

EXCAVATIONS AT THE SALT TOWER, TOWER OF LONDON, 1976

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SUMMARY

A small-scale excavation west of the Salt Tower revealed that the area had been subjected to river activity during the early Roman period. At some subsequent stage the ground level was raised, perhaps as part of a terracing operation. A second and more substantial heightening of the ground surface was carried out during the late 4th century. The c. 1240 foundations of Henry III's curtain wall were located, but nothing remained of the upstanding masonry. 16th and 17th-century deposits associated with the palace 'Privy Garden' were also recorded.

THE SITE AND ITS HISTORICAL BACKGROUND:

During October and November 1976, the Department of the Environment carried out an excavation against the outside angle of the Salt Tower and inner curtain (Fig. 1). The site lies some 45m east of the Roman city defences, within the south-east corner of Edward I's late thirteenth-century Outer Ward

During the 16th and 17th centuries the area formed part of a garden attached to the palace complex. The earliest documentary evidence for this appears to be found in the Haiward and Gascoyne survey of 1597 – the area being marked 'The Privy Garden'.¹ The laying out of the garden might have accompanied the construction of the King's Gallery between the Salt and Lanthorn towers a palace amenity in 1506.² A warrant of 1667 records the continued presence of the garden,³ but by 1682 a number of stables and coach-houses had been erected against the south face of the gallery (by now employed as lodgings for army officers) while a guard house had been established against the cross wall between the Salt and Well towers (Fig. 1). By 1686 the Office of Ordnance had requisitioned the buildings against the gallery and had turned them into barracks for the Tower garrison.⁴

In 1776 the eastern half of the Salt Tower barracks was converted into a sutling house called the Golden Chain (Plate 1). The inn had been moved from a site some 40ft to the west in advance of the demolition of the western half of the old palace gallery;⁵ in 1826 the inn was again taken down and rebuilt on the same ground.

The new Golden Chain was to stand for only twenty years, for in 1846 it, together with the remains of the old palace gallery, the barracks and section of cross wall south of the Salt Tower, was swept away as part of the programme of 'improvements' carried out to be the mid nineteenth-century Office of Ordnance.

During the following years the site was occupied by a temporary storehouse – a large and lamentable structure eventually demolished by the War Office in 1860. Finally, in 1882, reconstruction of the existing curtain wall began.

THE EXCAVATION:

The area of excavation measured approximately 6 m × 7 m. Examination of the archaeological deposits was restricted by the presence of two large walls belonging to the 1840's storehouse. Consequently it proved impossible to inspect the base of the Salt Tower and work was confined to two small shuttered trenches either side of

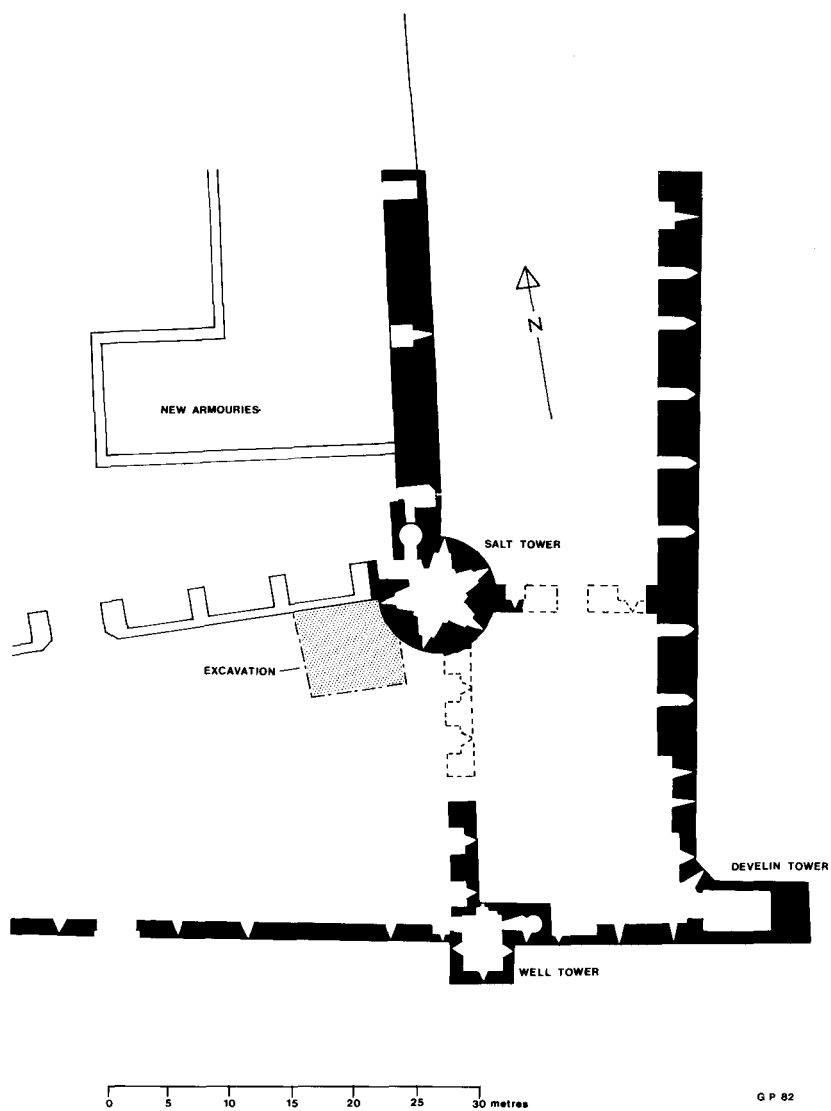


Fig. 1 Salt Tower 1976: Location of site.

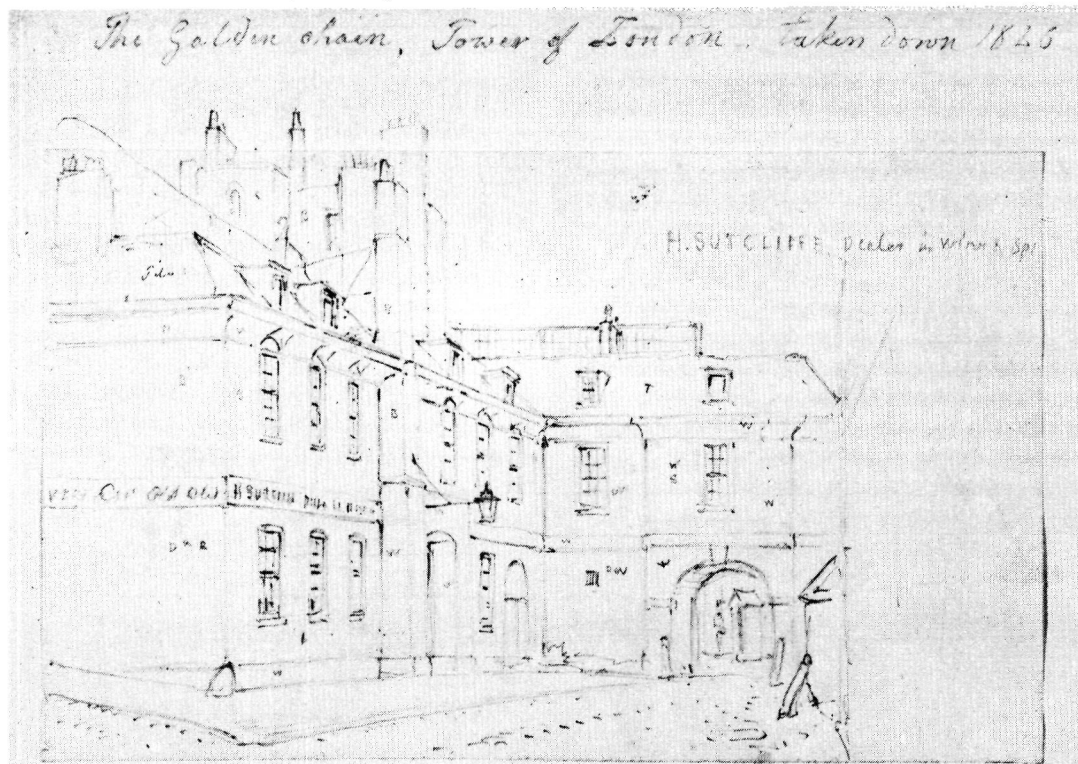


Plate 1. The Golden Chain Inn viewed from the south-west by G. H. Shepherd in 1826
(Courtesy of Guildhall Library).

wall 2, which ran east-west across the centre of the site (Fig. 3).

The history of the site can be arranged into the following sequence:

- I. Prehistoric and Roman
 - (a) River activity.
 - (b) Levels associated with possible terracing.
 - (c) Late 4th-century dumping.
- II. Medieval
- III. Post Medieval
 - (a) 16th-century garden levels.
 - (b) 17th-century garden levels.
 - (c) 18th and 19th-century buildings.

I. PREHISTORIC AND ROMAN.

Phase (a). The earliest deposits encountered (but not bottomed) were blue and

grey-coloured alluvial clay silts (Fig. 4, layers 47 and 48). Little can be said about these deposits as they were viewed only briefly in two small 'sondages' at a depth where the pump could no longer remove standing water. Neither appeared to contain anything other than a little organic matter in the form of rootlets, and all that can be said about them is that they indicate the river silting to a height of at least 1.50 m O.D.

Overlying the clays were bands of gravel, sandy silts and peat rising gently northwards to 1.70 m O.D. (Fig. 4, layers 36 and 38). These levels must represent a notable shift in river behaviour, with the water having retreated to the south and the area forming part of the Thames foreshore. Several pieces of eroded tile recovered from these levels represent the earliest stratified Roman material from the site.

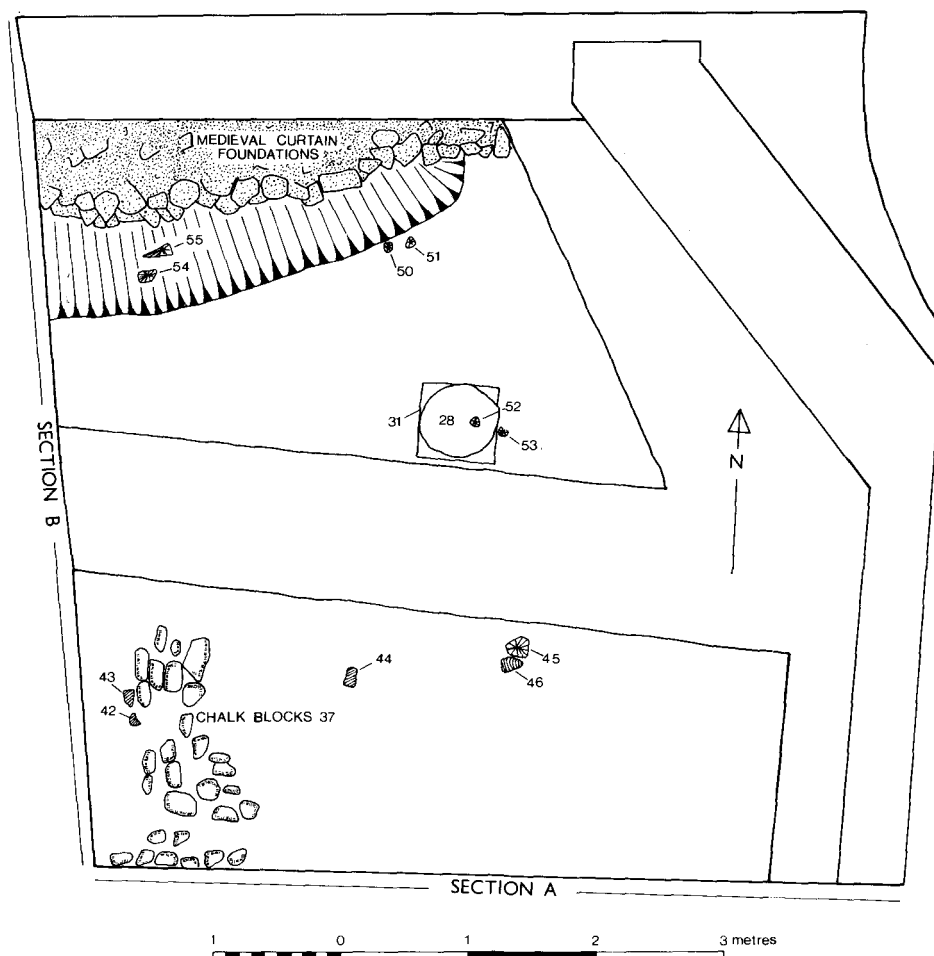


Fig. 2 Salt Tower 1976: Plan of Roman and medieval features.

Scant evidence for ensuing occupation was provided by a number of small oak piles which had evidently been driven-in to the above layers (Fig. 2, timbers 42–46, 54 and 56). An insufficient number were seen to provide any coherent pattern (though 42–46 might be regarded as forming an east-west line) and their function remains uncertain.

Phase (b). At some subsequent stage up to 60cm of dark grey clay and sand was evidently dumped into the foreshore (Fig. 4, layer 34). The material contained only a few sherds of 1st or 2nd-century pottery and could not be dated precisely. In the south-east corner of the site it was sealed by a layer of compact green sand

and gravel (Fig. 4, layer 37) which supported some irregularly placed chalk blocks (Fig. 2). Once again, however, the small size of the excavation prevented any clear picture and the function of these levels, other than as rough working surfaces, remains uncertain.

The above surfaces were sealed by a more extensive, very hard, gravel layer which occurred throughout the excavation (Fig. 4, layer 33). It was some 30cm thick and sloped gently northwards to a height of 2.20m O.D. Within its composition were numerous pieces of eroded Roman tiles and four small oak piles (Fig. 2, timbers 50–53). The dating of this deposit was again inconclusive, with only

sherds from a 1st – 3rd-century amphora being recovered.

Phase (c). During the late 4th century a considerable amount of material was dumped onto the site. It comprised two basic elements: dark earth deposits 30 and 41 sealed by dumps of orange clay, gravels and sands 25 and 40 (Fig. 4). The combined deposits were recorded to a depth of 1.50 m, though the original depth must have been greater as the surface was truncated during the 16th century (see below).

II. MEDIEVAL.

The only surviving medieval feature was the truncated foundations of the c. 1240 inner

curtain wall (Fig. 2). The mortared ragstone footings lay within a large construction trench which was traced to a depth of 2.10m, but not bottomed. The masonry had been built in four stages, each stage being followed by a partial infilling of the construction trench to allow the masons to work at a higher level (Fig. 4).

III. POST MEDIEVAL.

Phase (a). This period was represented by two horizons of dark earth, interpreted as belonging to the palace Privy Garden. The levels (lower 22, 23 and 24; upper 19, 20 and 21) appeared to represent separate depositions (Fig. 4) though the dating evidence indicates

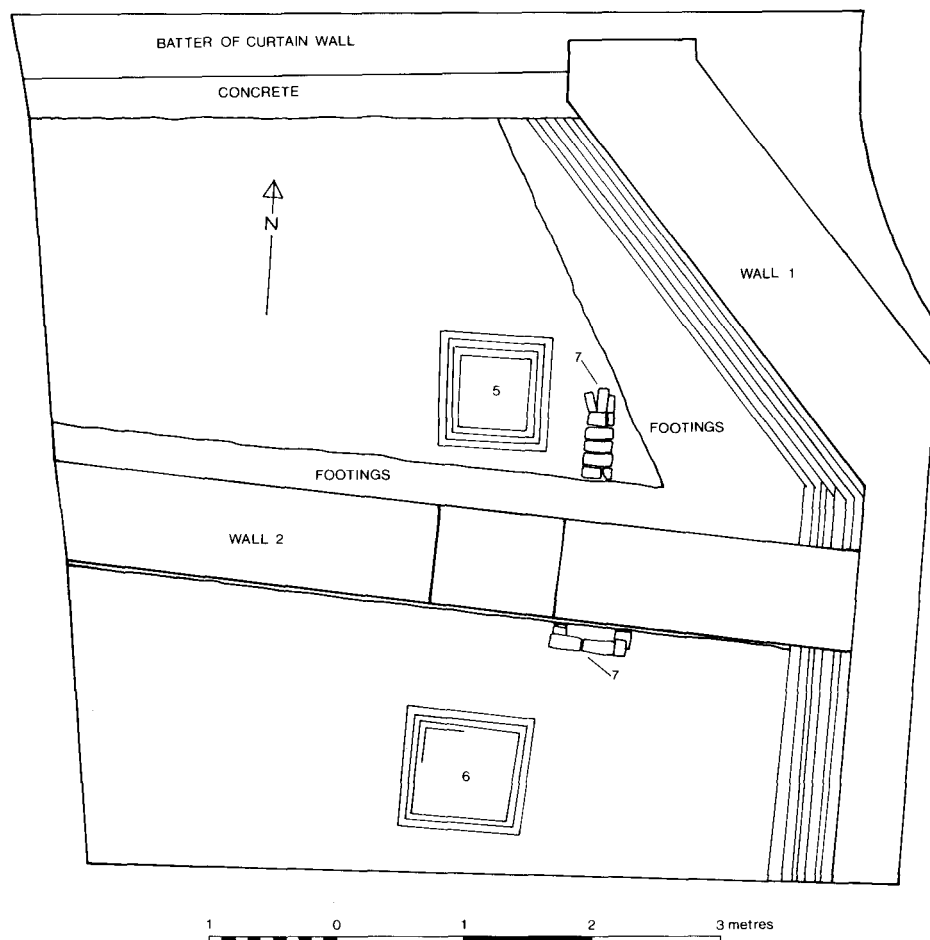


Fig. 3 Salt Tower 1976: Plan of post-medieval features.

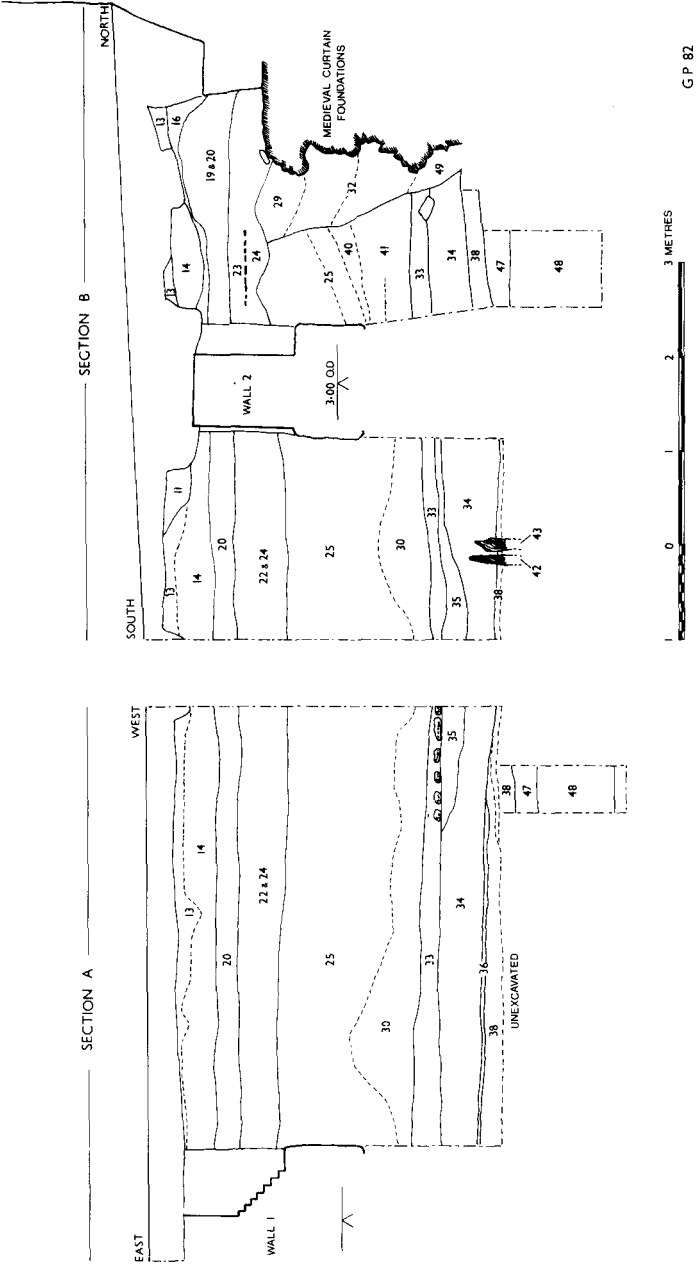


Fig. 4 Salt Tower 1976: Sections A and B.

no obvious time scale separating them. The pottery throughout can be assigned to the mid-late 16th century; a silver groat of Edward VI's reign (1547–50) was also recovered from layer 21. The dumping lay directly on the late Roman deposits and the truncated surface of the medieval curtain foundations, the only surviving evidence for intervening activity was an undated post hole within a post pit (Fig. 3, features 28 and 31). The absence of medieval activity strongly suggests that the site had been scarped in advance of the formation of the garden.

Phase (b). This period was represented by further garden deposits in the form of layers 13 and 14 (Fig. 4). Though much disturbed by modern intrusions the surface of 13 was hard and trampled and appeared to be a genuine ground surface. The pottery and clay pipes recovered from both 13 and 14 were similar and support the view that the deposits were laid at the same time, probably in the middle of the 17th century.

Phase (c). All that might be assigned to the 18th century were the remains of a brick drain and sump (Fig. 3, feature 7). Two brick piers possibly relate to the reconstruction of the Golden Chain in 1826 (Fig. 3 features 5 and 6), while the east wall and an internal division of the 1840's store were also exposed (Fig. 3, walls 1 and 2).

DISCUSSION

The limited results obtained from this small excavation are concerned largely with the Roman period. An absence of finds from most of the phases makes dating difficult. Recent excavations within the Inmost Ward, a short distance to the west, have indicated that by the early Flavian period the Thames had deposited silts up to a height of 1.70m O.D. along the extremity of the river bank.⁶ The earliest excavated river silts at the Salt Tower, undated, but stratigraphically probably late Iron Age or early Roman, reached a maximum of 1.50m O.D. These silts were sealed by foreshore deposits which rose to a height of 1.70m O.D. and must reflect a

fall in the river level. Much has been written about marine transgressions in the Thames estuary and estimates of the mean high tides in the prehistoric and Roman periods are constantly being reconsidered.⁷ It is perhaps sufficient to note here that the early Roman river deposits at the Salt Tower compare favourably with Flavian levels examined in the latest comprehensive survey of the city region.⁸

The clay and sand deposits sealing the foreshore might suggest some form of terracing along the river bank, with the overlying gravels and chalk representing associated surfaces. Terrace arrangements have been discovered downstream of London Bridge. These were either of late 1st and 2nd-century date and of uncertain function,⁹ or of early medieval date and associated with mooring and anti river erosion operations.¹⁰

If the refortifications of London towards the end of the 4th century was accompanied by the provision of a wider ditch (as suggested by the addition of bastions to the landward wall) it is possible that the late 4th-century dumping on the site derived from its excavation. Dumping in this area, which must have been close to the defences, might have served to strengthen the outer edge of the ditch where it entered the Thames – an area presumably susceptible to river erosion.

Finally, the complete absence of horizontal stratigraphy between the late Roman dumping and the 16th-century levels, suggests that the laying out of the Privy Garden was preceded by a general scarping of the site. The dating evidence from the lower garden deposits suggests that this was not before the middle of the 16th century. This is perhaps fifty years after the King's Gallery was constructed between the Salt and Lanthorn towers in 1506 – an event which might have provided an attractive date for the formation

of the garden. If the two events were connected, then perhaps it follows that the composition of the garden was renewed at a later date (as happened in 1977, in fact, when the soil was found to be too poor to be employed within a reconstruction of the garden).

NOTES

1. H. M. Colvin (ed) *The History of the Kings Works II* (London, 1963) Plate 45.
2. *Ibid.* III (London, 1975) 263–4.
3. G. Parnell 'The Tower of London: The Reconstruction of the Innermost Ward during the reign of Charles II' *Trans. London and Middlesex Archaeol. Soc.* 31 (1980) 151.
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8. G. Milne *et al.* 'The River Thames in London in the Mid 1st Century A.D.' *Trans. London and Middlesex Archaeol. Soc.* 34 (1983).
9. D. M. Jones *Excavations at Billingsgate Buildings, Lower Thames Street, London, 1974* London and Middlesex Archaeol. Soc. Special Paper No. 4 (1980).
10. S. Roskauskas (*pers. comm.*).

THE ROMAN POTTERY

by FIONA CAMERON

PHASE I (b).

Layer 34.

Very little material was recovered from this layer – a lid in a micaceous orange-buff fabric and a shell-gritted sherd with a row of impressed decoration on the shoulder. This latter is almost certainly from a hand-made vessel similar to Southwark type II.M. dated to the 1st or 2nd century AD.

Layer 33.

The only diagnostic sherds from this context are amphora body sherds, probably from a Dressel 20 South Spanish oil amphora. These vessels are known in London from the late 1st to early 3rd centuries AD but they are most common in the 2nd (Green 1980,40).

Phase I (c).

Layers 25, 30, 40 and 41.

Most of the fine wares in this group are from the Oxford region (Fig. 5, Nos. 3, 5, 6, & 13 for example) and seem to include Young's types C.51 and C.100 (a mortarium) and probably C.45, C.46, C.55 and C.56. There are also sherds from colour-coated beakers, one with deep roller-stamped lines in the form of a cross and another with both applied scales and rouletted decoration on the exterior (Fig. 5, No. 1). The provenance of the first is unknown but the second may be from the Oxford area c.f. Young's types C.23 (dated AD 270–400+) and C.30 (dated AD 340–400+). The date range for the red colour coated wares is very similar and also goes up to AD 340–400+ (Young 1978).

Among the oxidised wares are a ring-necked flagon (Fig. 5, No. 2) c.f. Southwark type 1.B.9 dated AD 130–180/200+ which is therefore probably residual here. There is also a body sherd from an Oxford parchment ware vessel with brown painted decoration, probably from Young's type P.24 (Young 1978) dated AD 240–400+. Another vessel whose provenance is unknown is the flanged bowl (Fig. 5, No. 7) although it is similar to Young's type C.51 dated AD 240–400+. This example is in an unslipped fabric, however, and is probably from another area. Apart from the colour-coated mortarium included with the fine wares, there is another example from the Oxford region (Fig. 5, No. 4) which is in a white colour-coated ware c.f. Young's type W.C.7.2. dated AD 240–400+. There is a third mortarium (Fig. 5, No. 12) in a white ware whose form may be related to 2nd-century AD types from Colchester c.f. Hull (1963, 116f), and is therefore probably residual.

There is little diagnostic material among the reduced wares and most of them are of uncertain provenance. Parallels for the 'dog-dishes' (eg. Fig. 5, No. 10) can be seen in late 4th-century AD contexts at Old Ford (McIsaac 1979) Fig. 19, Nos. 130–144 and Fig. 20, Nos. 185–190, although this is a very long-lived type. Of the 3 bowls with rims, one example (Fig. 5, No. 11) is probably from Alice Holt, Type 6.C.2. dated AD 350–420, a second (Fig. 5, No. 9) is paralleled at Old Ford (McIsaac 1979) in a late 4th-century AD context (Fig. 16, No. 43), whereas the third (Fig. 5, No. 8) seems to have more in common with the Southwark 2nd-century types eg Type IV.H and may be residual. There is also a single grey ware jar rim of the 'cavetto' type, which seems to start in the late 2nd-century AD in Southwark (c.f. Type II.F.8) but can still be found in 4th-century contexts at Old Ford (McIsaac 1979 Fig. 16, No. 56 and Fig. 21, No. 193).

As a whole this group is clearly 4th-century in date, with some 2nd-century residual material, but the inclusion of a number of the later types from Oxford and Alice Holt indicates that it belongs to the late 4th-century at the earliest.

Fig. 5

1. Beaker: soft micaceous buff fabric with pale grey core and brown slip on exterior. Rouletted and applied scale decoration. (layer 40).
2. Flagon: gritty grey fabric with pinkish surfaces and cream slip. (layer 40).
3. Bowl: orange fabric with orange-red colour coat. Oxford region. (layer 41).
4. Mortarium: micaceous orange fabric with cream slip; pink quartzite grits. Oxford region. (layer 41).
5. Bowl: soft micaceous orange fabric with red-orange colour coat and remains of white painted decoration. Oxford region. (layer 40).
6. Flanged bowl: fine grey fabric with orange surfaces and red-orange colour coat. Oxford region. (layer 40).
7. Flanged bowl: soft micaceous orange fabric. (layer 30).
8. Bowl: sandy dark grey fabric with burnished surfaces and burnished latic on exterior. (layer 41).
9. Bowl: sandy pale grey fabric with darker surfaces. (layer 25).

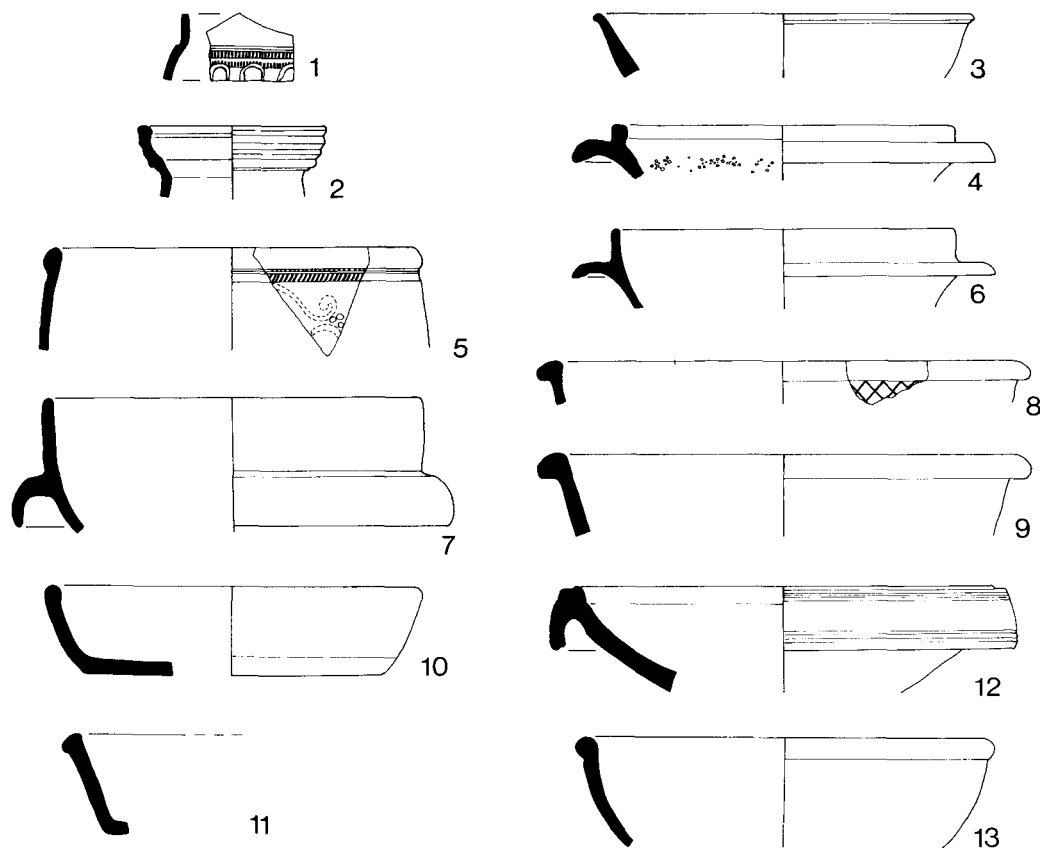


Fig. 5 Salt Tower 1976: Roman pottery Nos. 1-13. (1/4)

- 10. Bowl: hard, micaceous, pale grey fabric with burnished surfaces. (layer 30).
- 11. Bowl: sandy micaceous grey fabric with burnished surfaces. (layer 30).
- 12. Mortarium: soft pink fabric with cream surfaces. No grits. (layer 40).
- 13. Bowl: soft micaceous pinkish buff fabric with red colour coat. Oxford region. (layer 40).

THE MEDIEVAL AND POST MEDIEVAL POTTERY

by STEPHEN NELSON

The pottery from the post-Roman layers represented general accumulations of small and rather varied pottery types with no distinct groups, though there were two concentrations of material of the mid 16th century and the first-half of the 17th century. The fabric types were variable but material has been classified

into broad categories (Fig. 6).

PHASE II (medieval).

The only layers apparently of medieval date were 29 and 32 from the construction trench of the *c.* AD 1240 curtain wall. They contained largely residual Roman material, but included a few medieval grey/red-brown glazed jug sherds, possibly Mill Green types, and shelly and sandy wares. No other medieval deposits appeared to survive and the early sherds that occurred in other layers were clearly residual; even in these post-Roman layers the quantities of Roman pottery often outnumbered other material present.

PHASE IIIa (16th-century levels).

Layers associated with the Tudor Privy Garden (19, 20, 21, 22, 23, & 24) contained no clay tobacco pipes and a high proportion of hard red-earthenware of 16th-century date together with two distinctive imported French Saintonge polychrome vessels (Fig. 7, Nos. 1 & 2). No. 1 is a chafing dish of typical form (Hurst's type C.I. A - that is with 8 plain heads under small knobs glazed alternately

	Shelly Wares	Med. Grey Wares	Glazed & slipped M.G. type wares	Med. Surrey Ware	Stonewares	S.W. French Polychrome	Tin glaze	Later Surrey W. (Border W.)	Post-med. Red Wares	19th-cn. White earthenware	19th-cn. Stoneware
Layer											
3			23	6	11		6	5			
4				3							
9	1	1	13	11	1		2		1		
10			7				1				
12			24	5	1		4				
13			34	18	2		8				
14			128	56	8		55	3	4	3	
16			2					3	1		
19			2								
20			14	1			6			2	
21			3	1			1		1		
22								6	7		3
23			75	8	2	17	2	4	2	1	1
24			2					2	2		
29									2		1
32									1	2	1

Fig. 6 Salt Tower 1976: Table of post-medieval pottery.

green and yellow). The sherds show clearly the method of affixing the applied head and knob with two pointed wooden pegs and also exhibit oblique combed stabbing often seen on these imports. No. 2 is a finely modelled female head from the top of a spouted jug of Hurst's type A.II. The face and flared head-dress are glazed a very pale green. This contrasts with a head band extending over the head and continuing around the back of the neck which is an applied strip of red fabric glazed brown. The more exotic form of No. 2 may be slightly later than No. 1 but a mid to late 16th-century date for these two imports is suggested and would seem appropriate for this group of layers. Two sherds of a polychrome tin-glazed jar from layer 23 are probably 17th century in date and must be the result of contamination from the 1840's store foundation (layers 3 & 4) – a further sherd from the same vessel occurred securely in layer 3.

PHASE IIIb (17th-century levels).

Layers 13 and 14 apparently represented a raising of the garden during the 17th century; the large numbers of clay tobacco pipes recovered suggest a c. AD 1640/60 date (see

below). A high proportion of hard red earthenwares were present and though there were obviously some survivals from 16th-century levels, most of the forms would fit a date in the first half of the 17th-century. A large part of the side and base of a straight-sided redware mug was recovered (Fig. 7, No. 3) which showed part of a trailed slip inscription. Although the letters 'S' and 'ALL' are visible in two lines it is not possible to match these to any of the more common inscriptions, which are usually of a religious or convivial nature, found on Metropolitan slipware vessels, although it is tempting to link it to a homily on a jar in the Museum of London reading 'THE GIFT IS SMALL — GOOD WILL IS ALL 1650' (Hodgkin, 1891). Two sherds, from a disturbed context (layer 3) exhibited the trident motif very typical of Metropolitan slipware plates. The body of a Frechen stoneware 'belamine' (Fig. 7, No. 4) with a coat of arms plaque survived from layer 14. Although the neck and mask was missing it presumably dates to the first half of the 17th century. Sherds of other imported German stonewares were present both Cologne, Raeren and Siegburg, the latter two presumably again residual from earlier levels.

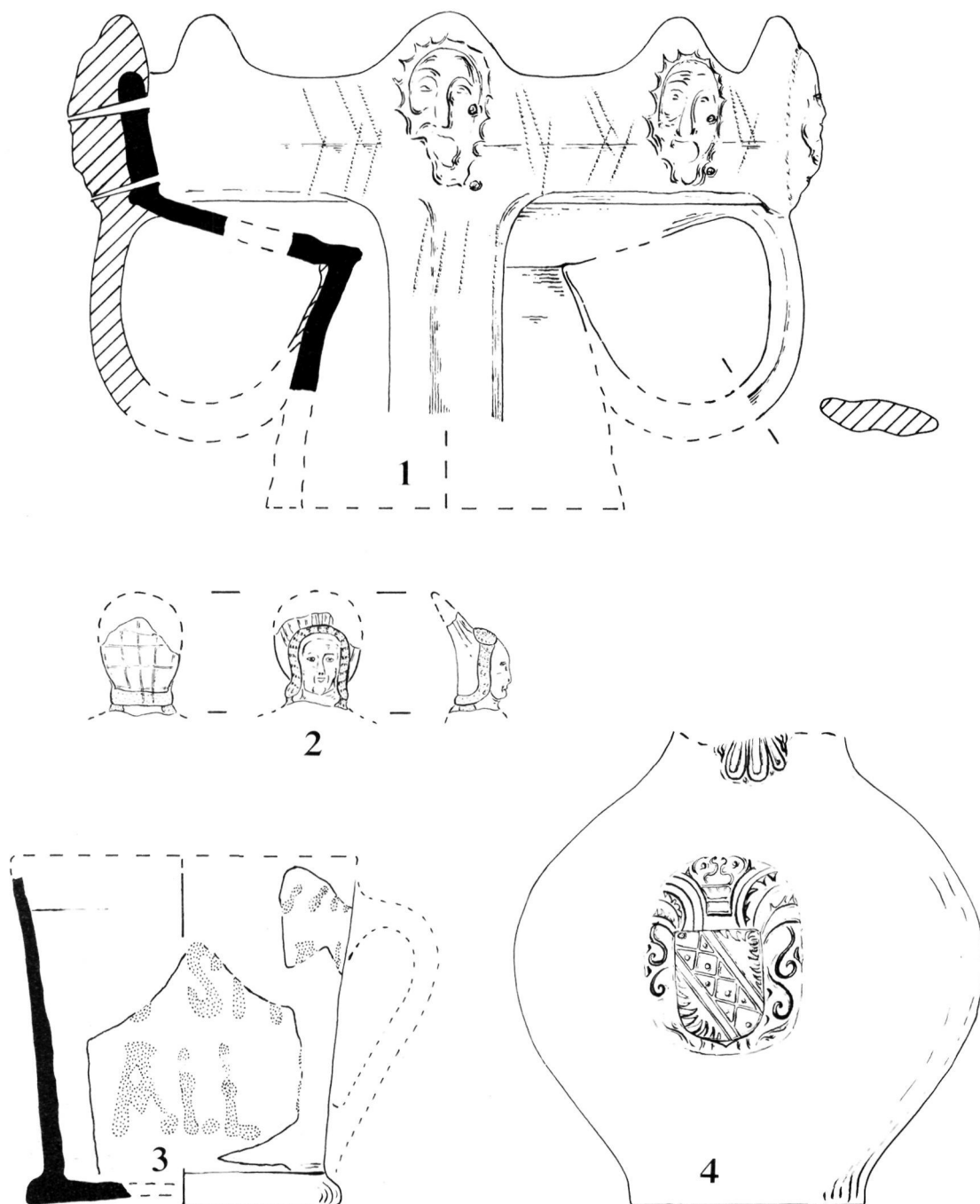


Fig. 7 Salt Tower 1976: Post-medieval pottery Nos. 1–4 (1/2)

PHASE IIIC (18th and 19th-century buildings).

Little material of 18th-century date occurred and only two sherds of clearly 19th-century occurred in layer 9 the infilling of a brick pier construction trench associated with the 1826 inn.

THE COINS

by PETER CURNOW

Postumus AD 259–68, Antoninianus, RIC 312 (Layer 22).

Regular Radiate c. AD 270, ? Tetricus II (Layer 24).

Gloria Exercitus (1st) AD 337–41, Constantius II, LRBC. I, 132 (Layer 25).

Edward VI, Groat, Southwark Mint, AD 1547–50, Brooke 188 (Layer 21).

THE CLAY PIPES

by STEPHEN NELSON

In Fig. 8 the clay pipe bowls have been classified by type as in Oswald & Atkinson's London typology. It will be seen that no 18th or 19th-century examples were present. The bowls in layers 3, 9, 11 & 12 are all obviously residual. The rest of the material (58 bowls) is from layers 13 and 14, the later levels of the Privy Garden, and fits quite closely in a mid 17th-century date bracket. Ignoring the one fairly early small bowl, type 5, all the others are broadly datable to 1640–80. Of the later dating pipes, types 14 and 15, the bowls are small for the type with a more acute angled bowl rim and so would appear to date nearer to 1660 than 1680. There were no makers marks and decoration was limited to one moulded line-and-dot stem on a type 10. Four other type 10 bowls appeared to be slightly burnished.

		Type							
		5	9	10	11	12	13	14	15
Layer	3		2	4				1	
	9			3				1	
	11							1	
	12		1	1		3	2	7	2
	13		2	3	1			2	1
	14	1	6	23		6	2	10	1
	15								

Fig. 8 Salt Tower 1976: Table of clay pipes.

THE GLASS

by JOHN SHEPHERD

Thirty fragments of glass were recovered from the post-medieval garden levels, of which nineteen are window glass. With the exception of window glass, the only piece

to come from the lower deposits (layers 22, 23 & 24) was a fragment from the base of a high-footed or bowl of 16th or 17th-century date.

The upper deposits (layers 19, 20 & 21) produced the lower part of the stem of a goblet (17th century), fragments from a thin-walled bulbous flask, possibly a urinal (16th or 17th century), a bowl or lid decorated with small ovals in diaper (late 16th-early 17th century) and five 'punts' applied to a blown beaker(s) (16th-17th century). Perhaps the most significant pieces are two fragments from the rim and side of a goblet or beaker decorated with 'nip'-t-diamond-waives' (mid-late 17th century). Goblets with such bowls were ordered by John Greene, a prominent member of the Glass Sellers Company, from Alessio Morelli of Murano from c. 1667 to 1673. (British Museum Sloane MS. 857). However, there is no knowing as to whether this is one of Morelli's products.

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