and interest is that none of the timber boxes was filled in after construction. The silt found inside was extremely fine (III-37 on Fig. 25) and had obviously accumulated over a very long period of time. In the top of the silt was fourth century pottery. This therefore leaves only two possible explanations: (a) that the timber structure was meant to float up and down with the tide, or (b) that there was no tidal rise and fall (*i.e.* the quay was above the tidal reaches of the Thames) and the level of water was never high enough up the side of the quay to cause it to float. Which of these two explanations is correct is as yet uncertain. The environmental evidence shows only fresh water conditions (see Professor Dimbleby's report, p. 210) and the possible depth of water in front of the quay could be 1 metre (*c.* 3-4 ft.) assuming the vertical quay front is at least 1.5 metres (5 ft.) high (Fig. 8 inset). This seems very shallow and in spite of the evidence for the cutting away of the natural clay in front of the quay (see Figs. 24 and 25), the ships must almost have sat on the mud when tied up at the quay.⁶ If the quay was situated above the tidal limits of the Thames, the level of water may, in the late second century, have been between Ordnance Datum and -1.5 metres O.D. This would mean that high tide at this time was well below Ordnance Datum, and that the rise in sea level had not yet started to take place. This conclusion is directly at variance with the evidence in the Walbrook valley, where Ralph Merrifield suggests⁷ that the Walbrook had become silted up by A.D. 160 at the latest on the evidence of the coins. Further evidence is still needed before any conclusions can therefore be made about the level of the Thames in the first two centuries A.D.

The timber staging is presumably the eastern end of the main Roman quay of Londinium (Fig. 5) which probably extended for at least $\frac{1}{4}$ mile to the Roman bridge across the Thames. The method of construction was clearly one of prefabrication with the timbers being cut and prepared elsewhere before presumably being floated into position down the river either in the box units or as individual timbers. All the joints were of a standard size and the beams themselves are perfectly rectangular in cross-section showing the use of the saw and plane. Most of the beams were joined longitudinally by simple butting except in one case in

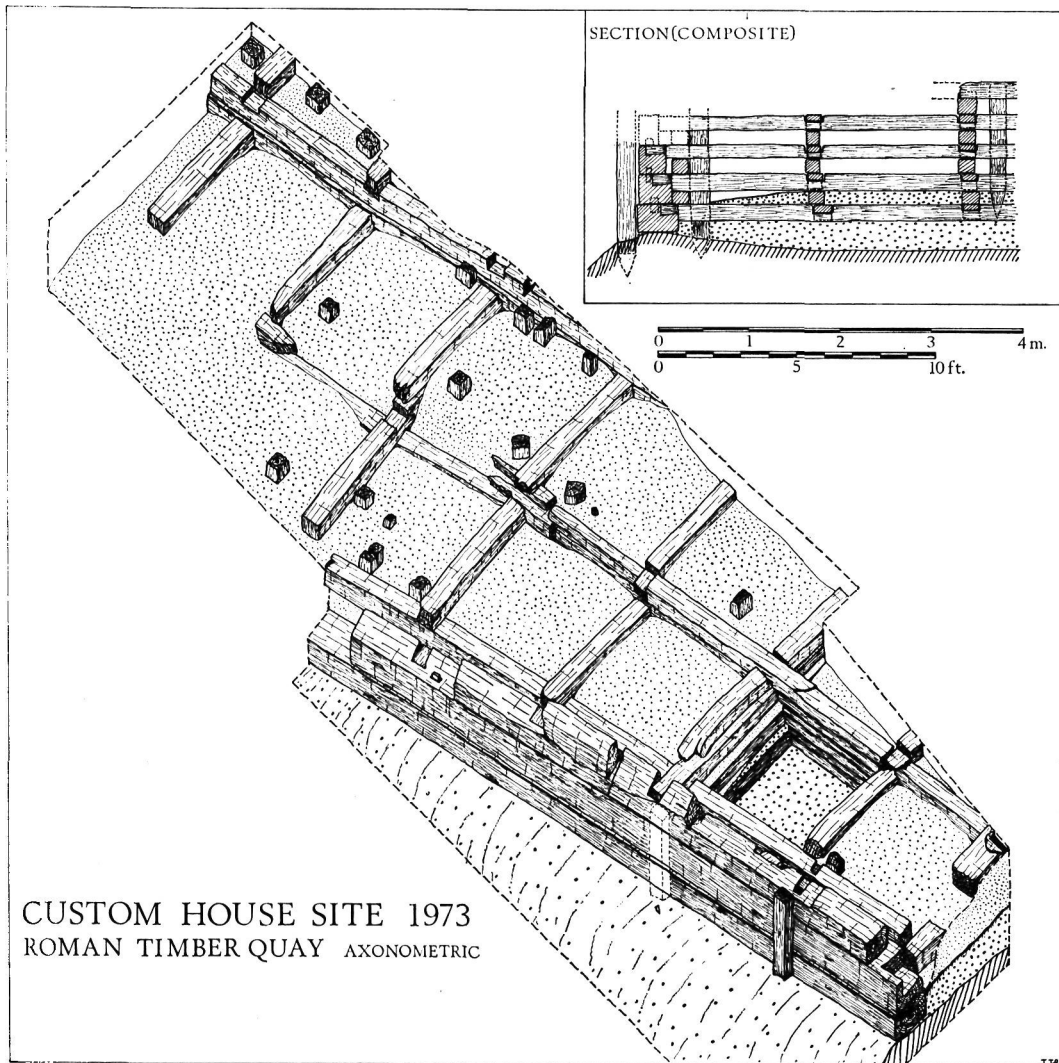


Fig. 8.—Custom House site; Roman timber quay; axonometric

trench III where a beam, which was not *in situ*, showed that it was originally joined to another by simple halving. This is very similar to the beams of the Xanten Roman quay.⁸ The whole quay may be presumed to have been officially constructed as part of a large-scale operation in London. Very large numbers of oaks must have been cut down to make the quay, but as oak was clearly abundant in the Thames valley in the Roman period, the trees were probably brought from very close to London.

The date indicated by the pottery for the construction of this quay is broadly between A.D. 150 and A.D. 200, and, as is shown below (p. 211), the dendrochronology, if matched correctly with the West German curve, gives a date in the last quarter of the second century, possibly in the decade between A.D. 180 and A.D. 190. One of the possible reasons for the

CUSTOM HOUSE SITE 1973

ROMAN TIMBER QUAY

TRENCHES I, III, V, & VI.

0 1 2 3 4 5 6m.

0 5 10 15 20 ft.

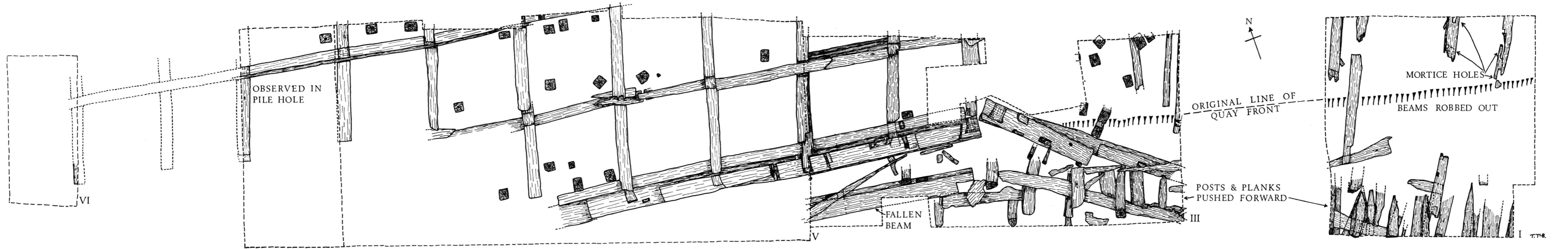


Fig. 7.—Custom House site; plan of Roman timber quay

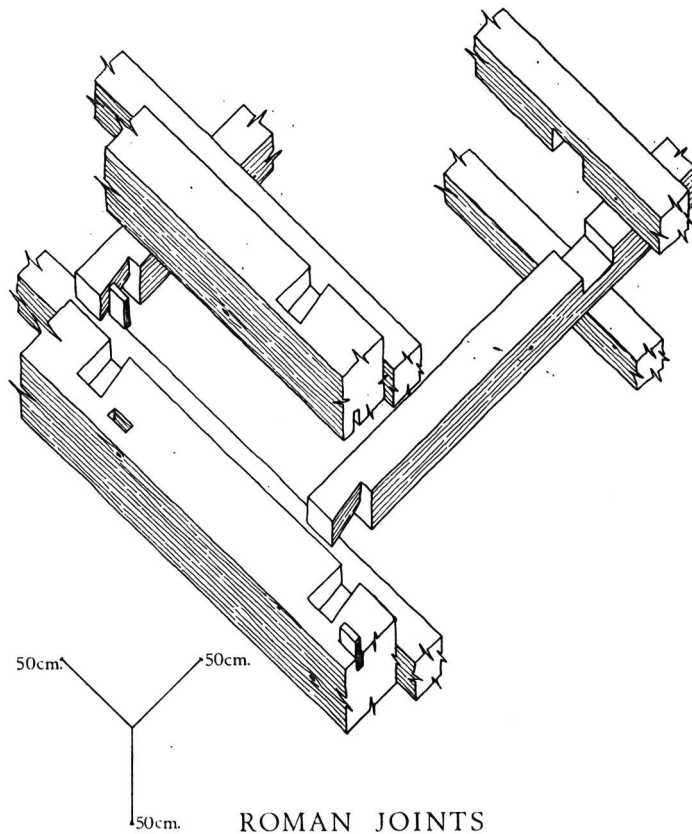


Fig. 9.—Custom House site; Roman joints (axonometric exploded view)

building of a massive quay at this time may have been that the construction of the defensive walls of the city necessitated a moving southwards of the quay so that there would be ample room between a possible southern defensive wall and the riverside for ships to unload (see Fig. 5). This would explain the necessity of constructing large-scale timber staging, particularly if there had been some rise in sea-level by the late second century. A Roman timber quay is in a similar position⁹ outside the walls of the Colonia at Xanten.

In the eastern part of the site the construction of the quay is different; the junction was unfortunately under one of the Medieval Custom House foundations in trench III and therefore could not be fully examined. It was also unfortunate that all the main beams of the quay front had been robbed out except in trench III where the lowest survived with half of another beam, the end having been deliberately sawn off.¹⁰ This section of quay must have been very similar to the Xanten quay in construction with a series of massive east-west beams at the front tied in at the top with lesser beams running north-south. Several of these beams were found in trench I and the eastern part of trench III as well as in trenches XI–XIV, in the eastern part of the site (Figs. 7 and 6). They had all been pulled forwards when the main beams were robbed (Pl. 3). Three of the beams in trench I had broken mortice holes in them and these may have lain on vertical posts with tenons in them, as at

Xanten. Around all these beams was packed building rubble, etc., including some painted wallplaster (e.g. I-26 to 29).

In front of the main quay wall had stood at least three rows of vertical posts with planks in between. They had all been pushed forward during the robbing of the massive beams. However, their original position can be reconstructed (Fig. 10) and this has been done for the Roman site plan (Fig. 4). Another section of this part of the quay was found in trenches XI-XIV where the alignment has changed more towards south-east to north-west. Packed around the timbers in this part is more rubble with, in the lowest levels (e.g. XIII-9) a lot of late first-early second century samian ware. In trench XIV all but one of the vertical posts had been pulled out, but as they had been carefully eased out in a vertical direction, an impression of them was left in the ground (Fig. 6). In trench XII, on the other hand, all the posts and planks remained. The largest post (XII-3) which was 20 cm. square had 68 rings in it which matched with the massive beams from trench III (see below p. 212).

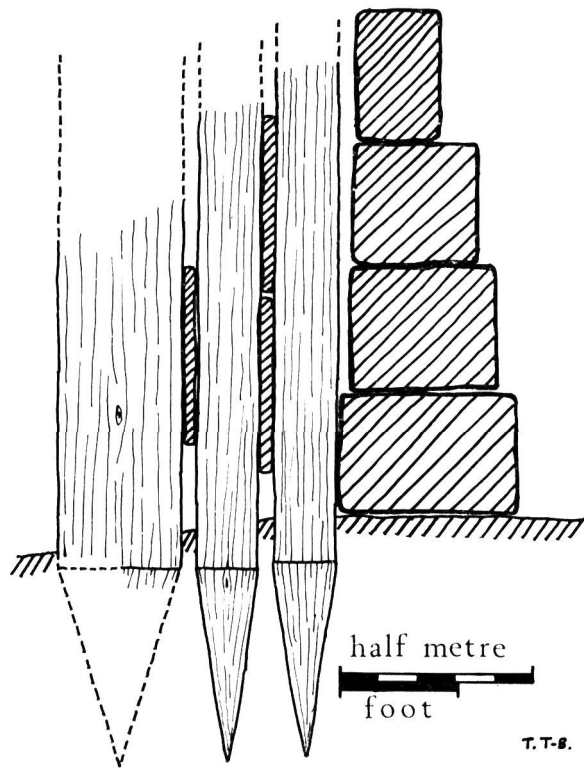


Fig. 10.—Custom House site; reconstructed Roman posts

This late second century waterfront appears to have remained in use for a fairly long time. The boxed staging of the western part of the quay had been gradually squeezed so that the timbers did not meet at right-angles before the boxes themselves had become filled up with fine silt. The result was that some of the dovetails broke, and the other dovetails and half-lap joints became pinched. When the quay went out of use is not certain, but the top part of the otherwise pottery-free silt filling the boxes (III-37) contains fourth century

pottery suggesting that by the fourth century, the planking of the quay had broken and pottery was falling through. We also do not know when the rise in sea-level in the Thames estuary started, but again it seems likely that there had been some sort of rise by the fourth century at the latest. It is also during this period that some of the timber must have been robbed from the now useless quay.

(c) FOURTH-LATE THIRTEENTH CENTURIES:

During this extremely long period of time, the upper Roman (and hypothetical early Saxon) levels were gradually eroded away by the action of the river. Virtually nothing dating from this period was found except for a few small sherds of Saxo-Norman and twelfth century pottery. All the other material from these layers was extremely well-rolled late Roman pottery. These post-Roman gravels covered all the trenches excavated on the site and are up to 50 cm. thick, though in places much thinner. South of the Roman quay the bottom of this layer is at -0.7 metres O.D., but it rises to $+0.5$ metres O.D. at the extreme northern limit of the site (*i.e.* above the early Roman quay). All the Saxon and subsequent waterfronts until the late thirteenth century must have lain further north under Lower Thames Street. Fitzstephen's account¹¹ of the wall on the southern side of the city being eroded away by the action of the river is possible documentary evidence for this. It seems likely that the rise in sea level reached a maximum in the late thirteenth century when extensive flooding took place in low-lying areas of the Thames estuary.

(d) FIRST MEDIEVAL TIMBER STRUCTURES

Some time in the fourteenth century (or possibly the late thirteenth century) a large, rough, braced structure was built on the foreshore. This was done first by cutting a rough channel parallel to the existing waterfront and at least eight metres south of it. In this channel were dug, at fairly regular intervals, sub-rectangular post-holes into which were put large roughly squared-off timber posts (Fig. 11 plan, Pl. 4, and Fig. 12 isometric). Some of these posts were of re-used timber (including part of a rib of a ship) and all varied greatly in size and length. The bottom of one post was nearly a metre below the contemporary surface, while another barely went in more than 29 cm. All the posts had sawn-off bases and were packed into the post holes with large stones (also Fig. 13). Along the south side of the line of posts so erected was placed a long horizontal beam which was held in place by a series of pointed silver birch piles which were driven in south of the beam. The tops of the posts were supported by a series of very rough braces which ran at an angle of about 45 degrees to the ground southwards from the post and rested on crude ground plates. The brace was inserted into the vertical post at the top and into the ground plate with a very rough tenon and mortice joint. The mortice hole was a long narrow slit which was far too big for the tenon, and on the ground plate very long wedges were driven in in front of the brace which acted both as a "chock" for the brace and as a means of holding the plate in place. There were possibly piles in front of the ground plate (shown dotted on Fig. 12) but it was not possible to excavate this area. Similar piles in front of ground plates were excavated along the north side of trench V (Fig. 14). Behind (*i.e.* north of) the vertical posts ran a continuous wall of planks, which had no visible means of attachment to the posts. These planks were all re-used and came originally from the hull of a boat or a ship which must have been broken up on the spot for re-use (this would be very logical on the foreshore). The hull fragments, which are possibly the two stern halves of a boat (Pl. 5 and Fig. 13) were at least 4.5 metres long and had up to five strakes articulated.¹² (The iron rivets of the clinker-built

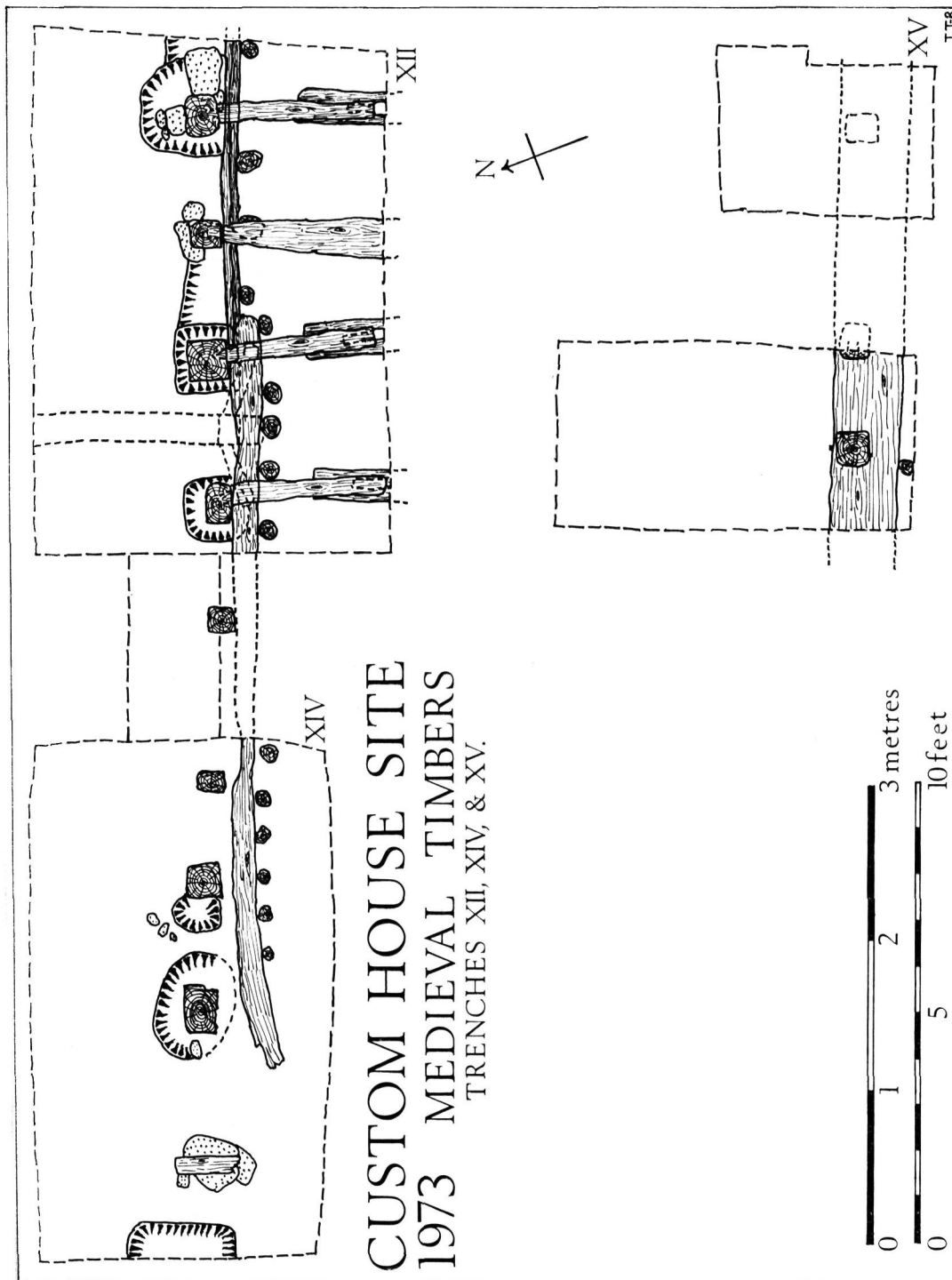
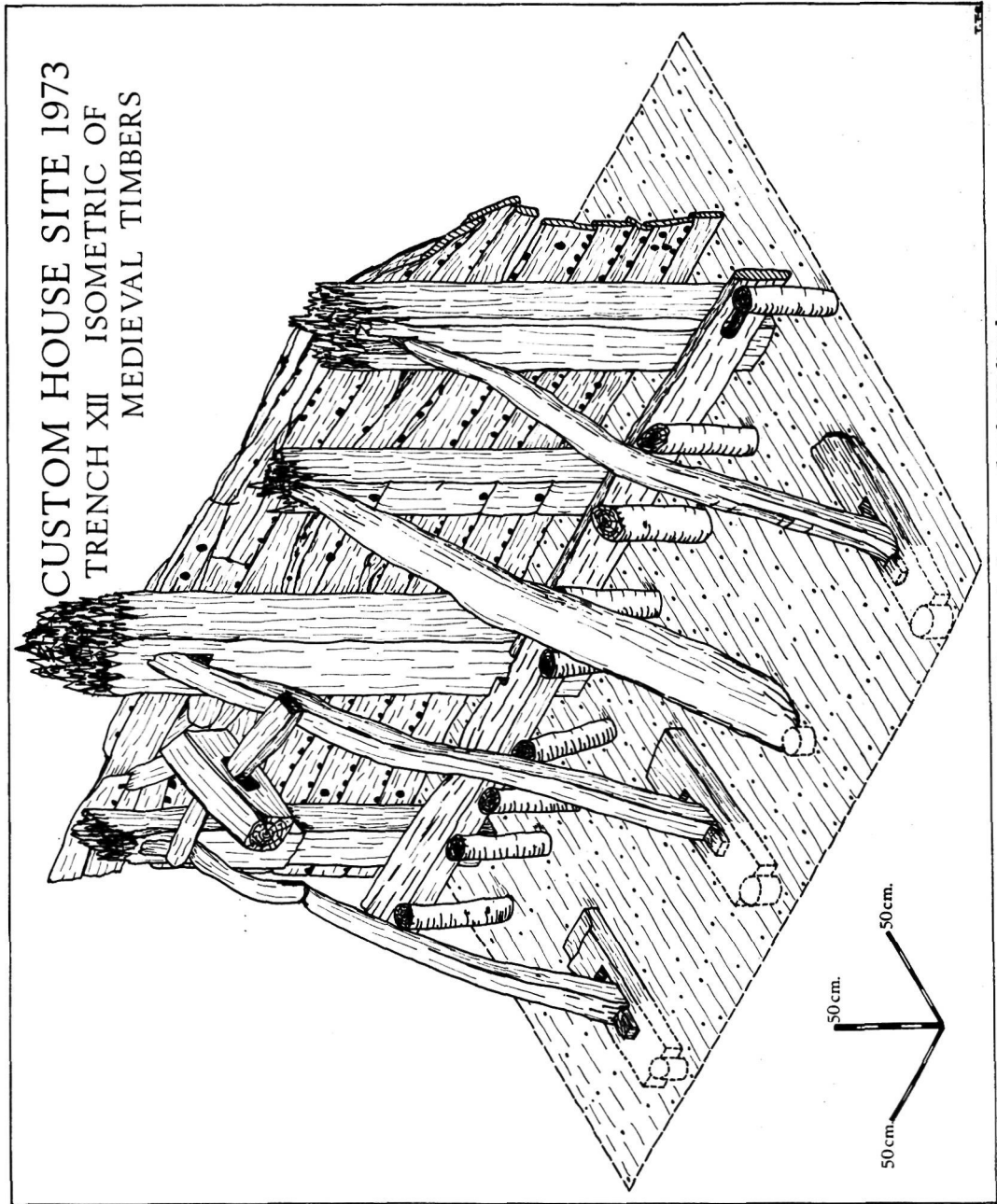


Fig. 11.—Custom House site; plan of Medieval timbers in Trenches XII, XIV and XV



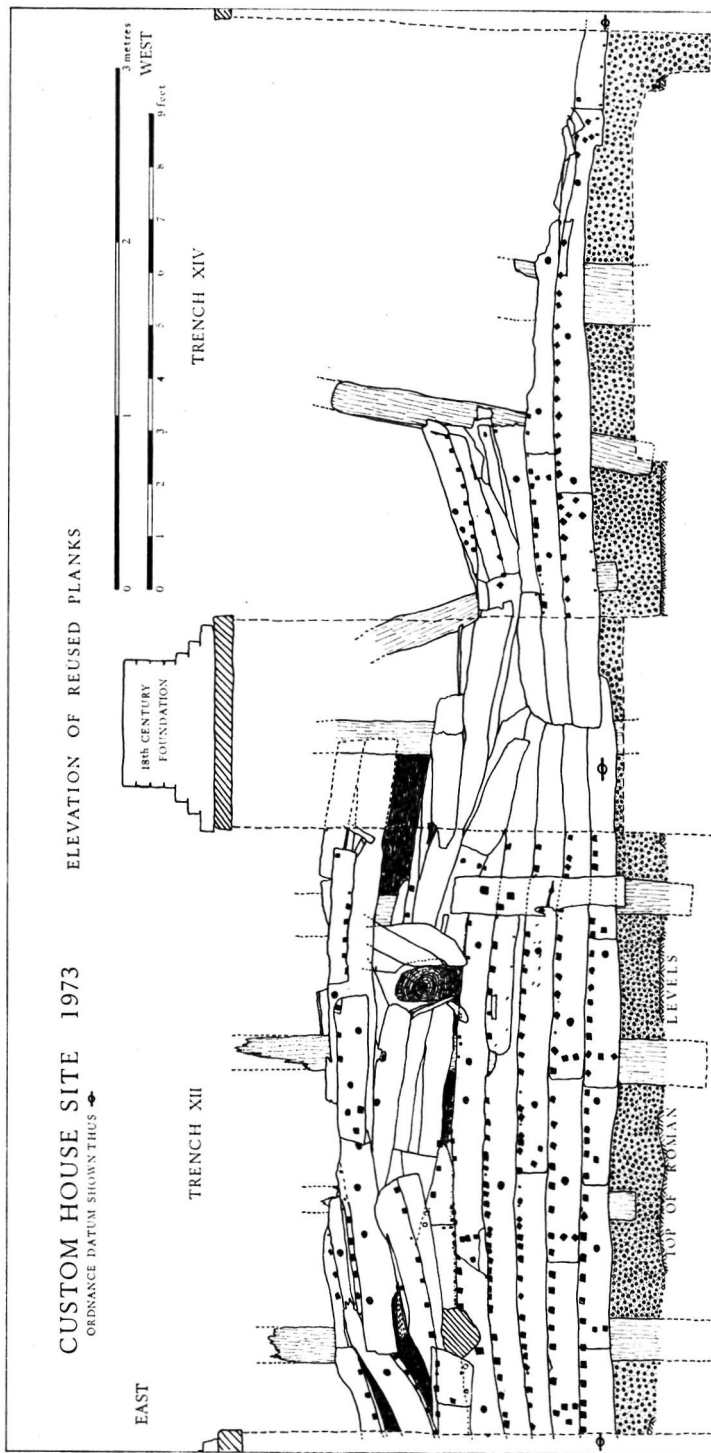


Fig. 13.—Custom House site; elevation of Medieval boat planks

hull were still in perfect condition due to the anaerobic condition of the waterlogged peat, and they only started to rust when water was regularly poured on the wood during excavation to stop it from drying out.) This braced timber structure was at least 2.2 metres high and probably ran right across the site (*i.e.* across both the Stone quay and the Wool quay of the documentary records). In the central basement (trenches I, III and V) only the gully and post-holes survived (Figs. 3 and 14); all the timbers had disappeared. However, a solitary post in trench V and several fragments of wood, rivets, etc., all point to the structure having been here. In trench XIV half of the structure had fallen forwards and in the western part of the trench a great "swirl" of gravel over the timbers suggested that the whole structure had collapsed unintentionally, and it was probably because of this that it had to be rebuilt six metres (*c.* 20 ft.) further forward. When one considers how roughly built the whole structure was (Fig. 12) it is hardly surprising that it collapsed. A large horizontal beam in trench XII appears to have been added later to tie in the already failing structure. Where this beam appears through the planks it has a very rough mortice hole cut through it. Into this hole was put a piece of wood about a metre long which was supported at either end on the top of two braces (Fig. 12).

At the same time that this structure was being constructed a north-south structure was also being built in the western part of the site (Fig. 14). This could only be partially examined in the excavations but it appears that it was a large timber jetty going out into the river. It was most probably the main jetty for the Wool quay. The east side of this was a braced and planked structure similar to that described above. However, running west from every second post was a large scissor brace. Three of these scissor braces were excavated, but in all cases it was not possible to examine them completely. The scissor brace in trench VI was later incorporated into the south wall of the Custom House foundations (Fig. 21) and even though this was partially demolished during the excavation it was not possible to examine the lowest part of the scissor brace. In trench VII two scissor braces were examined; both were crushed vertically and broken. In each case it was not possible to examine all the joints thoroughly; this was mainly due to shortage of time but also to the danger of working in the very narrow space with 2½-metre high unsupported sections on each side.¹³ However, on the drawing of the reconstructed scissor brace (Fig. 15) the only joint that is uncertain is that at the bottom of the post on the east side. All the other joints were pegged tenon-and-mortice or pegged half-laps. It was not possible to reconstruct what the rest of the scissor braces looked like, but they appear to have been double scissor braces with the whole structure supported on the ground on a plate. With the building of the second medieval timber waterfront, when the jetty carried on in use, the external raking braces had been removed, but a brace still survived (under the later timber drain) at the eastern end of the most northern scissor brace to be examined (Figs. 14 and 21). A similar series of scissor braces may have existed under the trestle bridge at Bodiam Castle where only the ground plates survive;¹⁴ a trestle bridge over a moat and a large jetty on the Thames would perhaps have been constructed in the same sort of way. They were both large-scale timber constructions of the fourteenth century.

(e) SECOND SERIES OF MEDIEVAL TIMBER STRUCTURES

Some time not long after the building of the first medieval timber structures it became necessary to replace them with something of much better design. This was probably due to the collapse of the first structure as described above, and this second structure may date

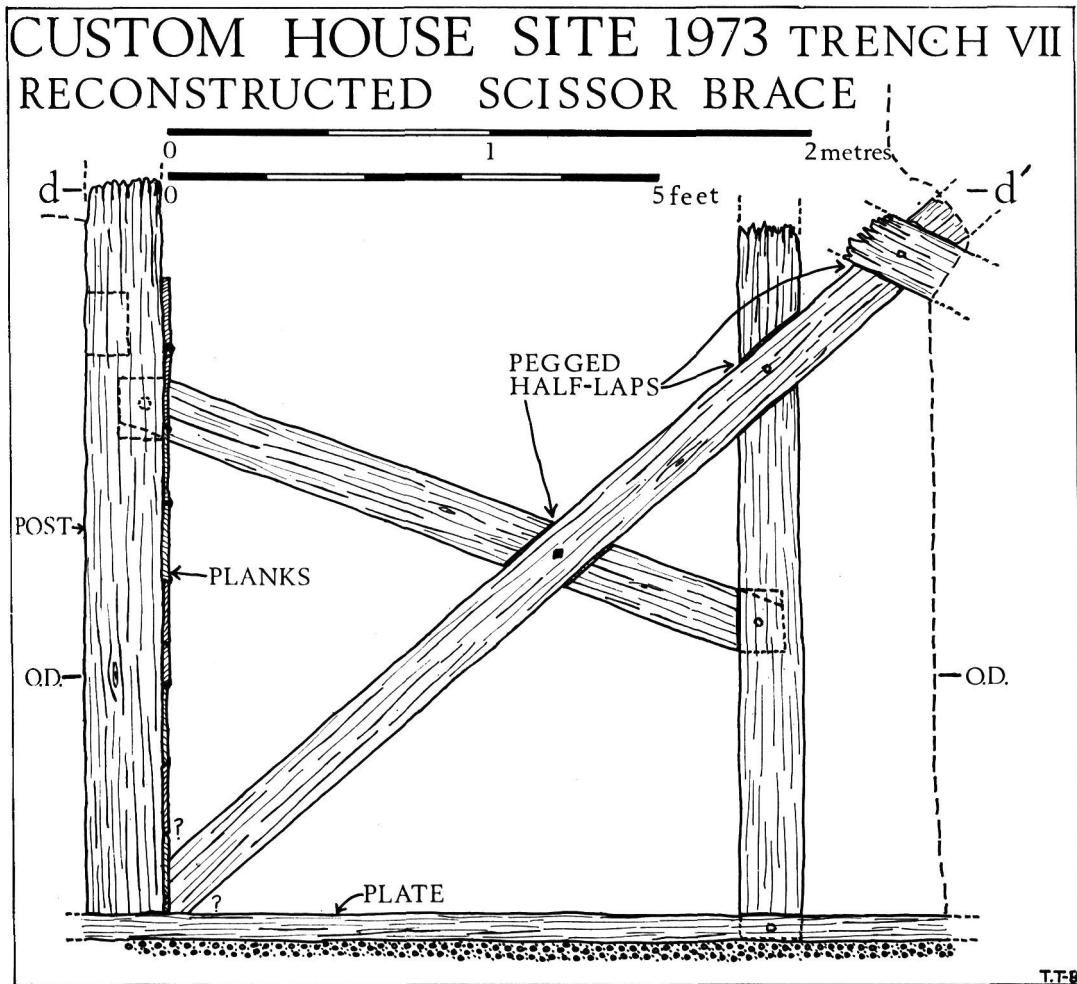


Fig. 15.—Custom House site; reconstructed scissor brace looking south

from not very long after the first; the former being “jerry built” while the latter used new materials and good carpentry. The new structure was exactly similar in function to the old one but it had the great difference of being supported on ground plates and piles (Pl. 7); no rough post holes were needed (Fig. 18 and Pl. 6). Under the main posts was a long continuous east-west plate on piles. The planks for this plate were carefully scarfed together, with a lightning or *trait de Jupiter* scarf joint and in trench II only this plate remained after the other timbers had been robbed (Fig. 14). The plates for the raking braces half-lapped over the main plate and were joined to it with vertical square pegs (see exploded view of this joint in Fig. 19). Into the centre of this half-lap joint was cut the mortice hole for the tenon of the vertical post, and this joint was fixed with a horizontal dowel (round peg). Small wedges were used in front of some of the raking braces to make sure of an absolutely tight fit of the chase-tenon (Fig. 16). The southern ends of all the ground plates of the braces were jointed on to a long east-west beam, and here a fine bare-faced soffit tenon was used

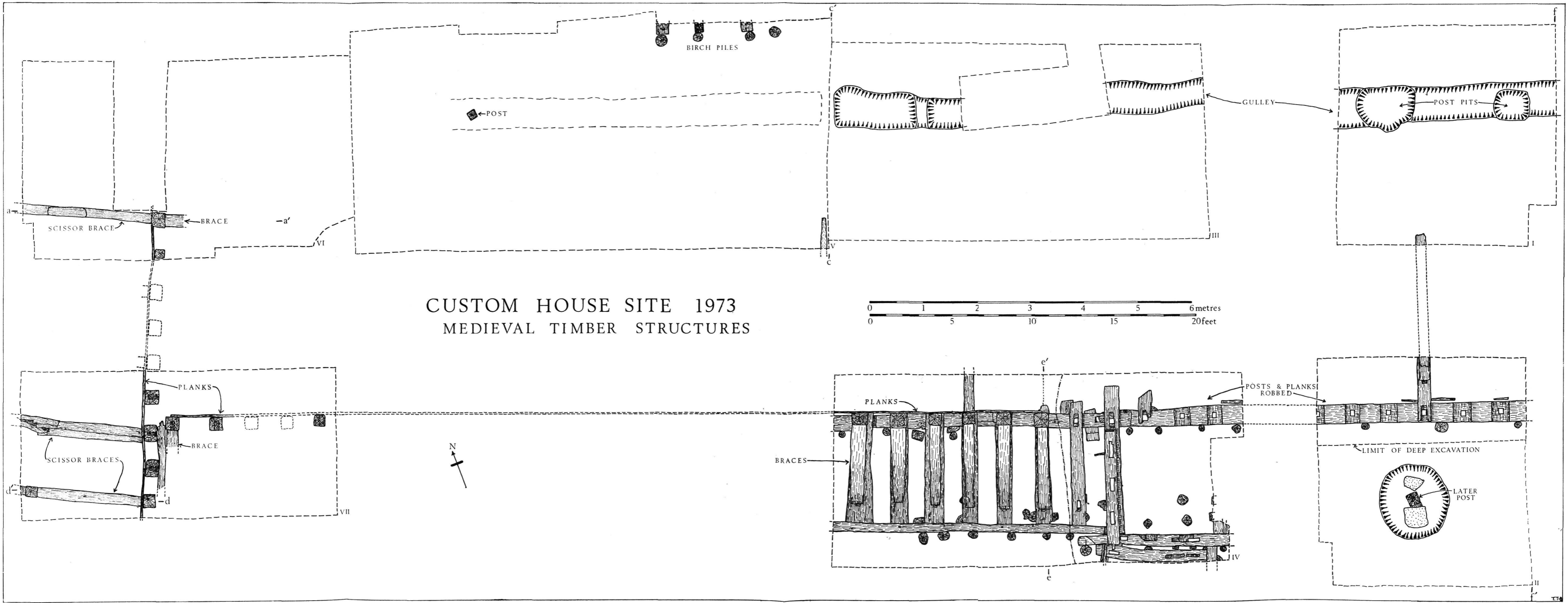


Fig. 14.—Custom House site; plan of Medieval features in central basement

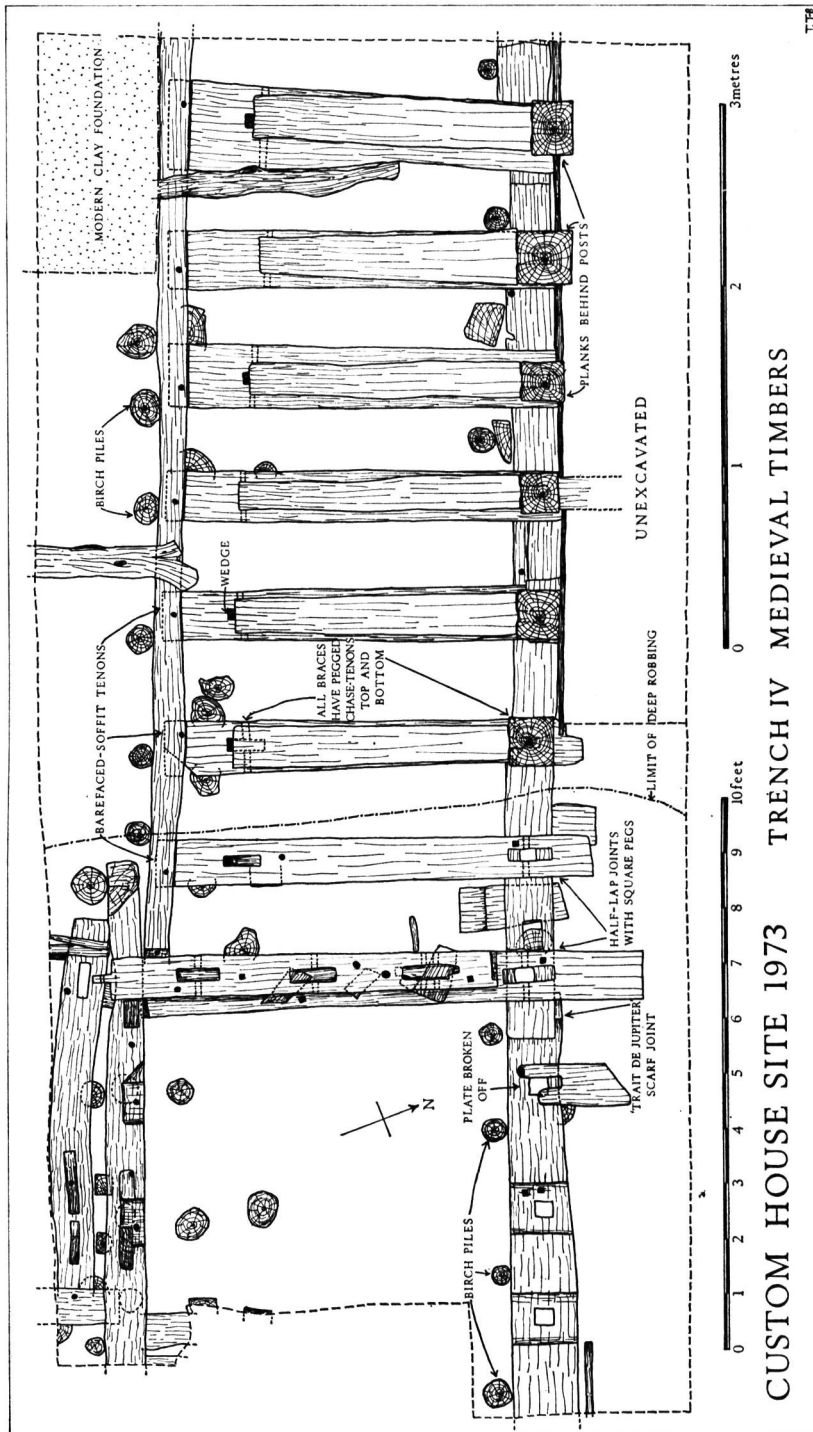


Fig. 16.—Custom House slan of item p; Medieval bers in Trench IV

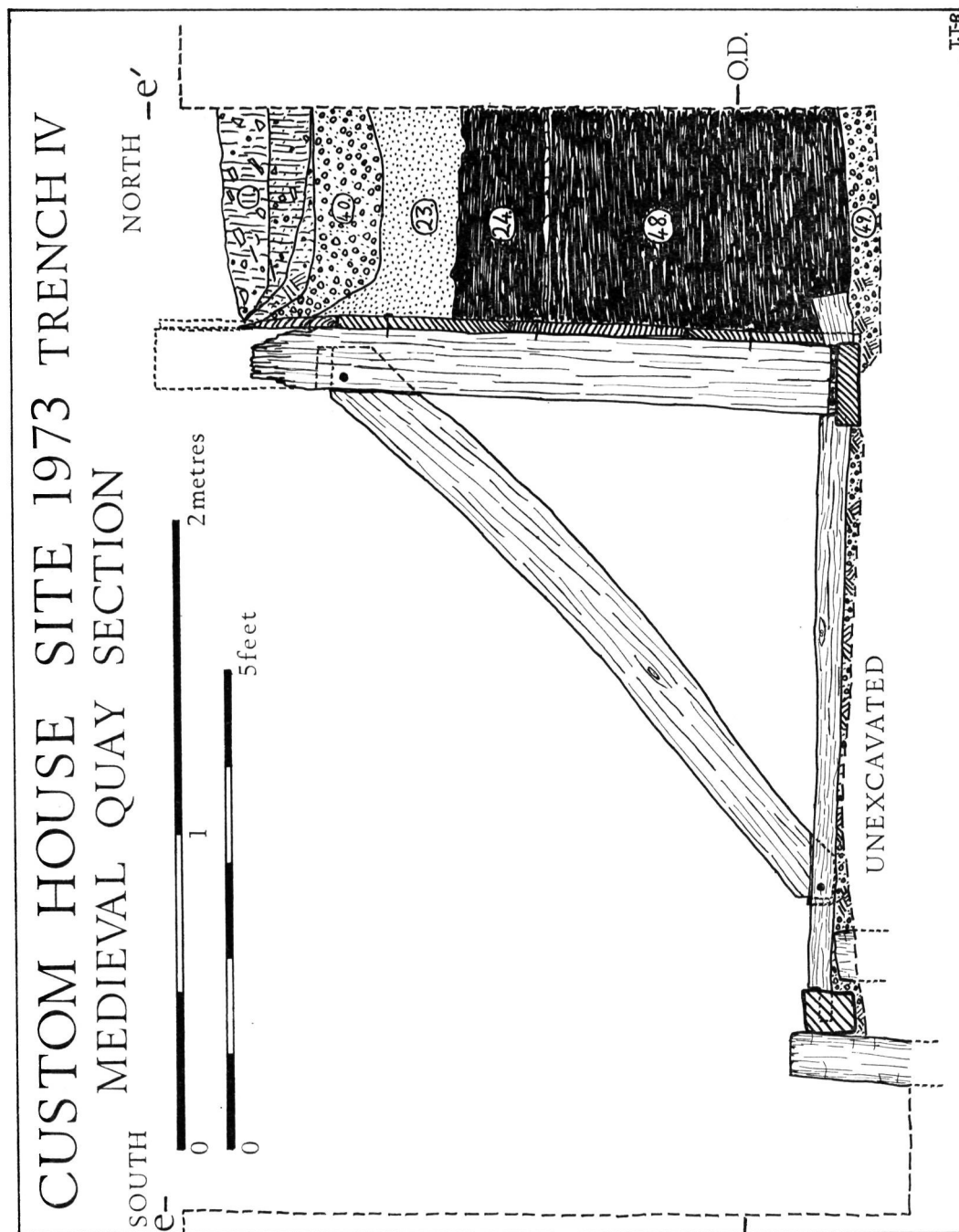


Fig. 17.—Custom House site; section through later Medieval quay in Trench IV

CUSTOM HOUSE SITE 1973 TRENCH IV
ISOMETRIC DRAWING OF MEDIEVAL TIMBERS

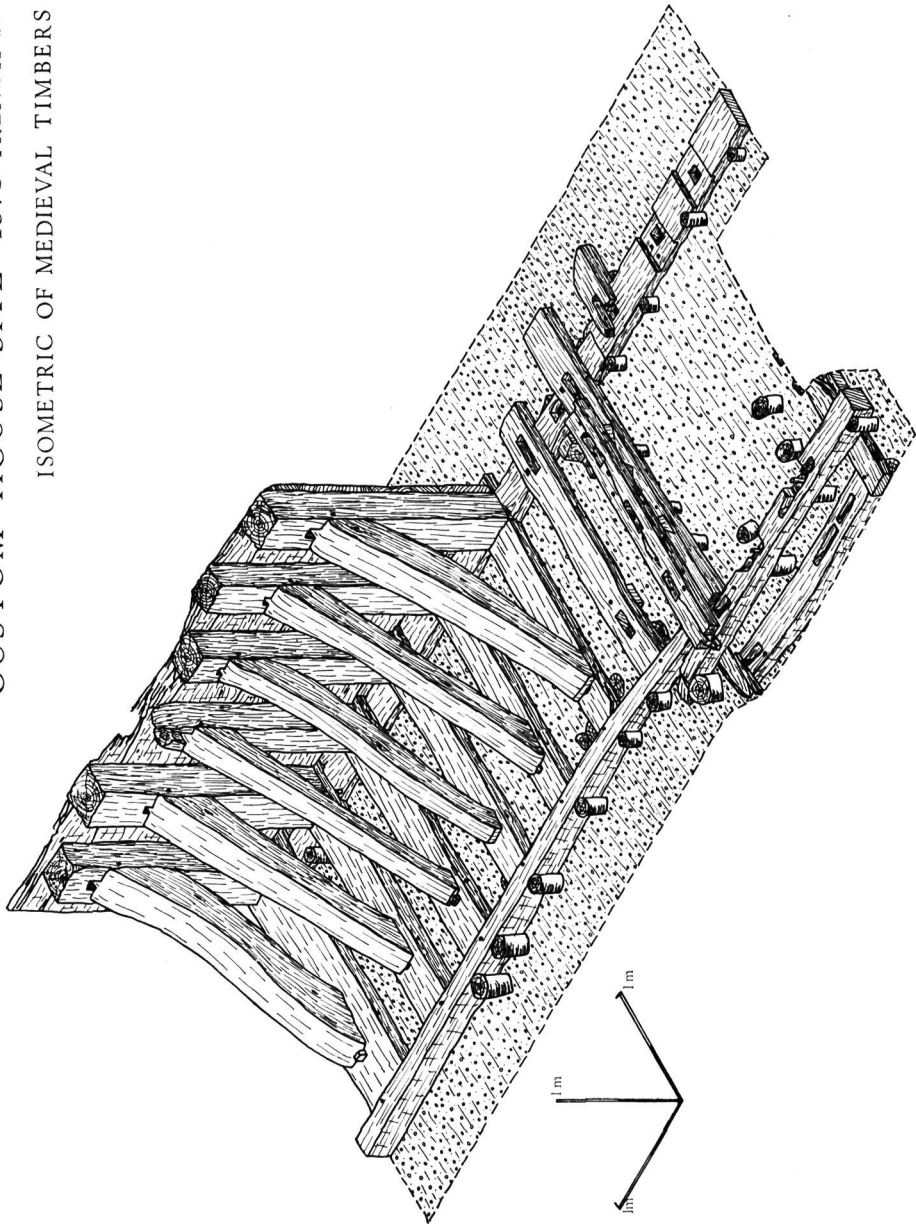


Fig. 18.—Custom House site; isometric drawing of Medieval timbers in Trench IV

with very long dowels driven in vertically (Fig. 17 and Pl. 7). In front of this beam a line of silver birch and elm piles had been driven in to hold it in place. Similar piles had also been used to hold the southern side of the main plate. Behind the posts were nailed large radially cut planks which fitted together perfectly.

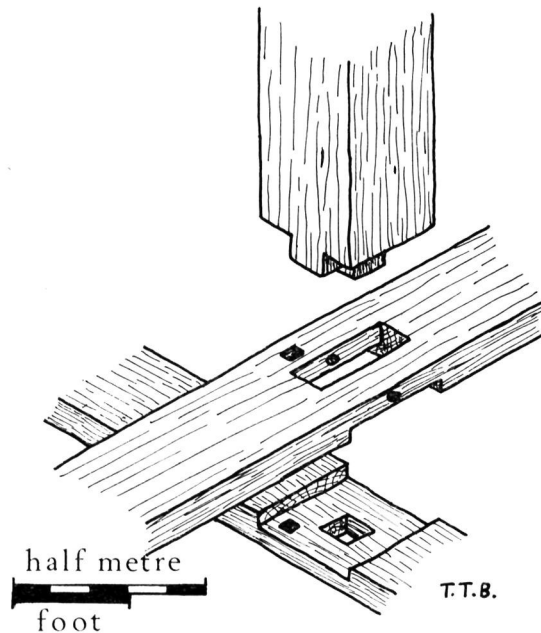


Fig. 19.—Custom House site; exploded view of Medieval joints

In the western part of trench IV this fine structure remained in excellent condition with only the tops of the posts and planks rotted (Pl. 6); however, for some unexplained reason, all the upright posts and some of the north-south ground plates had been robbed out in the eastern end of the trench and in trench II. The limit of robbing is sharply marked (Fig. 16) and clearly took place after the area south of the timbers had been filled in. The robbing appears to be associated with an additional timber structure which ran south from the east end of trench IV. There was clearly a line of vertical posts running north-south from the main plate; the last of these posts probably had a raking brace on the east. A possible explanation for this is that when the main waterfront for the Wool quay moved forward (and outside the area of excavation) it was necessary to have some form of ramp running down to the foreshore at the eastern end of the quay (*i.e.* in the area of trenches I and II), and for this end a north-south retaining wall was needed on the west side of the ramp.¹⁵ Equally there may have been a small stream here (as discussed above p. 121) necessitating the building of a small inlet to the river.

In the eastern part of the site (*i.e.* in the area of what was then the Stone Wharf) a new waterfront was also built. Unfortunately, only a very small part of this was able to be examined in trench XV (Fig. 11). This new waterfront was about $4\frac{1}{2}$ metres in front of the old one and consisted of a series of posts with planks behind them on a massive ground plate. Some of the planks were new while others were re-used from a boat. The line of these posts if continued westwards would join the waterfront in trenches II, IV and VII (Fig. 3).

The dating of all these medieval structures is still a problem as no clear method is yet available, but the most likely date seems to be some time in the mid-fourteenth century.¹⁶ Dendrochronology has so far been difficult because virtually all the oak used has been fast grown and is therefore not easy to match with existing mean-curves¹⁷ (see below p.214). The very large amount of pottery from the organic and peaty layers which immediately post-date the timber structures (Group C2) suggests a mid-fourteenth century date (see Mr. J. Thorn's interim report, p. 180-3) for the group. If the timbers date from much before this time one will have to postulate an area (behind them) open for a long time and full of half-rotted rubbish, which seems unlikely.

There is good documentary evidence for the site during the fourteenth century (see Mr. A. Dyson's report below, p. 143), and it is tempting to try and associate our timber structures with this. By far the most significant event in the mid-fourteenth century is the building of a fortification between the bridge and the tower at the start of the Hundred Years' War in 1339. On the Wool Quay site the lessee, William de Bricklesworth, complained that the landlord, Petronilla Turk, had refused to carry out the work of building these fortifications. The dispute was settled and the work was carried out by John de Tottenham at a cost of £10 and 6 shillings and 8 pence.¹⁸ It is just possible that the massive braced waterfront on the site was the base of such a fortification. The braced structure was certainly never intended to have ships lying alongside, and one must assume that the large ships anchored in the centre of the Thames. Their cargo would be taken off in smaller barges which then unloaded at the various watergates and jetties.¹⁹

(f) MEDIEVAL CUSTOM HOUSE FOUNDATIONS

Virtually all the later medieval layers on the site were destroyed by nineteenth and twentieth century rebuildings. Apart from the concrete foundations which go through everything down to natural clay (Fig. 2), the basements of all the warehouses have destroyed most of the upper levels down to +2 metres O.D. (i.e. 4 metres below the level of Lower Thames Street). When the excavations started in the two basements it was found that fourteenth century layers lay immediately below the basement floor. The only remains of later structures were some chalk and ragstone foundations in the central basement (Fig. 20 and Pl. 8) and chalk and brick cellars and foundations in the east basement which are described below (Fig. 23).

The chalk and ragstone foundations of the central basement (trenches III, V and VI) must be part of the medieval Custom House, though with only the foundations it is not easy to date them. It was also unfortunate that the few layers associated with these foundations produced few dateable objects (Group A). Apart from the foundations recorded in the excavations, a few additional observations were made in the north-western part of the site during piling operations (Fig. 3). The position of all these walls makes it quite clear that they can only belong to the Custom House. Wren's Custom House, which was built after the great fire of 1666, lay immediately in front (i.e. south) of the earlier Custom House and as can be seen from the plan (Fig. 3) this fits well with the remains found.

Of the actual walls excavated, little can be said; in trench VI the south-east corner of a building was found with a massive east wall going down to -0.3 metres O.D. (see sections a - a¹ Fig. 21, and b - b¹ Fig. 20). The south wall of this building was much less substantial and lay partly over an earlier scissor brace. The base of this wall was only at +1 metre O.D. but it was built on piles that were at least 1.5 metres long (Fig. 21). The position of these walls

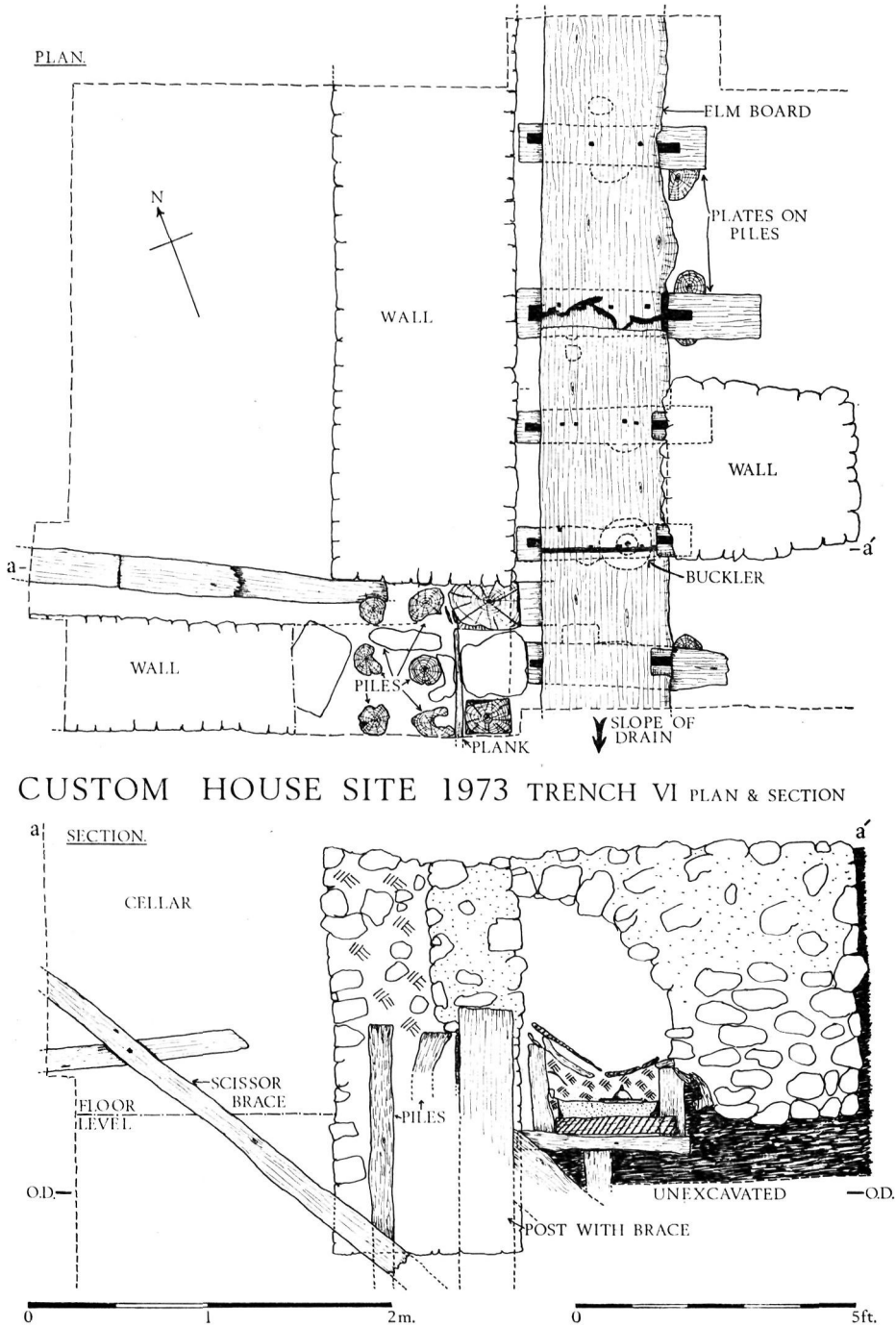


Fig. 21.—Custom House site; plan and section of Trench VI

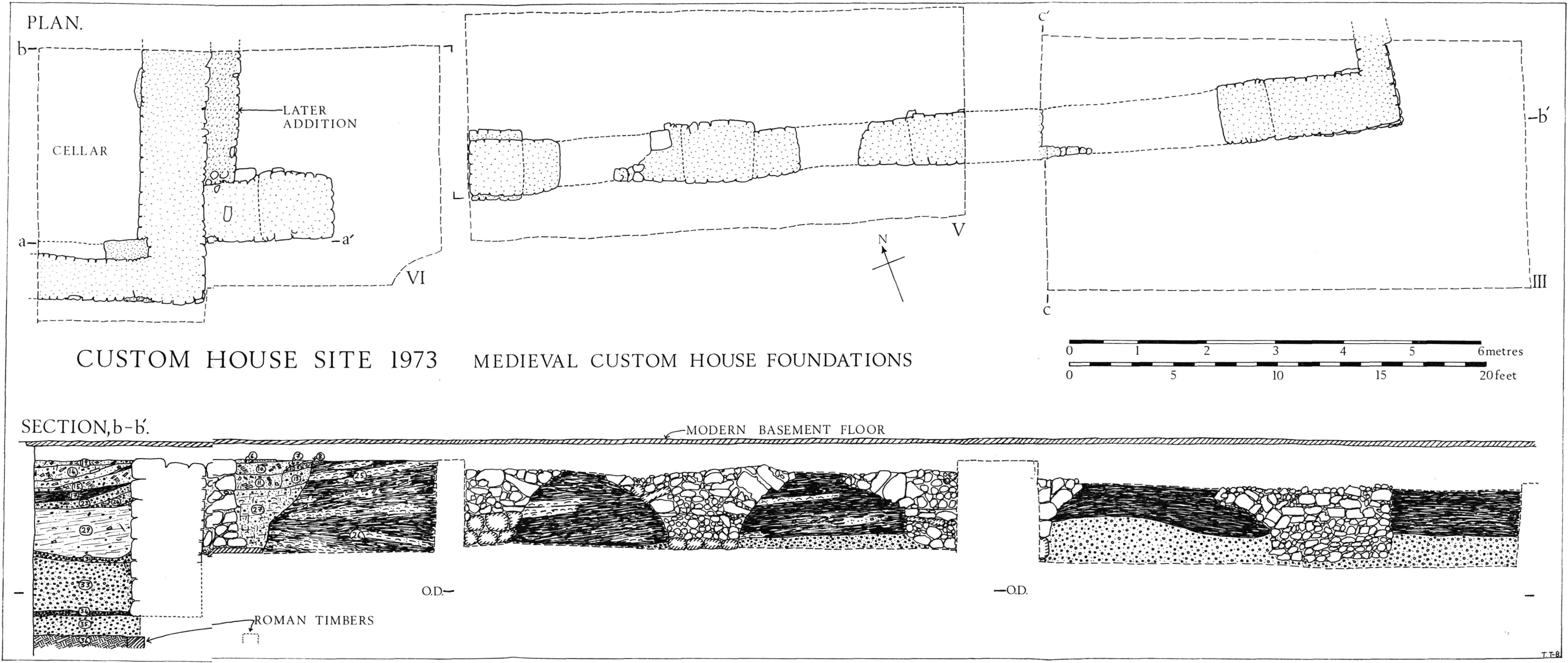


Fig. 20.—Custom House site; plan of Medieval Custom House foundation and section

in relation to the scissor braces of the jetty suggests that there may have been some connection between them. North-west of these two walls (i.e., within them) there appears to have been a cellar, though it must have been filled in soon after it was made. There is a very rough spread of chalk (VI-31) which is possibly the floor of the cellar.

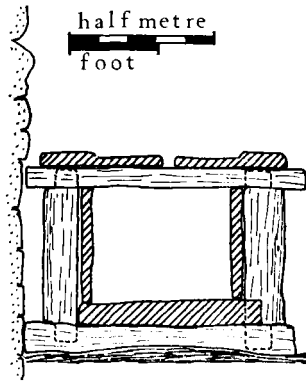


Fig. 22.—Custom House site; reconstructed section through Medieval drain

Outside the east wall of the building ran a very fine timber drain. This was constructed with a series of parallel ground plates on piles (like railway sleepers) above which was a series of elm boards carefully scarfed with diagonal bevels overlapping in the direction of flow. The boards were pegged down onto the plates (Fig. 21). At either end of the plates were two vertical posts; these were joined to the plates with a tenon-and-mortice joint that fitted almost perfectly. Across the top fitted another series of plates which supported the top of the drain, and inside were two vertical planks for sides (see Fig. 21 and reconstructed section, Fig. 22). The sides and top of the drain only survived in the southern part of the trench because in the northern part a later widening of the wall had destroyed it. This later wall used the elm board as a foundation (Fig. 20). Where the drain had survived intact the corrosive nature of the material flowing through it (presumably sewage) had almost completely worn away the side and top planks (see section a - a¹ Fig. 21). The fill of the drain consisted of c. 8 cm. of fine silt with above this and filling the rest of the inside a very sticky grey clay, in which were white limey streaks. Lying on top of the lower layer of fine silt was a buckler (see below, p. 201). The buckler had obviously been complete when thrown into the drain, and lay with its outside upwards; by good fortune it had come to rest in the drain at a point where neither the later Medieval nor the 20th century foundations had destroyed it. The drain itself sloped with a north-south gradient of roughly 1 in 14 going from +0.65 m. o.d. to +0.38 m. o.d. as it crossed trench VI.

At some time subsequent to the building of the drain an arched foundation for another building was added to the eastern side of the initial one. As can be seen from the elevation (Fig. 20 and Pl. 8) the arches were very roughly built in the ground with no uniformity about them. Apart from a few ragstones, which were used particularly for the bases of the rough piers, the whole of these foundations was of chalk and yellow mortar and they were clearly trench built. This contrasts strongly with the massive north-south wall described above which had ragstone on its east (outer) side and chalk on its inner side; on both sides the stone was coursed unlike the rough arched foundations. An as yet unexplained feature of this later foundation is that the final half arch at the western end (i.e., that going over the drain) is

offset from the rest of the foundations. There is also no arch between this offset pier and the neighbouring one on the east (see Figs. 20 and 21). The final addition to these foundations was the very solid north-south ragstone wall built on the elm board of the partially demolished drain which was mentioned above. No floors or walls above these foundations survive to tell us anything more about the building so one can only postulate for this part of the medieval Custom House a building *c.* 24 metres east-west by *c.* 10 metres north-south with an addition on the east 17 metres long by *c.* 9 metres wide. These are possibly the foundations of the famous Custom House of 1382 which John Churchman “newly built for the quiet of Merchants . . . to serve for the tronage of wools in the Port of London”. A further patent in the following year (1383) speaks of the granting of an extra sum “because he (John Churchman) has added a small chamber for a latrine and a sollar over the counting house 38 feet long by 21½ feet broad, containing two chambers and a garret, as a further easement for the customers, controllers and clerks”.²⁰ It is tempting to associate the main building on the west (Fig. 3) with the original hall of 1382 where the tron was kept and the extension with Churchman’s addition of the following year. The timber drain is clearly built to carry sewage into the Thames and would be ideal for Churchman’s latrine. It is an interesting thought that the most famous controller of Customs, Geoffrey Chaucer, may have used this latrine. However, they may only be the foundations of later 15th or 16th century buildings; but the depth of the foundations argues for an earlier rather than a later date.²¹ By the 16th century the area of the Woolwharf between Thames Street and the river seems to have been cluttered up with many buildings if we are to believe the maps of the time.²² The foundations of these later buildings may only have been of timber or, more likely, they were at a higher level and have therefore disappeared.

(g) POST-MEDIEVAL BUILDINGS

All the basements and buildings on the site in 1973 were of a 20th century date except for that in the north-east corner of the site. This building had a vaulted cellar three bays wide by seven bays long (Fig. 3). The foundations of this building were a series of reverse arches (Fig. 26) and it may date from the early eighteenth century, in which case it is Thomas Ripley’s 1722 extension to the Custom House, or more likely, from the early nineteenth century. This latter building would be a warehouse built after the Custom House site had been sold off in 1814.

The eight trenches (VIII–XV) excavated in the north-east part of the site were excavated in difficult conditions among these foundations, and the first thing to be encountered was a series of walls and small cellars of post-medieval date (Fig. 23). One of these cellars in the eastern part of trench XIII contained a group of pottery bellarmines, clay pipes, etc., which clearly dated from the second half of the seventeenth century and early eighteenth century (XIII-1). It is, therefore, almost certain that these walls belong to buildings constructed after the Great Fire on the property adjoining the Wren Custom House on the east. This property, called Hartshorn Quay at the time, was owned by Sevenoaks school.²³ On Ogilby’s map of 1677, three buildings are shown facing Thames Street with a small courtyard behind.

Apart from the walls noted above, a few other observations of post-medieval features were made, two of which are of importance. First several observations were made during piling of the front wall of the Wren-Ripley Custom House. Very little survived, but a series of brick arches was noticed and the foundations were also seen of part of the projecting east wing of the Custom House (Fig. 3). The position of the building fitted closely the position

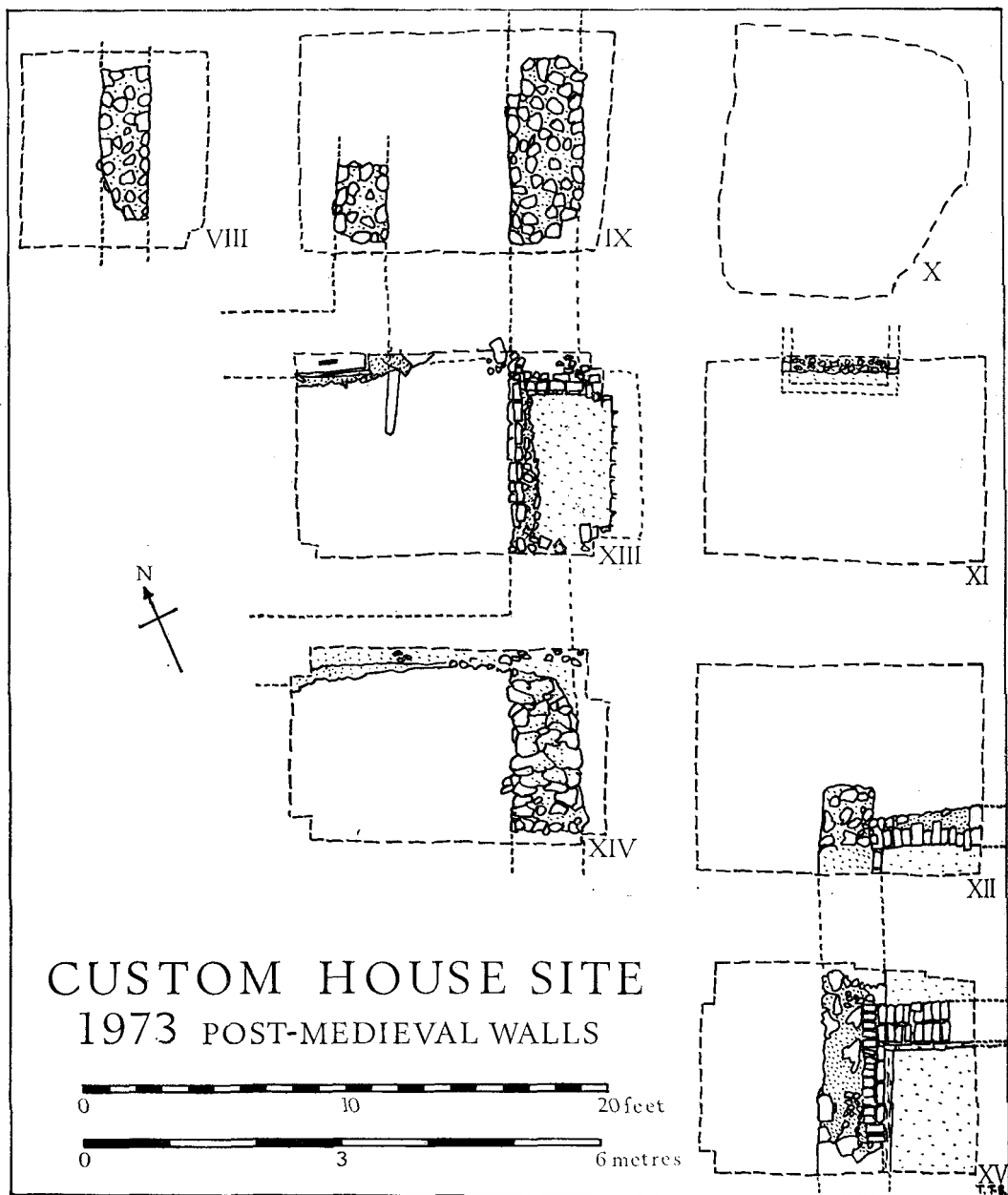


Fig. 23.—Custom House site; plan of post-Medieval walls in east basement

as known from early maps and plans.²⁴ It was not possible to locate the back wall of the Wren Custom House, though part of a brick foundation in the central basement (VII-11) may have been connected with it.

The second observation of importance is the lower part of the Wren-Ripley river wall which was observed during the demolition of the southern basement on the site (Fig. 2). Just in front of this wall (*i.e.*, in the Thames of the time) was found the Welsh hook (see small find report below, p. 195, No. 132).

NOTES

- ¹ See H. von Petrikovitz, "Die Ausgrabungen in der Colonia Traiana bei Xanten", *Bonner Jahrbücker* 152 (1952), 145-157 and Fig. 19.
- ² S. E. Rigold, "The Roman Haven of Dover", *Archaeol. J.*, CXXVI (1970), 91, Fig. 2.
- ³ F. Lambert, "Some recent excavations in London", *Archaeologia* LXXI (1921), 62-72. (For timbers east of Miles Lane) and Royal Commission on Historic Monuments, Vol. III, *Roman London* (1928), 132-34 (Timbers west of Miles Lane) and *J. Roman Stud.*, XIX (1929), 201 and Fig. 10 for a plan of all the timbers including those found in 1929 under Regis House by Dr. G. C. Dunning.
- ⁴ These were beams III, 4, 3, 2 and 1 respectively for the dendrochronology.
- ⁵ H. von Petrikovitz *op. cit.*, 146.
- ⁶ See P. R. V. Marsden, "A Ship of the Roman Period, from Blackfriars, in the City of London", Guildhall Museum (undated), 27, for a discussion of this type of ship.
- ⁷ R. Merrifield, "Coins from the Bed of the Walbrook and their Significance", *Antiq. J.*, XLII (1962), 48-52.
- ⁸ H. von Petrikovitz, *op. cit.*, Fig. 20.
- ⁹ H. von Petrikovitz, *op. cit.*, Figs. 4 and 13. It should also be said here that there is no conclusive evidence for a defensive wall on the south side of Londinium. I have put forward the arguments for a southern defensive wall in more detail in *The London Archaeologist* (1973), Vol. 2, Nos. 7 and 8.
- ¹⁰ This beam was beam H for the dendrochronology.
- ¹¹ William Fitzstephen, *Description of London* in John Stow, *The Survey of London*.
- ¹² The area under the baulk between trenches XII and XIV was only excavated on the last day of the excavations, and it was not possible at the time to plot on all the rivets on Fig. 13. All the boat timbers were, however, removed for a more detailed examination by Mr. Peter Marsden.
- ¹³ In fact, one of the sections slipped during the final stages of excavation.
- ¹⁴ See D. Martin, "Bodiam Castle Medieval Bridges", Hastings (1973).
- ¹⁵ A possible parallel for this is illustrated in a fine bird's-eye view of the area lying east of St. Katharine's Hospital, redrawn by Miss Honeybourne in London Topographical Society Publication No. 16 (1929).
- ¹⁶ Mr. C. A. Hewett suggested an earlier date for some of the joints but puts the scissor braces with tenon-and-mortices after c. 1300. I am extremely grateful to him for all his help and advice on the medieval timber joints, and for giving me the names of some of them.
- ¹⁷ Work is still in progress with the medieval samples and a matching is still possible in the future.
- ¹⁸ See *Calendar of Plea and Memorandum Rolls*, i, 177. This John de Tottenham was probably the same man as John de Tottenham I, who was City Carpenter from 1325 until 1347. Presumably, as City Carpenter, he was in charge of the work for all the fortifications built between the Tower and the Bridge in 1339. (For John de Tottenham I, see J. Harvey, "English Medieval Architects" (1954), 266. I am indebted to John Clark for this reference.)
- ¹⁹ See, for example, Braun and Hogenberg's map of 1572.
- ²⁰ *Cal. Patent Rolls* (1381-85), 149 and 299.
- ²¹ The bottom of the front wall of the Wren Custom House as observed was at +1.9 m. O.D.
- ²² *e.g.* Wyngaerde c. 1550, Aggas 1560, and Braun and Hogenberg 1572.
- ²³ See T. F. Reddaway "The London Custom House 1666-1740" in *London Topographical Record* xxi (1958), 1-25, for all the documentary aspects of this period.
- ²⁴ *e.g.* the plan drawn in T. F. Reddaway, *op. cit.*, 18. Fig. 5,

EARLY DEVELOPMENT OF THE CUSTOMS, AND THE TOPOGRAPHY AND DESCENT OF WOOL QUAY

BY TONY DYSON, *Department of Urban Archaeology, Guildhall Museum*

The first permanent and systematic exactions of royal customs in England were established in 1275 with the introduction of a New Custom, later known as the ancient or great custom levied upon wool, woolfells and hides. From the date of the earliest extant customs account of 1294-7 it is clear that a house was rented for these purposes—for the annual sum of 60s., at first, and for varying amounts intermittently thereafter—but no identification or location

of its site is given.¹ In fact, it is not until 1376, with the record of complaints by London merchants over certain charges imposed on wool and woollens at the *Wolkey*,² and 1377 when Richard II appointed Richard Baret as keeper of the great customs' house on *Wollekeye*,³ that an identification of the Custom house site with Wool Quay, where it remained until 1814, can definitely be made.

An attempt has been made to show that the customs administration, both great and petty had been based on the Wool Quay as early as 1318 and, in all probability, from the inception of the great custom in 1275.⁴ But while the evidence produced by Miss Mills in support of these claims is less than conclusive, it certainly shows—as might indeed be inferred from its name, which first appears in 1295—that the quay had been closely involved with the wool trade, and with customs, for three or four decades before Baret's appointment. In 1335 a plea of trespass for attaching 20 sarplers of wool on the site refers to the sale of this commodity in the house of Thomas Perle on Wool Wharf.⁵ Six years later Perle was appointed controller of customs.⁶ Between 1339 and 1341 three inquests relating to the non-payment of customs on wool were either held there or were attended elsewhere by juries of porters from the wharf.⁷ Wool "arrested" for similar reasons was stored at a house on the site at the king's expense.⁸ But it is with the description,⁹ in 1344, of John Vincent who died in, or shortly before, 1341,¹⁰ as weigher of wool at Woolwharf that we have the strongest indication, prior to the evidence of 1376–7, of customs activities here. Earlier than this, or earlier than 1339, there is little certainty. Miss Mill's contention that no other location in London can boast a comparable body of references to the wool trade, albeit negative, retains a degree of validity. Yet evidence from the early Mayor's Court rolls of 1305, a source not readily available in print when she wrote, shows Richer de Refham—who had been appointed collector of the new and old customs the previous year—"visiting" the quay, then known as "Baudri's wharf" in order to pass the merchants there.¹¹ The necessity to visit might suggest that wherever the site of the tron, the large wooden structure used for weighing and the indispensable hallmark of the great customs, may have been in 1305, it was not at Wool Quay. At the same time this evidence would suggest that, at least in the case of the new or petty customs (due on all goods except wool and wine) which were Refham's concern on this occasion, the early collectors were peripatetic, moving about their business from wharf to wharf. It is clear that other commodities than wool were handled at Wool Quay,¹² and before 1386, when a royal patent ordered that the petty customs be collected there,¹³ there is evidence that these had also been levied at Wool Quay¹⁴ in the years immediately before the temporary separation of the accommodation of the two customs in 1365–6.¹⁵

The earliest reference to Wool Quay, as *Wolhous*, appears in Adam Blakene's will of 1295 where the property is described as a hall (*aula*) with chambers, a house, and gardens in Sporienslane in the parish of All Hallows Barking.¹⁶ Sporienslane, later known as Water Lane, formed the western boundary of this parish, and *Wolhous* can therefore be located opposite Wool Quay on the north side of Thames Street. The property, which Adam bequeathed to his daughter Katharine, was one of three in the immediate area which he had purchased from John de la Tour whose own will, dated 1285, shows him to have been a considerable landowner in the area.¹⁷ Stonewharf, the quay immediately to the east of Wool Quay and the earliest Custom House site, was bequeathed to John's son Robert at the same time and was subsequently purchased by John of Canterbury, whose will of 1304 left it to his daughter Cecile.¹⁸ It may also be remarked that there is a tendency towards the same owner holding properties which faced each other across Thames Street.¹⁹

By some unrecorded transaction Katharine Blakene's property at Wool House came into the possession of Hugh Baudri, a fishmonger, who in 1305 entered a plea of trespass in the Mayor's court against Richer de Refham, a neighbour and a customs official.²⁰ Five years later the City sheriff's took the tenement into the City's hands and certified its value at 64s. p.a. By now Hugh had died, and a jury testified that Peter le Blount, who subsequently married Hugh's widow Agnes, occupied his house and affirmed that the deceased had held shops at the corner of Sporienslane, and that Roger de Romeseye presently held a wharf and cellars in the neighbourhood.²¹ In 1323 John Baudri, as the heir of Hugh and Agnes, demised to Godwyn and Petronilla Turk for life the whole tenement with a vacant plot of land, shops and a quay lying between the Canterbury tenement to the east and Spurienslane to the west, and between the tenement of Richer le Refham to the north and Thames Street to the south.²² The following year John quitclaimed all rights in the property to the Turks.²³

The Turk family held Wool Quay for at least 30 years. Appended to Godwyn's will of 1333 is Petronilla's claim to the property which had not been mentioned in that document.²⁴ By 1338 Petronilla had leased the quay to William de Bricklesworth for a period of four years. In considering measures for the defence of the City it was agreed by the Mayor's court on 9th October that all persons holding quays on the Thames between the Tower and the bridge should construct brattices of boards to this end. Bricklesworth, who was placed in charge of a contingent of men from Bassishaw and Coleman Street wards to provide day and night watches in the section of the waterfront from Stone Wharf to the bridge, complained that his landlord, Petronilla Turk, had refused to erect her defences. In the event William undertook the work, which cost £10. 6s. 8d. and was authorised to retain the quay beyond the term of his lease in order to recover his expenses.²⁵ But by 1344, according to a survey of Thames-side amenities and common ways, Petronilla's son Andrew occupied the quay, to the east of the improved Watergate.²⁶ Petronilla's will, drawn up on 20th April, 1349, left all her tenements with houses on Thames Street near the Woolwharf to her two sons Richard and Robert.²⁷

From this date until 1378 there is a break in the records—and in the tenure. In this year Gilbert de Meldeborne and William Rykyll granted to John and Emma Churchman the quay called Wool Wharf with houses, cellars and solars situated between the Salisbury's quay of Stonewharf to the east and Watergate to the west.²⁸ The grantors mention that they had only recently acquired the property, but there is no indication here or elsewhere in the Hustings rolls of how they had acquired it. Probably directly from the Turk family: two years later Thomas, the son of Richard Turk, quitclaimed to Churchman all rights in the property,²⁹ as at the same time did John, son of John Baudri.³⁰

NOTES

¹ P.R.O., Enrolled Customs Accounts, E.356, 1m. 25; 2m. 1v, cited in Mabel H. Mills, "The London Customs House during the middle ages" in *Archaeologia* LXXXVIII (1933), 309.

² *Rotuli Parliamentorum*, ii (Records Commission) London, 351.

³ *Cal. Patent Rolls* (1377-81), 36; *Cal. Close Rolls* (1377-81), 29.

⁴ M. H. Mills, *art. cit.* Cf. unpublished paper by Mr. A. J. Card on "Pre-Elizabethan Custom Houses in London" (1967).

⁵ Corporation of London, *Cal. Letter Book E*, 262.

⁶ *Cal. Patent Rolls* (1340-43), 83.

⁷ P.R.O., E.143, 11/1, No. 31 *Cal. Miscellaneous Inquisitions* (1307-49), No. 1762.

⁸ *Cal. Close Rolls* (1341-43), 64.

⁹ *Cal. Letter Book F*, 112.

¹⁰ *Cal. Patent Rolls* (1340-43), 83.

¹¹ *Cal. Early Mayor's Court Rolls* (1298-1307), 184. In 1323 Refham owned property on the east side of Sporienslane (Water Lane) immediately north of Wool House—Corporation of London Records Office, Hustings Roll 54 (115).

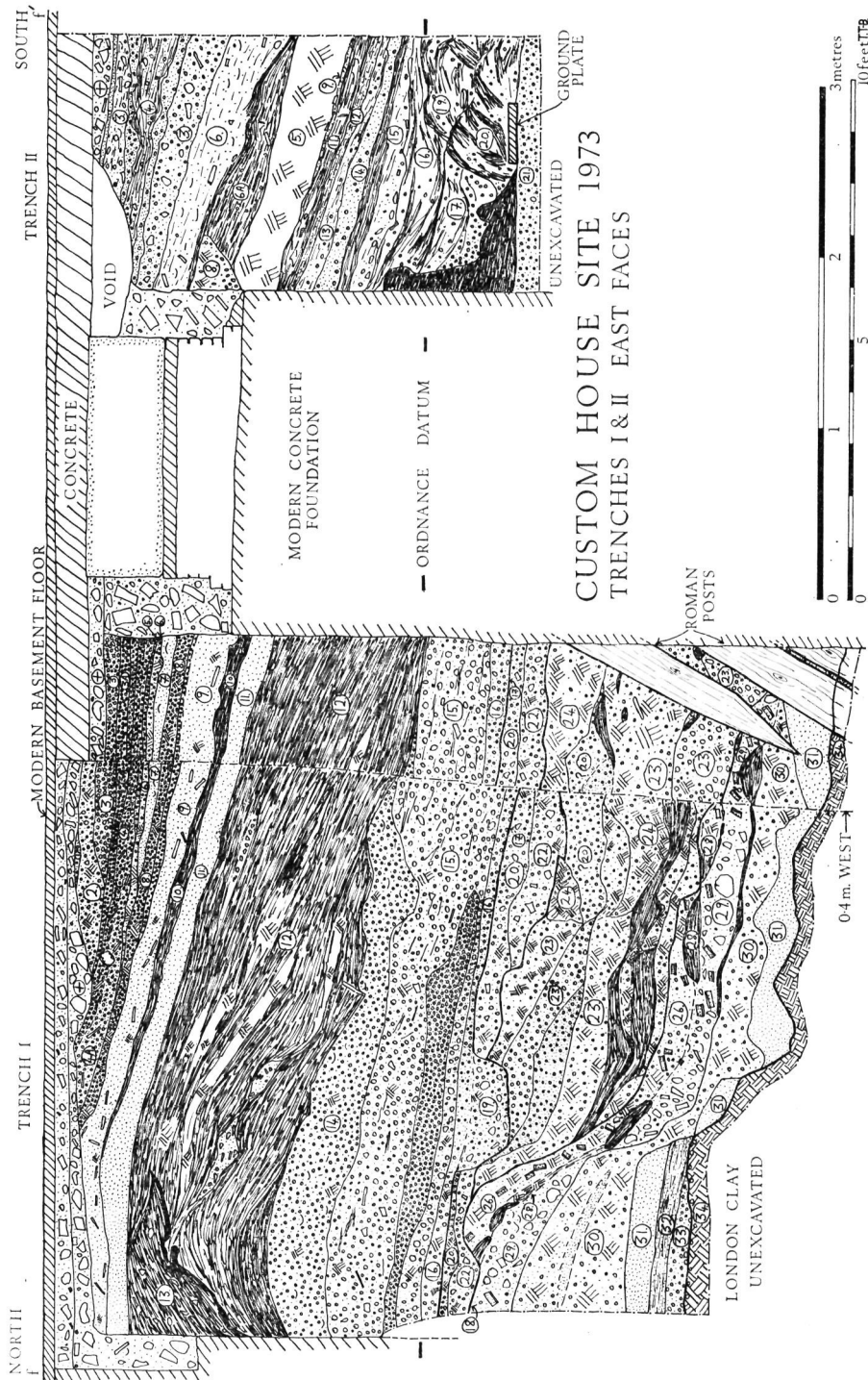


Fig. 24.—Custom House site; section of Trenches I and II, f—f¹

¹² Riley, *Memorials of London*, 254.

¹³ *Cal. Patent Rolls (1385-89)*, 204.

¹⁴ *Cal. Close Rolls (1360-64)*, 26, dated 1st May, 1360.

¹⁵ P.R.O., E.159, 142.

¹⁶ *Hustings Roll 24 (100)*.

¹⁷ *Ibid.*, 15 (48).

¹⁸ *Ibid.*, 32 (40).

¹⁹ *Cf. Ibid.* The Stonewharf and associated property east of Berewards Lane; and also the will of William de Bodele (dated 1332); *Ibid.*, 59 (145) whose property, divided and described in two parts, lay west of Sporiarslane and of its southern extension of Watergate. These tenements are described in the will as "apud le Wollewharf" in the parish of St. Dunstan. This appears to have led Leftwich, in his article on the Custom House in *Survey of London*, Vol. 15 (All Hallows Barking, part II), 1934, 31 *et seq.*, to confuse Bodele's property with the Woolwharf itself.

²⁰ See Note 11 above.

²¹ *Cal. Letter Book D*, 239.

²² *Hustings Roll 54 (115)*.

²³ *Ibid.*, 54 (116).

²⁴ *Ibid.*, 61 (83).

²⁵ *Cal. Plea and Memoranda Rolls*, i.177.

²⁶ *Munimenta Gildhallae Londoniensis: Liber Custumarum*, Pt. 2, 446.

²⁷ *Hustings Roll 78 (97)*.

²⁸ *Ibid.*, 106 (150).

²⁹ *Ibid.*, 108 (14).

³⁰ *Ibid.*, 108 (24). For the subsequent history of the Wool Quay Custom House, see Leftwich, *op. cit.* 31 *et seq.*

STRATIFICATION

TRENCH I (see Fig. 24, Section f—f¹)

Layers 1 – 8. Compacted gravel with some occupation in between (Group A3) — c. fourteenth century.

Layers 9–11. Clean orange sand with a thin layer of peat (10) in between. Layer (9) also contains a thick band of slate.

Layers 12–13. Very thick peat layer containing much organic material as well as much pottery, leather, and small finds. The layers also contain some clay lenses. —? Late thirteenth–mid-fourteenth century (Group C2).

Layers 14–17. Gravel with some streaks of peat. More Roman material towards the bottom. Later thirteenth–fourteenth century (Group D).

Layers 19 and 25. Fill of gully and post holes. Gravel with some large areas of tree bark — late thirteenth century.

Layers 20–22. Black sandy gravel with clay and much ragstone and Roman brick. Most of the pottery is late Roman but very well rounded, and these layers represent the erosion surfaces between the late Roman and the thirteenth century.

Layers 23–24. Mixed clay and gravel layers. These layers contain a mixture of late second-century pottery and a coin of Antoninus Pius (A.D. 151–2) and late third century pottery. They were presumably disturbed in the late Roman period when the main timber beams were robbed out.

Layers 26–29. Mortar, painted wallplaster, building rubble, clay and some peat. They represent the rubble from a building presumably further north. Most of the pottery is late second century, though some is a little later. The horizontal timbers were in these layers.

Layers 30–32. Layers of dark and light fine sand with some clay and gravel. The Roman pottery is a mixture of later second century types with some residual Flavian to early second century wares.

Layer 33. Thin layer of gravel and sand lying on the London clay at 1.5 metres O.D. Contains mainly late first–early second century pottery.

Layer 34. Natural London clay. This appears to have been cut away in the southern part of the trench, presumably when the Roman timber waterfront was built.

TRENCH II (see Fig. 24, Section f—f¹)

Layer 1. Posthole fill in the southern part of the trench.

Layers 2–20. Tips of sand, rubble, clay, gravel and peat disturbed during the robbing out of the medieval timbers (Groups A3 and B).

Layer 22. Thick peat layer (equivalent to Trench I, Layer 12) (Group C2).

Layer 21. Sand and gravel below medieval timber ground plate (equivalent to Trench I, Layer 15) (Group D).

CUSTOM HOUSE SITE 1973 TRENCH III WEST FACE
SOUTH NORTH

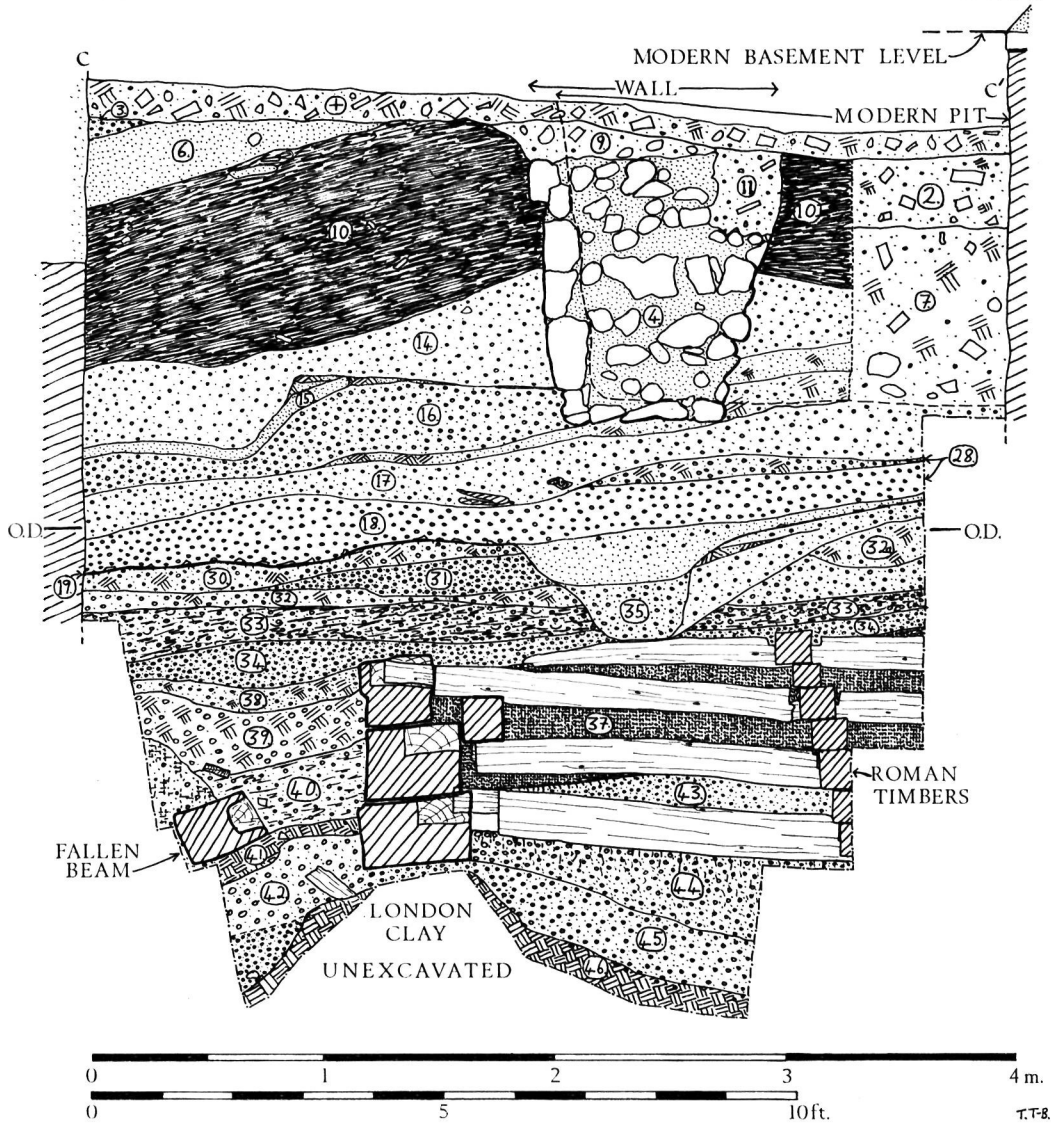


Fig. 25.—Custom House site; section of Trench III, c—c¹

TRENCH III (see Fig. 25. Section c—c¹)

Layers 2 and 7. Modern, rectangular pit filled with brick rubble, clay, etc.

Layer 3. Compacted gravel (equivalent to Trench I, Layers 1–8) (Group A3).

Layer 4. Chalk, ragstone and mortar wall foundation.

Layers 5, 9, 11 and 12. Wall construction trench fill (Group A2).

Layer 6. Clean yellow sand (probably water-lain) sloping south-eastwards (equivalent to Trench I, Layers 9 and 11).

Layers 8 and 13. Very thin occupation layer north of wall foundation.

Layer 10. Thick peat layer containing much organic material as well as leather, pottery, bones, and many small finds. Late thirteenth–mid-fourteenth century (Group C2).

Layers 14–19 and 28 and 36. Gravel with some clay and sand lenses. Also some peat. Late thirteenth–fourteenth century (Group D).

Layers 20 and 35. Fill of gully and postholes containing gravel with some wood chips and tree bark—? late thirteenth century.

Layers 21, 23, 25 and 30–34. Gravel with much rolled Roman material (equivalent to Layers 20–22 in Trench I). These are the foreshore gravels between the late fourth and thirteenth centuries.

Layers 24, 26 and 48. Mixed clay and gravel layers (equivalent to Trench I, Layers 23–24) overlying the robbed out Roman timbers. Mixed second–fourth century Roman pottery with even possibly some fifth century pottery.

Layers 27 and 29. Mortar, painted wallplaster, building rubble, clay and gravel (equivalent to Trench I, Layers 26–29). In this layer were the horizontal timber beams. There is some fourth century pottery as well as the late second century wares.

Layers 37 and 49. Grey-brown fine silt filling Roman timber boxes. This material was very uniform and darkened within a few seconds of being exposed to the air. In the very top part of the layer was a small quantity of fourth century pottery.

Layers 38–41. Grey-black sandy gravels with some clay and a very large quantity of molluscs in Layer 38. Layer 42. Sand and gravel above natural London clay in front of the Roman timber quay. Late second–early third century pottery.

Layer 43. Light sandy gravel below the box timber quay. Late first to later second century pottery. This layer definitely predates the Roman timber quay. At the bottom of the layer were small rootlets going down into Layer 44.

Layer 44. Light sandy gravel with some organic. Second century pottery.

Layers 45 and 47. Clean sandy gravel and London clay. No pottery.

Layer 46. Natural London clay—cut away north and south of the main Roman quay wall.

Layers 22, 50 and 51. Roman rubble, peat and sandy gravel north of the Roman quay (equivalent to Trench I, Layers 30–32).

TRENCH IV (see Fig. 17. Section c—c¹).

Layers 1 and 4. Modern clay and rubble foundation. The pit, however, produced a Cambridgeshire farthing of 1795.

Layers 2, 3, 5–8, 11–13, 30, 34–36 and 40. Gravel, sand, mortar, clay, etc. Trodden? Quay surfaces after the area in front of the medieval timbers had been filled in (Group A3).

Layers 9, 10, 14–22, 25–28. Tips of rubble, peat, etc., in the whole of the eastern part of the trench where the medieval upright timbers had been robbed out (equivalent to Trench II, Layers 2–20) (Group B. However, the majority of the material is redeposited from Group C1).

Layers 37–39, 41–47 and 50–60. Peat, clay, gravel, etc., mixed tip layers filling in the area south of and covering the medieval timbers (Group C1).

Layer 23. Clean yellow sand (equivalent to Trench I, Layer 11).

Layers 24 and 48. Very thick peat layer containing much organic material. The peat is water-laid and lies behind the planks (equivalent to Trench I, Layer 12 and Trench III, Layer 10). Late thirteenth century–mid-fourteenth century (Group C2).

Layers 37–39, 41–47 and 50–60. Peat, clay, gravel, etc., mixed tip layers filling in the area south of and covering the medieval timbers (Group C1).

TRENCH V (Fig. 20. Section b—b¹).

- Layers 1 and 4. Mortar, gravel, etc., with some occupation—perhaps a quay surface (Group A3).
 Layers 2 and 3. Chalk and mortar wall foundation with foundation trench (Group A2).
 Layers 5–7. Yellow sand layers (equivalent to Trench I, Layer 11, etc.).
 Layers 8–15. Thick peat and organic layers with much pottery, leather, tile, etc. (equivalent to Trench I, Layer 12, Trench III, Layer 10, and Trench IV, Layers 23 and 48). Late thirteenth–fourteenth century (Group C2).
 Layers 16 and 17. Mixed gravels (equivalent to Trench III, Layers 14–26). Late Roman–fourteenth century.
 Layer 18. Blue clay around Roman timber beams (equivalent to Trench III, Layer 37). Late Roman.

TRENCH VI (Fig. 20. Section b—b¹ and Fig. 21, Section a—a¹).

- Layers 6, 8, 10–13 and 27. Fill of foundation trench for addition to Custom House wall after the drain had been destroyed.
 Layer 9. Foundation trench for arched foundation.
 Layers 14, 15, 17, 23, 24, 29, 30 and 32. Fill of Custom House cellar (Group A4).
 Layer 31. Chalk rubble—? cellar floor.
 Layers 25 and 26. Thick peat and organic layers with thick lenses of shell, much pottery, leather (equivalent to Trench I, Layer 12, etc.). Late thirteenth–mid-fourteenth century (Group C2).
 Layer 28. Fill of timber drain construction trench (Group A1/A2).
 Layers 33–35. Mixed gravels. Late Roman–fourteenth century (Group D).
 Layer 38. Light brown clay—construction trench for south wall of Custom House (Group A1).
 Layer 40. Sticky wet blue clay above grey silty sand in the bottom few centimetres of the drain. The medieval buckler occurred between the two layers (see Section a—a¹). The clay also contained lime and a few bones, potsherds, etc.

TRENCH VII (Fig. 15. Section d—d¹).

- Layers 1–9. Sand, gravel, brick, chalk, slate, etc. (?hardcore for quay surfaces) (Group A3).
 Layer 10. Thick peat and organic material surrounding scissor braces.
 Layer 11. The fill of a post-medieval brick cellar, probably part of the Wren Custom House, c. late seventeenth century.

TRENCH VIII.

- Layer 1. Thick blue clay and horizontal timbers, c. eighteenth or nineteenth century.
 Layers 2–3. Clay and pebbly river gravel south of Roman posts (early waterfront).

TRENCH IX.

- Layer 1. Thick blue clay and horizontal timbers, c. eighteenth or nineteenth century.
 Layers 2–3. Clay, peat and pebbly river gravel south of Roman posts. Mainly early second century pottery, but with a few later sherds (early Roman waterfront—equivalent to Trench VIII, Layers 2–3).
 Layers 4–5. Clay, chalk lumps, etc., packed behind early Roman waterfront.

TRENCH X (Fig. 26).

- Layer 1. Thick blue clay and horizontal timbers, c. eighteenth or nineteenth century (equivalent to Trench VIII, Layer 1, and Trench IX, Layer 1).
 Layers 3–5. Chalk spread, clay, etc., packed behind early Roman waterfront. Late first–early second century pottery with a few late second century sherds in Layer 3 (equivalent to Trench IX, Layers 4–5).
 Layers 2 and 7. Gravel and clay overlying early waterfront and south of it—second century pottery.
 Layer 6. Gravel and clay above Roman timber beams and packed behind the early waterfront—late first–early second century pottery.

TRENCH XI (Fig. 26).

- Layer 3. Brick feature filled with rubble in north part of trench—c. eighteenth century.
 Layers 1, 2 and 4. Peat, sand and gravel (Group C2). Late thirteenth century–early fourteenth century.
 Layer 5. Pebbly gravel with organic material (Group D).
 Layer 6. Grey sand and gravel—mainly later Roman material.
 Layers 7–9. Sandy gravel, peat and clay—associated with timber posts, etc.—early second century with a few third–fourth century sherds mixed in the top.

TRENCH XII (Fig. 26).

Layers 1 and 6. Fill of brick cellar and wall foundations, c. seventeenth–early eighteenth century.

Layer 2. Compacted gravel layers (Group A3).

Layers 3–5. Gravel and peat layers around medieval timbers (Group C2).

Layer 7. Fine sandy gravel in front of medieval timbers and overlying plates and piles.

Layers 8–10. Very fine black sandy gravel—erosion surface with rolled pottery late Roman–thirteenth century (Group D).

Layers 11 and 14. Fill of post holes and gulley. Late thirteenth–fourteenth century.

Layers 12 and 16. Sandy clay and gravel in front of the Roman posts and planks—mainly second century pottery.

Layers 13 and 15. Brown peaty clay and gravel behind the Roman posts and planks.

TRENCH XIII.

Layer 1. Brick-lined rectangular pit or cellar in the eastern part of the trench. Contained later seventeenth–early eighteenth century pottery.

Layers 3–6. Peat, sand and gravel with much organic material (Groups C and D; late thirteenth–fourteenth century pottery).

Layers 7–10. Brown, peaty clay and gravel layers with some stone and mortar packed around horizontal Roman timbers—first quarter of second century—much Samian.

TRENCH XIV.

Layers 1 and 2. Mortar and compacted gravel (Group A3).

Layers 3–5. Peat, organic material and gravel with much pottery, leather, etc. (Group C2).

Layers 6, 7 and 11. Grey sandy gravel layers and post holes fill (Group D).

Layers 8–10. Black sandy gravel containing mainly worn Roman pottery.

TRENCH XV (Fig. 26).

Layers 1–6. Compacted gravel, mortar, etc. (Group A3).

Layers 7–22 and 25. Peaty organic material with gravel, etc. Much pottery and leather. Tips of material within the main layers (Group C2).

Layer 23. Sandy gravel south of the medieval timbers (Group C).

Layer 24. Rubbly fill of the lowest part of the late seventeenth–eighteenth-century cellar in the eastern part of the trench.

THE FINDS

For brevity, 1–22 in the individual reports equals Trench I, Layer 22 (see STRATIFICATION above) and the object number in brackets, e.g. (884), refers to a card index held with the excavation records in the Museum of London.

THE SAMIAN WARE (FIG. 27)

BY JOANNA BIRD

The information on potters' stamps has kindly been provided by Mr. B. R. Hartley

I 22 *Potter's Stamp*

1. Illegible on form 15/17 or 18. South Gaul, Neronian–early Flavian. (884). (Not illustrated).

I 23 *Potter's Stamps*

2. (D)RIPPINI on form 38. Die la, Drippinus of Lezoux. Antonine. (164).

3. ()M on form 38; burnt. Illegible; probably Central Gaulish. (885).

I 29 *Decorated*

4. Form 78, South Gaul. There is no exact parallel in O. for the lion; the grass and wavy lines are characteristically Flavian, c. A.D. 75–95.

- I 31 *Decorated*
5. Form 37 in the style attributed to Ioenalis of Les Martres de Veyre. He frequently used the beaded circle in place of an ovolo (S. & S. pl. 41, 475); for a similar vinescroll, cf. S. & S. pl. 41, 483. Perhaps slightly burnt, c. A.D. 100-125.
 6. Form 37, Martres ware. The ovolo is broken but may be the smaller one used by Druses I (X-3) and Igocatus (X-4): (S. & S. pl. 13, 155; 17, 218). c. A.D. 100-125. (Not illustrated).
 7. Form 37, Martres ware, c. A.D. 100-125. (Not illustrated).
- I 32 *Potter's Stamp*
8. ()IIAM on form 27. Probably an illiterate stamp; South Gaul. Flavian. (526).
Decorated
 9. Form 37. The ovolo is broken but is probably that used by Igocatus (X-4) of Martres (S. & S. pl. 17, 208.) c. A.D. 100-125. (Not illustrated).
- II 15 *Potter's Stamp*
10. (SE)VERIM on form 33. Die 3c, Severus IV of Lezoux, c. A.D. 160-195. (284).
- III 18 *Potter's Stamp*
11. NO(TTOC) on form 15/17 or 18. Die 5a, Cotto of La Graufesenque. Flavian. (827).
- III 22 *Decorated*
12. Form 37, South Gaul. Trident ovolo, tendrils in frieze, c. A.D. 80-100.
- III 23 *Decorated*
13. Form 37 in the style attributed to Donnaucus of Martres, who used the circle as ovolo (S. & S. pl. 44, 510), the pointed leaf (pl. 45, 518), and the feathery leaf (pl. 49, 588). There is no apparent parallel for the motif beneath the circles in the work of Donnaucus or that of his close associate Ioenalis, c. A.D. 100-125. (Not illustrated).
- III 39 *Potter's Stamp*
14. GALBINV (SF) on form 27. Die 3a, Galbinus of La Graufesenque, c. A.D. 70-90 (461).
- III 42
15. Form 37 in the style of the Sacer-Attianus group at Lezoux. The figures are too broken to identify, but are probably a panther/lion and a bear, c. A.D. 125-150.
 16. Form 37. East Gaul. The triple-banded ovolo is characteristic of Lavoye, and for others without a tongue, cf. Oswald 1945, fig. 6, xxvii and xlix. Antonine.
 17. Form 30, burnt, in the style of Cinnamus of Lezoux. The athlete (O.204), fine beads, astragalus and wreath medallion, are all on a bowl from Verulamiam (Hartley 1972, D 115), and this bowl may be from the same mould, c. A.D. 150-175.
- III 43 *Potters' Stamps*
18. IIVST on form 29, impressed into the mould. Die 15a, Iustus I of La Graufesenque, c. A.D. 70-85. (886).
 19. ()ISF on form 27. Illegible. South Gaul. (522). (Not illustrated).
Decorated
 20. Form 29 in the style of Passenus of La Graufesenque. The two sizes of leaf were used in a similar scroll on a bowl from Vechten (Knorr 1919, 6H), and the small circles and a similar wreath on bowls from London (Knorr 1952, 49E and F), c. A.D. 55-70.
 21. Form 29 stamped in the mould by Iustus of La Graufesenque (see above). Scroll with large serrated leaves, c. A.D. 70-85.
 22. Form 37, South Gaul. Neat leaf at base, c. A.D. 70-90.
 23. Form 37, South Gaul. Panel design with Victory (O.814), dog (no exact parallel in O), and arrowheads, c. A.D. 75-95.
- III 44 *Decorated*
24. Form 30. South Gaul. Saltire of wavy lines with tendrils, c. A.D. 70-95.
- III 48 *Decorated*
25. Form 37, Central Gaul. The ovolo is probably Cinnamus 3, which he shared with several other potters. A graffito (. . .]I LIIR[. . .) has been scratched on above the ovolo after firing. (Perhaps Celer), c. A.D. 140-170. (Not illustrated).
- IV 53 *Potter's Stamp*
26. BASSI on form 27g. Die 14f, Bassus of La Graufesenque, c. A.D. 45-60. (228).
- IV 60 *Potter's Stamp*
27. Illegible on form 27, probably. South Gaulish, Neronian-early Flavian. (882). (Not illustrated).

CUSTOM HOUSE SITE 1973

EAST BASEMENT, WEST FACES OF TRENCHES X-XII & XV

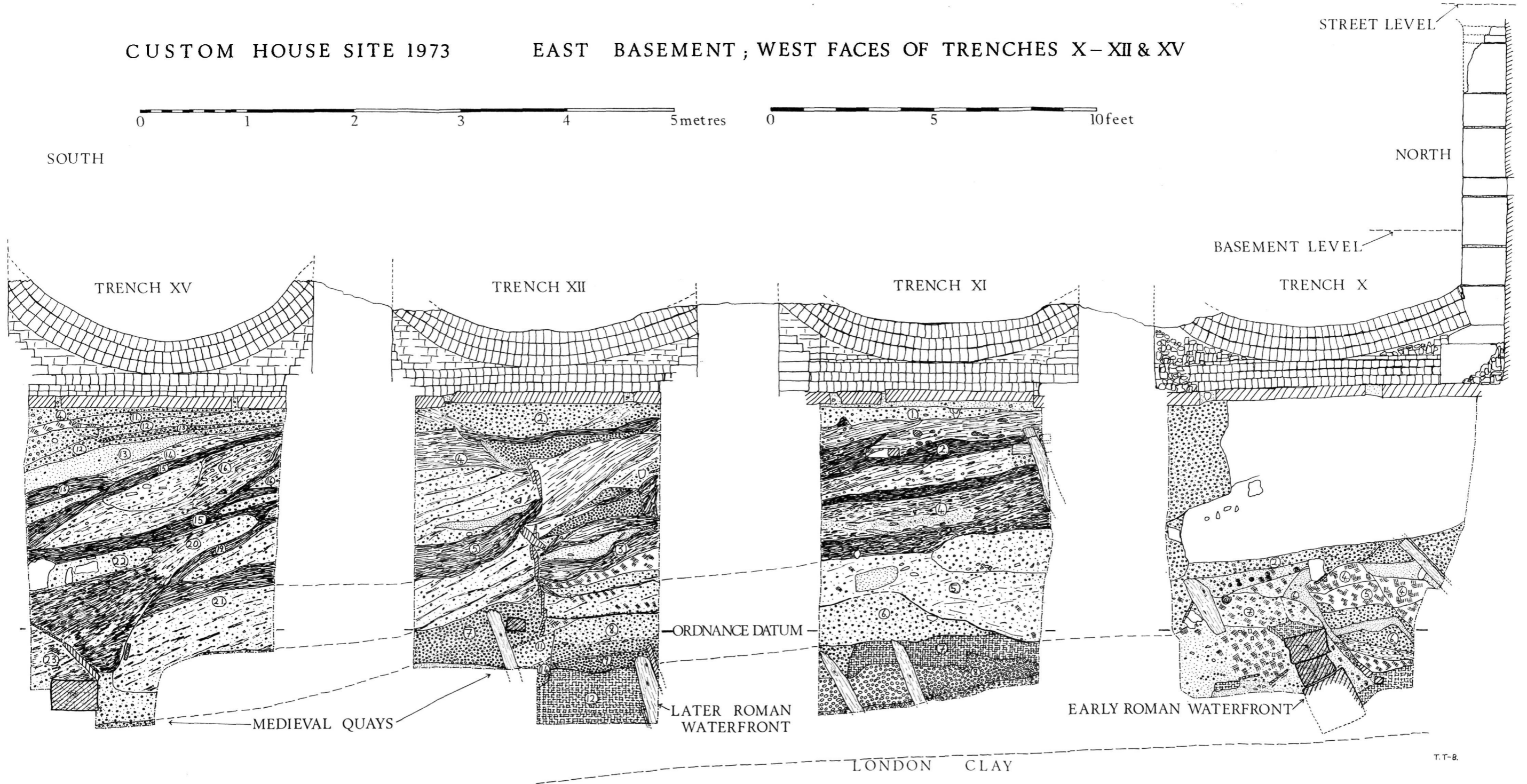


Fig. 26.—Custom House site; Section across Trenches X-XII and XV in the east basement

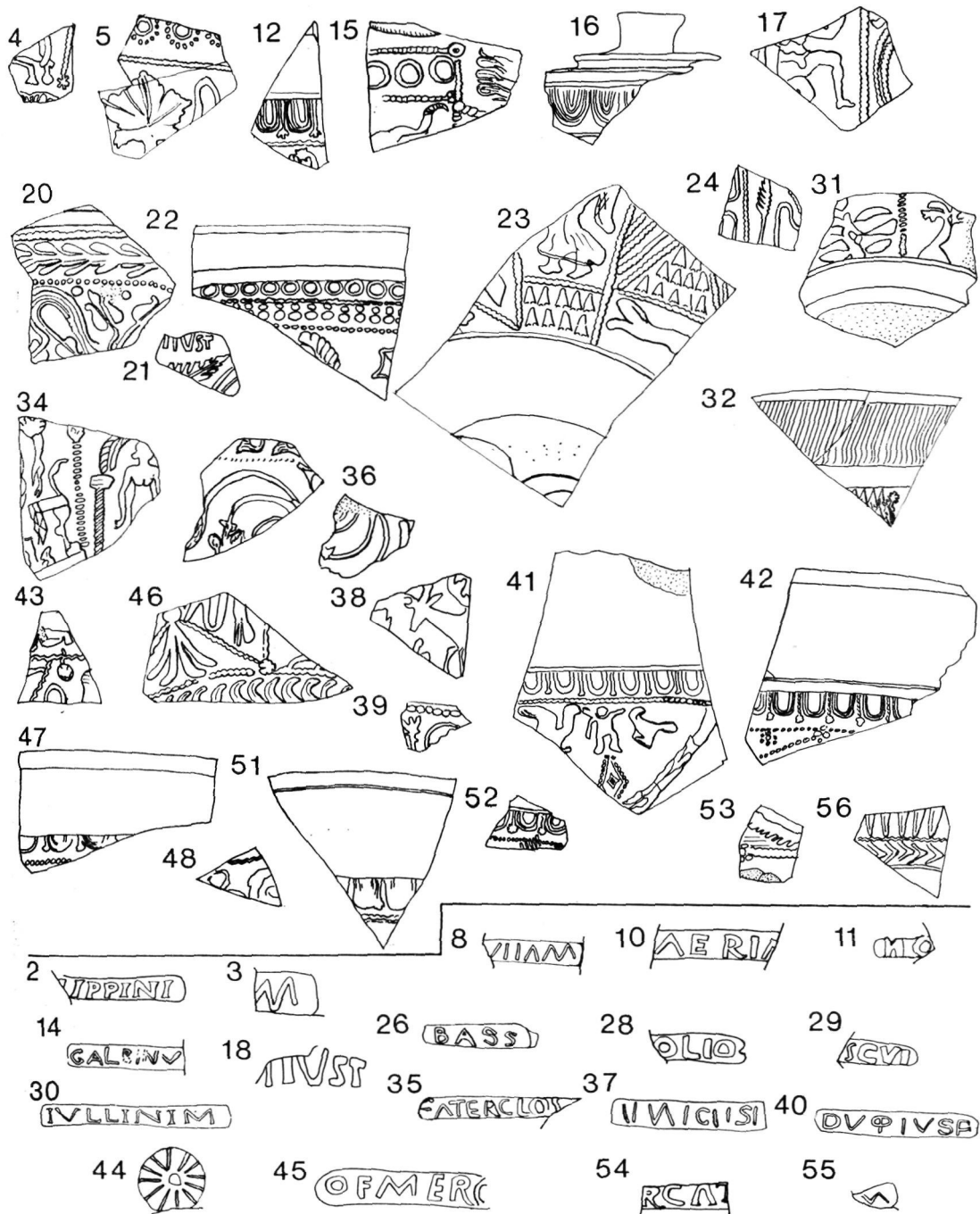


Fig. 27.—Custom House site; decorated samian ($\frac{1}{2}$) and stamps (1/1)

- VII + *Potter's Stamp*
28. (OFFP) ÓLIO on form 18. Die 2a', Pollio I of La Graufesenque. This broken version of die 2a was in use c. A.D. 75-95. (527).
- IX 2 *Potter's Stamp*
29. (OFMA) SCVI on form 15/17 or 18. Die 3b, Mascuus of South Gaul, c. A.D. 90-110. (856).
- X 2 *Potter's Stamp*
30. IVLLINIM on form 38. Die 3a, Iullinus II of Lezoux—this die was also used on decorated vessels, c. A.D. 160-190. (699).
- X 3 *Decorated*
31. Form 37, burnt, in the style of Cinnamus of Lezoux, who regularly used the cross motif (S. & S. pl. 160, 41). There is no apparent parallel for the tree, c. A.D. 150-180.
- X 6 *Decorated*
32. Form 29, South Gaul. Arrowheads in a panel, c. A.D. 60-75.
33. Form 29, South Gaul. Gadroons, c. A.D. 60-80. (Not illustrated).
34. Form 37 in the style attributed to Donnaucus of Les Martres de Veyre. He used the Abundantia (probably O.805, illustrated incomplete), the woman with scarf, and the arcade and corded column (S. & S. pl. 47, 549; 48, 576; and 49, 580), c. A.D. 100-125.
- X 6 & 7 *Potter's Stamp*
35. =ATERCLO (SFE) on form 33. Die 10a' or 10a'', Paterclus II of Les Martres de Veyre—both broken versions of die 10a, c. A.D. 110-130. (722).
- X 7 *Decorated*
36. Form 37 in the style of Drusus I (X-3) of Martres. For the anchor used as ovolo, and the same leaves and scroll, S. & S. pl. 15, 193, c. 100-125. (2 sherds illustrated).
- XI 2 *Potter's Stamp*
37. IINICIISF on form 33. Die 1a, Unicus of Lezoux. Mid-late Antonine. (998).
- XI 7 *Decorated*
38. Form 37 in the style of Cinnamus of Lezoux, who used the stag (O.1781) on S. & S. pl. 163, 66. For similar foliage, cf. S. & S. pl. 163, 66 and 70-71, c. A.D. 150-180.
39. Form 29, South Gaul. Scroll with small palmette, c. A.D. 55-75.
- XII 7 *Potter's Stamp*
40. DVPPIVSF on form 33. Die 1d, Duppius of Lezoux, c. A.D. 145-170. (721).
- XII 16 *Decorated*
41. Form 37 in the style of Docilis of Lezoux. The wreath and lozenge are used in the same arrangement on S. & S. pl. 92, 12, with similar birds; the cupid (O.408) has lost an arm on this piece. Hartley 1972, D 116 is attributed to Docilis, and probably has the same ovolo, though this one is too abraded to be certain; c. A.D. 130-155.
- XIII 8 *Decorated*
42. Form 37, in the style of Drusus I (X-3) of Les Martres de Veyre, with his ovolo, beadrow, and rosette (S. & S. pl. 13, 167). For a similar arrangement of beadrow, cf. Tétrisse 1968, pl. III; c. A.D. 100-125.
43. Form 37, Martres ware. The ovolo has been too damaged in the finishing to suggest attribution; the "Potter of the Rosette" tended to untidily over-running of wavy lines (S. & S. pl. 23, 286), and used a similar terminal rosette (pl. 21, 261), c. 100-125.
- XIII 9 *Potter's Stamp*
44. Rosette on form 46. Probably Central Gaul, and early second century. (841).
45. OFMERC on form 33. Die 1a, Mercato (r) I of La Graufesenque. This die was also used on decorated bowls; c. A.D. 90-110. (842).
- Decorated*
46. Form 37, South Gaul. A bowl from Verulamium (Hartley 1972, D 79) has all the motifs except the grass, and is attributed to M. Crestio, or possibly Memor; c. A.D. 75-95.
47. Form 37, South Gaul. Coarse fabric and badly modelled trident ovolo and border, c. A.D. 90-110.
48. Form 37, style of Igocatus (X-4) of Martres; badly burnt. His characteristic wavy line, with the crown, as S. & S. pl. 19, 241; c. A.D. 100-125.
49. Form 37. The tier of cups supporting an arcade was used by Igocatus (X-4) of Martres (S. & S. pl. 19, 241), c. A.D. 100-125. (Not illustrated).

50. Form 37, Martres. Fine beads with the backlegs of an animal, probably a deer, c. A.D. 100-125. (Not illustrated).
51. Form 37, Martres. The ovolo is smudged, but is probably one used with similar beads by Drusus I (X-3) on S. & S. pl. 13, 155-6, c. A.D. 100-125.
52. Form 37 with the small ovolo used by Iocnalis and Donnaucus of Martres—illustrated with a similar corded motif on S. & S. pl. 44, 513, c. A.D. 100-125.
53. Form 37, Central Gaul. The base is marked by a line of beads with a beaded rosette (cf. Dannel 1971, No. 95); above is a thick corded medallion. Probably Hadrianic or Antonine.
- XIV 7 *Potter's Stamp*
54. (ME)RCA(TOR) on form 31, probably. Die 5a or 5a', Mercator IV of Lezoux. This die was also used on decorated dowls; c. A.D. 160-190. (840).
- XIV 9 *Potter's Stamp*
55. (IVLLI)N on form 15/17 or 18. Die 7a, Iullinus I of La Graufesenque, c. A.D. 75-100. (881).
- XIV 10 *Decorated*
56. Form 37, South Gaul. Lance-gadroons and chevron wreath—cf. Atkinson 1914, Nos. 37 and 38, both by the "Potter of the Large Rosette", c. A.D. 70-85.

The plain Samian is not published here but is listed and lodged with the detailed records of the excavation.

ABBREVIATIONS:

- O: F. Oswald, *Index of Figure-types on Terra Sigillata* (Liverpool, 1936).
 S. & S.: J. A. Stanfield and G. Simpson, *Central Gaulish Potters* (Oxford, 1958).

OTHER REFERENCES:

- ATKINSON 1914: D. Atkinson, "A Hoard of Samian Ware from Pompeii" in *J. Roman Stud.* iv.
 DANNELL 1971: G. B. Dannel, "The Samian Pottery" in B. W. Cunliffe, *Excavations at Fishbourne II* (London).
 HARTLEY, 1972: B. R. Hartley, "The Samian Ware" in S. S. Frere, *Verulamium Excavations I* (London).
 KNORR, 1919: K. Knorr, *Töpfer und fabriken verzierter Terra-sigillata des Ersten Jahrhunderts* (Stuttgart).
 KNORR, 1952: R. Knorr, *Terra-sigillata-gefäße des ersten Jahrhunderts mit Töpfernamen*.
 OSWALD, 1945: F. Oswald, "Decorated Ware from Lavoye" in *J. Roman Stud.*, xxxv.
 TÉRRISSE, 1968: J.-R. Terrisse, *Les Céramiques Gallo-romaines des Martres de Veyre* (Gallia Supplement XIX).

ROMAN COARSE POTTERY (FIGS. 28-33)

BY WENDY McISAAC

Complete records of all the pottery are lodged with the finds themselves. In this report all the rims and important sherds from stratified Roman layers are published. The pottery on the whole was extremely fragmentary and only the better pieces are drawn.

Apart from a small group of pottery from the late first and early second century, the majority of Roman pottery is of a later second century or fourth century date.

Mr. Michael Fulford comments: "It seems to me that the assemblage may reflect the function of the wharf—the unloading and loading of ships. Without some statistics I may be wrong, but I was struck by the small number of 'cooking jars, flange bowls and dishes' which are common on an occupation site, and also by the variety of fabric and form of the pots represented. Many seem to be foreign to London; more may prove to be the case (accurate identification of the ?BB2). This variety and quantity of odd imports, making a very strange occupational assemblage, would fit very nicely for pots lost from either ships or the wharf."

We are extremely grateful to Mr. Fulford for his help and comments on the various wares and fabrics. Also Harvey Sheldon provided many helpful comments.

In the following report, the word "dish" has generally been used to indicate an absence of rim, rather than a shallow bowl. Also, the description "coarse sandy" indicates that a fair number of individual sand grains can be seen.

TRENCH I

(Fig. 28, 21-160)

LAYERS 20 AND 21 (Fourth century)

Fine Ware

1. Beaker. Soft micaceous red fabric, matt brown coat.
2. Wide rimmed bowl with hook formed by upturned outer edge. Hard micaceous red fabric, grey core, darker red coat. Oxfordshire.
3. Part of flanged bowl. Red micaceous fabric, darker red coat, slightly burnt. Oxfordshire.
4. Bowl. Worn sherd. Red micaceous fabric, darker red coat, roller-stamped decoration. Argonne ware. See Hübener (1968) perhaps groups 3-6.

Jars

5. Undercut rim. Hard sandy micaceous grey fabric.
6. Rim with groove or lid seat. Very worn. Coarse sandy buff fabric, traces of cream slip.

Bowls

7. Triangular rim profile. Coarse sandy micaceous grey fabric, burnished with lattice decoration. BB2 type. (Second-third century survival.) Similar to No. 141 below, but larger and heavier.
8. Bowl with short rounded flange. Very worn. Sandy micaceous light grey fabric, burnished. (Mid-third century plus.)
9. Bowl with raised bead and hooked flange, reminiscent of a mortaria. Sandy micaceous pink-buff fabric.
10. Bowl with raised bead and hooked flange, similar to mortaria types. Sandy micaceous orange-buff fabric, cream surfaces.

LAYER 22 (Fourth century)

Fine Ware

11. Beaker. Hard red fabric with dark brown coat.
12. Beaker. Worn. Light red fabric, traces of brown coat.
13. Cornice-rimmed beaker. Worn. Fine pasty light red fabric, brown coat.
14. Beaker. Fine micaceous red fabric, traces of brown coat, rouletted decoration. Burnt.
15. Beaker. Fine red fabric, lustrous brown coat.
16. Beaker sherd. Fine red fabric, lustrous dark brown coat, white paint decoration. Possibly a German import.
17. Bowl with flange. Fine white fabric, brown coat.
18. Bowl or dish. Fine micaceous red fabric, interior red coat, traces of brown coat on exterior.
19. Bowl. Imitation of Dr. 38. Sandy micaceous grey fabric, reddish exterior. Badly burnt. Similar to Gillam (1970) type 206, and to No. 61 below. (Late fourth century).
20. Bowl. Sandy micaceous red fabric, darker red coat.
21. Bowl. Hard fine micaceous red fabric, darker red coat with rouletted decoration. Oxfordshire. Similar to Frere (1972) No. 1200, but with a larger band of rouletting. (Late fourth century). (Illustrated).
22. Bowl sherd. Fine micaceous red fabric. Rosette stamp, similar to sherd No. 317 below.
23. Mortarium. Hard micaceous red fabric with grey core, dark brown coat, pink and white grits.

Jars

24. Squared, everted rim. Hard gritty micaceous grey-buff fabric.
25. Squared, everted rim. Hard gritty cream fabric. Form of rim similar to late Roman calcite-gritted types. Diameter 20 cm. Similar to Frere (1972) No. 1283. (Late fourth-fifth century).
26. Very small hooked rim. Coarse sandy micaceous grey fabric, burnished. (second-century survival).

Bowls

27. Rounded rim profile. Sandy micaceous grey fabric, burnished. BB2 type. Burnt. Similar to Gillam (1970) type 225. (Third century). Also see No. 267 below, but the latter is not as heavy.



Plate A.—The pottery kiln from the south-east (*Photo: S. A. Castle*)



Plate B.—Sesterterius of Vespasian. A.D. 71, x 2 linear (Photo: R. A. Gardner)

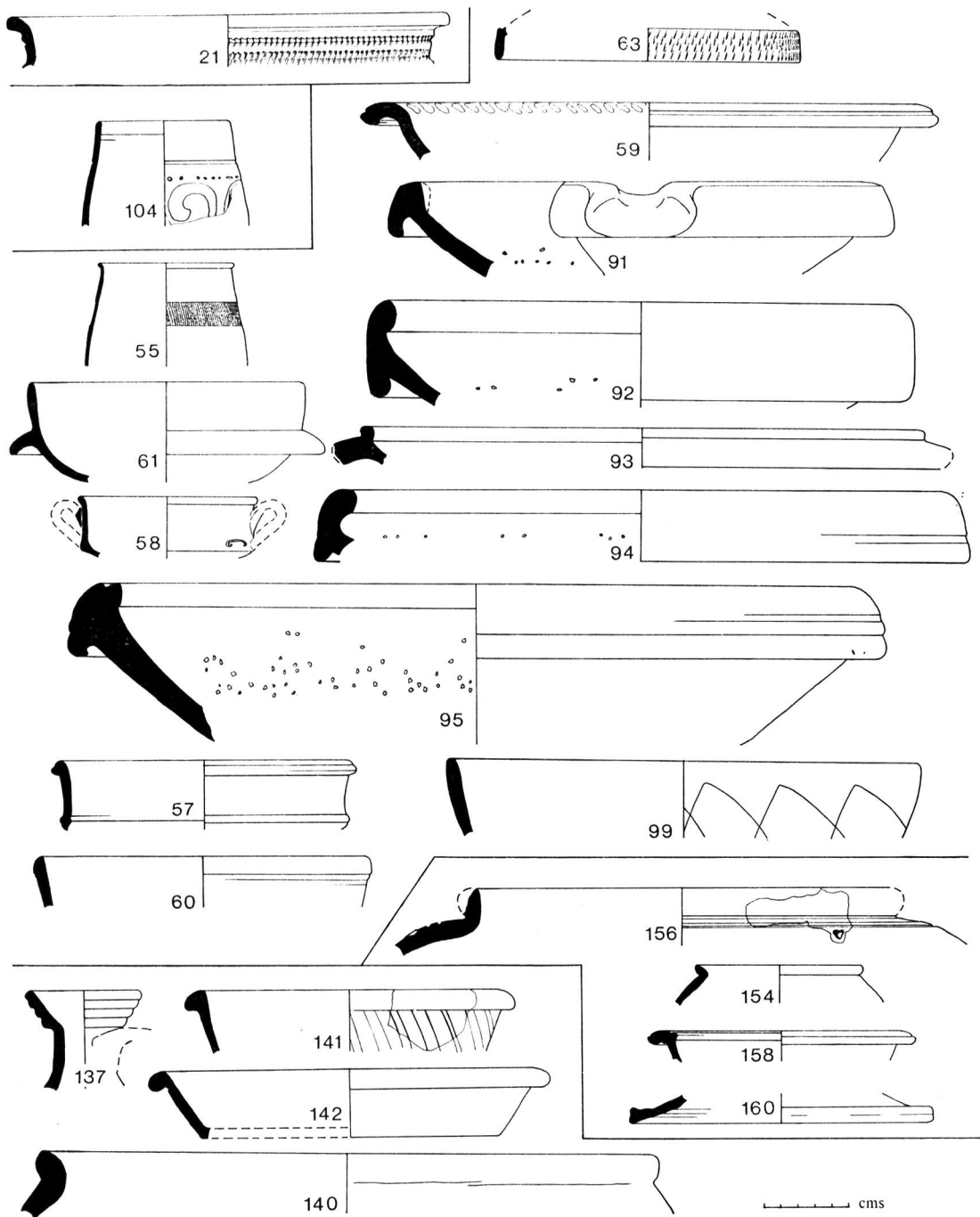


Fig. 28.—Custom House site; Roman pottery 21-160 ($\frac{1}{4}$)

28. Bowls (two rims) with slightly curved flanges. Coarse sandy micaceous grey fabric. Similar to Sheldon (1971) Fig. 7, No. 26 (fourth century) and to No. 328 below but thinner.
29. Bowl with short rounded flange. Very worn. Grey micaceous fabric, darker surfaces, burnished. Similar to No. 257 below.
30. Bowl with short rounded flange. Worn. Fabric as above, burnished.
31. Bowl with short rounded flange slightly undercut. Worn. Fabric as above, burnished. Similar to No. 237 below.
32. Bowl with small curved flange. Worn. Fabric as above, burnished.
33. Bowl with slightly upturned flange. Coarse sandy micaceous grey fabric, burnished.
34. Bowl with straight flange angled slightly downward. Fabric as above. Burnt.
35. Bowl with "parrot-beaked" flange. Hard sandy light grey fabric, burnished.
36. Bowl with curved flange. Coarse sandy black fabric, burnished. Burnt.
37. Small shallow bowl with small hooked flange. Fabric as above but micaceous. Burnished with intersecting arc decoration. BB1. Similar to Gillam (1970) type 227. (Third century).
38. Bowl with flange angled slightly downward. Sandy micaceous light grey fabric, black surfaces, burnished. Diameter 15 cm. Similar to Frere (1972) No. 1102 (late third century). Also see No. 327 below, but No. 38 is more square.
39. Imitation Dr. 38. Sandy micaceous grey fabric. Burnt. See Gillam (1970) types 205 or 206. (Late fourth century).
40. Tazza. Sandy red fabric with grey core.

Mortaria

41. Raised undercut bead and hooked flanged. Fine buff fabric, slipped, grits primarily brown and pink.
42. Wall-sided with a beaded lip. Gritty cream-buff fabric. Similar to Gillam (1970) type 272. A smaller version of No. 92 below.
43. Two hooked flanges. Coarse sandy fabric, one orange fabric with orange slip, the other buff.
44. Fragment of mortarium. Hard sandy buff-grey fabric.

Dishes

45. Two rims. Sandy micaceous grey fabric, burnished.
46. Sandy micaceous grey fabric slightly raised bands near rim probably once had some burnishing. See Frere (1972) No. 1267. (Late fourth-fifth century).

Lids

47. Sandy red fabric. Burnt.
48. Gritty grey fabric.
49. Gritty buff fabric.

LAYER 23 (Late third-fourth century)

Fine Ware

50. Beakers. Four sherds of rough-cast ware.
51. Beaker. Base and half of the body. Fine white fabric, matt dark brown coat. ?Nene Valley.
52. Beaker. Rim and sherd. Fine white fabric, matt dark brown coat, barbotine decoration under coat. Nene valley.
53. Beaker sherd. Fine white fabric, brown coat, white paint decoration. ?Nene Valley
54. Beaker. Two sherds. Fine white fabric, dark brown coat, rouletted decoration. ?Nene Valley.
55. Beaker. Fine red fabric, lustrous dark brown coat, rouletted decoration. Probably from Lezoux. (Illustrated).
56. Beaker sherd. Fine red fabric, lustrous metallic brown coat, scroll barbotine decoration. Lezoux.
57. Bowl. Fine white fabric, red paint on rim. Parchment ware. (Illustrated).
58. Two-handled cup. Fine red fabric, lustrous dark brown coat, barbotine scroll decoration. Lezoux. Cf. Wheeler (1930) pp. 144-45, Fig. 54, No. 7. (Illustrated).
59. Wide-rimmed bowl. Hard micaceous red fabric, darker red coat, white paint strokes on rim. (Illustrated).
60. Imitation Dr. 37. Hard micaceous orange-red fabric with shiny orange slip. Argonne ware. (Illustrated).
61. Bowl with flange. Hard sandy micaceous grey fabric, silky black surfaces, burnished. Sometimes known as London ware. (Illustrated).
62. Sherd. Fabric as above. Rouletted decoration.
63. "Castor-box" lid. Sandy white fabric, tan coat, rouletted decoration. ?Nene Valley. (Illustrated).

Amphora

64. Fairly small light rim with rounded profile. Fine micaceous buff fabric. See Hawkes and Hull (1947) No. 183.

Jars

65. Out-turned small oval profiled rim. Sandy micaceous buff fabric, grogged. Heavily mica coated. Rim similar in form to Frere (1972) Nos. 469 or 470. (Early second century).
66. Everted rim. Sandy micaceous grey fabric with brown core, darkened surfaces, burnished. (Late second–fourth century).
67. Everted rim. Sandy micaceous grey fabric with light grey core, darker surfaces, burnished. (Late second–fourth century).
68. Everted rim. Sandy micaceous grey fabric with dark grey core and surfaces, burnished.
69. Everted rim. Sandy micaceous light grey fabric, darker surfaces, burnished.
70. Everted rim. Sandy micaceous brown fabric with grey core and surfaces, burnished.
71. Large very everted rim. Coarse sandy micaceous grey fabric with light grey core, darker surfaces, burnished.
72. Poppy-head beaker. Sandy micaceous grey fabric with light grey core, metallic grey surface, burnished.
73. Poppy-head beaker. Sandy micaceous grey fabric, darker surfaces, burnished.
74. Necked jar. Sandy micaceous light grey fabric, darker slightly metallic surfaces, burnished with diagonal stroke decoration on shoulder. See Chapman (1973) No. 227. (Late first–early second century).
75. Necked jar. Sandy micaceous grey fabric, darker surfaces. Burnt deposit on exterior. Rim form similar to Frere (1972) No. 829. (Mid-second century).
76. Undercut bead rim. Sandy micaceous grey fabric, burnished. Similar to Cunliffe (1971) type 169.
77. Neckless jar with oval rim profile. Coarse sandy buff fabric. Similar in form but not as heavy as example in Sheldon (1971) Fig. 9, No. 3. See also No. 215 below, of which this is a smaller version.
78. Small storage jar. Sandy micaceous brown-grey fabric, darker grey surfaces.
79. Storage jar. Grey-brown micaceous fabric, shell tempered, dark grey surfaces, decorated. Similar to Chapman (1973) Nos. 194 and 195. Also similar in form to No. 165 below, but with different decoration.
80. Pedestal urn. Base. Fine sandy micaceous buff fabric, rouletted decoration. See Hull (1963) pp. 128–29. (Late second century).

Bowls

81. Reeded rim. Coarse sandy micaceous brown fabric, slipped white on upper rim surface. (Earlier second century).
82. Reeded rim. Sandy micaceous light grey fabric, darker surfaces, burnished. Diameter 21 cm. (Earlier second century).
83. Plain rim. Sandy micaceous grey fabric, darker grey surfaces, burnished.
84. Six rims with rounded or almost circular profiles. Sandy micaceous grey fabric, burnished. BB2 types. (Mid-second–mid-third century).
85. Two small shallow bowls with rounded rim profiles. Fabric as above, burnished. BB2 types.
86. Small shallow bowl with rounded rim profile, rim undercut. Fabric as above, burnished. BB2 type.
87. Small shallow bowl with very rounded rim profile. Fabric as above, burnished. BB2 type.
88. Small shallow bowl with rounded, almost square rim profile. Fabric as above, burnished. BB2 type.
89. Bowl with squarish rounded rim profile. Fabric as above, burnished with vertical or diagonal stroke decoration. BB2 type.
90. Bowl with rounded rim profile. Fabric as above, burnished with vertical or diagonal stroke decoration.

Mortaria

91. Pasty cream fabric containing some coarser sand, grogged, grits mainly white. (Illustrated).
92. Wall-sided with beaded lip. Coarse sandy micaceous white fabric, larger inclusions, grogged. See Gillam (1970) type 272. (Third–fourth century). (Illustrated).
93. Raised bead and drooping flange. Sandy white-cream fabric, coarser inclusions. (Illustrated).
94. Wall-sided with beaded lip. Coarse sandy micaceous cream fabric. See Gillam (1970) type 272. (Third–fourth century). (Illustrated).
95. Wall-sided. Pasty cream fabric with some coarse sand, white and grey grits. Similar to Frere (1972) No. 1095. (Third century). (Illustrated).

Dishes

96. Sandy white fabric, heavily mica coated.
 97. Five rims. Sandy micaceous grey fabric, black surfaces, burnished. Similar to Gillam (1970) type 330. (Fourth century).
 98. Coarse sandy dark grey fabric, black surfaces, burnished with intersecting arc decoration. BB1 type. Cf. Gillam (1970) type 329. (Third–fourth century). (Illustrated).
 99. Sandy micaceous grey-brown fabric, dark grey surface, burnished. (Illustrated).
 100. Fine sandy micaceous orange fabric.
 101. Sandy micaceous buff-brown fabric. Form similar to Frere (1972) No. 946. (Mid-second century).

Lids

102. Sandy micaceous grey fabric.
 103. Sandy micaceous buff fabric.

LAYER 24 (Late third-fourth century)

Several sherds from this layer were burnt; many were worn.

Fine Ware

104. Beaker. Sandy white fabric, brown coat, trailed white paint decoration ?Nene Valley. (Illustrated).
 105. Beaker. Sandy white micaceous fabric, light brown coat.
 106. Beaker. Fine white fabric, dark brown coat.
 107. Beaker. Fine red fabric, dark brown coat.
 108. Beaker. Hard fine red fabric, lustrous dark brown coat. Rhenish ware or perhaps Lezoux.
 109. Beaker. Two sherds. Fine white fabric, brown metallic coat with barbotine decoration under coat. ?Nene Valley.
 110. Bowl. Hard micaceous grey fabric, black coat, white paint decoration.
 111. Bowl. Worn. Red micaceous fabric, darker red coat, rouletted decoration. Oxfordshire.
 112. Mortarium. Very worn. Red micaceous fabric, traces of darker red coat. Oxfordshire.

Jars

113. Out-turned rim. Sandy micaceous grey fabric, burnished.
 114. Everted rim. Sandy micaceous grey fabric, surfaces slightly metallic in places, burnished.
 115. Small everted rim. Coarse sandy grey fabric, burnished with lattice decoration. ?BB1. Similar to Gillam (1970) type 123. (Second century).
 116. Small horizontal rim. Hard gritty micaceous grey fabric, grey surfaces.
 117. Everted rim. Gritty light grey fabric, bluish slip. Probably a local fabric.
 118. ?Poppy-head beaker. Hard sandy micaceous grey fabric, darker surfaces, burnished.
 119. Necked jar with heavy rounded rim. Hard sandy micaceous brown fabric, grey core and surfaces.
 120. Squared undercut rim. Hard gritty light grey fabric, buff surfaces. For similar rims see Sheldon (1971) Fig. 8, Nos. 29 and 31. (Fourth century).
 121. Rounded rim with lid seat. Heavily gritted micaceous pink fabric, yellow-bluish grey surfaces. Mayen ware import (fourth century). See Stamm (1962), No. 80.
 122. Sherd. Gritty white fabric, blue exterior surface. Mayen ware.

Bowls

123. Reeded rim. Worn. Hard coarse sandy grey-brown fabric, grogged. Similar to Frere (1972) Nos. 933, 934. (Mid-second century). Also see No. 184 below.
 124. Grooved rim. Hard coarse sandy micaceous brown fabric, dark grey surfaces, burnished.
 125. Grooved rim. Sandy micaceous grey fabric, darker surfaces, burnished. (Early second century).
 126. Bowl with flange. Worn. Sandy micaceous red fabric with grey core, grogged, red surfaces, burnished. Burnt.
 127. Bowl with flange. Coarse sandy micaceous red fabric with grey core, red surfaces, burnished. Burnt.
 128. Bowl with short rounded undercut flange. Worn. Sandy micaceous grey fabric, burnished. Similar to Frere (1972) No. 1256. (Later fourth–fifth century).
 129. Bowl with very small rounded flange. Hard coarse sandy micaceous red fabric, grey surfaces, burnished. Burnt.
 130. Bowl with small rounded flange. Fabric as above, burnished, burnt. Similar to No. 238 below.
 131. Bowl with very small flange. Sandy micaceous grey fabric, some coarser inclusions, darker surfaces, burnished. ?Burnt.

Dishes

132. Sandy micaceous grey fabric, darker surfaces, burnished.
 133. Coarse sandy brown fabric, grey surfaces, burnished.
 134. Hard sandy micaceous red fabric with grey core, red-brown surfaces, burnt. Similar to Frere (1972) No. 1272. (Later fourth–fifth century). Also see No. 243 below.
 135. Three rims. Coarse sandy grey fabric, darker surfaces, burnished with intersecting arc decoration. One sherd burnt. Similar to Gillam (1970) type 329 and Frere (1972) No. 1175. (Fourth century). Also see Nos. 259 below and 98 above.

LAYER 26 (Later second century).

Fine Ware

136. Beaker. Hard micaceous red fabric, darker red coat. Oxfordshire.

Flagon

137. Ring-necked. Coarse sandy micaceous red and grey fabric, greyish white slip. (Second century). (Illustrated).

Jars

138. Everted rim. Sandy micaceous brown fabric with grey core, darker surfaces, burnished. Diameter *c.* 15 cm. Similar to No. 251 below, but much larger.
 139. Necked jar. Gritty micaceous grey-brown fabric, some burnishing inside. Similar to No. 322 below.
 140. Out-turned rim. Very coarse gritty grey fabric, dark grey interior surface, light grey slipped exterior, hand made. (Illustrated).

Bowls

141. Rim with triangular profile. Sandy micaceous grey fabric, burnished with diagonal stroke decoration. Cf. Frere (1972) No. 721. (Later second century). (Illustrated).
 142. Bowl with almost circular rim profile, fabric as above, burnished. Cf. Frere (1972) No. 1083. (Illustrated).
 143. Rounded rim profile. Coarse sandy micaceous grey fabric, burnished. BB2 type.

LAYER 27 (Second century)

Fine Ware

144. Beaker base. Sandy micaceous red fabric, dark brown coat, rough cast surface. Rough-Cast ware.
 145. Beaker base. Fine white fabric, dark brown coat, rough cast surface. Rough-Cast ware.

Bowl

146. Triangular rim profile. Coarse sandy micaceous grey fabric, burnished with diagonal stroke decoration. BB2 type. Diameter *c.* 23 cm. Similar to Frere (1972) No. 984. (Mid-second century).

Dish

147. Coarse sandy micaceous red fabric, brown core, a few larger inclusions, buff surfaces, mica coated. Diameter 26 cm. Similar to Frere (1972) No. 526. (Early second century). Also see No. 302 below.

Lid

148. Sandy micaceous red fabric.

LAYER 29 (Second century)

Fine Ware

149. Sherd. Fine white fabric, burnished.

Jar

150. Necked jar with small rounded rim. Sandy micaceous light grey fabric, darker surfaces, dark grey slip. Diameter 12 cm. See Chapman (1973) Nos. 63 and 134. (Late first–early second century).

LAYER 30 (Early–mid-second century).

Fine Ware

151. Sherd. Fine white fabric, grogged, cream exterior. (Possibly late first–early second century).
 152. Two sherds. Fine buff fabric, containing coarser sand, white surfaces.
 153. Beaker sherd. Fine micaceous brown fabric with grey core, dark brown coat, rouletted decoration.

Jars

154. Out-turned rim. Fine sandy micaceous light grey fabric, dark grey slip, burnished. (Illustrated).
 155. Poppy-head beaker. Fine sandy micaceous light grey fabric, darker surfaces, burnished. Possibly Highgate Wood type.
 156. Storage jar. Fine grey fabric, shell tempered, black surfaces, traces of grey slip, decorated. Similar to Chapman (1973) Nos. 194, 195. (Latter part of first century). (Illustrated).

Bowls

157. Reeded rim. Coarse sandy grey-white fabric, grey surfaces.
 158. Grooved rim. Fine sandy micaceous light grey fabric, darker surfaces, burnished. See Chapman (1973) No. 150. (Early second century). Possible Highgate Wood type. (Illustrated).
 159. Rounded rim profile, slightly undercut. Coarse sandy micaceous dark grey fabric, darker surfaces, burnished with lattice decoration. BB2 type. Similar to No. 474 below.

Lid

160. Sandy micaceous red fabric, grey-brown slip. (Illustrated).

(Fig. 29, 162-193).

LAYER 3 I (Early-mid-second century).

Fine Ware

161. Two sherds. Fine white fabric, burnished.
 162. Beaker sherd. Fine white fabric, brown coat, rouletted decoration. ?Nene Valley. (Illustrated).

Jars

163. Everted rim. Coarse sandy black fabric, burnished. BB1 type.
 164. Coarse sandy buff fabric, light grey slip on surfaces. (Illustrated).
 165. Storage jar. Brown micaceous fabric, shell tempered, grey surfaces, brown slip, decorated burnished. Cf. Chapman (1973) Nos. 194, 195. (Latter part of first century). (Illustrated).

Bowls

166. Grooved rim. Fine sandy micaceous grey fabric, darker surfaces, burnished. (Illustrated).
 167. Hooked rim. Coarse sandy micaceous brown and grey fabric. (Illustrated).
 168. Triangular rim profile. Sandy micaceous grey fabric, darker surfaces, burnished. BB2 type.

Mortaria

169. Hooked flange. Coarse sandy buff fabric, grogged. ?Brockley Hill type. (Second century).
 170. Angled flange. Coarse sandy pink fabric, buff surfaces.

Dishes

171. Two rims. Hard sandy red fabric with grey core, buff surfaces. Diameter c. 23 cm. See No. 303 below.
 172. Coarse sandy micaceous grey fabric, interior surface brown-grey, exterior dark grey, burnished, burnt. (Illustrated).

Lids

173. Coarse sandy micaceous light buff fabric. (Illustrated).
 174. Coarse sandy micaceous red fabric with grey core and surfaces. (Illustrated).
 175 and 176. Coarse sandy micaceous red fabric with grey core. (Illustrated).

Lamp

177. Sandy very micaceous red fabric with grey core, probably mica coated. (Second century). See type III in Wheeler (1930), p. 67.

LAYER 3 2 (Early-mid-second century)

Fine Ware

178. Beaker sherd. Fine white fabric, dark brown coat, rough cast surface. Rough-Cast ware.

Flagons

179. Ring-necked. Coarse sandy buff fabric. Cf. Frere (1972) No. 409. (Early second century). (Illustrated).
 180. Ring-necked. Coarse sandy red fabric with grey core, yellow slip. Cf. Frere (1972) No. 802. (Second century). (Illustrated).

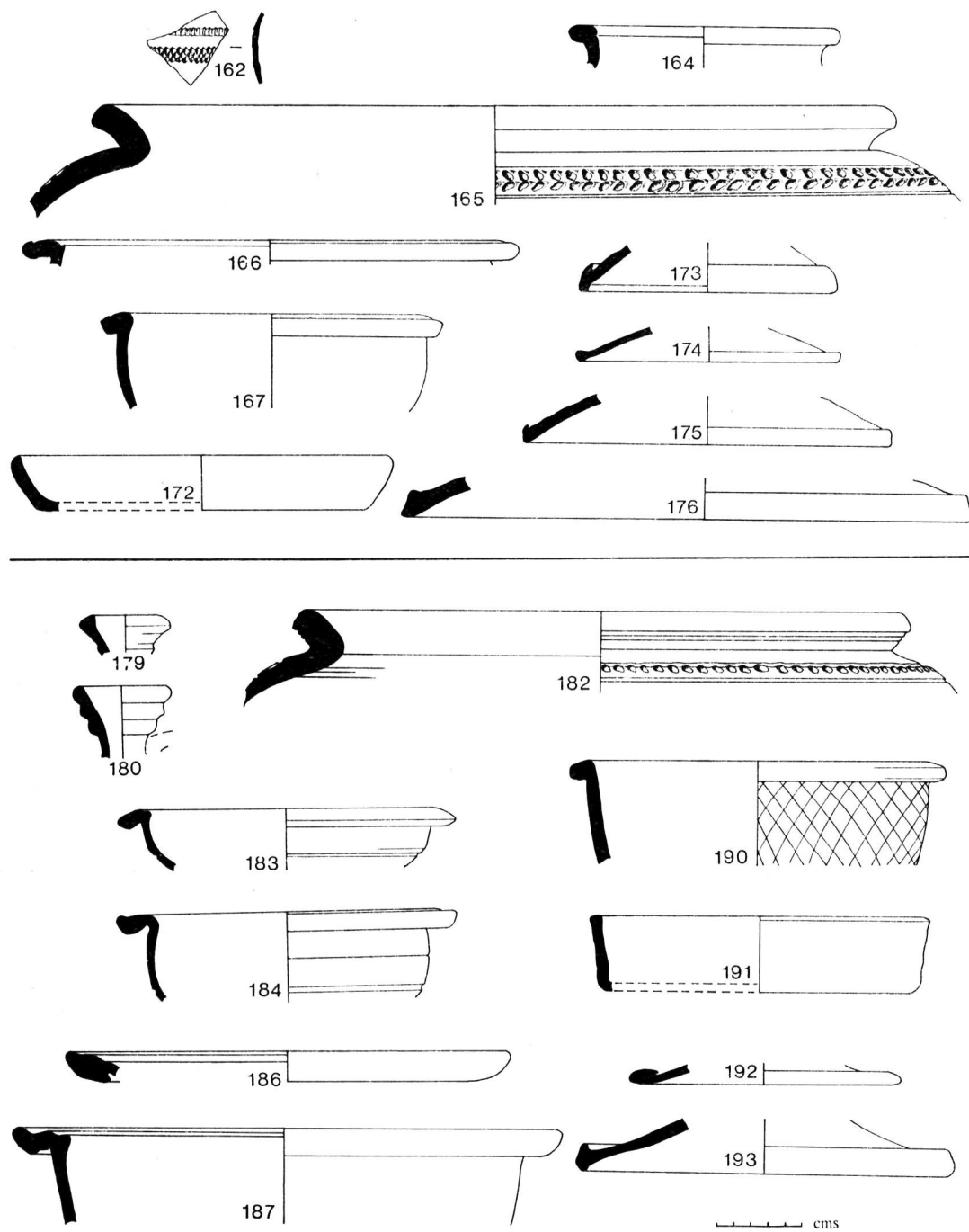


Fig. 29.—Custom House site; Roman pottery 162–193 ($\frac{1}{4}$)

Jars

181. Out-turned rim. Fine micaceous brown fabric, light grey core, dark grey surfaces.
 182. Storage jar. Fine micaceous grey fabric, shell tempered, brown surfaces, slipped, decorated and burnished. Cf. Chapman (1973) Nos. 194, 195. (Latter part of the first century). (Illustrated).

Bowls

183. Grooved rim. Sandy micaceous grey fabric, burnished. (c. early second century). Possible Highgate Wood type. (Illustrated).
 184. Reeded rim. Fine sandy micaceous grey fabric, darker surfaces, burnished. (Early second century). (Illustrated).
 185. Reeded rim. Coarse sandy orange fabric, grey surfaces. Diameter c. 19 cm. Similar to No. 187 below.
 186. Reeded rim. Coarse sandy light grey fabric, darker surfaces. Cf. Frere (1972) No. 669. (Early second century). (Illustrated).
 187. Reeded rim. Fabric as above. Cf. Frere (1972) No. 675. (Early-mid-second century). (Illustrated).
 188. Plain wide rim. Coarse sandy micaceous grey fabric, burnished. Diameter c. 15 cm. (Early-mid-second century).
 189. Plain wide rim. Sandy micaceous grey fabric, burnished. (Early-mid-second century).
 190. Sub-rectangular rim profile. Coarse sandy micaceous grey fabric, black surfaces, burnished with lattice decoration. BB2 type. (Illustrated).

Dish

191. Hard sandy micaceous red fabric with grey core. (Illustrated).

Lids

192. Hard sandy micaceous red fabric, buff surfaces. (Illustrated).
 193. Sandy micaceous grey fabric. (Illustrated).

Lamp

194. Fragment of a scallop shell relief decoration, probably from the discus of a Type I or II lamp. See Wheeler (1930), p. 66.

LAYER 33 (Early second century)

Bowl

195. Reeded rim. Sandy micaceous grey fabric, darker surfaces, burnished. Similar to forms from Highgate Wood kilns. (Early second century).

(Fig. 30, 196-270).

TRENCH III

LAYER 22

Fine Ware

196. Bowl. Very worn. Fine micaceous red fabric, traces of dark red coat, fragment of stamped rosette decoration. Oxfordshire. Cf. Frere (1972) No. 1290. (Late fourth century). (Illustrated).

Bowls

197. Rounded almost circular rim profile. Sandy micaceous grey fabric, burnished. BB2 type.
 198. Heavy rim with rounded profile. Coarse sandy micaceous grey-brown fabric, burnished with lattice decoration. BB2 type. Form similar to Frere (1972) Nos. 973 or 978. (Mid-second century).

Dish

199. Coarse sandy micaceous grey-buff fabric, buff surfaces, mica coated. Burnt. Form similar to Frere (1972) No. 141. (Mid-second century).

Lid

200. Sandy micaceous grey-brown fabric.

LAYER 24 (Fourth century).

Bowls

201. Triangular rim profile. Coarse sandy red fabric, interior surface partially grey, burnished with lattice decoration. Badly burnt. Similar to No. 141 above. (Second century survival).

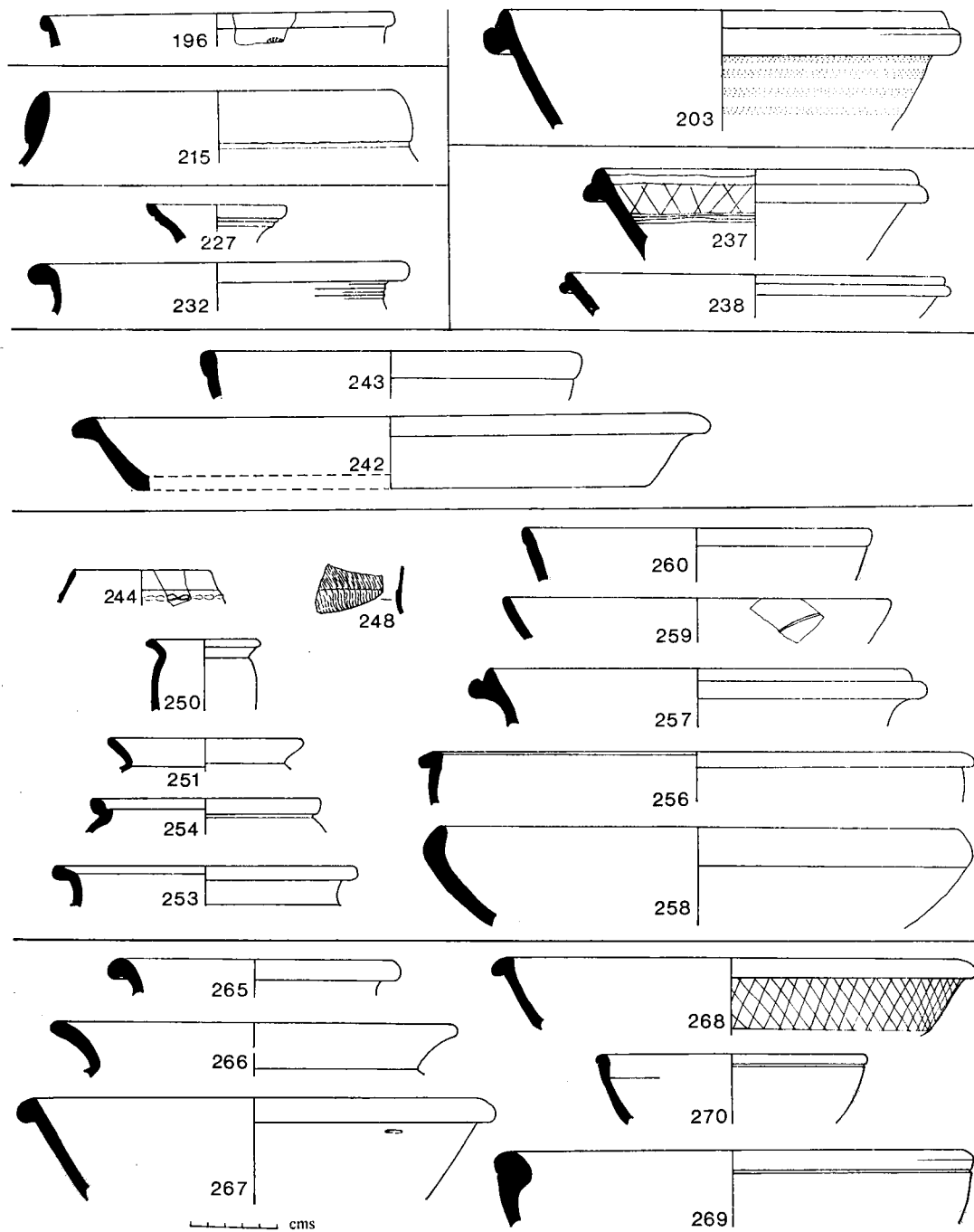


Fig. 30.—Custom House site; Roman pottery 196–270 ($\frac{1}{4}$)

202. Bowl with "parrot-beaked" flange. Sandy micaceous light grey fabric, darker surfaces, burnished.
 203. Bowl with flange which appears as a slightly flattened roll of clay. Sandy micaceous grey fabric, burnished. (Illustrated).

LAYER 25

Bowl

204. Gallo-Belgic bowl. Fine white fabric, burnished with rouletted decoration. Joins to a sherd from Trench III, Layer 26. For general type of vessel, see Hawkes and Hull (1947) No. 51, which is described as "bobbin-shaped bowl with strong basal kick".

LAYER 27 (Fourth century).

A number of sherds from this level have been either burnt or hardened by unusually high temperatures.

Fine Ware

205. Cornice-rimmed beaker, possibly part of a Hunt cup. Fine micaceous white fabric, dark brown coat, barbotine decoration under coat. Burnt. ?Nene Valley. Cf. Gillam (1970) type 85. (Late second-early third century).
 206. Bowl with flange. Fine white fabric, brown coat. Burnt. ?Nene Valley. Similar to Woods (undated) No. 310. (Later fourth century).
 207. Flange from bowl. Imitation 38. Fine white fabric, brown coat. Possibly Nene Valley.
 208. Bowl. Red micaceous fabric, traces of darker coat. Oxfordshire.
 209. Bowl. Two sherds. Worn. Red micaceous fabric, traces of darker red coat and burnishing, stamped and rouletted decoration. Oxfordshire. (Mid-fourth century plus).
 210. Bowl with flange. Hard micaceous red fabric with grey core, darker coat. Burnt. Probably Oxfordshire. (Late third century plus).

Amphora (or possibly part of a terra-cotta pipe)

211. Hard coarse sandy micaceous grey fabric, buff surface.

Jars

212. Everted rim. Sandy micaceous grey fabric, burnished.
 213. Necked jar with squared rim. Hard gritty micaceous red fabric with grey core, slipped. Burnt. (Probably fourth-fifth century).
 214. Large necked jar with rounded rim. Coarse sandy micaceous buff fabric. Similar to Frere (1972), No. 1240. (Late fourth century).
 215. Neckless jar with oval rim profile. Coarse sandy micaceous buff fabric with red-orange core. Form similar to Sheldon (1971) Fig. 9, No. 3. (Fourth century). (Illustrated).
 216. Storage jar. Brown micaceous fabric with grey core, shell tempered, dark brown surfaces. (A first or second century survival). Similar to Chapman (1973) Nos. 194, 195. (Late first century).

Bowls

217. Rounded rim profile. Coarse sandy micaceous dark grey fabric, burnished with lattice decoration. Burnt. Similar in form to No. 474, but without the undercut. Diameter 16 cm.
 218. Rounded rim profile. Sandy micaceous red-brown fabric with grey core, burnished. Burnt. BB2 type. Diameter c. 24.5 cm. Similar to No. 267 below. (Latter half of second-third century).
 219. Rounded rim profile. Sandy micaceous dark grey fabric, burnished. BB2 type.
 220. Circular rim profile. Sandy micaceous grey fabric, darker surfaces, burnished. BB2 type. Diameter c. 25 cm. (Probably third century).
 221. Rounded nearly circular rim profile. Coarse sandy micaceous grey fabric, darker surfaces, burnished. BB2 type. (Latter half of second-third century).
 222. Bowl with short straight flange angled slightly downward. Very hard micaceous grey fabric, burnished. Burnt. (Latter half of third-fourth century).
 223. Large heavy bowl with small rounded rim and vertical flange. Coarse sandy micaceous red fabric.

Mortaria

224. With high bead and drooping flange. Fine sandy white fabric, white and pink or brown grits.
 225. Coarse sandy micaceous grey-buff fabric, slipped exterior, mainly white grits. Burnt.

Lid

226. Coarse sandy micaceous dark grey and orange fabric, heat-cracked interior.

LAYER 37 (Fourth century).

Fine Ware

227. Jug. Hard fine red fabric, dark brown coat. Possibly from Lezoux. (?Late second-early third century). (Illustrated).
228. Bowl sherd. Fine micaceous red fabric, darker red coat, rouletted decoration. Oxfordshire.
229. Bowl with flange. Sherd. Fabric as above. Oxfordshire.
230. Bowl with flange. Sherd. Hard fine micaceous red fabric with grey core, darker red coat. Burnt. Oxfordshire.

Flagon

231. Sandy micaceous red fabric with grey core.

Jar

232. Necked jar. Coarse sandy light grey fabric. Cf. Frere (1972) No. 1240. (Late fourth century). (Illustrated).

LAYER 38 (Fourth century - ?).

233. Beaker. Fine buff fabric, brown coat.
234. Beaker sherd. Fine micaceous buff fabric, dark brown coat, barbotine decoration under coat.
235. Bowl. Sandy micaceous orange fabric with grey core, burnished. Probably Oxfordshire.

Jar

236. Everted rim. Sandy micaceous grey fabric, darker surfaces.

Bowls

237. Bowl with short rounded flange. Sandy micaceous grey fabric, darker surfaces, burnished with lattice decoration on interior surface. Possibly Alice Holt ware. For examples of this general type, see Frere (1972) Nos. 1256, 1257. (Late fourth-fifth century); Hawkes and Hull (1947) No. 554; Sheldon (1972) Fig. 11, No. 1. (Late fourth-fifth century). (Illustrated).
238. Small shallow bowl with short rounded undercut flange. Fabric as above, burnished. (Illustrated).

Dish

239. Coarse sandy grey fabric, burnished.

LAYER 39 (Fourth century - ?).

Fine Ware

240. Sherd. Fine sandy buff fabric, dark brown coat.

Amphora

241. Sherd. Sandy micaceous orange fabric, rilled inside. Late Roman in date, possibly from the Eastern Mediterranean.

Bowl

242. Rounded rim profile. Sandy micaceous grey-brown fabric, burnished. BB2 type. (Illustrated).

Dish

243. Hard sandy micaceous brown fabric with grey core, dark brown surfaces. Similar to Frere (1972) No. 1272. (Late fourth-fifth century). (Illustrated).

LAYER 40 (Fourth century)

Fine Ware

244. Beaker. Fine white fabric, dark brown coat, barbotine decoration under coat. Probably Nene Valley. (Illustrated).
245. Beaker. Two sherds. Fine white-buff fabric, dark brown coat, rouletted decoration.
246. Beaker. Two sherds. Fine white fabric, orange-brown coat, one with teardrop decoration.
247. Beaker sherd. Fine light red or buff fabric, dark brown coat, white paint decoration.
248. Beaker sherd. Fine micaceous red fabric with grey core, brown coat, rouletted decoration. (Illustrated).
249. Bowl sherd. Worn. Hard sandy micaceous orange fabric, red-grey core, burnished. Argonne ware.

Jars

250. Small everted rim. Coarse sandy grey fabric, burnished. (Illustrated).
251. Everted rim. Sandy micaceous grey fabric, darker surfaces, burnished. (Illustrated).

252. Everted rim. Hard micaceous dark grey fabric with lighter core. BB1 type. Similar to Gillam (1970) type 145. (Third–fourth century).
 253. Necked jar. Coarse sandy grey fabric with light grey core, metallic grey surface, burnished. (Illustrated).
 254. Rounded rim with groove or lid seat. Sandy micaceous grey-brown fabric, darker surfaces. (Illustrated).

Bowls

255. Rounded rim profile. Sandy micaceous grey fabric, darker surfaces, burnished. BB2 type. (Mid-second–third century). Similar to No. 267 below.
 256. Triangular rim profile. Sandy micaceous grey-brown fabric, grey surfaces, burnished. BB2 type. (Illustrated).
 257. Bowl with short rounded flange. Sandy grey fabric, burnished bands on interior surface. (Fourth–?fifth century). (Illustrated).

Dishes

258. Coarse sandy red-orange fabric with grey core, orange-buff surfaces, mica coated. (Illustrated).
 259. Coarse sandy grey fabric, burnished intersecting arc decoration. BB1 type. Cf. Gillam (1970) type 329. (Third–fourth century). (Illustrated).
 260. Coarse sandy grey-brown fabric, grey surfaces, burnished. (Illustrated).

LAYER 42 (Late second–early third century)

Fine Ware

261. Hunt cup sherd. Fine white fabric, brown coat, barbotine decoration under coat. ?Nene Valley. (?Late second–third century).
 262. Beaker sherd. Fine white fabric, dark brown coat.
 263. Beaker sherd. Fine micaceous buff-orange fabric, cream-buff surfaces, barbotine decoration. Rusticated ware. (Late first–early second century).
 264. Bowl. Fine micaceous red fabric, darker red coat, white painted decoration. Oxfordshire. (Late fourth century). Possibly from layer above.

Jars

265. Sandy micaceous grey fabric, burnished. (Late second century plus). (Illustrated).
 266. Wide everted rim. Fabric as above. (Late second century plus). (Illustrated).

Bowls

267. Nine rims with rounded profiles. Sandy micaceous grey fabric, darker surfaces. Several burnished, most probably were at one time. BB2 type. (Mid-second–third century). Cf. Frere (1972) No. 960 (mid-second century). (One illustrated).
 268. Two rims with triangular profiles. Fabric as above. Burnished with lattice decoration. One has been slightly burnt, one has been badly burnt. Probably BB2. (Identified by Mr. R. A. H. Farrar). Mid-second century. (Illustrated).
 269. Bead-lipped bowl. Fine almost soapy red and white fabric containing grit. (Illustrated). Probably a German import from Speicher (mid-second century). See E. Gose, *Gefäßstypen der Römischen keramik in Rheinland* (Bonn 1950) type 451.

Dishes

270. Sandy micaceous grey fabric, light red surfaces, burnt. (Illustrated).
 271. Sandy micaceous grey-brown fabric. (Probably late first–second century).

(Fig. 31, 272–308).

Lids

272. Coarse sandy micaceous grey fabric. (Illustrated).
 273. Sandy micaceous buff-grey fabric.
 274. Coarse sandy micaceous grey fabric, burnished.

Chimney Pot

275. Two sherds. Sandy micaceous grey fabric, orange-buff surfaces. One has cut edges, punched holes and a frill. See A. W. G. Lowther, *Surrey Archaeol. Collect.*, XLII (1933), 61–66, plate XII. (Illustrated).

LAYER 43 (Mid-second century)

Fine Ware

276. Beaker sherd. Fine white fabric, brown coat, rough cast surface. Rough-Cast ware. Possibly Nene Valley. (Second century).

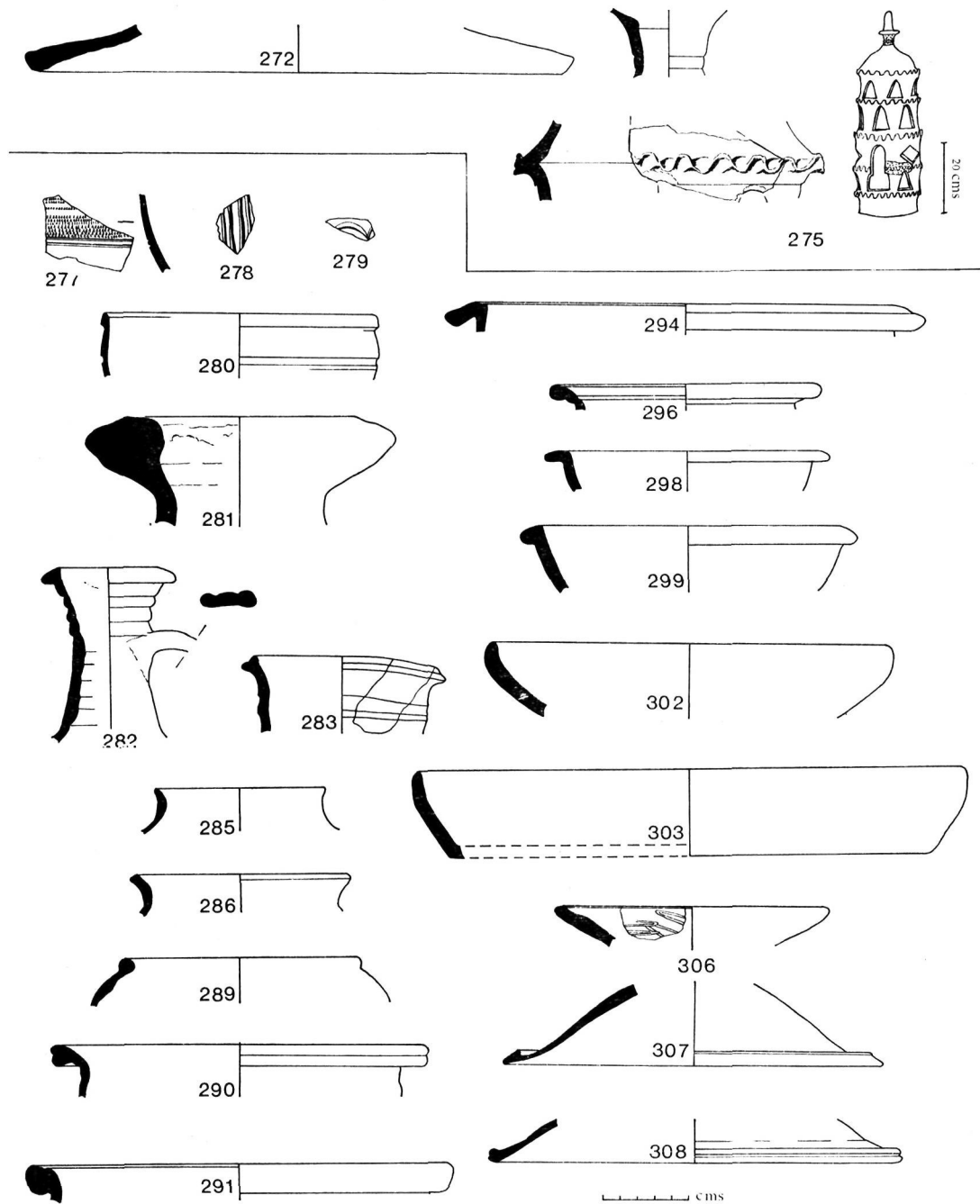


Fig. 31.—Custom House site; Roman pottery 272–308 ($\frac{1}{4}$)

277. Beaker sherd. Fine sandy micaceous red fabric, brown surfaces, rouletted decoration. (Illustrated).
 278. Beaker. Two sherds. Very thin fine white fabric, brown coat, vertical ridged decoration. (c. late first–early second century). (Illustrated).
 279. Beaker sherd. Fine pasty white fabric, orange-light brown coat. (c. late first–early second century). (Illustrated).
 280. Bowl. Hard fine sandy buff fabric, containing coarser sand grains. white coat, burnished. (2nd century). (Illustrated).

Amphora

281. Dressel 20. Spanish. Coarse sandy grey fabric, containing some larger grits. Cf. Chapman (1973) Nos. 210 and 211. (Late first century). (Illustrated).

Flacons

282. Ring-necked. Coarse sandy buff fabric. Cf. Frere (1972) No. 378. (Early second century). (Illustrated).
 283. Pinched mouth. Coarse sandy white fabric. Cf. Frere (1972) Nos. 580 and 821. (Mid-second century). (Illustrated).

Jars

284. Everted rim. Sandy micaceous grey fabric, burnished.
 285. Poppy-head beaker. Sandy micaceous light grey fabric, metallic grey surface, burnished. (First half of second century). (Illustrated).
 286. Possibly poppy-head beaker. Fabric as above. Black surfaces, burnished. (Illustrated).
 287. Necked jar. Coarse sandy micaceous grey fabric, darker surfaces, burnished. Form similar to No. 253 above but with thinner rim. Diameter 16 cm.
 188. Necked jar. Coarse sandy micaceous light grey fabric, dark grey surfaces, burnished. Form similar to No. 253 above but with thinner rim. Diameter 16 cm.
 289. Bead rim. Sandy micaceous grey fabric, burnished. Cf. Chapman (1973) No. 174. (Late first century). (Illustrated).
 290. Honey pot. Coarse sandy white fabric with buff core. (Illustrated).
 291. Storage jar. Sandy micaceous grey fabric. Cf. Frere (1972) No. 203. (Mid-late first century). (Illustrated).

Bowls

292. Reeded rim. Coarse sandy-orange fabric.
 293. Reeded rim. Coarse sandy micaceous grey-brown fabric. Cf. Frere (1972) No. 686. (Mid-second century).
 294. Reeded rim. Sandy micaceous light grey fabric, darker surfaces, burnished. Cf. Gillam (1970) type 215. (Late first–early second century). (Illustrated).
 295. Grooved rim. Sandy micaceous light grey fabric, darker surfaces, burnished. Somewhat similar to No. 348 below.
 296. Grooved rim. Sandy micaceous grey fabric, burnished. (First half of second century). This could be a jar. (Illustrated).
 297. Grooved rim. Fabric as above.
 298. Coarse sandy micaceous grey fabric, darker surfaces, burnished. BB1. (Identified by Mr. R. A. H. Farrar). (Illustrated).
 299. Fabric as above although slightly less coarse. Burnished with latic decoration. BB2. (Identified by Mr. R. A. H. Farrar). (Illustrated).

Mortaria

300. Flange. Coarse sandy white fabric. (Illustrated).
 301. Flange. Coarse sandy buff fabric. Cf. Gillam (1970) type 244. (Early–mid-second century).

Dishes

302. Hard coarse sandy grey fabric, orange surfaces, lightly mica coated. (Illustrated).
 303. Sandy micaceous grey fabric, brown surfaces, heavily mica coated inside. Burnt. (Illustrated).
 304. Coarse sandy orange-buff fabric with grey core, lightly mica coated. Burnt.
 305. Sandy micaceous red fabric, orange-buff surfaces, mica coated mainly inside. Similar to No. 258 above although No. 305 is smaller and lighter.
 306. Imitation Gallo-Belgic platter. Coarse sandy micaceous grey fabric, burnished. (Illustrated).

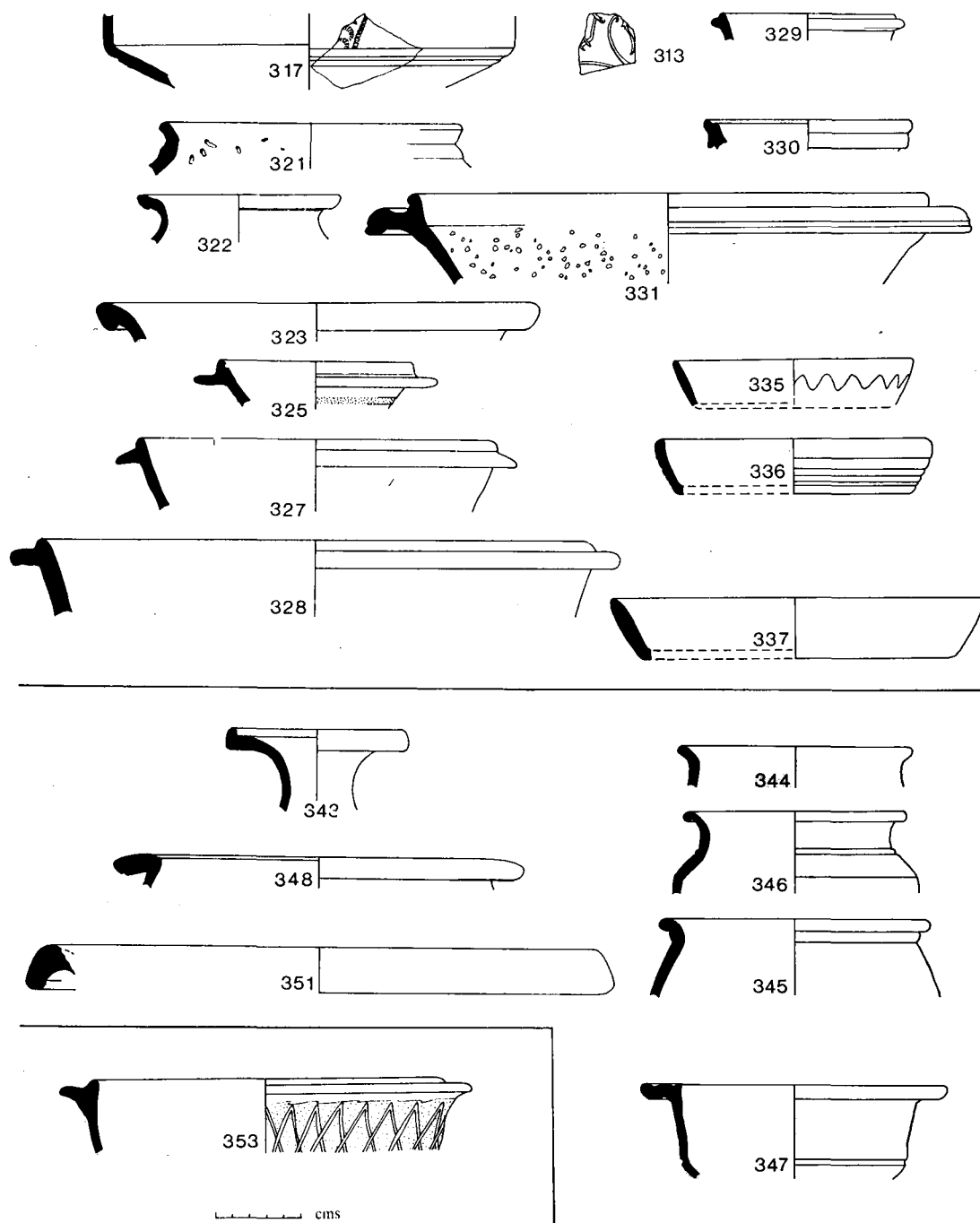


Fig. 32.—Custom House site; Roman pottery 313–353 ($\frac{1}{4}$)

Lids

307. Hard sandy micaceous red fabric with grey core and surfaces. (Illustrated).
 308. Sandy micaceous grey fabric. (Illustrated).

LAYER 44 (Second century)

Jar

309. Necked jar. Coarse sandy light grey fabric, grogged. (Mid-second century). For examples of this general type of vessel see Frere (1972) No. 654. (Mid-second century).

Dish

310. Fine micaceous orange fabric. Possibly of pre-Flavian date.

Lid

311. Coarse sandy micaceous grey-brown fabric.

LAYER 48 (Fourth century)

Fine Wear

312. Beaker. Three sherds. Fine white fabric, dark brown coat, rouletted decoration. (Fig. 32, 313-353).
 313. Beaker sherd. Hard sandy micaceous red fabric with grey core, brown coat, barbotine decoration. (Illustrated).
 314. Beaker. Fine light red fabric, brown coat.
 315. Beaker. Fabric as above, dark brown coat.
 316. Two bowls. Red micaceous fabric with grey core, darker red coat. Oxfordshire.
 317. Bowl sherd. Worn. Fine micaceous red fabric, darker red coat, stamped half rosette and rouletted decoration. Oxfordshire. (Post-mid-fourth century). (Illustrated).

Jars

318. Everted rim. Sandy micaceous grey fabric, white slip, burnished.
 319. Everted rim. Coarse sandy micaceous dark grey fabric, burnished.
 320. Everted rim. Gritty micaceous white fabric, grogged, dark grey surfaces, burnished.
 321. Out-turned rim. Gritty micaceous red-brown fabric, black core. Possibly a late Roman import. (Illustrated).
 322. Necked jar. Hard coarse sandy micaceous grey fabric. (Illustrated).
 323. Storage jar. Grey-brown micaceous fabric, densely shell-tempered. Brodrigg (1968) p. 142, B. (Late fourth-fifth century). (Illustrated).

Bowls

324. Bowl with short rounded flange. Sandy micaceous grey fabric, burnished decoration on interior. Similar to Frere (1972) Nos. 1256 and 1257. (Late fourth-fifth century); Hawkes and Hull (1947) No. 554; Sheldon (1972) Fig. 11, No. 1. (Late fourth-fifth century). Also similar to No. 237 above.
 325. Bowl with thin slightly upward curving flange. Coarse sandy micaceous brown fabric with grey core, dark grey surfaces, burnished. Similar to example from Guildhall Museum E.R. 1286. (Illustrated).
 326. Bowl with "parrot-beaked" flange. Sandy micaceous grey fabric, darker surfaces, burnished. Form similar to example from Guildhall Museum E.R. 1286; Sheldon (1972) Fig. 9, No. 21. (Late fourth-fifth century).
 327. Bowl with triangular profiled flange. Fine sandy micaceous grey-brown fabric, darker grey surfaces, burnished. Similar to examples from the Guildhall Museum E.R. 1286; Sheldon (1971) Fig 5, No. 22. (Fourth century). (Illustrated).
 328. Bowl with slightly curved flange. Coarse sandy micaceous dark grey fabric, burnished. (Fourth century). (Illustrated).
 329. Small bowl with short rounded flange. Sandy micaceous grey fabric, burnished. Similar to example from the Guildhall Museum E.R. 1286. (Illustrated).
 330. Bowl with flange. Gritty white fabric. (Illustrated).

Mortarium

331. With raised bead and drooping flange. Coarse sandy orange fabric, buff surfaces, reddish and grey grits. Cf. Frere (1972) No. 1028. (Mid-late second century). (Illustrated).

Dishes

332. Sandy micaceous grey fabric, burnished.
 333. Coarse sandy micaceous grey fabric, burnished.
 334. Sandy micaceous grey fabric, slipped, burnished.
 335. Coarse sandy micaceous grey fabric, burnished with wavy line decoration. Possibly BB2. Cf. Gillam (1970) type 328. (Late second–third century); Frere (1972) No. 1005. (Mid-second century). (Illustrated).
 336. Fine sandy grey fabric with red core, burnished with incised linear decoration. (Illustrated).
 337. Coarse sandy micaceous dark grey fabric, burnished. (Illustrated).

Lid

338. Gritty buff-red fabric with grey core.

LAYER 5 I (Early–mid-second century)

Fine Ware

339. Beaker. Two sherds. Fine white fabric, brown coat, rough cast surface. Rough–Cast ware. Possibly Nene Valley. (Second century).
 340. Beaker sherd. Fine micaceous buff fabric, cream surface, barbotine decoration. (?Late first–early second century).
 341. Probably beaker sherd. Fine buff fabric, dark brown coat.
 342. Probably beaker sherd. Fine micaceous buff fabric, dark brown coat, three ridges on surface.

Flagon

343. Hard sandy micaceous red fabric, buff surfaces, mica coated, more heavily on interior surface. (Illustrated).

Jars

344. Out-turned rim. Coarse sandy micaceous grey fabric, light grey core. (Illustrated).
 345. Everted rim. Hard coarse sandy micaceous grey fabric, slipped, burnished. (Illustrated).
 346. Necked jar. Sandy micaceous grey fabric with light grey core, burnished. Cf. Frere (1972) No. 445. (First half of second century). (Illustrated).

Bowls

347. Reeded rim. Hard coarse sandy micaceous red fabric with grey core. Burnt. (First half of second century). Cf. Bowl from Guildhall Museum 18620 from Walbrook Hadrianic fire level. (Illustrated).
 348. Grooved rim. Hard sandy micaceous grey fabric, darker surfaces, burnished. Cf. Frere (1972) No. 328. (Late first–early second century); Chapman (1973) No. 150. (Late first–second century). Possibly a Highgate Wood type. (Illustrated).
 349. Coarse sandy micaceous brown–grey fabric, black surfaces, burnished with lattice decoration. Possibly BB1. Similar to Gillam (1970) type 218. (Second century).
 350. Rounded almost rectangular rim profile. Coarse sandy micaceous grey fabric, burnished with lattice decoration. ?BB1. (?First half of second century). Similar to No. 190 above but smaller.

Mortarium

351. With hooked flange. Coarse sandy white fabric. Possibly Brockley Hill type. (Late first–early second century). (Illustrated).

Lids

352. Two rims. Sandy micaceous red–grey fabric.

TRENCH IV

LAYER 55

353. Bowl with flange. Coarse sandy micaceous dark grey fabric, burnished with decoration. Probably BB1. (Fourth century). Cf. Gillam (1970) type 227. (Third–fourth century). (Illustrated).

TRENCH X

LAYER 4

Amphora

354. Dressel 20. Spanish. Coarse sandy micaceous brown–grey fabric, dark buff surfaces. Similar to Chapman (1973) No. 211. (Mid–late first century).

Flagon

355. Coarse sandy buff fabric. (Late first–early second century).

Jars

356. Everted rim. Coarse sandy micaceous light grey fabric, black surfaces, burnished.
 357. Undercut bead rim. Sandy micaceous buff fabric with light grey core, darker grey surfaces, burnished. (Late first–early second century).

LAYER 6 (Early–mid-second century)

358. Coarse sandy micaceous grey–buff fabric. Similar in form to Frere (1972) No. 12. (Early–mid-second century).

(Fig. 33, 359–476).

Flagon

359. Ring-necked. Coarse sandy buff–white fabric, buff–cream surfaces. Cf. Frere (1972) No. 566. (Mid-second century). (Illustrated).
 360. Small flask. Coarse sandy orange fabric. For general type of vessel see Gillam (1970) No. 39. (Late second–third century).

Jars

361. Everted rim. Coarse sandy black fabric, burnished. Possibly a BB1 type.
 362. Poppy-head beaker. Fine sandy micaceous grey–brown fabric, burnished. Possibly a Highgate type.
 363. Necked jar. Sandy micaceous grey–brown fabric, burnished.
 364. Ovoid beaker. Pasty micaceous cream fabric containing some coarser grains, yellow slip. Chapman (1973) No. 75. (Mid–late first century).

Bowls

365. Reeded rim but lighter and thinner than most. Hard fine sandy micaceous grey fabric, orange slipped interior, buff exterior, lightly mica coated.
 366. Bowl with very short rim. Coarse sandy micaceous grey fabric, darker surfaces, burnished. (First half of second century).
 367. Coarse sandy micaceous fabric ranging from white to dark grey, burnished. Burnt. BB1 type. Diameter 20 cm. (First half of second century).
 368. Coarse sandy micaceous light grey fabric, dark grey surfaces, burnished. (First half of second century). (Illustrated).
 369. Coarse sandy micaceous grey fabric, darker surfaces, burnished with lattice decoration. ?BB1. Cf. Gillam (1970) type 219. (Early–mid-second century); Frere (1972) No. 708. (Mid-second century). (Illustrated).
 370. Bowl with very small rim. Coarse sandy micaceous grey fabric, lightly tempered with bits of shell, burnished.

Mortaria

371. Hooked flange. Coarse sandy light buff fabric. Possibly Brockley Hill type.
 372. Hooked flange. Fabric as above. Cream–yellow surfaces. Possibly Brockley Hill type.
 373. Hooked flange. Coarse sandy micaceous buff–cream fabric. Possibly Brockley Hill type. For stamped Mortaria from this Layer, see page 179.

Dishes

374. Sandy micaceous red–buff fabric with grey core, mica coated. Similar to Frere (1972) No. 740. (Mid-second century).
 375. Fabric as above. Similar to Frere (1972) No. 741. (Mid-second century).
 376. Coarse sandy micaceous grey fabric, darker surfaces, burnished. Burnt. (Illustrated).

Lids

377. Sandy micaceous buff–black fabric.
 378. Fine sandy micaceous red fabric, buff surfaces.
 379. Sandy micaceous grey fabric, buff surfaces.
 380. Hard fine sandy micaceous orange fabric with grey core.
 381. Sandy micaceous grey fabric, darker surfaces.

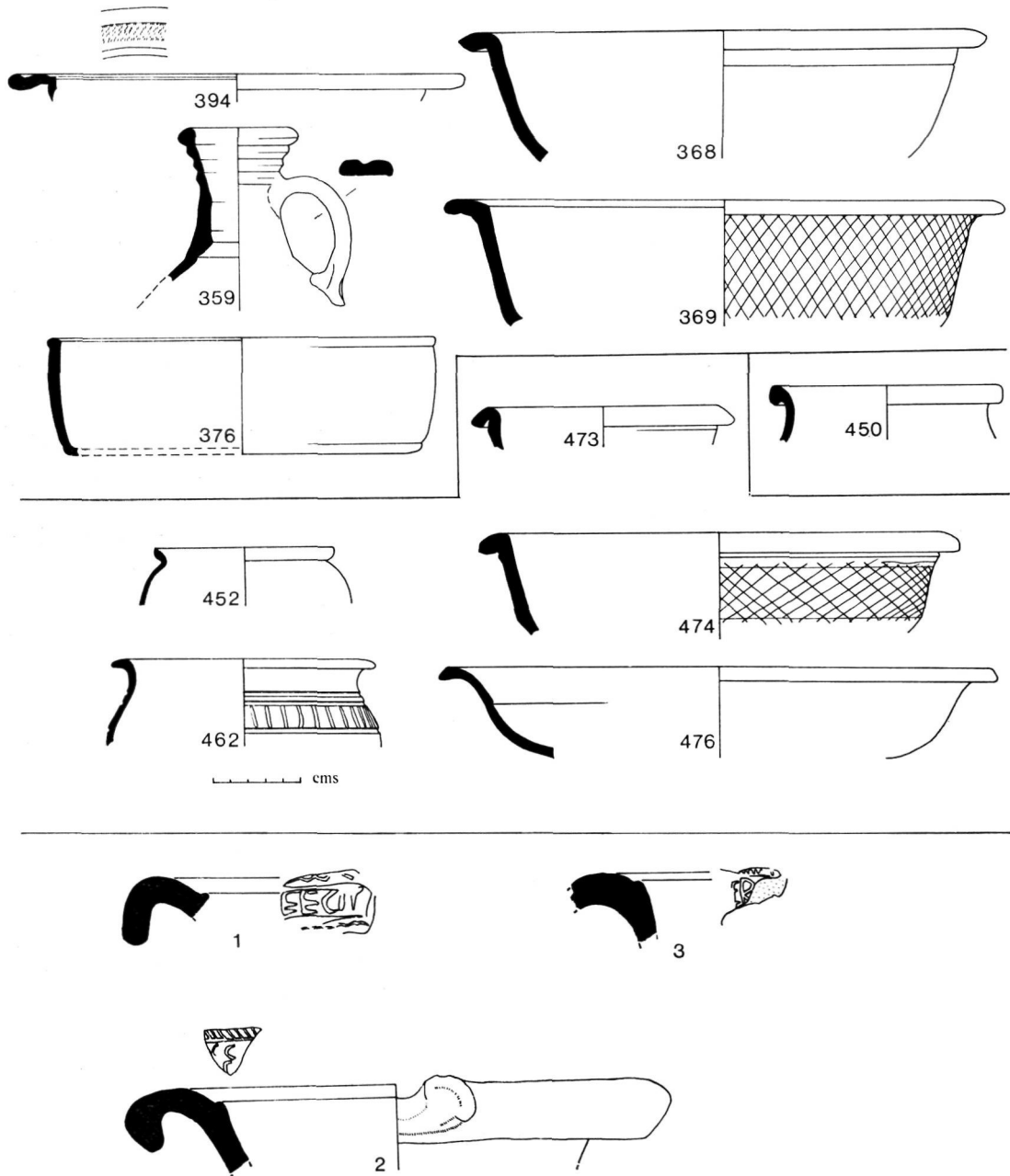


Fig. 33.—Custom House site; Roman pottery 359–476 ($\frac{1}{4}$), and stamped mortaria 1–3 ($\frac{1}{4}$)

LAYERS 6 AND 7 (Early-mid-second century)

Fine Ware

382. Beaker. Fine white fabric, brown coat. ?Nene Valley.
 383. Bowl. Fine micaceous light red fabric, red-brown coat. Imported ware, possibly from the Lower Rhineland. See Greene (1972), p. 24, No. 1.3.
 384. Bowl. Hard fine white fabric, buff core, white slipped surfaces, burnished.

Jars

385. Necked jar with small rounded rim. Sandy micaceous grey fabric, metallic grey surfaces, burnished. Diameter 10 cm. Form similar to Chapman (1973) No. 38. (Late first-early second century). Similar forms made at Highgate Wood kilns.
 386. Necked jar. Sandy micaceous grey fabric, black surfaces, burnished. Diameter 20 cm. Form similar to Chapman (1973) No. 185. (Mid-late first century).
 387. Necked jar. Coarse sandy buff fabric. Burnt. Diameter 11 cm. Form similar to Frere (1972) No. 82. (Late first century) and No. 483. (Early-mid-second century).
 388. Storage jar. Brown micaceous fabric containing some grits, shell tempered, grey surfaces, brown slip, burnished and decorated. Cf. Chapman (1973) Nos. 194 and 195. (Mid-late second century).

Bowls

389. Reeded rim. Coarse sandy micaceous buff fabric.
 390. Reeded rim. Sandy micaceous grey fabric, darker surfaces, burnished. Similar to Chapman (1972) No. 152. (Late first-early second century). Also see No. 166 above, but groove at outer edge of rim of No. 390 is not as pronounced.
 391. Grooved rim. Sandy micaceous grey fabric with brown core, burnished.
 392. Slightly drooping rim. Coarse sandy micaceous dark grey fabric, black surfaces, burnished with lattice decoration. Burnt.
 393. Coarse sandy micaceous dark grey fabric, black surfaces, burnished with lattice decoration. BB1 type. Similar to Gillam (1970) No. 219. (Early-mid-second century). Also see No. 369 above.
 394. Fine micaceous grey fabric, burnished with rouletted decoration on rim. For general type of vessel see Frere (1972) No. 214. (Late first century). (Illustrated).

Dishes

395. Fine micaceous grey fabric, buff surfaces. Burnt.
 396. Pasty white-buff fabric containing some coarser grains, mica coated.

Lids

397. Two rims. Sandy micaceous buff fabric.
 398. Two rims. Sandy micaceous grey fabric with red core.
 399. Fine micaceous grey fabric.
 400. Sandy micaceous orange fabric with buff-red core.

TRENCH XI

LAYER 7

Fine Ware

401. Beaker sherd. Fine white fabric, brown coat, rough cast. Rough-Cast ware.
 402. Beaker. Fine light grey fabric, dark brown coat.
 403. Bowl. Hard fine sandy white fabric with buff core, burnished.
 404. Bowl sherd. Fine micaceous red fabric with grey core, traces of dark red coat. ?Oxfordshire.

Jars

405. Necked jar. Sandy micaceous light grey-brown fabric, darker slightly metallic surfaces, burnished. Similar to Chapman (1973) No. 80. (First century).

Bowls

406. Grooved rim. Sandy micaceous light grey fabric, darker grey surfaces, burnished.

Mortarium

407. With downward curving flange. Fine sandy light buff fabric containing some white grits.

Lids

408. Fine micaceous light grey fabric, darker surfaces.
 409. Coarse sandy white fabric with buff-pink core.
 410. Sandy micaceous red fabric with grey core, buff surfaces.

LAYER 8

Bowl

411. Grooved rim. Sandy micaceous grey fabric, burnished. (First half of second century). Similar to No. 183 above.

Lid

412. Sandy micaceous buff fabric with grey core.

TRENCH XII

LAYER 12

Fine Ware

413. Two sherds. Fine sandy micaceous buff fabric, grogged, marblized orange-brown coat.
 414. Base. Fine sandy white fabric, marblized orange-brown coat.
 415. Bowl with flange. Hard micaceous red fabric with grey core, dark red-brown coat. Burnt. ?Oxfordshire.
 416. Bowl. Hard fine micaceous red fabric with grey core, dark red coat. ?Oxfordshire.
 417. Dish. Fine micaceous grey fabric, black surfaces, rouletted decoration inside, burnished.

Flagon

418. Coarse sandy white fabric, cream surfaces. For general type see Chapman (1973) No. 266. (Mid-second century).

Jars

419. Everted rim. Coarse sandy micaceous dark grey fabric, black surfaces, burnished.
 420. Fabric as above. Burnished with wavy line decoration. Probably BB1. See Gillam (1970) type 120. (Early-mid-second century).
 421. Necked jar with square rim. Sandy micaceous buff-grey fabric.

Bowls

422. Plain rim. Sandy micaceous grey fabric with light grey core, black surfaces.
 423. Bowl with flange angled slightly downward. Sandy micaceous light grey fabric, black surfaces, burnished.

Dish

424. Sandy micaceous red fabric, with grey core. Perhaps originally mica coated. Burnt.

Lids

425. Sandy micaceous buff fabric.
 426. Fabric as above with pink core, grogged.
 427. Sandy micaceous red fabric.
 428. Two rims. Sandy micaceous orange fabric with grey core.

LAYER 13

Fine Ware

429. Base. Sandy micaceous white fabric, olive-brown coat. ?Nene Valley.

Jars

430. Everted rim. Sandy micaceous grey-brown fabric, darker surfaces, burnished.
 431. Poppy-head beaker. Sandy grey-brown fabric, metallic grey surfaces, burnished.
 432. Necked jar with small round undercut rim. Sandy micaceous rust-brown fabric, grey surfaces, burnished.
 433. Necked jar. Sandy micaceous grey fabric, metallic grey surface, burnished. Form similar to Chapman (1973) No. 39. (Late second-early third century).

Bowls

434. Reeded rim. Coarse sandy micaceous grey fabric. (Late first-early second century).
 435. Coarse sandy micaceous grey fabric, black surfaces, burnished with vertical stroke decoration. BB1 type. Diameter 16 cm. (First half of second century). Similar to No. 369 above.

LAYERS 12 AND 13

Fine Ware

436. Beaker. Four sherds. Fine sandy red fabric, dark brown coat. Three of the above have rouletted decoration. All come from the same vessel.
437. Probably flanged bowl sherd. Hard fine micaceous red fabric with grey core, dark red coat. Burnt. :Oxfordshire.

Flagon

438. Ring neck. Coarse sandy micaceous buff fabric, grogged. (Early-mid-second century). For smaller version of the type see No. 179 above.

Jars

439. Everted rim. Coarse sandy micaceous grey fabric, burnished.
440. Jar with slightly undercut or hooked rim. Coarse sandy buff fabric with orange core, grogged. Form similar to Frere (1972) No. 835. (Mid-second century). Also see No. 450 below for smaller but basically similar type.
441. Necked jar with small rounded rim. Fine micaceous grey fabric with light grey core, darker surfaces, burnished.
442. Bead rim. Coarse sandy micaceous light grey fabric, grey slightly metallic surfaces, burnished. Similar to Chapman (1973) No. 217. (Mid-late first century).

Bowl

443. Bowl with short "parrot-beaked" flange. Coarse sandy micaceous grey fabric, darker surfaces, burnished. Diameter 22.5 cm. Similar to Sheldon (1972) Fig. 9 No. 21. (Fourth century).

Mortarium

444. With level bead and hooked flange. Gritty buff fabric. Form similar to Frere (1972) No. 743. (Late first-mid-second century).

Lid

445. Sandy micaceous buff-grey fabric.

LAYER 16

Bowl

446. Tazza. Coarse sandy micaceous cream-buff fabric.

Lid

447. Sandy micaceous light grey fabric, darker surfaces.

TRENCH XIII

LAYER 8 (Second century)

Jars

448. Everted rim. Coarse sandy micaceous dark grey fabric, burnished.
449. Everted rim. Sandy micaceous brown-grey fabric, darker surfaces, burnished.
450. Jar with squared undercut rim. Coarse sandy buff-cream fabric. Cf. Chapman (1973) No. 141. (Late first-early second century). (Illustrated).

Bowl

451. Reeded rim. Coarse sandy buff fabric. Similar to Frere (1972) No. 686. (Mid-second century). Also similar to No. 186 above.

LAYER 9 (First half of second century)

Fine Ware

452. Beaker. Fine red fabric, brown coat, possibly Colchester. (Late first-early second century). (Illustrated).
453. Three sherds. Fine white fabric, brown coat, rough cast surface. Rough-Cast ware. ?Nene Valley. (Second century).
454. Beaker sherd. Fine micaceous white fabric, brown coat, barbotine decoration under coat. Rusticated ware.

Jars

455. Short out-turned rim. Grey-brown micaceous fabric containing some grits, surfaces slipped black.
456. Everted rim. Coarse sandy micaceous black fabric, burnished with wavy line decoration. Possibly BBI. Similar to Gillam (1970) types 120 and 125. (Early-mid-second century).
457. Poppy-head beaker. Sandy micaceous light grey fabric with darker core, metallic grey surfaces, barbotine decoration, burnished. Similar to Chapman (1973) No. 199. (Latter part of first century). Possibly a Highgate Wood type.
458. Necked jar. Coarse sandy micaceous dark grey fabric.
459. Necked jar with small rounded rim. Hard coarse sandy micaceous light grey fabric with darker core and surfaces, burnished.
460. Necked jar with rounded rim. Sandy micaceous grey fabric, darker surfaces, bands of burnishing in interior.
461. Necked jar. Sandy micaceous grey-brown fabric, shiny black surfaces, burnished.
462. Necked jar. Fine micaceous light grey fabric with darker core and surfaces with metallic grey vertical stroke decoration on shoulder, burnished. (Late first-early second century). ?Possibly Highgate Wood type. (Illustrated).
463. Jar with squared rim. Coarse sandy pinkish-buff fabric, cream-white surfaces.

Bowls

464. Reeded rim. Coarse sandy micaceous grey-buff fabric. Similar to Frere (1972) No. 670. (Mid-second century). Also see No. 186 above.
465. Reeded rim. Coarse sandy micaceous reddish-buff-grey fabric.
466. Reeded rim. Coarse sandy micaceous grey fabric. Similar to but smaller than No. 186 above.
467. Reeded rim. Sandy micaceous orange fabric, burnished.
468. Grooved rim. Sandy micaceous grey-brown fabric.
469. Grooved rim. Sandy micaceous grey fabric with purplish-grey core, burnished.
470. Grooved rim. Sandy micaceous grey-brown fabric, burnished. Diameter 14 cm. Highgate Wood type.
471. Hooked rim. Fabric as above, burnished. Diameter 20 cm. Highgate Wood type.
472. Hooked rim. Sandy micaceous reddish-buff fabric with grey core. (Illustrated).
473. Coarse sandy micaceous grey fabric, darker surfaces, burnished.
474. Undercut rounded rim profile. Coarse sandy micaceous grey fabric, black surfaces, burnished with lattice decoration. (Illustrated).
475. Rounded rim profile with slight undercut. Sandy micaceous grey fabric, black surfaces, burnished with lattice decoration. (First half of second century). Similar to No. 474 above although smaller and more rounded.
476. Bowl with out-turned rim. Hard sandy micaceous buff fabric with grey core, interior slipped, burnished. Sometimes known as London ware. (Illustrated).

Mortaria

477. Hooked flange. Coarse sandy buff fabric. Possibly Brockley Hill type.
478. With level bead and slightly drooping flange. Fine sandy micaceous buff-brown fabric. For stamped mortaria from this Layer see page 180.

Dishes

479. Hard sandy micaceous red-buff fabric with grey core, lightly mica-coated surfaces. Burnt.
480. Fine soapy micaceous buff fabric, light grey surfaces, burnished.
481. Coarse sandy red-buff fabric with grey core. Similar to Frere (1972) No. 528. (Early-mid-first century). Also similar to No. 191 above.

Lids

482. Five rims. Sandy micaceous grey fabric, red or red-brown surfaces.

STAMPED MORTARIA (FIG. 33)

BY KATHARINE F. HARTLEY

1. (880. X-6). Two joining fragments of a mortarium in granular orange-brown fabric fired to a darker shade in parts. There is a retrograde counterstamp reading FECIT. Seven stamps from the same die are known from the potteries at Brockley Hill, Middlesex, where he worked and now four stamps from London. The

cable borders of these stamps are highly unusual and only one potter, Gissus (recorded from Baldock, Brentford, Brockley Hill (3), London, Towcester and Verulamium (2) (S. S. Frere, *Verulamium Excavations I*, 375, No. 21, and Fig. 145) is known to have used them; it seems, therefore, highly probably that this counterstamp should be attributed to him. Sufficiently large portions of three relevant mortaria have been found for the stamps on each side of the spout to survive but unfortunately none clear up the difficulty; one is stamped with Gissus' name on both sides, another with *Fecit* on both sides, and the third is stamped LALLAIUS//FECIT. The second presumably represents a mistake on the potter's part, while at least two other potters, Doinus and Saturninus, often stamped with name only though they had counterstamps for the dies. Lallaius or Lallaus is a well-known potter (*ibid.*, 376, No. 24 and Fig. 145), whose stamp has a totally different type of border from this *Fecit* stamp, and he normally impressed his name on both sides of his mortaria. The best explanation appears to be that Lallaius and Gissus were active in the same workshop.

Rim forms carrying all the stamps concerned fit well with manufacture within the period A.D. 100-140 and the stamp of Lallaius? from Verulamium was found in a deposit dated c. A.D. 90-105. The profile of the London mortarium is likely to be earlier than A.D. 130.

2. (920. X-6). In granular greyish fabric with orangy-brown slip; grey, white (flint) and brown tinturation grit. The fragmentary stamp preserves part of the lower line of a retrograde stamp of Melus which, when complete, reads MILUS//FICI. Melus worked at Brockley Hill where 23 of his stamps have been found (*Trans. L.M.S.* No. XI (1954), 261). Other stamps of his have been found from Canterbury; Eccles, Kent; Lincoln; London (10); Northchurch, Berks.; Richborough; Verulamium (3); Wanborough, Wilts.; Water Newton (2) and Withington, Glos. One of the Verulamium examples was found in a deposit dated A.D. 130-145 (S. S. Frere, *Verulamium Excavations I*, 376, 28) and the forms used indicate manufacture in the period A.D. 95/100-135/140.

3. (845. XIII-9). A heavily burnt rim fragment in granular fabric of the kind made at Brockley Hill. The fragmentary stamp is probably from an unknown die. The surviving profile suggests a Flavian-Trajanic date.

MEDIEVAL POTTERY

BY JAMES C. THORN

This interim report is a synopsis of the most significant aspects that have become clear from the analysis so far conducted. It should be noted that the location of the Custom House on the banks of the River Thames makes a natural threshold for illustrating through imported wares the extent of London's trading interests.

The ceramics as a whole were dominated by a wide range of provincial London wares. These were mostly red wares, white slipped West Kent wares, and a range of Surrey White wares. Small ranges of pottery also occurring were hard grey wares, mostly of Limpsfield type, with a few fragments of Hertfordshire reduced ware, a range of shell-tempered wares and isolated examples of wares such as a Scarborough-type knight jug and a jug with de-based stamped leaf motif cited by Rackham as a London-type stamped jug.

The range of imports from the site is mostly from South-western France. The most prevalent are Saintonge green glazed jugs, but there are also examples of Saintonge polychrome jugs with bird and shield and botanical motifs, and a few fragments of incised Saintonge jugs. In addition, there is a fragment of a Rouen-type jug from Normandy, a few examples of Siegburg and Langerwehe stonewares and lustreware Valencian bowls from Southern Spain. Earlier imports also occurred on the site and ranged from Pingsdorf, Andenne and handled ladles which are found in the Lower Rhineland.

These medieval ceramics fall into four main groups which are as follows:

GROUP A.

Layers associated with the stone foundations which were cut into the peat of Group C2. The structure is possibly the Churchman Custom House built in 1382. This foundation Group A1 (III-11 to 12) produced a small amount of provincial wares ranging from Surrey White, West Kent and Limpsfield Grey wares but contained no imports. The extension to the stone structure with arched foundations, Group A2 in III-5, showed a similar range of provincial wares, lacking Limpsfield Grey ware but containing a piece of Rhineland stoneware and fragments of a lobed cup from South-western France. The trodden gravel in front of the structure, Group A3, produced the largest range of provincial wares, in which Red wares and West Kent ware predominate with a few fragments of Limpsfield Grey ware and shell-tempered ware. This range also represents the material from the lower levels of Trench I, though a few imports (Saintonge polychrome, green glazed jugs and a piece of Langerwehe stoneware) were found in layers 10 and 11. Some of these gravels in IV-12 contained residual sherds of Roman pottery, implying that these gravels had been re-deposited. The filling of the post-hole found in the trodden gravels in Trench II produced pieces of Surrey White ware and a piece of a Saintonge polychrome jug. A later wall in Trench VI belonging to the stone structure extended over the destroyed drain, Group A2. This contained a similar range of provincial wares and imports as A3, but excluded shell-tempered wares and included instead fragments of earthenware roofing tiles. The cellar found in the stone structure in Trench VI contained a filling above the floor, Group A4. The early filling above the floor contained West Kent and Limpsfield Grey wares. On top of this was later filling, which at the bottom contained Surrey White, Red, and West Kent wares, and at the top the pottery content was similar but also included Limpsfield Grey ware.

GROUP B.

This is a robbing feature of the timber structure in Trenches II and IV which cut through the gravels of C1. The range of provincial wares is similar to C1 and C2 (see below), the only difference being that shell-tempered wares are only represented once in 11-12. The imports predominating are Saintonge polychrome and green glazed jugs. There were some pieces of Siegburg and Langerwehe stonewares from II-10, and from II-13 and 15 there were fragments of two lobed cups. It would seem that a high proportion of this robbing feature contained residual material from Group C.

GROUP C.

These are layers associated with the timber structure, peat layers forming behind as C2 and containing the largest range of provincial wares and imports found. There was a great increase in Surrey White wares, and a large range of shell-tempered wares (associated with London copies of Rouen jugs) from Trenches XI-XV, though the shell wares were lacking in Trenches I-VII. Amongst the imports Saintonge polychromes and green glazed wares predominated, though a wider range of imports with a Saintonge pegau type pitcher came from V-13. A fragment of Saintonge polychrome, which may be a lid from III-10, was associated with a Saintonge green glazed jug fragment, pieces of a lobed cup, and a piece of Rhineland stoneware. A fragment of a Rouen jug with rouletted strip decoration associated with Saintonge green glazed rilled jug occurred in XIV-4. A more squat jug showing a painted band of red slip under a clear yellow glaze on a white smooth fabric was recovered

from V-8. This was associated with a piece of Rhineland stoneware and fragments of a Saintonge green glazed jug. In VII-10 there was a sherd belonging to a small Valencian Hispano-Moresque bowl, which was associated with the upper portion of a South-western French-type jug (pale yellow/green glaze) and fragments of a Saintonge green glazed jug. A fragment of a Langerwehe rouletted jug was found in IV-24. Earlier, residual imports were Pingsdorf and Andenne wares, the most significant pieces coming from VI-26, VII-10 and XIII-3. The gravels C1 which formed in front of the timber structure showed a similar sequence of provincial wares and imports to that found in C2. Trench IV likewise contained a similar sequence and had Saintonge polychrome and green glazed wares as imports. The exception to this was IV-58 in which there was another fragment of a Valencian Hispano-Moresque bowl associated with a Saintonge polychrome jug and a Rhineland stoneware jug.

GROUP D.

The group represents the material from post-Roman gravels pre-dating the timber structure. In D2, the lowest and earliest levels, Red wares, West Kent wares and shell-tempered wares were prevalent, with a few fragments of Surrey White and reduced grey wares. In V-17 these were in association with Saintonge green glazed jug fragments and residual pieces of Pingsdorf and Andenne ware and a handled ladle, an import from the Rhineland. The upper gravels D1 were immediately below the timber structure and contained a similar range of wares to the lower gravels, but with an increase in the quantity of Surrey White wares and the number of imports. From III-15 came a wide range of Saintonge wares, including a wide-mouthed pitcher similar to the pegau type. Saintonge polychrome wares showing a botanical motif occurred in III-14 associated with the upper portion of a Siegburg jug and a residual piece of Pingsdorf. A further piece of Saintonge polychrome ware with an applied human mask came from I-15 together with early Siegburg jugs and a horse's head belonging to a Scarborough-type knight jug. Saintonge incised jug fragments occurred in I-14. Another handled ladle from the Rhineland was found as residual in III-18 with a piece of Andenne ware. It was noticed that Trenches XII-XIV showed a lack of the basic range of provincial wares and shell-tempered wares predominated often being associated with London copies of Rouen jugs. An unusual import was a Mediterranean amphora found in III-15 (Fig. 34). It is in a fine pink fairly soft fabric with red and black inclusions and cream-coloured surfaces. A thin dull terra-cotta red wash has been used mostly on the exterior, handles and partly inside the neck. This seems to contain a fine red granular substance which gives it a fine sand-paper texture.

The dating of the groups suggests that they generally contained wares which begin in the later thirteenth and carried through to possibly the early fifteenth century. In the gravels belonging to Group D there were some residual Roman wares and the late twelfth century imports. The dating for the construction of the timber structure could therefore be in the middle of the fourteenth century. It would seem that Group C echoes a similar date range as Group D although it extends to the early fifteenth century. In Groups A and B this date margin also applies to the redeposited wares which were identical to those found in Groups C and D. It is noticeable that most of the imports found in the Groups were in trenches in front of the Custom House and Wool Quay and there was a marked lack of them in Group A where, for example, the cellar filling contained none. This suggests that there was a change in the pattern of imports and exports at this site. In Trenches VIII-XV the peat and gravel

layers of Groups D and C were generally sparse in the volume of imports although there was a wider range of shell-tempered wares and London copies of Rouen jugs.

The full medieval pottery report will be published in Transactions, Vol. 26.

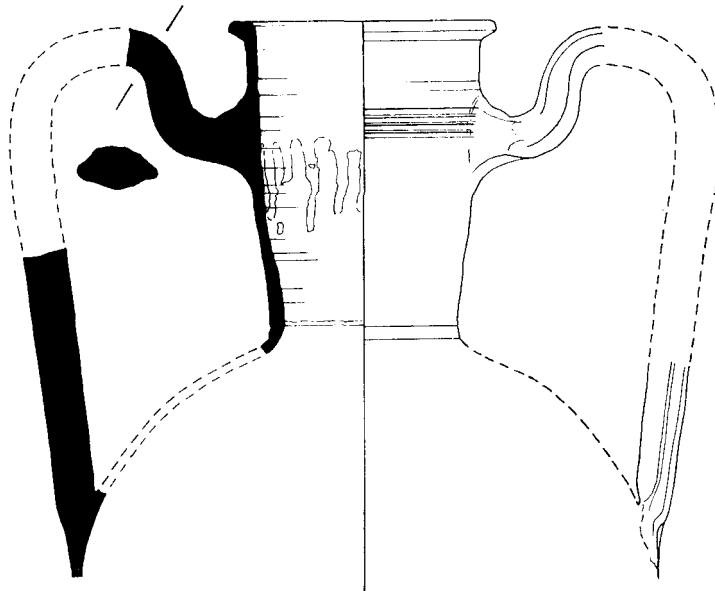


Fig. 34.—Custom House site. Medieval amphora ($\frac{1}{4}$)

THE GLASS (FIG. 35)

Roman

(241. I-23)

1. Rim of straight-sided bowl or dish, colourless, blown, slightly worn near rim; diameter 9 cm. (Illustrated).
- (242. I-23)
2. Fragments of matt/glossy window glass, bluish-green. Thicker piece has textured abrasion which runs in one direction.
3. Part of a footring, bluish-green, free blown and folded, weathered; diameter 6 cm.
4. Part of rim of globular jar, bluish-green, free blown with folded neck rim; diameter 7 cm. (Illustrated). Similar to Frere (1972) Fig. 76, No. 25, latter half of first century.
5. Fragment of largish globular bottle or jar, bluish-green, free blown, slightly weathered.
6. Fragment of pillar moulded bowl, clear bluish-green, blown. See Chapman (1973) Fig. 20, No. 4. (243. I-23)
7. Three fragments of rim of a thin-walled jar, free blown, brown flaking and iridescent; diameter 9 cm. (Illustrated).
- (239. I-24)
8. Rim of straight-sided bowl, colourless, blown with thickish rounded rim; diameter 12.5 cm. (Illustrated).

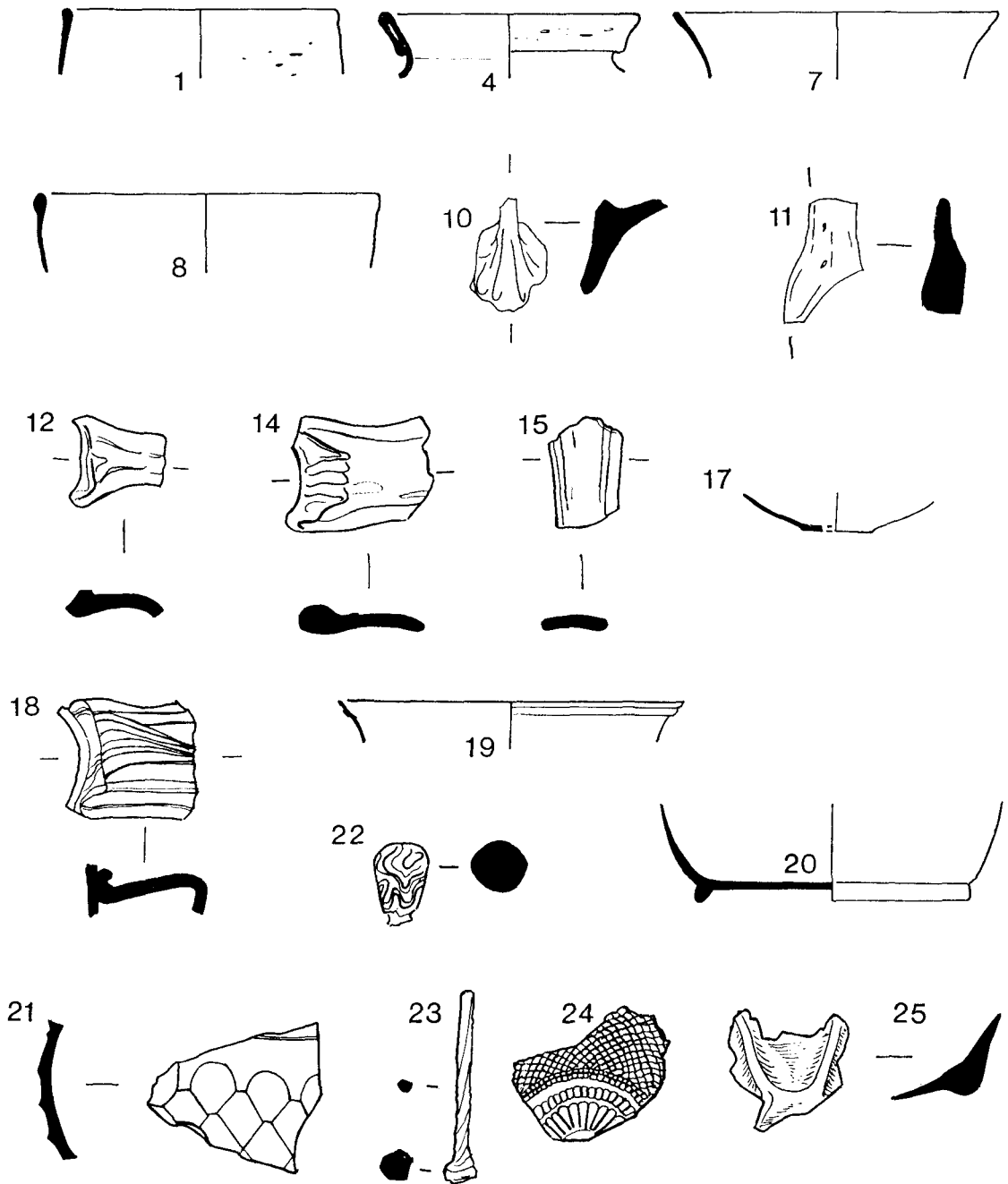


Fig. 35.—Custom House site; glass ($\frac{1}{2}$)



Plate 1.—Custom House site; Trench III, Roman quay looking south (scale in 0.5 m.)



Plate 2.—Custom House site; Trench III, Roman quay from the south-east (scale in 0.5 m.)



Plate 3.—Custom House site; Trench III, Roman posts and planks in front of quay as excavated (scale in 0.5 m.)

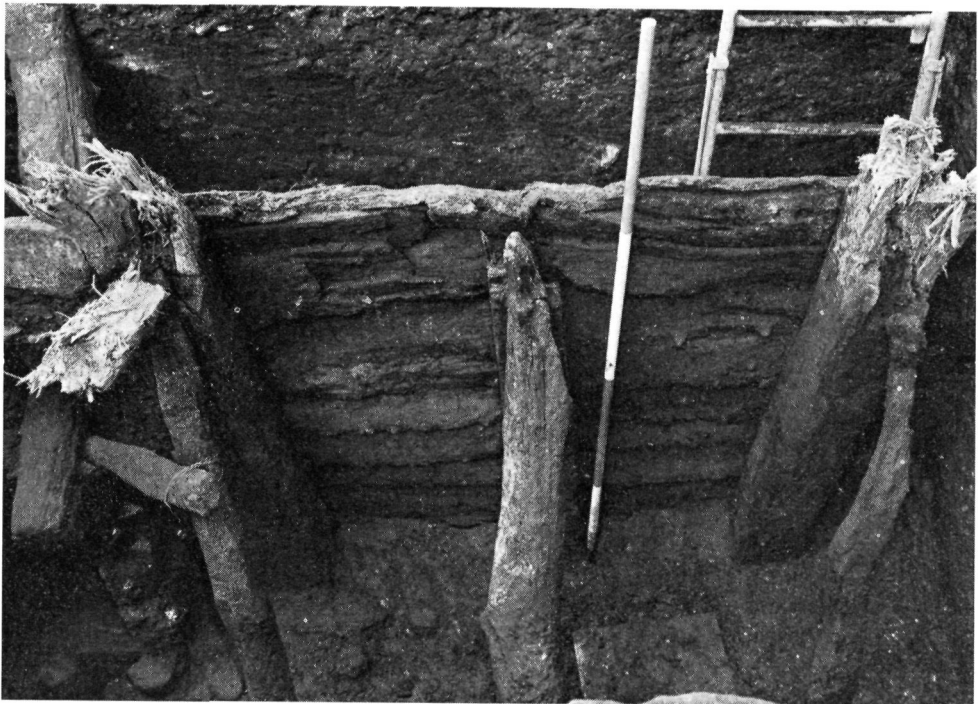


Plate 4.—Custom House site; Trench XII, earlier Medieval quay from the south (scale in 0.5 m.).
Photo: G. T. Denford

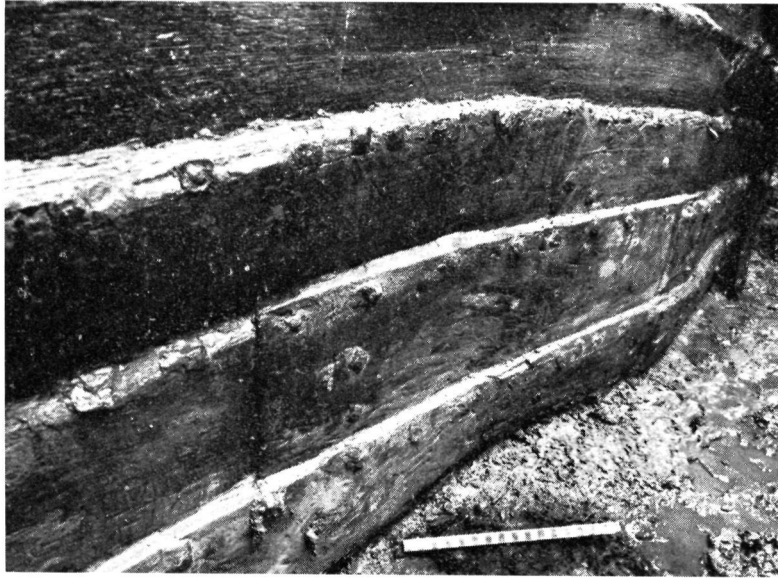


Plate 5.—Custom House site; Trench XII, boat timbers re-used in Medieval quay (scale in cm.)
Photo: G. T. Denford

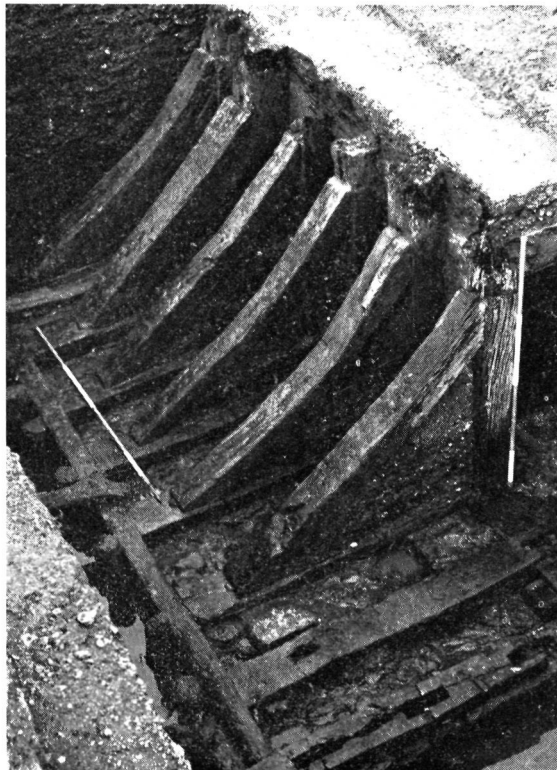


Plate 6.—Custom House site; Trench IV, later Medieval quay from the south-east (scale in 0.5 m.)



Plate 7.—Custom House site; Trench IV, elm and birch piles below ground plates of Medieval waterfront; note also the long pegs in the broken mortice holes (scale in 0.5 m.)



Plate 8.—Custom House site; Trench III, foundations to extension of Medieval Custom House. (Scale in 0.5 m.)

- (578. I-30)
9. Fragment of (?) globular bottle, bluish-green.
- (240. III-27)
10. Lower part of thin, circular flagon handle, drawn, part of shoulder attached, bluish-green, blown, weathered; length 3.2 cm., diameter c. 4 mm. Similar to Frere (1972) Fig. 77, No. 40. (Late first-early second century). (Illustrated).
- (231. IV-7)
11. Part of lower end of plain strap handle of bottle, bluish-green, slightly weathered. Similar to Chapman (1973) Fig. 20, No. 16. (Illustrated).
- (237. IV-32)
12. Upper end of strap handle from bottle, pale green, free blown, slightly weathered; length 2.5 cm., width 1.6 cm. (Illustrated).
- (238. IV-40)
13. Fragment of (?) side of panel moulded vessel, light bluish-green, weathered.
- (807. X-6)
14. Upper part of strap handle of rectangular bottle, pale green, free blown, slightly weathered; length 3.6 cm., width 3.0 cm. (Illustrated).
15. Part of a strap handle of conical bodied (?) jug, bluish-green, drawn; length 3 cm., width 2 cm. Similar to Chapman (1973) Fig. 20, No. 7, but Custom House piece has no rib. (Illustrated).
16. Fragment of window glass, glossy on one surface, bluish-green.
17. Fragment of base of (?) dish, colourless, slightly worn and weathered. (Illustrated).
- (785. X-6)
18. Upper part of ribbed strap handle from a square bottle, bluish-green, free blown; length 3.2 cm., width 3.2 cm. (Illustrated).
19. Two fragments of a rim of beaker, colourless, free blown with cut double ring around rim, slightly weathered; diameter 9-10 cm. For very similar vessel see Cunliffe (1971) Fig. 140, No. 60. (Illustrated).
- (784. X-6 and 7)
20. Part of base and footring of a bowl, colourless, possibly mould blown, abraded inner and outer surfaces, thickness of base is very uniform, weathered; diameter of base 8.5 cm. Similar to piece from Guildhall Museum 18544. (Illustrated).
- (942. X-6 and 7)
21. Fragment of faceted beaker, colourless, blown, cut and polished with several rows of shallow disc cutting to give shallow faceted honeycomb pattern; also has raised thread. For similar fragments see Cunliffe (1971) Fig. 139, Nos. 43, 44. (Illustrated).
- Medieval*
- (236. I-12)
22. Knob on end of bronze bottle stopper; length 2.5 cm., diameter 1.5 cm. at widest part.
- (235. I-13)
23. Worn part of glass stem, green. The glass has random twist marks and widens out at end to blown foot. Appears as though outer layers have been eroded. Probably stem of goblet; diameter 2 cm. Cf. Guildhall Museum 20569. (Illustrated).
- (234. II-10)
24. Miss Wendy Evans writes: Fragment of base of bowl of a large (?) goblet. Very pale green with much internal attack in the form of large rust-brown patches. Surfaces relatively clear and glossy but part of edge fracture has ragged "crystalline" form. An interesting fragment in that it has "hot" decoration on both sides of the glass, probably produced in the following manner. The gob of hot glass was blown into a ribbed mould, then removed, and further blown and smoothed. This had the effect of transferring the ribbed pattern to the inside of the bubble. (This technique is still used today. The effect produced is known as "optical".) The hot glass was then blown into another mould with the intricate pattern visible on the outer surface of the fragment. (This is, incidentally, very reminiscent of the decoration on a mould blown bowl of much earlier date from Cologne, illustrated in O. Doppelfeld, *Römisches und fränkisches Glas in Köln*, Köln, 1966.) The pattern suggests that there was a stem.

- (576. IV-48)
25. Part of bottom of a wine glass bowl, green, applied fins or lobes, glass attacked internally. (Probably fourteenth century). For similar vessels see Guildhall Museum 18425, 20569. Harden (1972), Pl. XIIB. (Illustrated).

SMALL FINDS (FIGS. 36-42)

BY DR. MARTIN HENIG

Note: Objects marked * are of uncertain date. They have been included in their most likely contexts.

The numbers in brackets are, first the index card number; then the Trench and Layer.

The remainder of the small finds, which are still being conserved, will be published next year.

ROMAN FINDS

Wallplaster

A considerable quantity of Roman wallplaster was found, providing evidence for panels in various colours as well as for the use of vegetal motifs. Items 2-4 are suggestive of a *schema* ultimately derived from the Third Pompeian Style (Hanfmann (1964, colour plate XII), second century, from Ostia. Davey (1972, 251-268) for similar panels in Britain).

The colours represented are red, purple, yellow, olive green, white and black.

The most noteworthy pieces are described below—all illustrated.

1. (III-40). Sprays of green vegetation on a black ground. This is clearly the upper area of a composition as the beginning of a white register could be observed above it.
2. (I-26). Greenish fruit with white highlights, on a black ground. Perhaps from a still-life composition.
3. (I-26). A black swag (possibly originally dark green) with white flowers on it, depicted against a red ground.
4. (I-26). A yellowish band with white and olive green vegetal pendentives, executed on a red ground.
5. (III-40). Curving black strokes with yellow colouring on one side and grey on the other.
6. (I-23). Curving yellow strokes on a red ground.
7. (I-23). Black and red registers separated by a white band.
8. (III-27). White plaster with red and black splashes on it as though the paint had been thrown.
9. (III-27). White and purple registers separated by a black line. This is part of a moulding as a sharp carination runs through the purple layer.

Iron

10. (709. XI-7). Bar of iron, tapering at one end. 2.57 cm. Cunliffe (1971, 139 and Fig. 63, No. 75).
11. (794. XI-8). Nail or hook. 9.5 cm. (Illustrated).
12. (645. I-26). Nail. 6.3 cm.

Copper Alloy

13. (792. XIII-9). Ligula with flat scoop at one end, used for extracting ointment from containers. 15 cm. Greenfield (1963, 147 and Fig. 6, No. 22; Brigstock, Northamptonshire). Cunliffe (1971, 107 and Fig. 42, No. 58). (Illustrated).
14. (24. I-23). Large needle or bodkin. 15.5 cm. Wheeler (1930, 105 and Pl. XLII, No. 2); Cunliffe (1971, 120 and Fig. 52, No. 177); Down and Rule (1971, 45, No. 3). (Illustrated).
15. (21. I-34). Needle (most of eye missing). 8 cm. Wheeler (1930, 105 and Pl. XLII, Nos. 3-5). *Small Finds from Walbrook 1954-1955*, 10-11, Pl. IV, No. 4. (Illustrated).
16. (23. I-23). Stud with hollow "domed" head. Drawing pin type. Diameter 2.8 cm. G. Webster in Butler (1971, 122 and Fig. 17, No. 97—Fremington Hagg). (Illustrated).
17. (22. I-23). Stud with slightly "domed" head. Type as last. Diameter 2.6 cm. (Illustrated).

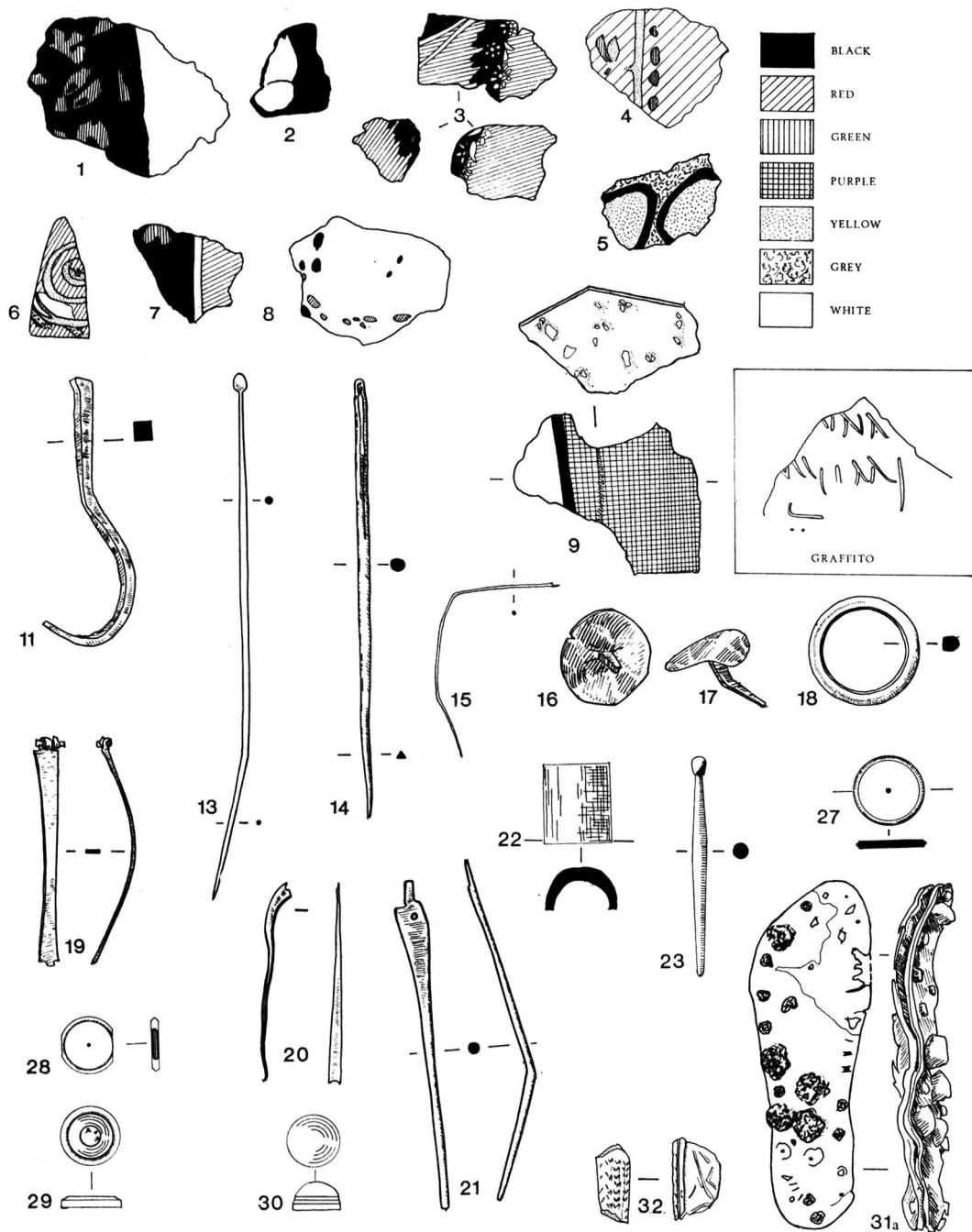


Fig. 36.—Custom House site; small finds 1-9 and 31-32 ($\frac{1}{4}$), and 11-30 ($\frac{1}{2}$)

18. (19. I-23). "Harness ring", rounded on outer face; flat within. Diameter 3.1 cm. Brodrigg, Hands and Walker (1968, II, Fig. 50, Nos. 106-110). Hobley (1966-7, 114 and Fig. 20, No. 9—Baginton, Warwickshire). (Illustrated).
- 19*. (76. IV-25). Piece of metal curved and expanding at each end. At one end is a hinge but whatever was attached at the other is now missing. Perhaps a fitting from the lid of a small coffer. *c.* 7.5 cm. Date uncertain (possibly Roman). (Illustrated).
- 20*. (103. I-15). ?Nail cleaner from a "châtelaine"; 5.7 cm. (Illustrated).
- 21*. (106. I-15). ?Probe from a "châtelaine". 9.9 cm. Kenyon (1948, 257, Fig. 86, No. 5). (Illustrated).
- Bone*
22. (814. XIII-10). Bone hinge, turned from a long bone. Part of side with perforations missing. 2.4 cm. Goodburn in Frere (1972, 149 f, Fig. 54, Nos. 188, 190). (Illustrated).
23. (274. I-24). Pin with ovoid head and shaft which swells in the centre. 6.3 cm. Kenyon (1948, 264 f, Fig. 91, No. 8). Cunliffe (1971, 147 f, Fig. 68, No. 24). Brodrigg, Hands and Walker (1968, I, 110 f, Fig. 37, No. 16). (Illustrated).
24. (252. III-23). Pin with groove around head which is partially broken away; the point is missing. 6.1 cm. Kenyon (1948, 264 f, Fig. 90, No. 1).
25. (378. I-24). Shank of pin. 1.8 cm. (fragment).
26. (535. I-31). Point of pin. 5 cm.
27. (247. III-43). Counter, flat disc with central hole made with a compass on one side. Diameter 1.9 cm. Kenyon (1948, 266 f, Fig. 91, No. 17). Down and Rule (1971, 83, and Fig. 5, 15A). (Illustrated).
28. (804. XIII-9). Counter. Type as last. Diameter 1.5 cm. (Illustrated).
29. (530. III-48). Counter, plain with slightly sunk centre. Scratch on base. Diameter 1.7 cm. Kenyon (1948, 266 f, Fig. 91, No. 9). Frere (1972, 152 and Fig. 56, No. 215). Down and Rule (1971, 83 and Fig. 5, 15F). (Illustrated).
30. (532. I-31). Counter, flat base and domed upper surface. Height 0.7 cm. Diameter 1.3 cm. For a glass counter of this type, Cunliffe (1971, 150 and Fig. 69, No. 6). (Illustrated).

THE ROMAN LEATHER SHOES

BY TIMOTHY AMBROSE

- 31a. (303. I-23). Right foot shoe—bottom unit. Middle sole and sole (illustrated) laminated and deteriorated around edges. Overall length 20 cm., width at waist 5.7 cm., width at ball 6.6 cm., width at heel 4.7 cm. The middle sole has a series of parallel thonging slots 0.6 cm. wide at 0.7 cm. intervals. These are set 0.9 cm. inside the edges and run from the waist to the toe end. There are further slots at 2 cm. intervals at the heel end. The sole has parallel thonging slots as above. The stud arrangement is straightforward, with an estimated 12 studs in the right-hand row, 10 in the left-hand row, five in the centre line row running from the heel end to the waist, and five at the ball. Some of the studs are heavily corroded and a number are missing. A badly deteriorated fragment of (?)insole was also found with this shoe. There are no traces of upper.
- 31b. (943. I-23). (?)Left-foot shoe—bottom unit. Sole, forepart of middle sole and middle sole filling section heavily deteriorated. Estimated original length 20 cm., present width at heel 4 cm., at waist 5.5 cm. The sole appears to have had a row of studs running around both edges and a centre line row. There is a diamond-shaped arrangement of studs at the ball, divided in two by the centre line. (Goodfellow and Thornton (1966, No. 34) for similar arrangement).
- 31c. (301. I-23). Fragments of (?)middle sole, badly deteriorated and contorted. One fragment from the (?)forepart has parallel rows of stud holes 1.7 cm. apart running from edge to edge (maximum number five). Another fragment of (?)insole has four incised lines running parallel to the edge, which is intact. These are some 0.6 cm. apart and 0.7 cm. from the edge. Their original length cannot be determined owing to deterioration at one end. This is perhaps a maker's mark, or part of one, although it may indicate re-use of leather or trial cutting.
- 31d. (304. I-24). Fragment. Possibly one end of a middle sole filling section.
- 31e. (304. I-24). Fragment of (?) middle sole.

There are no unusual features in this small sample. On the basis of size alone, both Shoe No. 31a and Shoe No. 31b are likely to have belonged to a woman or a child. Shoes of

similar size come from elsewhere in London (Goodfellow and Thornton, 1966, *e.g.* Nos. 2, 13 and 25) and have also been found in more military contexts at Portchester Castle (Ambrose, 1974, *e.g.* Nos. 264, 266 and 267) and Hardknott (Charlesworth and Thornton, 1973, No. 14). Although it does occur, the heavy nailing pattern seen on No. 31e is not particularly common on shoes from London, and may reflect the use of heavy-duty footwear which is, perhaps, to be expected in an area of docks.

White clay figurines

32. (165. I-23). Fragment of *Dea Nutrix* figurine, showing part of wicker-work of basket chair and drapery. 4.8 cm. Chapman (1973, 48 and Fig. 23, No. 20—and refs. cited); Rouvier-Jeanlin (1972, 166, Nos. 342-354). (Illustrated).
33. (861. I-32). Upper leg from a "Venus" figurine. 3.9 cm. Rouvier-Jeanlin (1972, 92 ff. *e.g.* 103 No. 43).

MEDIEVAL FINDS

Figurine

34. (1036. XV-17). Wendy McIsaac writes: A rather crudely made figurine of sandy red fabric with grey surfaces and an olive-green glaze. The middle of the figurine has been partially hollowed out. The small octagon is probably the base of a pedestal. Height 9.0 cm. (Illustrated).

Iron

35. (108. III-17). Small knife of "Scramasax" type. Blade of triangular section is set with three rivets of copper alloy; tanged handle. 10.2 cm. Ward-Perkins (1940, 52 and Pl. XI, 1 and 3). (Illustrated).
36. (496. IV-58). Knife of similar "Scramasax" form, but without the rivets. 9 cm. (Illustrated).
37. (63. I-12). "Scramasax" knife; tang set in remnant of wooden handle. 8.5 cm. (Illustrated).
38. (716. XV-15). "Scramasax" knife. 13 cm. Ward-Perkins (1940, 51 f. No. A310, Pl. XI, 2). Biddle (1959, 184, No. 33, Fig. 19—Manor of the More, Rickmansworth, Hertfordshire).
39. (1032. IV-48). "Scramasax" knife; tang inserted into complete wooden handle. 15 cm. Ward-Perkins (1940, 53, No. A3041, Pl. XI, 9). (Illustrated).
40. (69. IV-10). "Scramasax" knife, as last. 11.5 cm. (Illustrated).
41. (796. XV-21). "Scramasax" knife. End of blade missing. 12 cm.
42. (107. IV-28). Knife with broad blade, slightly convex in profile; tanged handle. 15.3 cm. Ward-Perkins (1940, 52 and Pl. XI, 6). (Illustrated).
43. (31. III-10). Blade of a knife with tang. Iron collar for handle. 17.5 cm. (blade 14.5 cm.). Blade is *c.* 3 cm. broad. (Illustrated).
44. (509. VI-26). Knife with strip tang that fans outwards; rivets of copper alloy survive in the two end holes of the handle. Two other holes have lost their rivets. 14.5 cm. Ward-Perkins (1940, 53 and Pl. XI, 12). (Illustrated).
45. (33. II-12). Knife with strip tang containing three rivet holes; most of blade is missing. Blade 3.5 cm. handle 8 cm. (Illustrated).
46. (59. IV-14). End of knife blade, single-edged and triangular in section. 8.4 cm.
47. (46. I-12). Section of knife blade (broken). 5.5 cm.
48. (82. I-12). Dagger, double-edged with tang. 14 cm. (Illustrated).
49. (13. IV-4). Barbed and socketed hunting arrow. 8 cm. Ward-Perkins (1940, 72 and Pl. XV, 29 and 31. Type XV). *G. M. Cat.* 276 No. 19, Pl. LXXXIX, 21. Ashmolean Museum 1920, 87 (Thame). (Illustrated).
50. (11. I-24). Arrow with head of quadrangular section, tapering to a point. Socketed. 7 cm. Ward-Perkins (1940, 68 f. Fig. 17, 7 and 71, Pl. XV, 22. Type VIII). Thompson (1957, 84 and Fig. 8B—Huttons Ambo, near Malton, Yorkshire), dated to the thirteenth century. (Illustrated).
51. (1. I-16). Fish-hook with barbed end. 5 cm. Dullely (1967, 28 and Fig. 65, 6—Pevensy, Sussex). (Illustrated).
52. (54. I-12). Fish-hook. Type as last. 3.5 cm. (Illustrated).
53. (29. III-10). Pair of shears. 9.5 cm. Ward-Perkins (1940, 55 and Pl. XXXII, 1 and 3. Type II). (Illustrated).

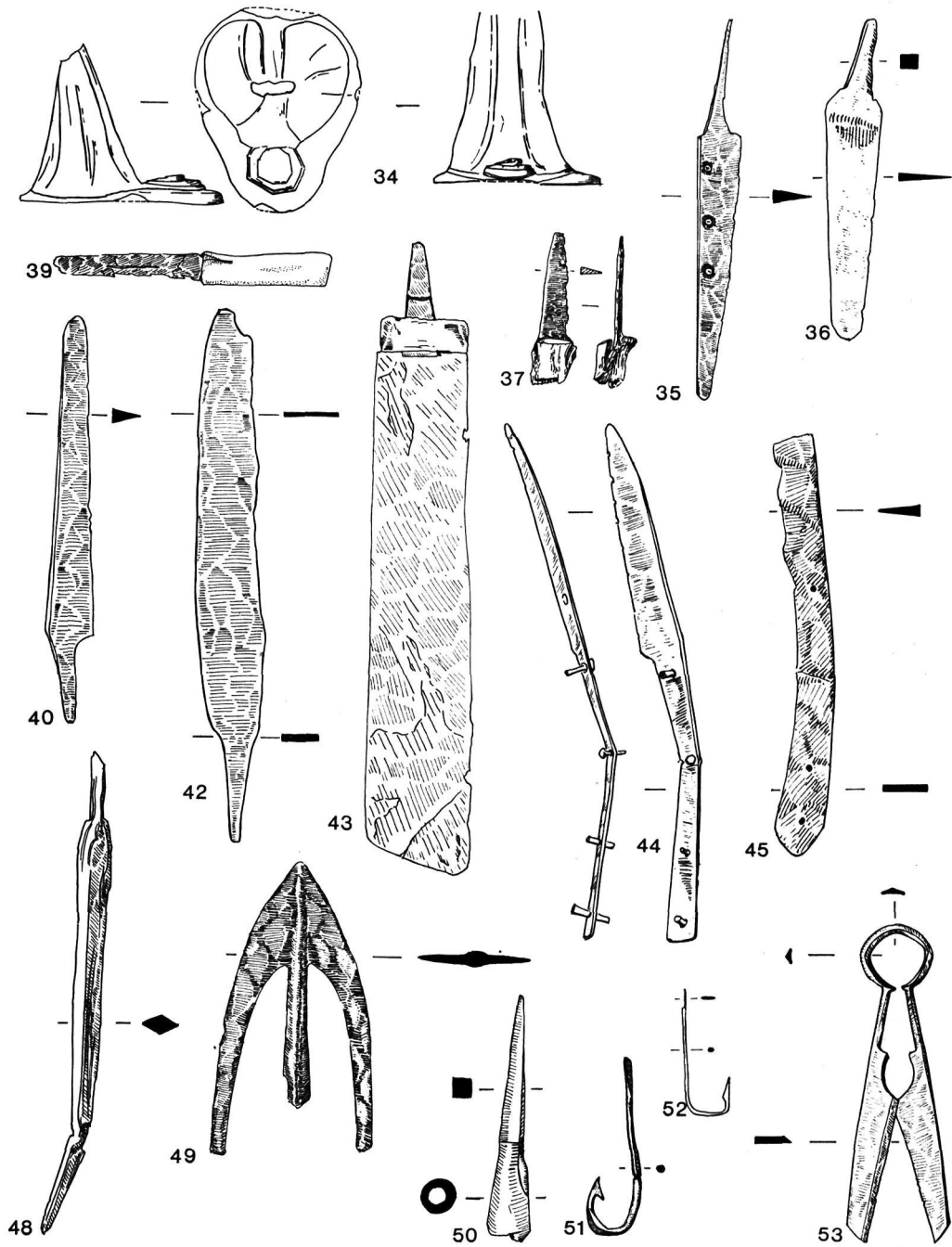


Fig. 37.—Custom House site; small finds 34–53 ($\frac{1}{2}$), except 37 and 39 ($\frac{1}{4}$)

54. (36. III-10). A fragment from a similar pair of shears, comprising a piece of the looped spring and the handle of one blade. 4.5 cm.
55. (109. III-17). Tweezers, looped at the centre and with spatulate arms. These each terminate in a trefoil device of which the outer points are rudimentary. The central projection is a pronounced claw which is designed to grip the opposing extension. 12 cm. Myres and Green (1973, 106-8, for iron looped tweezers from Anglo-Saxon contexts, which stand at the beginning of the tradition represented by the Custom House example). (Illustrated).
56. (7. IV-42). Spoon-bit. 9.3 cm. Biddle (1961-2, 177 and Fig. 30, 3.—Seacourt, Berkshire). Rahtz (1969, 87 and Fig. 48, No. 79). (Illustrated).
57. (61. III-14). Twist-bit from an auger. 7 cm. (Illustrated).
58. (88. I-12). Bit, tapered at both ends. 14 cm. (Illustrated).
59. (40. I-12). (?)Bit with tang. 6.6 cm. (Illustrated).
60. (628. V-16). (?)End of a bit. 8.5 cm.
61. (26. III-10). Horseshoe, complete, with four rivet holes on each side. 13.5 cm. For the type, Ward-Perkins (1940, 115 and Fig. 36, 12—Visby, Gotland, A.D. 1361). Biddle (1961-2, 180 and Fig. 30, 19—Seacourt, Berkshire). Huggins (1970, 144 and Fig. 56, 2 and 1972, 121-124, Fig. 32, 1-9—Waltham Abbey, Essex). Richardson (1959, 100 f, Fig. 28, 7—Hungate, York). (Illustrated).
62. (49+50. I-12). Two pieces of horseshoe, perhaps from the same artifact:
 (a) Over half a horseshoe with three rivet holes containing rivets. 11 cm. (Rivets 2.5 cm.).
 (b) Piece of horseshoe with one rivet hole. (Illustrated).
63. (987. XII-4). Horseshoe: half survives with three rivet holes, two with rivets surviving. 12 cm. (Rivet 3 cm.).
64. (701. XV-16). Piece of horseshoe (most of one side) with four rivet holes. 11 cm.
65. (224. II-19). Swivel attached to chain link from which two rings lead off to strap ends, each riveted to a piece of leather. Probably from horse harness. Link and swivel c. 9 cm. (Illustrated).
66. (79. I-12). Hook with three links of a chain (ovoid, but pinched inwards at the mid-point). 12 cm. (Length of hook 4 cm., length of each link c. 3 cm.). (Illustrated).
- 67*. (10. I-22). Spike with square section and hollow socket, perhaps a ferrule used as an ox-goad. 6.6 cm. Similar objects are found in Roman contexts (e.g. Frere, 1972, 188, Fig. 69, No. 120) and in medieval ones. (Bryant and Steane, 1971, 53 and Fig. 13b). (Illustrated).
- 68*. (9. I-23). T-shaped attachment with kink in upright arm. In each extremity is a rivet hole. Perhaps from a bucket. 6.5 cm. (Illustrated).
69. (677. XII-3). Pricket candle holder consisting of a spike between volutes and with vertical "spiked" base. 13 cm. (Illustrated).
70. (704. XIV-5). Pricket. Type as last. 14 cm. (Illustrated).
71. (486. IV-55). Pricket, as last, but spiked base is at right-angles. 7 cm. (Illustrated).
72. (643. VII-10). Candlestick with socketed holder and one volute. Spiked base at right-angles, as last. 10 cm. Richardson (1959, 100 and Fig. 28, No. 6—Hungate, York). (Illustrated).
73. (34. III-10). (?)Spike at base of candlestick. 4.5 cm. Ward-Perkins (1940, 182 and Fig. 56, 2). (Illustrated).
74. (55. I-12). Key. 5.8 cm. Note silvery colour of metal. Ward-Perkins (1940, 139 and Pl. XXX, 27, Type IV). Biddle (1961-2, 182 and Fig. 31, Nos. 8-10—Seacourt, Berkshire). (Illustrated).
75. (489. IV-56). Key (bow and part of stem). 6.5 cm. Richardson (1959, 100 f, Fig. 28, 1 and 2—Hungate, York) for moulding at top of stem below bow. (Illustrated).
76. (631. V-16). Handle (?)key of barrel padlock, but shank is circular in section. 8.3 cm. Ward-Perkins (1940, 149, Fig. 45). Biddle (1961-2, 180 and Fig. 31, No. 1—Seacourt, Berkshire). Rahtz (1969, 85 and Fig. 47, No. 45 f). (Illustrated).
77. (77. I-12). (?)Handle to key of barrel padlock. 6 cm. Ward-Perkins (1940, 148, Fig. 44, 2). (Illustrated).
- 78*. (8. I-24). (?)Plain buckle consisting of loop and pin. The pin consists of a strip of metal bent over and hammered together along its total length. Width 4.5 cm., pin 5 cm. Perhaps Roman, but more probably of medieval date.
79. (53. III-10). Buckle of plain type, with loop of pin bent over. Width 3.5 cm., pin 3.5 cm. Biddle (1961-2, 179 and Fig. 30, No. 15—Seacourt, Berkshire). (Illustrated).
80. (799. XV-21). Buckle with projecting "tongue". Pin missing. Width 6.3 cm. (depth including tongue 4.5 cm.). Fingerlin (1971, 455, No. 475 and Fig. 167—Visby, Gotland, A.D. 1361). Biddle (1961-2, 179 and Fig. 30, No. 17—Seacourt, Berkshire). Bryant and Steane (1971, 59 and Fig. 15, C5). (Illustrated).

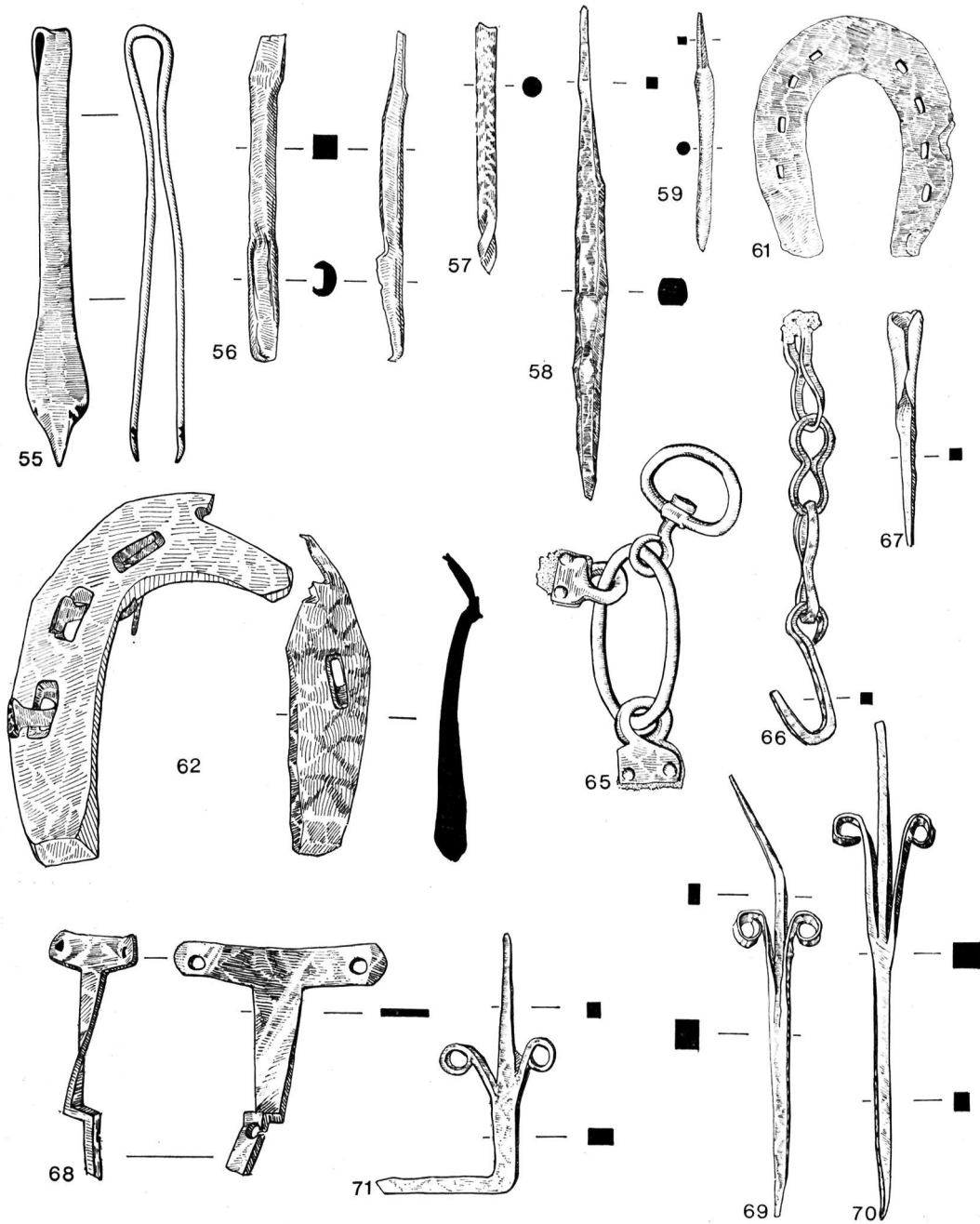


Fig. 38.—Custom House site; small finds 55-71 ($\frac{1}{2}$), except 61 ($\frac{1}{4}$)

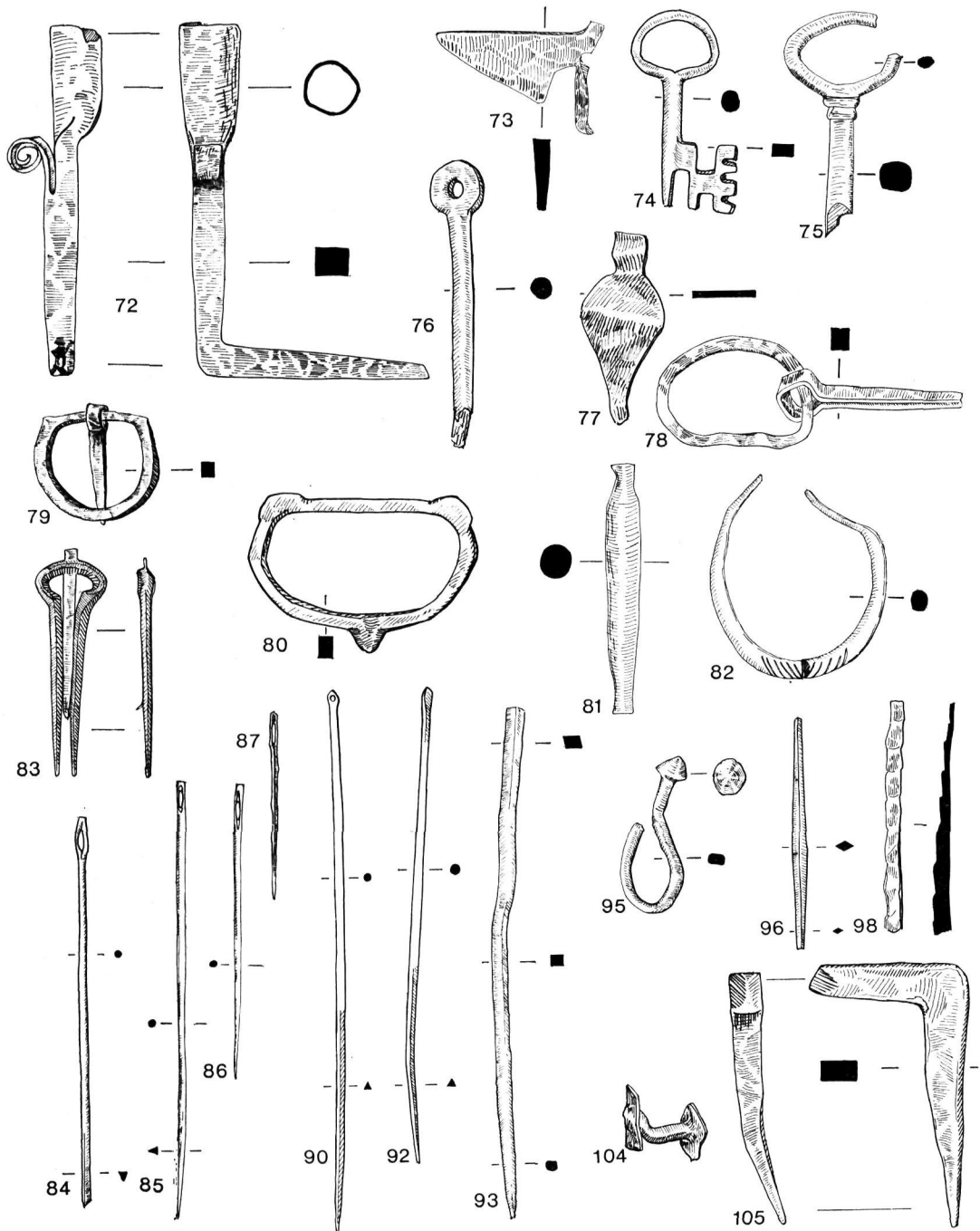


Fig. 39.—Custom House site; small finds 72-105 ($\frac{1}{2}$)

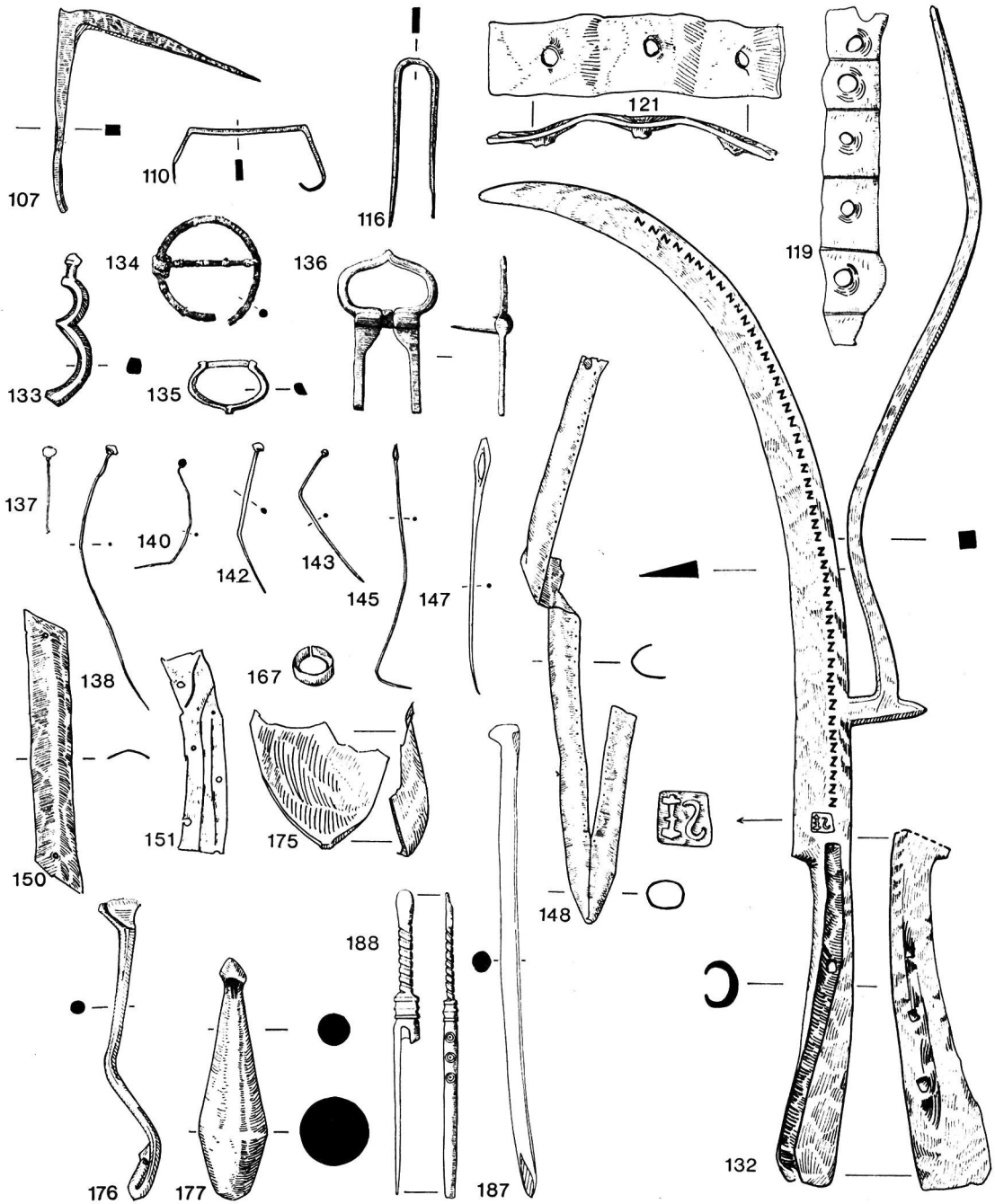


Fig. 40.—Custom House site; small finds 107–188 ($\frac{1}{2}$), except 132 ($\frac{1}{4}$)

81. (91. I-12). Cylindrical bar of iron from a harness-buckle. 7.1 cm. Ward-Perkins (1940, 277 and Pl. LXXIX, 1 and 2). (Illustrated).
82. (75. I-12). Loop of buckle of strap-end type, thickening towards centre. Filled decoration on either side of deeper grooves, where the pin is "bedded". External diameter 5 cm. (Illustrated).
83. (30. III-10). Jew's Harp consisting of a piece of metal fashioned with two prongs and with a tang welded between them. 6.5 cm. Note that end of tang is missing. Elliston-Erwood (1958, 200f—Lesnes Abbey, Erith) and other examples cited. All are of bronze and lack original tang. (Illustrated).
84. (64. IV-14). Needle or bodkin. The tip is triangular in section. 11.1 cm. (Illustrated).
85. (41. III-10). Needle. 12.7 cm. (Illustrated).
86. (41. III-10). Needle. 8.5 cm. (Illustrated).
87. (96. III-16). Needle. 5.5 cm. (Illustrated).
88. (16. XV-16). Needle. Most of the eye is missing. 13.2 cm.
89. (78. III-10). Needle. Most of the eye is missing. 5.3 cm.
90. (37. I-12). Needle or bodkin; splayed head and large eye. The tip is triangular in section (15.5 cm. Diameter of eye 0.2 cm.). (Illustrated).
91. (838. XV-25). Needle. 7.0 cm.
92. (58. I-12). Pin with flattened head. 13.9 cm. (Illustrated).
93. (97. III-16). Pin. 15.0 cm. (Diameter of head 0.5 cm.). (Illustrated).
94. (850. IV-48). Pin. 7.2 cm.
95. (67. III-10). Hook, with head in the form of a domed stud. 4.5 cm. (Illustrated).
96. (518. VI-26). Bar of iron, diamond-shaped section; tapering at each end. Perhaps part of a tool (awl or piercer). 8.7 cm. (Breadth 0.5 cm. at mid-point, 0.25 cm. at the ends). *G. M. Cat.* 53 f, Nos. 81, 82, 116. (Ac. Nos. 1584, 1585, 1619). Also Ac. No. 13404. (Illustrated).
97. (517. VI-26). Bar of iron, quadrangular section. 10.2 cm. (Breadth c. 0.5 cm. at one end and 0.2 cm. at the other).
98. (860. VI-26). Piece of iron, flattened by hammering for half of its length. 6.7 cm. (Illustrated).
99. (491. IV-60). Rod of iron, bent. 16 cm.
100. (110. III-17). Strip of iron, perhaps a handle. 8 cm. It tapers from 0.9 cm. in centre to 0.3 cm. at each end.
101. (32. III-10). Iron ring, rudely worked, with lapped ends. Diameter 3.0 cm.
102. (498. IV-56). Iron object, consisting of a tang with expanded head; lobe on each side. 4.2 cm.
103. (60. I-12). Rivet with circular head and diamond-shaped washer. 5 cm. The type was used in the construction of clinker-built boats. (See also Plate 5). Dullea (1967, 228, Nos. 7 and 8—Pevensy, Sussex). Ó'Riordáin (1971, 76 and 82, Fig. 24—Dublin).
104. (98. I-14). Rivet. Type as last. 1.8 cm. (Illustrated).
- 105-109. Angle brackets, with arms at right-angles one to the other. The length of each arm is given (86. I-12) 7.5 and 3.0 cm. (Illustrated); (86. I-12) 6.0 and 3.0 cm.; (90. I-12) 5.0 and 5.0 cm. (Illustrated); (185. IV-14) 5.0 and 3.0 cm.; (100. V-8) 5.5 and 3.0 cm.
- 110-118. Staples. (795. XV-18) 3.5 cm. (Illustrated); (519. IV-56) 3.0 cm.; (512. VI-26) 5.0 cm.; (727. XXI-7) 6.0 cm.; (84. II-16) 8.0 cm.; (83. III-16) 5.0 cm.; (72. I-12) 5.0 cm. (Illustrated); (836. XV-24) 4.0 cm.; (675. XV-+) 11.0 cm. The last two are respectively from seventeenth- and eighteenth-century levels and may be post-medieval.
- 119-128. Strips of iron with rivet holes in them. (719. XV-17) 5 rivet holes, 9.8 cm. (Illustrated); (57. III-10) 4 rivet holes 14.0 cm.; (793. XIII-5) 3 rivet holes 8.4 cm. (Illustrated); (627. VI-26) 2 rivet holes 8.0 cm.; (712. XII-5+7) 2 rivet holes 5.2 cm.; (500 IV-60) 2 rivet holes 9.0 cm.; (497. I-26)* rivet hole 2 cm.; (857. IV-58) rivet hole 7.0 cm.; (14. I+) rivet hole 5.6 cm.; (487. III-36)* 2 rivet holes 7.5 cm.
- 129-131. Nails. (798. XV-21) 10.5 cm.; (35. I-12) 12.2 cm.; (638. VI-26). 3.1 cm.
132. Welsh Hook; a bill with a scythe-shaped blade and a long vertical back spike now bent. On the blade the maker's initials and a decorative series of stamped or engraved Z-shaped marks. c. 68 cm. Dr. Borg of the Tower Armouries, who kindly supplied the references cited below, points out that the Welsh hook (or Forest bill) usually incorrectly identified as a guisarme, is in fact English. Bills with open or wrap-over sockets are an insular speciality.
- Datable examples from the site of the battle of Sedgemoor (Taunton Castle Museum. H. St. George Gray, "Some relics of the Monmouth Rebellion in Somerset", *Connoisseur*, Feb. 1903, 116-119), in the Ludlow Castle Museum (date 1688 on the blade) and in Salisbury Museum (from Amesbury. H. Shortt, *A Souvenir of Salisbury Museum*, 1957, 6. Date 1731 on the haft) were made in the seventeenth

or eighteenth centuries, but the type seems to have originated in the sixteenth, to which time the Custom House specimen may be assigned—at least tentatively. Unfortunately the Welsh Hook was retained by the finder and is not now available for examination. (Illustrated).

Copper Alloy

133. (39. I-12). Part of a drop-handle or a pendant with lobed sides. 4.4 cm. (Illustrated).
134. (28. III-10). Penannular brooch, hoop circular in section. Elaborately decorated with lateral grooving that alternates with groups of concentric bands on both hoop and pin. Diameter c. 3.0 cm. Ward-Perkins (1940, 273-276, especially No. A2667, Pl. LXXVII, 2). Evans (1953, 57 f and Pls. XII-XIII. "The fourteenth century witnessed a steady development of the ring-brooch towards a less utilitarian design."). (Illustrated).
135. (51. I-12). Strap-end buckle; pin missing. Width 2.1 cm. Ward-Perkins (1940, 272, No. A2564, Pl. LXXV, 8). Rahtz (1966, 71 and Fig. 6, No. 40—Kenilworth, Warwickshire). Fingerlin (1971, 114, Figs. 181-187). (Illustrated).
136. (697. XIII-2). Strap-end buckle of pronged type, with flattened pin. Length 4.7 cm. Width 2.8 cm. Ward-Perkins (1940, 272, No. A3150, Pl. LXXV, 2). Fingerlin (1971, 333 No. 63 (Fig. 198—Rischolm), 380 No. 185 (Fig. 186—London), 384 No. 205 (Fig. 202—Bury St. Edmunds), 386 No. 218 (Fig. 182—Dunwich), and 399 No. 296 (Fig. 185—London), all assigned to the second half of the fourteenth century). (Illustrated).
137. (95. V-8). Pin with stone (probably red jasper) head. 2.5 cm. (Illustrated).
138. (48. I-12). Pin with (?)red jasper head; type as last. 8 cm. (Illustrated).
139. (44. I-12). Pin with bead of (?)lead as head. 8 cm.
140. (4. I-20). Pin with bead of (?)lead as head. Type as last. 4 cm. (Illustrated).
141. (705. XIII-4). Pin. Head missing? Originally of lead. 3.2 cm.
142. (674. XI-5). Pin with bead of (?)lead as head. Type as last. 4.7 cm. (Illustrated).
143. (2. I-16). Pin with domed head. 4.5 cm. Kenyon (1948, 262, Fig. 89, No. 9). Rahtz (1969, 87 and Fig. 49, No. 97). (Illustrated).
144. (485. V-8). Pin with domed head. Type as last. 6.2 cm.
145. (62. III-10). Needle with "open" eye, perhaps a netting-needle. 8 cm. Wheeler (1930, 105, Pl. XLII, Nos. 11-14), but these have a head at each end. The Custom House example has only one (but possibly another has broken away). I see no reason to doubt its medieval dating. (Illustrated).
146. (490. IV-60). Needle. One side of eye missing. Very thin. 4.5 cm.
147. (918. XI-5). Needle; lozenge-shaped eye. 7.5 cm. Thompson (1957, 84 and Fig. 8C). (Illustrated).
148. (797. XV-18). Binding of scabbard chape; somewhat rough work. c. 17 cm. (Illustrated).
149. 791. XV-19). Bent strip of (?)scabbard binding with U-shaped end. Rivet hole in it; twisted. 5 cm.
150. (102. IV-26). Strip of metal with a raised spine running down it. A small hole at each end (?mounting from box). 8.5 cm. (Illustrated).
151. (715. XIII-3). Small strip of metal with six small rivet holes. Roughly etched decoration on one surface (?mounting). 6 cm. (Illustrated).
- 152*. (74. I-10). Washer. Diameter 0.8 cm.
153. (6. IV-45). Washer. Diameter 1.1 cm.
154. (43. III-10). Disc of brass with a small depression in the centre of one side. Diameter 2 cm.
- 155-166. A number of *off-cuts* from sheets of copper alloy suggest that metal-working was conducted on the site. (700. XIV-5); (17. I-20); (720. XII-7); (507. VI-26); (696. XII-12); (714. XIV-9); (504. V-8); (16. IV-54); (70. I-12) with rivet holes; (27. I-12); (713. XII-7); four *off-cuts*; (101. I-15).
167. (502. IV-48). A ring made by bending a piece of metal over onto itself. Diameter 1.2 cm. (Illustrated).
- 168-173. *Wire* (492. IV-58) 18 cm.; (56. I-12) c. 26 cm.; (42. I-12) c. 48 cm.; (18. I-20) c. 2.5 cm.; (5. I-14) c. 13 cm.; (20. II-16) c. 21 cm.
174. (501. VII-+). A (?)post-medieval buckle, which retained traces of silvering was also found. The pin had almost entirely disintegrated. Length 3.7 cm.; breadth 3 cm.

White Metal and Lead

175. (508. IV-60). Leaf-shaped bowl of spoon (part). White Metal. 4 cm. Breadth 4 cm. Ward-Perkins (1940, 133, No. A10165, Pl. XXVI, 1). (Illustrated).
176. (80. IV-25). Pewter handle of spoon. Diamond-knop. Most of the bowl is missing. 10 cm. Ward-Perkins (1940, 132 No. A38, 277, Pl. XXVII, 5). (Illustrated).
177. (111. I-12). Lead plumb-bob; elongated shape. 7 cm. (Illustrated).

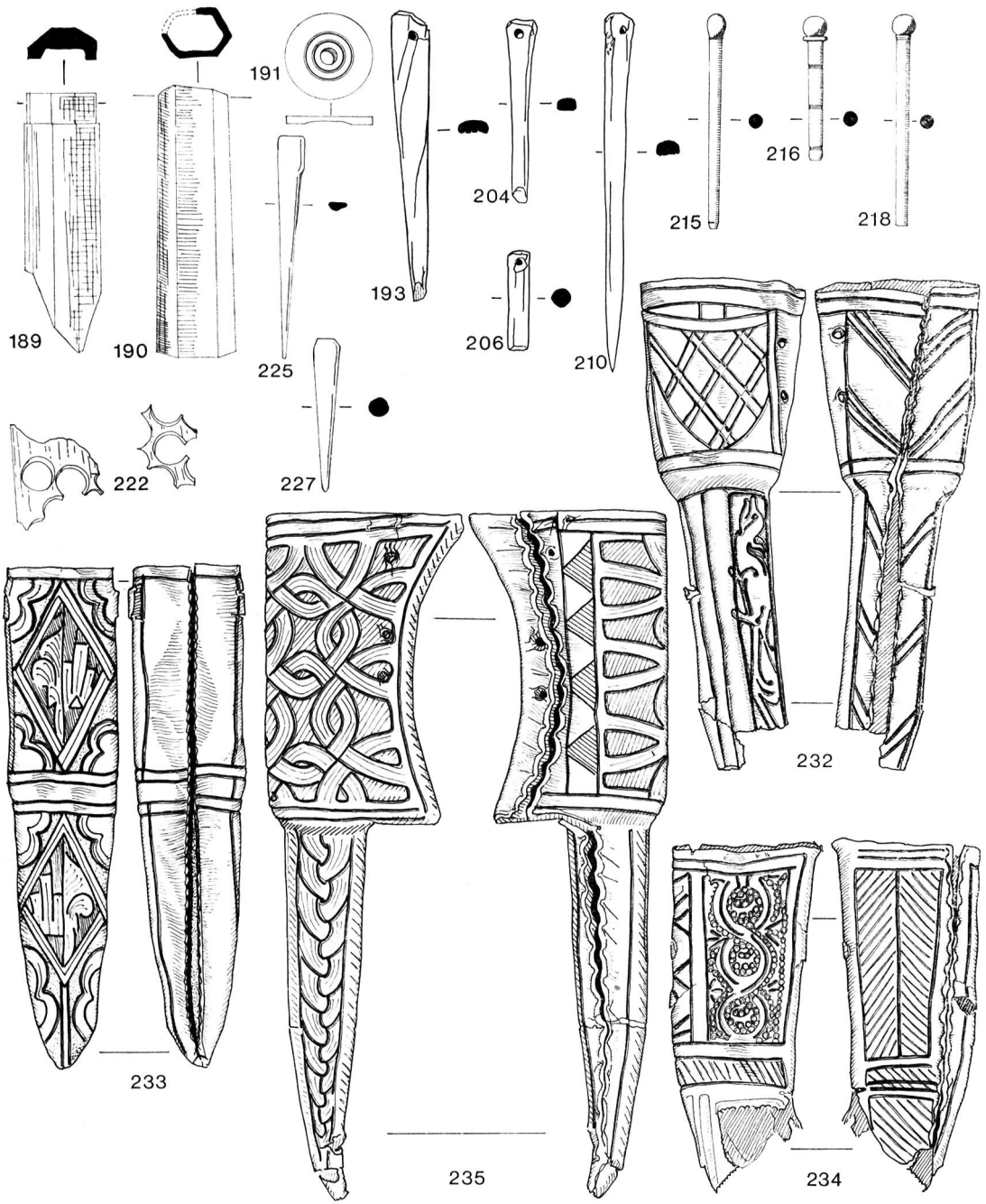


Fig. 41.—Custom House site; small finds 189–234 ($\frac{1}{2}$) except 193, 204, 206, 210 ($\frac{1}{4}$)

178. (86. V-8). (?) Lead disc with criss-cross decoration on both sides. On one side a shield seems to be intended. Perhaps a counter. Diameter 1.4 cm.
179. (45. I-12). Piece of lead sheet with rivet holes in it. 4 cm.
180. (94. I-12). Piece of very thin (?) lead sheet, folded over onto itself.
- 181-185. Note the following off-cuts of lead. (494. IV-58); (89. III-14); (93. I-12); (633. III-27); (675. XI-+).
186. (688. XIII-1). A lead weight made by rolling a sheet of lead round onto itself to form a cylinder. c. 5.5 cm. Diameter 3.5 cm. Probably eighteenth century.

Bone

187. (260. II-18). Right radius of goose (*Gallus domesticus*) with obliquely cut end; traces of black staining. 13 cm. Moorhouse (1972, 43 and Fig. 7, 12—Dominican Friary at Boston, thirteenth century. Examples from Coventry and Norwich cited). Perhaps used as a pen or—more probably—as an insertion into the broken end of a quill in order to lengthen it. (Illustrated).
188. (533. V-8). Toilet implement consisting of tweezers with a handle that ends in a shallow ear-scoop. Made in one piece from a metapodial of sheep or deer. A prong from the tweezers has broken away. Decoration consists of incised, concentric circles on the tweezers and corkscrew-cutting on the handle. 9 cm. *G. M. Cat.* 121, Nos. 97, 98, Pl. LII, 4 and 5. (Ac. Nos. 3999, 4000). (Illustrated).
189. (805. XIII-3). Knife handle with faceted sides and a groove around one end to take the collar. Only part survives (with traces of five facets); probably it was originally octagonal. (*Bos* long bone). 7.5 cm. (Illustrated).
190. (249. IV-54). Knife handle, roughly hexagonal in section. (*Bos* radius). 8 cm. (Illustrated).
191. (264. I-11). Button with central hole, surrounded by concentric grooves. Diameter 2.4 cm. Rigold (1971, 148 f. Fig. 11, 0.3.—Eynsford Castle). Kenyon (1948, 266 f. Fig. 91, No. 14). (Illustrated).
- 192-213. Bone awls used for coarse sewing, with perforation at one end, and a point at the other. (858. XV-19). *Ovis* radius 13 cm. (point broken away), diameter of perforation 0.3 cm.; (844. XV-25). *Bos* tibia 16.5 cm., perforation 0.3 cm. (Illustrated); (801. XV-15) *Dama* tibia, point only 10.5 cm.; (800. XV-22). *Dama* tibia, 16.5 cm., perforation 0.3 cm.; (695. XV-15). *Bos* tibia, 17 cm., perforation 0.3 cm.; (666. VI-26). *Bos* tibia, 13 cm. (point broken away), perforation 0.3 cm.; (277. II-6). metacarpal, 14.2 cm., perforation 0.3 cm.; (275. II-14). tibia, 12.5 cm., perforation 0.2 cm.; (272. II-12). Metapodial, 12.5 cm., perforation 0.4 cm.; (270. II-12). *Ovis* radius, 13.4 cm., perforation 0.3 cm.; (263. I-12). *Ovis* metatarsal, 12.7 cm., double perforation 0.3 and 0.15 cm.; (262. I-12). *Dama* metacarpal, 16 cm., perforation 0.5 cm.; (259. I-12). *Ovis* radius, 10.7 cm. (point broken away), perforation 0.5 cm. (Illustrated); (258. IV-23). *Ovis* tibia, 10.8 cm. (point broken away), perforation 0.3 cm.; (257. I-12). metapodial, 5.7 cm. (point broken away), perforation 0.4 cm. (Illustrated); (255. IV-14). *Bos* tibia, 14.8 cm., perforation 0.3 cm.; (254. I-14). *Bos* radius, 17.5 cm., perforation 0.5 cm.; (253. I-14), *Bos* metatarsal, 15.5 cm., perforation 0.7 cm.; (250. V-8). *Dama* metapodial, 21 cm., perforation 0.3 cm.; (246. IV-51). *Dama* tibia, 14.5 cm., perforation 0.5 cm.; (1033. V-8). *Dama* tibia, 16 cm. (point broken away), perforation 0.3 cm.; (1034. VI-26). Point only, 2.7 cm. Rahtz (1969, 81 and Fig. 43, No. 1). Haslam (1973, 84 and Fig. 3, No. 17—Aldersgate Street).
214. (534. V-8). Bodkin or "stylus". Spherical head with groove below. Small hole in end for iron pin. 7.3 cm. For "styli", Knocker (1959, 145—Clare Castle). Rigold (1971, 148 f. Fig. 11, 0.2—Eynsford Castle).
215. (271. III-2). Bodkin or "stylus". Type as last. 6.2 cm. (Illustrated).
216. (265. I-12). Bodkin or "stylus". A triple groove appears at three places on the shank; end broken away. 4 cm. (Illustrated).
217. (268. III-10). Bodkin or "stylus" with sub-spherical head, two grooves below; end broken away. 4.7 cm.
218. (256. I-12). Bodkin or "stylus" (from femur of domestic fowl) with spherical head and two grooves below; remains of iron pin at end. 6.2 cm. (Illustrated).
219. (269. III-10). Bodkin or "stylus" with onion-shaped head; small hole at end for pin. 7.7 cm.
- 220*. (244. I-20). Small piece of worked bone (domestic fowl); from the shank of a pin. 4.4 cm.
221. (266. II-12). Piece of rib with perforation in it. 4.5 cm.; perforation 0.4 cm.
222. (803. XV-17). Two pieces of bone from which discs (? buttons), diameter 0.9 cm., have been cut. (Illustrated).
223. (802. XIII-3). Peg of bone, roughly circular in section, with a point. 7.3 cm.
224. (245. V-8). Piece of bone roughly cut down to a point. 11 cm.

225. (536. IV-58). Similar (from *Sus*, ulna). 6.5 cm. (Illustrated).
 226. (276. I-4A). Similar. 5.3 cm.
 227. (267. III-10). Similar. 4.5 cm. (Illustrated).
 228. (862. XII-3). Tine of antler (*Capreolus capreolus*) sharpened to a point. 13 cm.
 229. (684. XI-4). Offcut of brow tine of antler. 13 cm.
 230. (248. III-36). Bone off-cut. 9.7 cm.
 231. (273. II-9). Bone off-cut. 7.2 cm.
 231a. (1035. XV-14). Bone off-cut (rib). 10.8 cm.

Alison Fleck-Abbey writes: Long bones from *Bos*, *Dama* and *Ovis* were used for the manufacture of many of these objects listed above. Where identification is not specific (e.g. "metapodial") it is probable that the bone is from *Dama*.

Leather

The following are sheaths, engraved or stamped with ornamental devices

232. (829. VI-26). Upper part, widened to take knife handle, engraved with a shield; a dragon is shown on the longer lower zone. On the back is a shield (also note two holes for rivets). End missing. 14.3 cm. For monsters engraved on sheaths see Richardson (1959, 102 f, Fig. 29 and Pl. VII No. 1—Hungate, York). *G. M. Cat.* 145, No. 78 (Ac. No. 4643). (Illustrated).
 233. (299. VI-25). Sheath in light-coloured leather with heraldic device. 14.5 cm. Type as Ward-Perkins (1940, 193 and Fig. 60 No. 1—fourteenth century, engraved with a blunt tool). (Illustrated).
 234. (227. I-12). In the upper register a stamped pattern showing lions against a background of dots. The lower zone almost completely vanished but the outline of a shield remains. 9 cm. On the back of the sheath is some simple herring-bone decoration. Cf. Ward-Perkins (1940, 191 and Pl. L, 3, No. A3682); also Richardson (1959, 103, Fig. 29 and Pl. VII No. 4—Hungate, York). Both are referred to the fifteenth century, but our example suggests a somewhat earlier dating. (Illustrated).
 235. (835. Pile Hole 1). Sheath engraved with interlace pattern in two zones. 19 cm. Ward-Perkins (1940, 191 and Pl. XL, 1, No. A3684—scribed to the fourteenth century). Ó'Ríordáin (1971, 75 and Pl. VI D—assigned to the late twelfth or early thirteenth centuries, probably incorrectly. Dublin). (Illustrated).
 236. (226. III-10). Fragment of sheath, type as above. 6 cm. (Illustrated).
 237. (513. III-17). Sheath with stamped decoration of rosettes. 15.5 cm. Ward-Perkins (1940, 191 and Pl. XLII, 1, No. A3666 (with *fleurs-de-lis*) ascribed to the fifteenth century). (Illustrated).
 238. (300. IV-55). Strap set with rectangular studs of copper alloy. Length 18 cm., width 0.7 cm. Studs 2.7 cm. apart. Ward-Perkins (1940, 195 and Fig. 63, No. 10). (Illustrated).
 239. (859. I-12). Strap set with studs of copper alloy. Length 21 cm.; width 0.9 cm. Type as last but studs are closer together. (Illustrated).
 240. (515. II-14). Strap with iron handle. Length 17 cm. (buckle and plate 2.0 cm.); width 0.7 cm. Ward-Perkins (1940, 198 and Fig. 63, No. 7, A3691). (Illustrated).
 241. (514. I-12). Pieces of leather with studs in edges, perhaps from shoe-uppers.
 242. (846. XIII-3). Pieces of thin leather with slight traces of gilding.

N.B. All other medieval leather objects will be published next year. This includes a very large number of cobblers' off-cuts and shoes.

Wood

243. (157. I-12). Wooden chessman, with moulding running horizontally around "waist" and vertically up sides. Probably a bishop. Height 3.3 cm.; diameter at base 2.6 cm. For bone examples cf. Wheeler (1927, 46 f and Fig. 26, 1 and 2, "included in the Viking period with all reserve"). Bryant and Steane (1971, 67 f, Fig. 19a and Pl. 18—Lyveden and examples cited). (Illustrated).
 244. (852. III-17). Conical object with slightly convex base. Probably a gaming-piece. Height 5.2 cm.; diameter at base 2.3 cm. For stone and shale examples cf. Eogan (1967-8, 366 and Pl. LVIIIa - Knowth, Co. Meath. He cites examples from Birka, also of the Viking period). (Illustrated).
 245. (149. I-12). End of a comb decorated in fretwork. The teeth of the comb are cut on two modules. 4 cm. Width 6.4 cm. (Illustrated).

Several other wooden combs will be published next year.

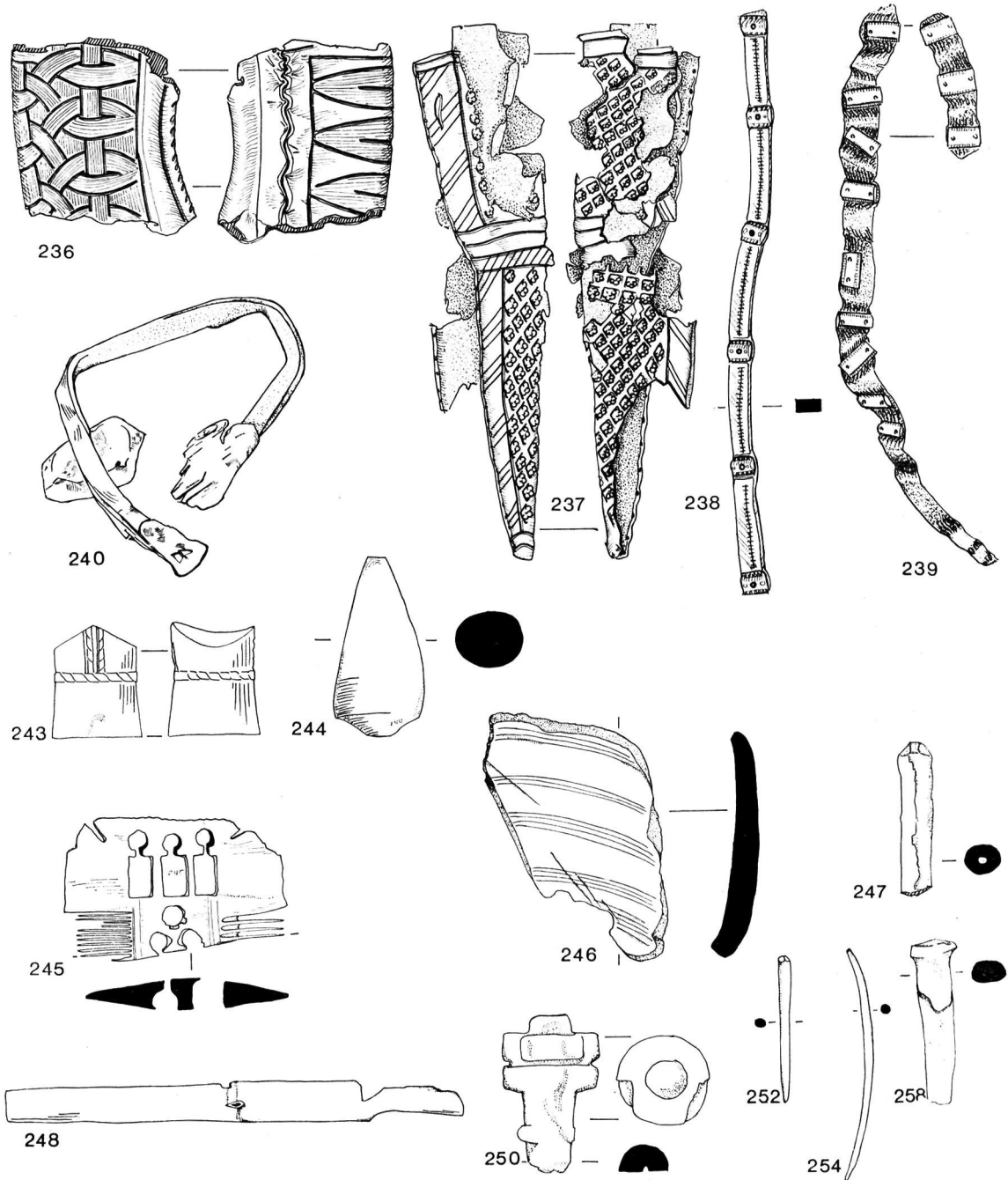


Fig. 42.—Custom House site; small finds 236–246 ($\frac{1}{2}$), and 247–258 ($\frac{1}{4}$)

246. (818. XIII-4). Piece of turned bowl. 6 cm. Biddle (1959, 182 and Fig. 18, 23 and 24—Manor of the More, Rickmansworth). (Illustrated).
247. (122. I-12). Handle for knife; at one end is a hole for the tang. 8.3 cm. (Illustrated).
248. (112. III-10). Label or tally. A strip of wood with a notch at the handle end, and thinned down at the other end of the stave. 27 cm. Thickness 0.4 cm. at one end; 0.2 cm. at the other. For the use of tallies, Dalton (1924, 133 f). (Illustrated).
249. (616. IV-58). Flat strip of wood with a hole cut through it. 12 cm. Possible from a similar label.
250. (669. VII-10). A cylinder with horizontal groove through which runs a cylindrical shaft or axle. Perhaps a piece of tackle or part of a hawser. 9.5 cm. (Illustrated).
- 251-256. Thin pins or pegs, all from a fourteenth-century context. (124. I-12) 5.3 cm.; (125. I-12). 8.8 cm. (illustrated); (261. III-10) 7.0 cm.; (673. VI-26) 15.0 cm. (illustrated); (819. XV-16) 15.5 cm.; (671. IV-48) 8.5 cm.
257. (617. III-38). Peg, somewhat thicker than above. 6 cm.
258. (816. XV-13). Peg, roughly cut. 9.5 cm. (Illustrated).
259. (851. I-14). Peg, roughly cut. 22 cm. A small strip of leather found wedged through its split end appears to be an accidental intrusion. 14 cm.
260. (159. I-12). Roughly-cut piece of wood. 14 cm.
261. (142. III-10). Roughly-cut piece of wood. 4.5 cm.

The finds from the medieval levels (thirteenth and fourteenth centuries) are particularly revealing about life on the waterfront in the High Middle Ages. Alongside fishing (fish-hooks) and (?)fowling (hunting arrow), there is evidence for industrial activity in the various tools, off-cuts of copper alloy and the bone awls (although these may have been used to make or repair fishing-nets). Sewing of finer quality is represented by the bodkins and needles from the site. The turbulence of the period is suggested by the dagger and the sheaths, but the lighter side of medieval life is also represented—in the Jew's Harp and wooden gaming-pieces. Amongst other objects, the candlesticks call for special mention. At night the area would have been dark, forbidding and dangerous, and such means of artificial lighting as existed must surely have taken a high priority amongst the possessions of those who dwelt there.

THE MEDIEVAL BUCKLER (FIGS. 43—44)

BY DR. G. C. DUNNING

As far as I know, this is the first reasonably complete buckler of medieval date to be found in this country. There are three points about it that require comment:

1. Its small size, only about 11 in. in diameter. The ones that I have seen in Norway range from 14 to 20 in. across. So the iron boss on the London buckler seems to be disproportionately large for the size of the shield.
2. The boss itself is very similar to that of the thirteenth century from the Wallingstones homestead, Llangarron, Herefordshire (see *Transactions of the Woolhope Naturalists' Field Club*, Vol. XL (1970), Pt. 1, p. 105 and Fig. 17A). There are, of course, slight differences in detail. The London one has a rather higher and more conical shape, and the terminal spike is of heavier make.
3. The three concentric circles of iron strips on the London buckler are exactly matched on one of the Norwegian shields (see Grieg's book, Fig. 292 and 293). It also has radial strips extending inwards. In Norway these are usually curvilinear or shaped like C scrolls.

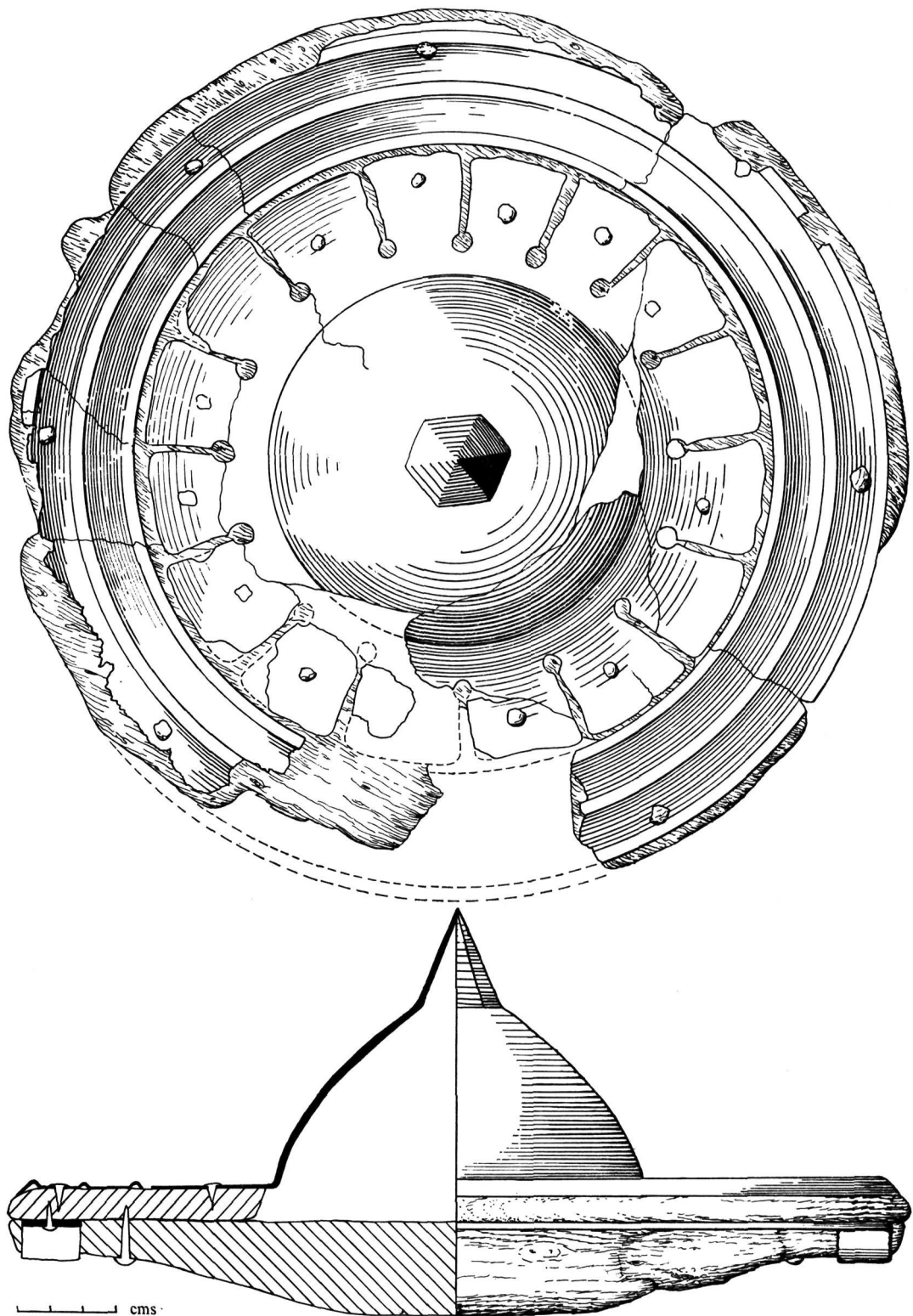
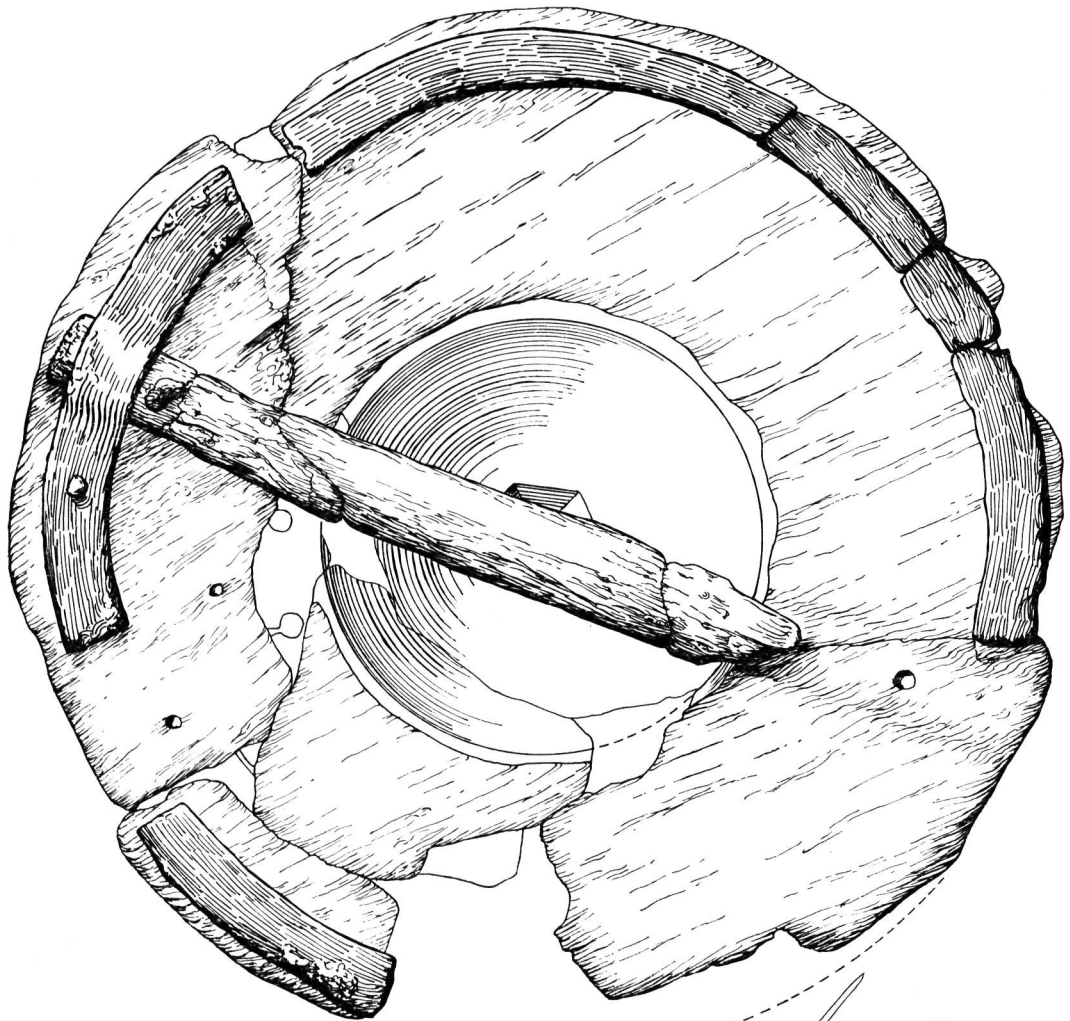


Fig. 43.—Custom House site; Medieval buckler: front and transverse section ($\frac{1}{2}$)



_____ cms

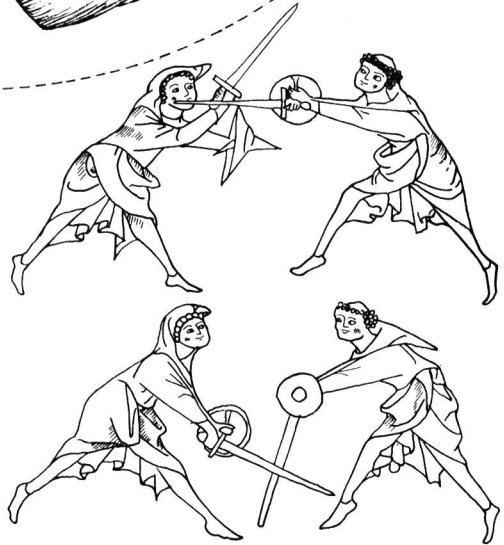
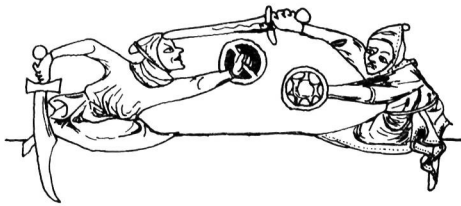


Fig. 44.—Custom House site; Medieval buckler: back ($\frac{1}{2}$), and contemporary illustrations of use from *The Luttrell Psalter* (left) and a late thirteenth century manuscript (right)

Mr. Claud Blair, Keeper of the Department of Metalwork, Victoria and Albert Museum, remarks that such small bucklers were used in fencing, not in battle, for parrying sword thrusts. He also refers to a marginal illustration in the Luttrell Psalter, *c.* 1340 (see Fig. 44). and Sir Eric Millar, *The Luttrell Psalter* (1932), p. 27, Pl. 6A (Folio 49). The drawing shows a combat between two grotesque men, the one on the left with a falchion, and the other with a sword. Both men have small circular fist-shields, showing the back (left) and front (right) respectively. The decorations on the front is very like the scrolls on some of the bucklers.

THE GRAFFITI

BY MARK HASSALL

Institute of Archaeology, University of London

- (525. I-26). Body sherd of an amphora, with a graffito cut onto it when it was in the leather-hard state. The end of the first line may be complete; it reads:
...]VNA ... / ...] NIISIMI
In line 2 the S is represented by a single vertical stroke and a second, detached, hook-shaped stroke below the line. If this reading is correct O]nesimi would be a possible restoration. (Fig. 36. Graffito).
- (I-26). A fragment of red wall plaster. The surface has been lightly scored with random markings and at least one deliberate graffito. This appears to read:
...]Λ.MΛ.XI.O[...
The final letter might be a C or an S followed by a second letter.
- (528. III-48). A sherd of Drag. 37 (style of Cinnamus). A graffito cut above the ovolo reads:
...]ILIR ... perhaps C]eler.

THE COINS

BY RALPH MERRIFIELD, *Guildhall Museum*

- I-24 (25). Dupondius of Antoninus Pius, as R.I.C. 894 but figure of Salus holds cornucopiae (A.D. 151-2).
- III-22 (506) :As of Germanicus issued under Caligula—struck off flan and possibly an imitation. (*Cf. B.M.C.* I, p. 155, 53). Very worn and with reverse illegible.
- III-42 (505). As of Antoninus Pius—illegible, and identifiable from portrait only. Rev. Female figure standing l., holding cornucopiae.
- IV-1 (52). *Cambridgeshire Farthing* token, dated 1795 (*D+H.* 36). Obverse: *Industry has its sure reward* (Beehive). Reverse: *Current in the countries of — 1795* (Druid's Head r.).
- XII-+ (670). Post-medieval AE (diameter 20.05 mm.). Worn and illegible.
- XIII-+ (676). Farthing of George IV—first issue 1822.

BUILDING MATERIALS AND SAMPLES

Among the large number of samples of building materials, mortar, etc., that were recovered from the excavation, the following selection are listed because of their importance in relation to medieval trade with London.

(a) SLATE:

Many large and small fragments of blue slate were recovered from the fourteenth century layers (Groups A, B and C). One layer in particular (VII-6) had a very large number of fragments crushed together in a large spread. This layer was right in front of the Custom

House and may represent the working surface for the slate roof of the building. The slates themselves are of standard size (see E. M. Jope and G. C. Dunning, "The use of blue slate for roofing in medieval England", *Antiq. J.*, 24 (1954), 209ff.) and usually had a single hole. It is surprising to see that in the above-mentioned article, London is not shown on the map as having received slates from Devon and elsewhere in the medieval period.

(b) COAL:

Many lumps of coal were found in the peat and gravel layers of the fourteenth century. The coal, which presumably was imported from Newcastle by sea, may have been unloaded near here. We know that by 1369 at least, coal meters were appointed in the City of London (*Cal. Letter Book G*, f.230).

(c) BRICKS:

Rough fragments of bricks of various sizes and colours were found in the fourteenth-century layers, particularly in Group C1.

(d) ROOFING TILES:

Many fragments of the usual rectangular two-holed medieval roofing tiles were found, but only one whole one. This tile from III-II was 26 cm. long by 15.5 cm. wide and had a small blob of glaze on the bottom.

(e) STONE:

Apart from the large quantities of chalk and ragstone occurring in the medieval foundations and fourteenth century layers, a few other types of stones were found. These have not yet been identified, except for a fragment of a Purbeck marble basin and part of a small column drum of Purbeck marble 8 cm. in diameter.

(f) SCHIST HONESTONES:

Sixteen mica-schist honestones were found in the fourteenth century layers of the excavations. These have not yet been sectioned.

POST-MEDIEVAL FINDS
(INCLUDING POTTERY) (FIG. 45)

Miss Naomi Tarrant provided many helpful comments.

TRENCH VII

LAYER II

1. Two sherds. Soft fine red fabric, black iron glaze.
2. Probably cup. Sherd. Fine white fabric, blue tinted glaze on interior, flower and leaf pattern in blue and white on exterior. Nineteenth century transfer ware.
3. Bellarmine. Sherd. Hard grey fabric, interior yellow, exterior surface covered with iron wash and salt glaze giving fairly even brown colour. Lines of beard in one corner. Stone ware. Probably fairly late in date.

(For clay pipes in this Layer see page 208).

TRENCH XIII

LAYER +

4. Probably sides of a cup. Two sherds. Fine white fabric, blue tinted glazed interior, trees and goats or sheep in blue and white on exterior. Nineteenth century.
5. Plate. Base. Fine white fabric lightly tinted blue glazed exterior, interior has Chinese landscape in dark blue and white. Willow pattern. Nineteenth century.
6. Plate. Rim. Fine white fabric, pattern on both surfaces in blue on blue tinted background, glazed.
7. Dish. Fine sandy-red fabric, haematite slipped surfaces, lead glazed interior. (Illustrated).
8. Bottle. Rim. Hard, sharp light grey fabric, iron washed and salt glazed light brown surfaces. Stoneware, Nineteenth century (*cf.* Guildhall Museum 20751).

Also several small fragments of clay pipe stems.

LAYER I

9. Drug Jar. Fine pasty cream-buff fabric, white fine glaze with design in blue on exterior surface. Probably made at Southwark, or Lambeth, the latter being more likely. For similar type of vessel, see Guildhall Museum 24391, 24, 164. Also Bloice (1971), Fig. 55, 81. (Illustrated).
10. Dish or Plate. Fine pasty cream fabric, white tinglaze with degenerate Chinese landscape in blue. Possibly made at Lambeth. Possible parallel from Bloice (1971), Fig. 53, 38. Custom House example has shorter footring and base is of a fairly even thickness. (Illustrated).
11. Milk Pan. Fine sandy light red fabric, covered with a haematite slip, lead glazed interior. (Illustrated).
12. Bowl. Fine sandy cream-buff fabric, yellow glazed interior. Surrey Ware. Possible seventeenth century. (Illustrated).
13. Flagon of Bellarmine type. Sherd. Hard cream fabric, iron washed and salt glazed exterior giving lightish brown colour. Oval body plaque with beasts, possibly lions. Stoneware for plaques with similar animals, see Guildhall Museum 25138, 25139, 25181. (Illustrated).
14. Small Flagon of Bellarmine type. Hard grey fabric, iron washed and salt glazed with brown "tiger skin" exterior. Half of face mask missing. Oval body plaque with crown and heart. This motif is usually attributed to the last quarter of the seventeenth century. Stoneware, see Guildhall Museum 18718 and others. (Illustrated).
15. Large Flagon of Bellarmine type. Hard light grey fabric, iron washed and salt-glazed with brown "tiger skin" exterior. Grotesque face mask and two round body plaques—one missing. The remaining one contains floral design. Stoneware. This type of plaque seems common; for examples, see Guildhall Museum 25147, and others. (Illustrated).

(*For clay pipes from this Layer see page 208*).

TRENCH XIV

LAYER +

16. Rim of large bowl or basin. Fine white fabric, covered in blue tinted glaze.
17. Bottle. Base. Hard lightish grey fabric, iron wash and salt glaze, light brown surfaces. Stamped with the words "Blacking Bottle". Stoneware, nineteenth century. Similar bottle from Trench XV, Layer 24. (*For clay pipes from this Layer see page 208*).

TRENCH XV

LAYER 24

18. Drug Jar. Base fine cream fabric, discoloured white tin glazed surfaces. Possibly made locally—*i.e.* at Lambeth. Eighteenth century. For general type of vessel, see Bloice (1971), Fig. 55, 93–96.
19. Sherd. Hard grey fabric, salt glazed, pale green surface.
20. Bottle. Base. Hard, sharp blue-grey fabric, iron wash and salt glaze giving uneven brown exterior surface, light brown interior. Stamped with the words "Blacking Bottle". Stoneware. Nineteenth century.

Also several small fragments of clay pipe stems.

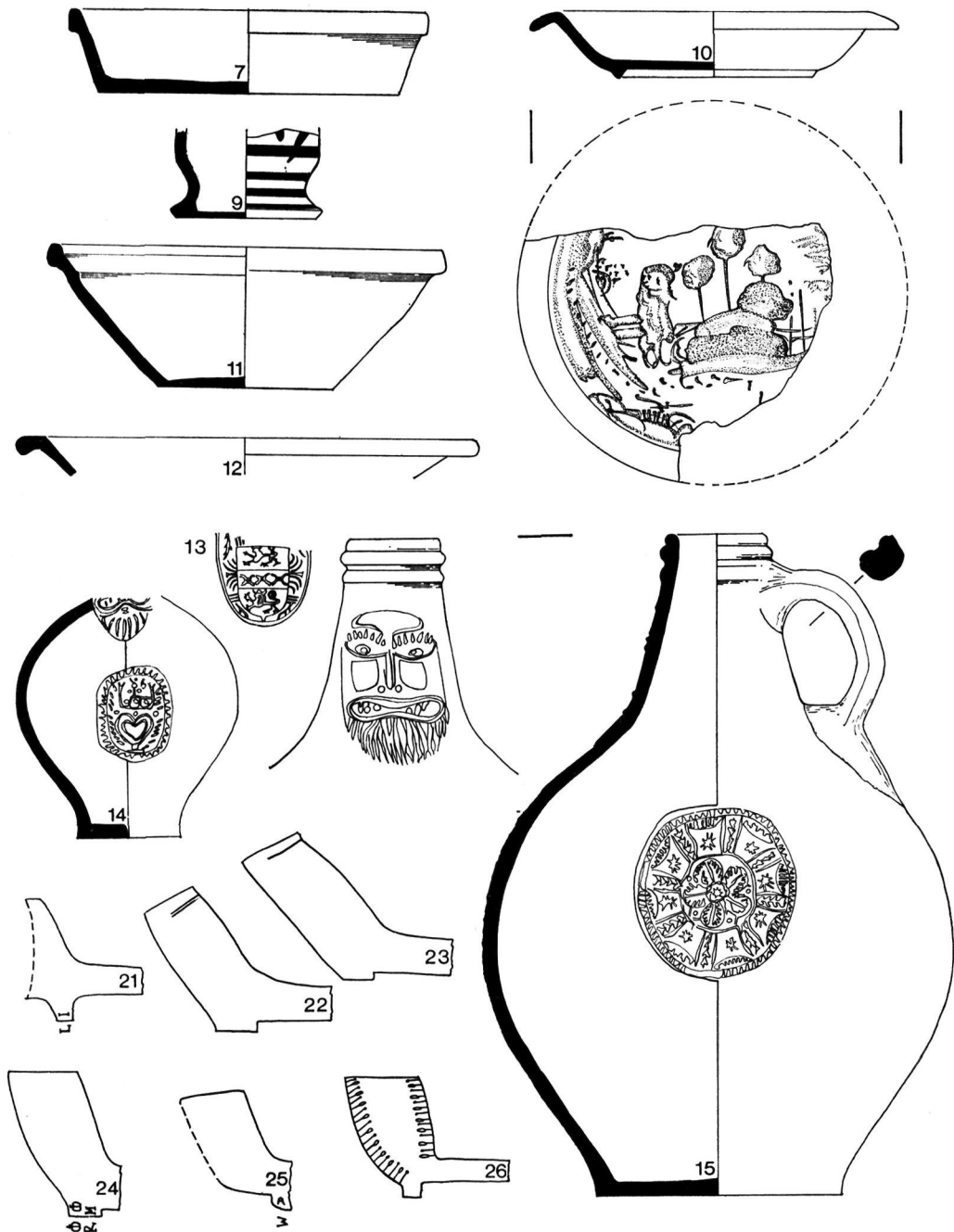


Fig. 45.—Custom House site; post-Medieval finds ($\frac{1}{4}$), except pipes ($\frac{1}{2}$) and bowl No. 11 ($\frac{1}{8}$)

THE CLAY PIPES (FIG. 45, Nos. 21-6)

BY STEPHEN WALKER

N.B. Typology used is as in "London Clay Tobacco Pipes" by D. Atkinson and A. Oswald

- (IV-+). One heel (c. mid-eighteenth century) with illegible initials.
One bulbous pipe (florally decorated), c. 1840 (No. 26).
- (XIII-I). Type 22 - 1680-1710 x 1.
Type 20 - 1680-1710 x 1.
Long Bowls - 1680-1710 x 12 (No. 22).
18 - 1660-80 x 11. (No. 23 drawing of a variation).
15 - 1660-80 x 1, and one stem—late seventeenth century.
Date of Layer—late seventeenth century—early eighteenth century.
- (VII-II). Fragment of type 18 - 1660-80 x 1.
Type 15 - 1660-80 x 6.
- (XIV-+). Type 25 of early eighteenth century with crowned initials M.R. This might be Mary Robins working c. 1686, but this is only a possibility (No. 24).
- (VII-+). Type 25 of c. 1730 and two stems of early eighteenth century.
- (XI-+). Type 18 - 1660-80 x 2, and seven stems of late seventeenth century.
- (XV-+). One spur with initials LL., probably James Lawrence of West Smithfield - 1805-11 (No. 21).
One Victorian bowl with initials D.W., probably David Wilson of Little Arthur Street, Golden Lane, c. 1828 (No. 25).
- (IX-+). One bowl fragment, possible type 28, 1820-40.

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ANALYSIS OF ORGANIC REMAINS¹

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In a waterlogged site of this nature organic remains are likely to be preserved. It is tempting to regard such remains as of environmental significance, in much the same way as in other wet deposits such as well-fillings or accumulating peat. In a town site, however, such is not likely to be the case; an urban situation produces a wealth of discarded or misplaced organic material which is no sense representative of the local environment. At the same time, there may be contributions of an adventitious nature from the environment, but they may be so disjunct that it is not possible to frame any useful picture of the surroundings. These limitations apply with some force to these particular investigations. The fact that it is a riverside site means that material may have been carried by water from well beyond the immediate locality

The evidence from the two periods, Roman and thirteenth or fourteenth century, will be presented separately, and commented on in the light of the above considerations.

A. ROMAN²

MOSS:

Large quantity of *Rhynchostegiella pumila* (Wils.) E. F. Warb.³ This moss can probably be dismissed as an introduction by man. This species is characteristic of deeply shaded basic soil, stones or rocks. It seems most unlikely that such conditions could have existed at this stretch of the course of the Thames, even if there were no disruption of the environment by the Roman shore works. This species of moss grows in tufts and so might lend itself to collection for a variety of purposes for which we have other materials today.

SEEDS:

Cyperaceae (sedges)—3 seeds.

Rumex (dock)—2 seeds (not species of wet places).

Ranunculus (buttercup)—1 seed. Probably *R. bulbosus* or *R. acris*.

Leguminosae—1 seed.

Sambucus nigra (elder)—1 seed.

The number of seeds was small. The sedge seeds could have been water-carried or they could have been of local origin. The other species could all be weeds of local origin. They are all plants of dry ground; though the species in most cases was not established for certain it was possible to exclude the docks from wet places, and the aquatic *Ranunculus* species. Apart from elder (only one seed) none of these could be regarded as food species. The most likely explanation for all of them except the sedges is that they were casual weeds of roadsides and waste places.

B. THIRTEENTH-FOURTEENTH CENTURIES⁴

MOSSES:

Two species of moss were identified: *Cratoneuron commutatum* (Hedw.) Roth., probably var. *falcatum* (Brid.) Moedk. and *Acrocladium giganteum* (Schimp.) Rich. and Wall.

Acrocladium giganteum is a plant of marshes and fens and might have grown locally. The same could apply to *Cratoneuron commutatum*, but if it is indeed var. *falcatum*, then it is more characteristic of wet moorlands and moderately acid bogs. *Acrocladium giganteum* is a some-

what local plant and had suitable habitats occurred in this neighbourhood there are commoner species that one might have expected to find in this context.

As with the Roman moss it seems likely that it was deliberately collected and used in this urban situation. It is perhaps significant that both these mosses are robust, freely-branching forms.

SEEDS:

Cyperaceae (sedges)—27 seeds fall in this category; probably 2 species.

Juncus sp. (rush)—2 seeds.

Compositae—*Anthemis* sp. (mayweed or chamomile)—1 seed.

Chrysanthemum cf. *segetum* (Corn Marigold)—2 seeds.

One unidentified seed in the same family.

Rumex acetosa (sorrel)—9 seeds.

Ranunculus (buttercup) (cg. *R. bulbosus* or *R. acris*; not an aquatic *Ranunculus*)—3 seeds.

The species from which these seeds are derived fall into two categories: those from wet habitats (sedges and rushes) and those from freely-drained sites (*Compositae*, sorrel and buttercups).

The sedges and rushes probably reflect riparian vegetation, not necessarily local. The remainder are a collection of weeds of waste land and roadsides, but it is not possible to infer the communities with any greater precision. There has clearly been some selection of species: the absence of grass fruits (but see below) which would surely have been abundant, is remarkable. As with the Roman material, there is no evidence of food plants in this assemblage. Nor is there any indication from any of the botanical material that the locality was saline or even brackish.

OTHER MATERIALS:

Fish bones: a large quantity, mainly from fins or tails.

Plant material: some grass-like fragments and some pieces of stem, probably *Urtica* (nettle).

Fabric: not of vegetable fibre; almost certainly silk.

This assemblage seems to be an assortment of waste fragments from everyday life. The nettle might indicate local weed growth, but it was used as a fibre plant and may therefore have no relation to the local environment.

NOTES

¹ Mr. P. Porter kindly prepared and examined the samples.

² Taken from Trench III, Layer 37, inside the timber box of the Roman quay. The sediment in this layer probably formed in the third and fourth centuries.

³ All the mosses were kindly identified by Mr. Eddy of the British Museum (Natural History).

⁴ Taken from the "peat" layer (I-12 and II-10).

THE DENDROCHRONOLOGY

BY JOHN FLETCHER

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OBJECT:

Samples from oak timbers were taken to determine, if possible, approximate construction dates¹ by dendrochronology.

SAMPLES:

Slices (about 4 in. thick) of various oak beams, posts and planking were cut *in situ* by a power-driven saw and brought to Oxford in the wet state. For convenience in freezing and subsequent handling, wedge-shaped pieces (two per sample) between the pith and sapwood were split from the wet beams and posts in such a way as to include as many annual rings as possible of typical growth.

METHOD:

After a day or so in a deep-freeze, the pieces were prepared for ring-width measurements by using a gouge-chisel on the top surface, or a knife or razor-blade on the edge. After partial drying the rings were marked and their widths measured by an $\times 10$ eyepiece which incorporated a scale. Measurements were made along two lines for each piece and the widths plotted on transparent semi-logarithmic paper.² For the planks measurements were made on their edges.

RESULTS

A. ROMAN:

Details about the beams sampled and about their annual rings (none of which were sapwood) are given in Table 1.

TABLE 1. ROMAN SAMPLES

Sample	Cross-section	Type of Timber	No.	Annual Rings	
				Av. Width	Final Width
Trench No.				mm.	mm.
III 4	12in. x 18in.	Pith boxed	213	1.6	2.5
III H	12in. x 12in.	Pith central	178	1.3	V. Variable
III 3	14in. x 14in.	Pith boxed	160	1.8	1.2
III 2	11in. x 6in.	Halved	100	1.7	1 to 1.5
XII 3	8in. x 8in.	Pith central	68	2.2	V. Variable
III I	9in. x 8in.	Pith boxed	39	4	3.5
VIII I	12in. x 9in.	Pith central	55	4	2 to 3
IX I	9in. x 9in.	Pith central	46	3.5	1.6

In addition, slices were taken from four posts, a plank and a beam in Tranches II or I. The number of their annual rings lay between 35 and 70. Three of them had an almost full complement of sapwood.

The ring-width sequences were compared with one another both visually and by our computer programme (Ref. 1b gives details). There was a position (Fig. 46 inset) with good agreement ($W=67\%$ between the charts for III-2 and XII-3, and a mean curve was made from them). The chart for III-3 was matched with this and a mean curve (MC₃) for the three trees made. The charts for the two largest beams, III-4 and H, were matched not directly versus one another, but by the agreement they each gave with MC₃ and Hollstein's mean curve for the Roman well at Wederath.³ Some of the agreement values obtained in building up the 218-year mean curve for all five trees (MC₅) are given in Table 2.

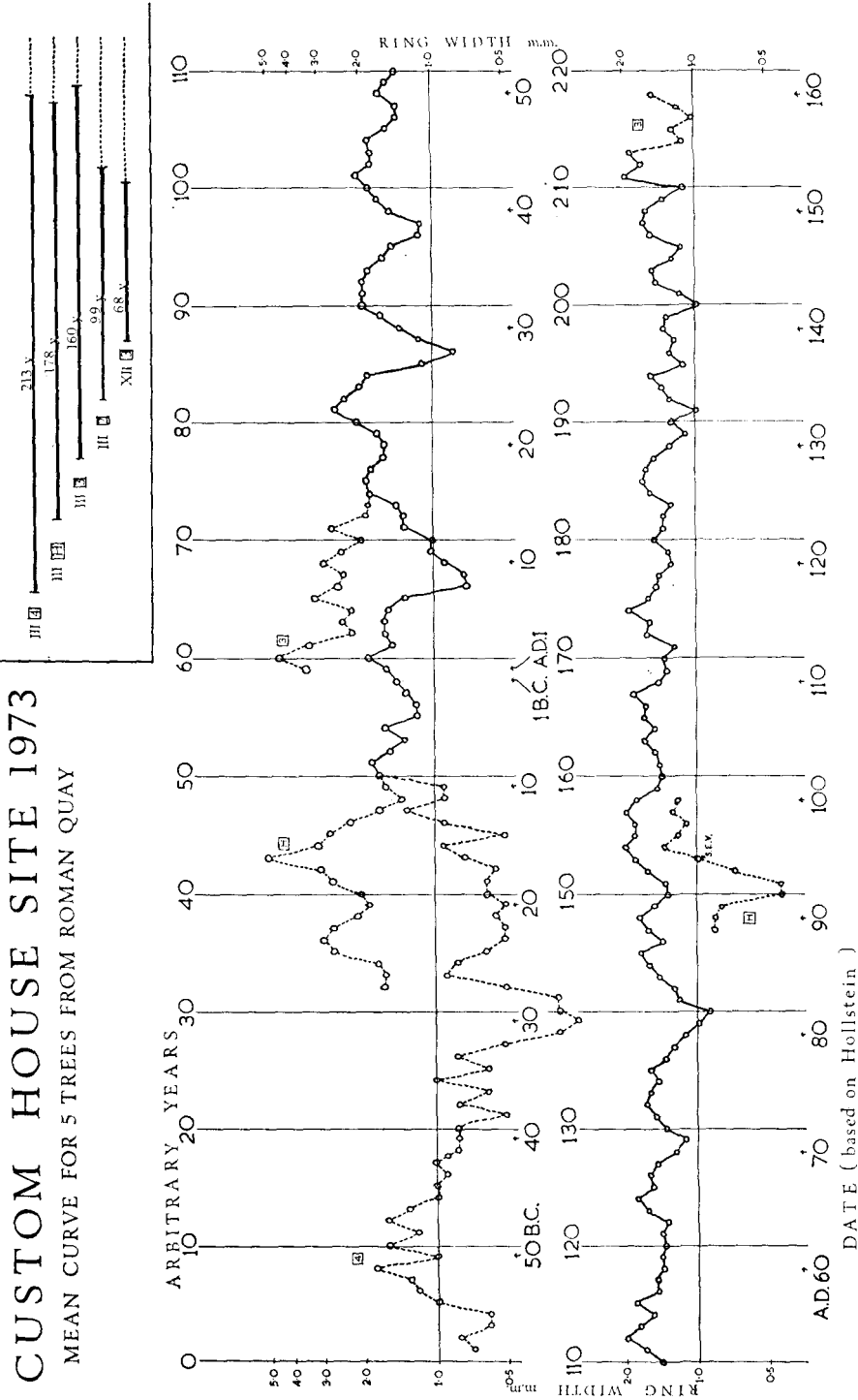


Fig. 46.—Custom House site; mean curve (MC5) giving ring-widths derived from Roman beams of Trenches III and XII, and (inset) relative positions of the tree-ring sequences for the Roman beams used to compile MC5

TABLE 2. AGREEMENT VALUES (W) FOR CHARTS OF THE FIVE LARGEST ROMAN BEAMS

Curve	Trees	No. of Rings	With Mean Curve for Wederath Well 50-201 A.D.		With MC3	
			W	Overlap	W	Overlap
MC2	4+H	155	67%	105 yrs.	67%	98 yrs.
MC3	3+2 + XIII 3	100	62	73	—	—
MC5	All 5 above	161	65	101	—	—

The 218-year mean curve, MC5, is shown in Fig. 46. By cross-dating from the Rhineland curve for a well at Wederath this spans the years 58 B.C. to A.D. 160, the final rings for the five beams being A.D. 114, 124, 151, 155 and 160 respectively.

With an allowance of 20 ± 6 rings of sapwood (this being appropriate to the widths of the last annual rings and the age of the trees), and subject to confirmation of the Wederath dates,³ the likely period for the use of the beams lies between A.D. 178-192 and almost certainly in the last quarter of the 2nd century.

B. MEDIEVAL:

Samples were taken:

In Trench IV (i) from the vertical planking behind the posts
(ii) from a ground plate

In Trench XII from the bottoms of two vertical posts.

In Trench XIV from the bottom of a post.

Except for one of the posts in Trench XII, the planks and posts were derived from fast-grown trees, the samples containing less than 75 rings, thereby making dating by dendrochronology almost impossible.

However, sample XII-1, from a post 9 in. x 8 in. with pith central, was slow-grown and contained about 150 annual rings, all but the first thirty being < 1 mm. wide. The chart for this post has not yet been dated reliably, though a possible match has been found with two of our curves derived from panel paintings.

DISCUSSION:

The largest timbers are remarkable for their size and for having been planed or otherwise shaped to perfect rectangular cross-section. To obtain the largest beams (about 24 ft. long) the Romans used the trunks of slow-grown oaks, aged 200 to 250 years with a diameter of the order of 2 to 3 ft. In making the beams all the sapwood was removed.

There is no reference curve for English oaks of the Roman period but we have already found similarities between mean curves for oaks grown in the London region with those grown in hilly ground in west Germany. It was therefore an obvious step to try to date these curves relating to Roman London against those available for the same period in Germany. However, it is important to emphasise that matching by a German curve was only feasible in this case for the following reasons:

- the trees used for the four largest beams maintained average to slow growth (average width between 1.2 and 2 mm.) for 100 years or more.
- It was known by other evidence from the site that they were used in the second half of the second century A.D.

- (c) Similar Roman beams are known, from the research by Hollstein in Germany, to have been shaped and used within a year or two of being felled.
- (d) A computer programme was available to calculate the agreement values between the charts for the London beams and appropriate German reference curves in hundreds of positions.

In Table 3 of the paper referred to in Ref. 1(b), reliable cross-dating with probability $P < 0.001$, was achieved by matching mean curves for sixteenth-century panel paintings in England with a German reference curve for oaks growing in hilly areas of Hesse to the east of the Rhine. Its reliability and that now obtained between the Roman beams and the mean curve for Wederath are of the same order.

An important outcome of this tree-ring study is that it provides a reference curve based on two or more trees for the period from about A.D. 1 to 160 which may be useful both for dating floating chronologies already derived from Roman timbers by Lowther⁴ as well as others that may be obtained in the future from archaeological excavations on Roman sites in southern England.

NOTES

¹ References to papers on dating by dendrochronology from this laboratory are:

(a) John Fletcher, North Elmham, *Current Archaeology*, No. 36, Jan. 1973, 25-28.

(b) J. M. Fletcher, M. C. Tapper and F. S. Walker, "Dendrochronology—a Reference Curve for Slow Grown Oaks A.D. 1230-1546, *Archaeometry* 16 (1974), 31-40.

(c) John Fletcher, "Tree Ring Dates for Some Panel Paintings in England, *Burlington Magazine*, CXVI (May 1974), 250-8.

² The method follows that developed in the Forestry Depts. at Munich and Hamburg.

³ E. Hollstein, "Dendrochronologische Datierung von Hölzern aus Wederath" (Belgium), *Trierer Zeitschrift* (1972), p. 123. Hollstein mentions in a footnote to this paper that his dating of the chart of the Wederath well is conditional upon the dating of the Roman bridge at Trier being the year 310 A.D.; this means there is an element of doubt in our date of the Roman frontage at London until such time as Hollstein's dates are certain.

⁴ A. G. W. Lowther and D. J. Schove, *Medieval Archaeol.*, 1 (1957), 79.

THE MOLLUSCA

BY DR. JOYCE E. RIGBY

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Edible molluscs dominate this collection.

The bivalves, *Ostrea edulis* (oyster), *Cardium edule* (cockle), *Mytilus edulis* (mussel) form the bulk of the collection and they occur in the seaward parts of the Thames estuary. *Unio pictorum*, a freshwater mussel, is abundant in some reaches of the River Thames and though not normally eaten, it may well have been sampled for its shells to appear here along with shells of *Mytilus edulis*.

Buccinum undatum (whelk) and *Littorina littorea* (winkle) are edible prosobranch gastropods and these whelks must have been dredged from lower parts of the Thames estuary. In the last 5,000 years sufficiently saline conditions have never extended up to Tower Bridge to allow for their natural deposition in this area.

Ecologically, the specimens of the calcifile, freshwater prosobranch gastropods, *Bithynia tentaculata* and *Theodoxus fluviatilis* are likely to be significant and suggest the occurrence of hard water courses or the expanse of the River Thames. Similarly, the specimens of terrestrial pulmonate gastropods *Helix aspersa* (common garden snail) and *Cepaea nemoralis* (banded snail) suggest the occurrence of dry land with mixed vegetation of higher plants. Most shells of members of these four species are in very good condition regarding texture, colour and contour (especially the mediaval ones) and are unlikely to have been transported to such sites.

MOLLUSCA

Trench	Layer	Sample No.	Dating	Identification	Condition	Habitat		
I	II	415	Fourteenth century	3 <i>Mytilus edulis</i>	Valves	M (Marine)		
		416	Fourteenth century	7 <i>Unio pictorum</i>	Valves	F.W. (Freshwater)		
		417	Fourteenth century	<i>Ostrea edulis</i>	Valves	M.		
		418	Fourteenth century	<i>Cardium edule</i>	1 entire 4 valves	M.		
	II		419	Fourteenth century	<i>Buccinum undatum</i>	Sizes range 20-75 mm. length	M.	
			420	Fourteenth century	1 <i>Nassarius reticulatus</i> 1 <i>Littorina litorea</i> <i>Bithynia tentaculata</i>	Mainly 6-8 mm. but very good condition	M. M. F.W.	
		I	12	421	Fourteenth century	<i>Bithynia tentaculata</i>	Ditto	F.W.
				422	Fourteenth century	<i>Helix aspersa</i>	Fragment	T. (Terrestrial)
				889	Fourteenth century	1 <i>Buccinum undatum</i>	77 mm.	M.
				423	Fourteenth century	1 <i>Buccinum undatum</i>	80 mm.	M.
I	23	424	Fourteenth century	1 <i>Buccinum undatum</i>	70 mm.	M.		
		320	Roman	<i>Cepaea nemoralis</i>	Fragments	T.		
		314	Third century	<i>Helix aspersa</i>	Fragments	T.		
		323	Roman	Large marine bivalve— <i>Venerupis?</i> or <i>Cyprina?</i>	Fragment	M.		
II	26	308	Third-fourth century	<i>Ostrea edulis</i>		M.		
		439	Fourteenth century	<i>Ostrea edulis</i>	3 small valves	M.		
	III	6	425	Fourteenth century	<i>Bithynia tentaculata</i>	6.0-9.0 mm.	F.W.	
			426	Fourteenth century	1 <i>Buccinum undatum</i>	Small 55 mm.	M.	
		10b	427	Fourteenth century	1 <i>Theodoxus fluviatilis</i>		F.W.	
			441	Fourteenth century	<i>Ostrea edulis</i>		M.	
		10	428	Fourteenth century	<i>Bithynia tentaculata</i>	In reddish sand 6.0-9.0 mm.	F.W.	
			429	Fourteenth century	<i>Bithynia tentaculata</i>	In blackish sand 6.0-9.0 mm.	F.W.	

Trench	Layer	Sample No.	Dating	Identification	Condition	Habitat
	58	568	Fourteenth century	<i>Ostrea edulis</i>	1 valve, length 110 mm.	M.
	60		Fourteenth century	<i>Cardium edule</i>	1 valve	M.
				<i>Ostra edulis</i>	6 valves, 45-80 mm.	M.
				<i>Cardium</i>	1 valve	M.
XI	1	978	Fourteenth century	<i>Buccinum undatum</i>	4 excellent condition length 60-70 mm.	M.
	2	692	Fourteenth century	<i>Buccinum undatum</i>	5, sizes 44-70 mm.	M.
	4	976	Fourteenth century	<i>Buccinum undatum</i>	2, approx. 65 mm.	M.
XII	3	980	Fourteenth century	<i>Buccinum undatum</i>	Broken	M.
	4	974	Fourteenth century	<i>Buccinum undatum</i>	Young—33 mm.	M.
	7	759	Fourteenth century	<i>Buccinum undatum</i>	Approx. 54 mm.	M.
XIV	7	809	Fourteenth century	<i>Buccinum undatum</i>	Broken	M.
XV	18	808	Fourteenth century	<i>Buccinum undatum</i>	Broken	M.
	21	810	Fourteenth century	<i>Buccinum undatum</i>	Several damaged approx. 30.0-60.0 mm.	M.
XIII	10	813	Roman	<i>Helix aspersa</i>	Good condition and colour	T.
	8	815	Roman	<i>Buccinum undatum</i>	75 mm. approx.	M.

ANCIENT BOATS FROM THE CUSTOM HOUSE SITE

BY PETER MARSDEN

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One of the early medieval timber waterfront constructions on this site was partly constructed from pieces of at least two ancient vessels. One of these, possibly a sea-going ship, was represented only by a short length of a large rib. The other vessel was represented by a considerable length of clinker built planking from the bottom and side of a boat. Judging from the scarf joints in the planking it is clear that the lower part of the stern of the boat is particularly well preserved, though the keel and sternpost were not re-used.

On preliminary analysis there seems to be some close similarities between this vessel and the more complete late Saxon boat of the ninth century found recently in Graveney Marsh, near Whitstable, Kent. The Graveney boat is under careful study and will be preserved at the National Maritime Museum, Greenwich. The Custom House boat fragments were removed from the excavation, and a detailed report describing them will be published in due course in the *International Journal of Nautical Archaeology*.

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Thanks must go to the many people who helped on the excavations, particularly the supervisors, Andy Cauldwell, Brian Yule, Gerald Clewley and Gil Burrell. Geoff Denford helped with the photography and Peter Muir, Martin O'Connell, Peter Ellis, Lee Gillibrand, Peter Leach and Alex Campbell assisted by drawing plans and sections. Iris Furlong, Sioned Alban-Jones, and Wendy McIsaac were successively in charge of the finds, and Wendy McIsaac sorted and indexed all the pottery and finds. She also prepared the Roman coarse pottery, the post-medieval finds and the glass for the report. The finds and pottery were drawn by Vanessa K. Mead, Mrs. Jennifer Gill and Mrs. Hilary Guise. Bill Rector and Joyce Andrews conserved the finds.

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