

The Accessioned Finds from No 1 Poultry

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The range of accessioned finds from Number One Poultry is one of the largest ever recorded from the city and it comes from an area of prime importance to the understanding of the character and development of Londinium. It lies close to the centre of the Roman town, near the Walbrook stream, an area that has produced huge quantities of artefacts in the past. The importance of the Poultry collections is that they come from a large scientifically excavated site and there has been, for the first time, an opportunity to study a complete, well-stratified assemblage from this part of London.

This report covers all materials except for leather (see report by J Keily). Certain specific object categories are the subject of separate specialist reports, for example the coins (M Hammerson), quernstones (D Williams) and industrial waste (D Dungworth, AMLab), glass (A Wardle). Wherever possible the results of the other specialist reports have been incorporated within the following discussions.

The report is in three sections; a chronological narrative which gives a basic description of finds in their stratigraphic sequence, with discussion of specific points as appropriate; discussion of research themes identified in the project design; specialist finds study. The report is supported by select finds catalogues, intended for publication and comprehensive catalogues intended for archive.

1 Chronological Narrative

The Pre-Boudican sequence at ONE94

Periods 2, 3, 4

The pre-Boudican groups have been arranged in accordance with a suggested pattern of zoning. Discussion of Period 3 features follows those of Period 2 within each zone.

Zone 1 – North-west area; P2ii and iii, B1, OA2, OA3, OA4

Building 1

There is no evidence of function for this building. The origin of the querns in the post-packing, the only identified artefacts, is unknown, although there are querns from similarly early levels at CID90. An intrusive coin of Vespasian (AD 69–79) may have been introduced during later disturbance. Open Areas 2 and 3 produced no finds of significance.

Open Area 4 (P2iii)

This area produced a small group of mixed finds, including a copper alloy finger ring, missing its inset stone bezel <3881>, a poorly preserved iron knife <3791> and an iron ox-goad <3793>, of which there are four examples at

Poultry, but few from the city as a whole. These implements, which consist of either a spiral or a solid ferrule with a projecting iron spike are conventionally interpreted as animal goads, but their presence at Vindolanda among the large number of inscribed writing tablets has raised the possibility of their being simple pen nibs. Certainly there are considerable numbers of styli and wooden writing tablets at Poultry in later contexts, but no trace of the forms of tablet which were used with pen and ink at Vindolanda. The goads from Poultry are all quite large and seem quite unsuitable for use as any form of writing implement. Although they are found more frequently on rural sites, their use as animal goads in an urban setting is perfectly feasible.

The presence of a coin of Vespasian in the same series of intercutting features, Group 105, which was hurriedly excavated, throws some doubt on the date of deposition of the identified artefacts. Although on spatial evidence they could be associated with activity in Building 1, which lay nearby, they may represent rubbish discarded during later quarrying. They are indistinguishable in character from later material.

P3 – B2, OA6, B3, OA7, OA8, B4

Building 2

There are no finds from this building, but it is possible that the finds from the construction levels of Building 3 might be from the occupation of Building 2 – see below. Open Area 6 produced a small group consisting of copper alloy fittings, a boss <3885> and ring <5475>, unidentified iron and vessel glass fragments.

Building 3

The construction levels of Building 3, which obviously contain material from earlier features, possibly the underlying Building 2, contained a distinctive group of good quality mid 1st-century glass vessels comprising tablewares, a pillar-moulded bowl in blue and white marbled glass <4026>, the grozed base of a cast emerald green bowl <3789>, perhaps reused as a palette and the rim of a Hofheim cup <3790>. The cup is in naturally coloured glass, which dates it to after AD 50. One utilitarian vessel, a fragment of square bottle was also found. The tablewares are of high quality and the fact that the green bowl had been reused suggests that it was of some age when broken and discarded. All are imported and it is possible that the strongly coloured vessels in particular may have been brought to London as the personal possessions of one of the earliest settlers.

The construction levels of Room H belonging to the second phase of Building 3 (Period 3 iv) produced part of a blue jug of similarly early date together with fragments of unidentified vessels in colourless and naturally coloured glass. In addition to the glass, the construction levels produced an unusual bone implement. This is similar in appearance to a medieval 'parchment pricker', although lacking an iron point, and such bone rods have in the past been thought intrusive in Roman levels. This example is however securely stratified and more have been found recently well-dated levels at Plantation Place (FER97). It seems likely therefore that such tools could be writing implements, bone styli or perhaps pens. There is certainly evidence

for literacy in the form of more conventional styli and writing tablets in the pre-Boudican groups.

Levels associated with the use of the building produced a coin of Antonia, AD 41-45, and an irregular Claudian issue, two melon beads in turquoise frit, and more glass vessels, the only identifiable forms being containers, a jar <6002> and a square bottle. There are none of the quality early wares found in the construction levels.

Other groups

There were no finds from OA7, OA8 or Building 4.

Zone 2- South-west area; – P2 – OA19, S4, S5, S6, S7

P3 – B12, B13, B14

P2 – Open Area 19

Dumping and make-up in a potentially wet area is reflected in the survival of organic materials in this group (223), comprising a child's nailed shoe, and several fragments of waste leather, also a wooden writing tablet <4039>. A composite wood and iron handle could be part of an item of furniture (<4060>) and another may be from a tool. Conditions did not in general favour the preservation of metals and the only recognisable objects a distorted Hod Hill brooch <3560>, and parts of two copper alloy bracelets of 1st century type, <3374> and <3559>. These wide armlets, covered with punched and repoussé decoration are clearly distinguishable from the narrow bangles of the later Roman period. A mount <3558> may have been a military strap fitting. In addition there were several fragments of iron and lead from Open Area 19, but none are identifiable as objects. One of the five fragments of samian inkwell from the site came from this area.

Structure 4

Structures 5,6 and 7 yielded no finds but Structure 4, the box revetment associated with Open Area 19 contained a large group of artefacts, most of which could date from the mid 1st century. Two coins of Vespasian are (presumably) intrusive (contexts 12926, 12824). The group, which in contrast to OA19 contains few organic objects, with only one fragment of stitched leather, includes five brooches, two well-preserved Hod Hill types <3738> <3739>, an early Colchester <3723> and two incomplete 1st-century plate brooches. Hod Hill brooches are frequently found on military sites and were apparently worn by soldiers, although not exclusively so. Several studs from the same feature are almost certainly from armour, showing typical radial decoration on the face, the details picked out in niello inlay <3883><3892>. Such studs were used on straps, aprons and belts as part of infantry uniforms. A copper alloy terminal of characteristic lozenge shape may also be part of an apron mount <3895>. An unusual lead pendant or mount <3735> is perhaps phallic and could also have military association. The only other personal item is a small circlet of iron wire, with knob terminals which is probably a bracelet or bangle <3866>. Iron jewellery was more

popular than might be supposed today and finger rings are well known, as are brooches, of which there are two examples from ONE94. Bracelets which were more fragile, are only infrequently preserved and are rare outside burial contexts. It is notoriously difficult to ascribe the use of artefacts to a specific gender, but it is probable that all the personal items of jewellery in this group were worn by men.

There are few household or domestic artefacts, principally two fragments of quern, similar to the examples which, as has already been noted, were reused in the construction of Building 1. The few fragments of glass vessels are among the earliest deposited in this area and include one distinctive vessel <3616>, a pillar moulded bowl in natural green glass with a streak of red on one side caused accidentally by iron oxide. A pale blue-green beaker <3617> is a type of drinking vessel found on several pre-Boudican sites in Britain. The remaining glass fragments, all naturally coloured are from unidentified vessels.

There are two iron styli in the group, both of undecorated simple type, but no associated writing tablets (although one was found in OA19), unsurprising in view of the poor preservation of organic materials. The remaining non-ceramic finds comprise miscellaneous fittings, copper alloy studs and a chain, possibly a lamp hanger, and an iron wall hook.

P3

Building 12

The few recognisable artefacts, which include a 1st century coin, not closely dated, a copper alloy ring fitting and a fragment of worked horn core are all from the construction levels.

Building 13

The construction levels contained Claudian coins, and two distinctive 1st century brooches. A dolphin brooch <3724> shows signs of repair, where the catch plate has been replaced with one in a different alloy. The other is an unusual plate brooch with central roundel flanked by two swan heads <3607>. The group also contained a copper alloy spoon <3442> a needle, part of a ligula and a quern fragment, together with glass vessel fragments all in naturally coloured glass, the only recognisable form, part of a jug handle <4723>.

There were no finds from Building 14.

Zone 3 – Central area, Terraces 1 and 2; P3, B5,6,7,8,16,23, OA9p3, 10,11, 12, 34, S11, 13

Building 5 – no finds

Building 6

Building 6 (which might represent the construction levels of Building 7) contained a rare lead alloy inkwell <2690>, for which there are parallels from the Continent. There is evidence for literacy in the form of styli and writing

tablets from the inception of Roman London, but this implies the existence of more permanent forms of record, using ink and parchment (more likely than paper). Inkwells were also made in other materials, glass and ceramic, most commonly samian (RT13) and it may be of significance that three of the five fragments of samian inkwell from Poultry came from the pre-Boudican levels, in OA19, OA13 and S4.

Building 7 – no finds

Building 8

Iron artefacts were well preserved in the construction levels of Room B. A spear <2742> is of military type and one arm of a loop hinge <2969> may be structural.

Building 15

The construction levels contained two early brooches, a lion-bow derivative <3736> and a Hod Hill <3737>, both of which date from the early to mid 1st century, quite consistent with a pre-Boudican date for the group. The only other identified object from the construction levels was an annular bead in pale green glass <5803>, but a substantial fragment of quern, a ferrule, and at least one irregular Claudian coin were found in Room C.

Building 16

A very small group from construction deposits comprising a ribbed copper alloy ferrule <3886> and an irregular Claudian coin (AD 45-65).

Building 23

The outstanding find from the contexts associated with the use of the building, which was destroyed in the Boudican fire, (Room A) are 27 wooden beads, of varying sizes which appear to be a graduated necklace. They were found on wooden shelves with grain, which was perhaps stored in sacks or bags. Two bone spoons were also found, lying on the floor below the shelves <2790, 6454> and rim of a glass phial <2699>. It is thought, from the evidence of the ceramic finds which included stacked samian vessels, that it was a shop. As can be seen from the brief summary, few non-ceramic objects are directly associated with the use of the building, but the overlying destruction levels (Period 5, OA24) which is presumed to be *in situ* fire debris, contained a large number of fragmentary bone spoons <2791>, which may have represented stock or may have been used to dispense dry goods such as herbs. At least nine individual spoons are represented, all of the same common round-bowled form and several are burnt. The other finds from the destruction material may be domestic, but could equally well have had a place in a shop. They include two of the very few ceramic lamps from the site, both imports and incomplete, ligula handles, and glass vessel fragments. Among the latter are parts of two flasks or phials and the handle of a good quality vessel, probably a jug, in purple glass, consistent with a pre-Boudican date.

Open Area 11

There were no finds from Open Area 9 in Period 3, nor from the contemporary Open Areas 12 and 34 and only a small group from Open Area 10, where a fragment of copper alloy waste <1672> is more likely to be part of a burnt object than residue from metal-working. A larger group from Open Area 11 (?near Building 8) produced miscellaneous domestic rubbish but also some military finds, the overall character of the group perhaps being more akin to the finds from the Structure 4 dump. The only dress accessory is a small 1st-century plate brooch, but hobnails from a nailed shoe survive. The military items are a socketed spearhead <3088> and a copper alloy mount with an acorn terminal <3208>, and a stud <3122>. Another stud is more likely to be domestic rather than military and there are other miscellaneous fittings such as a fragmentary iron key <3702>. A spoon bit from a drill <3115> is a comparatively rare find as identifiable tools are in general unusual discoveries in London, although the collections from the Walbrook are notable exceptions. A lead weight <3011> is the earliest stratigraphically of many found on the site. The burial environment in Group 172 was suitable for the preservation of wooden objects. Fragments of writing tablets were found and part of a large turned wooden bowl <3087>. A flask in naturally coloured glass dates from the mid 1st century <3041>.

Structure 11

The base of a well-preserved chest or coffer was found in this structure, showing various carpentry techniques, including dovetail jointing (report by D Goodburn). Apart from ceramics, the only other finds from the structure were small fragments of glass.

Zone 4 – Eastern end of site, north of Road 1; P3 – B9, 10, OA13p3, 14, S1, S 2; P4– B11, OA15,16,17, 24p4

P3

Building 9; OA13

The only recognisable artefact from group 192, with the exception of a coin of Nero (AD 64-68) as a stone hone, and there were no finds from Building 10.

There is little material from the associated open areas. A glass bottle base with moulded inscription <1388> from OA13 is one of the very few pre-Boudican bottles in the glass assemblage. An early Hofheim cup came from OA13 in period 2, and a corroded iron key <2576> was identified in OA14. There were no finds from Structures 1 or 2.

P4

There were no identifiable artefacts from Building 15 in this phase. Open Area 15 produced various fittings, a copper alloy stud, ring-headed iron pin and chain linking. Some wood was preserved, but the only objects recovered were stoppers or bungs from containers, which could have been made from a number of materials.

Road 1

The Road 1 construction layers in P2 produced a miscellany of objects, a copper alloy needle <3440>, a cosmetic spoon (ear pick) <3441> a lead weight <3576> and the lid of a bone pyxis <3595>.

Other Pre-Boudican groups

OA5, = Zones 1 and 3

Three brooches date from the mid 1st century, a simple one piece brooch with strip bow <3740> and two Colchester two-piece brooches, of different sizes <3663> <3742>. The larger Colchester is complete, the others nearly so, lacking only their pins and all are in good condition, presumably representing accidental loss, perhaps during the levelling process. All could pre-date the Boudican fire.

Building function/zones

Table 301 Finds tabulated by functional category within Zones 1-4, Periods 2-4

Analysis of the finds within the four zones.

Zone 1- north-west area, to north of Road 2.

Although this part of the site appears to be a focus of early activity, at seventeen, the number of identifiable artefacts is very small. Most finds are personal or domestic in character, and the construction levels of Building 3 contained high quality imported glassware.

Zone 2 – south-west area, to the south of Road 1.

This was the most productive of the four zones, chiefly because of the large dump in Structure 4 (the box revetment), with held 24 artefacts. Among these were five items with military association, mostly studs and part of an apron mount. Three brooches are of mid 1st-century date and like the only other item of personal ornament, could have been worn by men. Glassware from this feature is of quite good quality and is typical of pre-Boudican groups. Two styli were the earliest found on the site, with one writing tablet from OA19. The only anomalous finds from this group were two coins of Vespasian -- which could bring into question the date of deposition of some of the smaller items of metalwork, the military studs for example.

The finds from the remaining groups in Zone 2 are all of similar date, but there are no further military items. The largest group, six objects which included two distinctive 1st century brooches, came from the construction levels of Building 13.

Zone 3 – central area, Terraces 1 and 2 to the south of Road 2 and the north of Road 1.

The largest group of finds from this area again came from dumps in Open Area 11, (?associated with Building 8) and although smaller, is similar to the group from Structure 4. A socketed spearhead and an incomplete copper alloy mount with acorn terminal are distinctive military items. An iron drill bit

would have been used in carpentry and, although poorly preserved, is one of the rare tools from the site and a large turned wooden bowl is a good survival.

In general the buildings produced few finds. Another spearhead in the construction levels of Building 8, room B, may reinforce the tenuous link between Open Area 11 and Building 8 and other finds in construction levels (eg brooches in Building 15) merely serve to strengthen the dating evidence. Building 23 however, was destroyed, with its contents in the Boudican fire and the artefactual evidence, although limited is consistent with its interpretation as a shop, suggested originally by stacks of unused samian vessels (see summary above).

Zone 4 – eastern end of the site, Terraces 3 and 4, north of Road 1. The more ephemeral structures here are associated with water channels and it has been suggested that they are probably workshops. There are, unfortunately, very few finds from these structures. A hone from the construction levels of Building 9 is very tenuous evidence on which to postulate a workshop (and such tools are as likely to have been used during building construction). There are no concentrations of artefacts or scrap metal which might suggest industrial activity, but three wooden stoppers from Open Areas 15 and 16, preserved in wet conditions, suggest the presence of storage vessels, perhaps ceramic.

Post-Boudican reconstruction - Period 5 – Boudican fire debris

Zone 1

Open Area 27

One coin of Nero is dated AD 64-69.

The group consists of four glass vessel fragments, two of them burnt. One of the burnt vessels is a Hofheim cup (AD 40–70); the others from the shape of their necks are containers of uncertain form. A corroded iron tool, probably a small gouge would have been used for fine carpentry <3899>.

The group overlies Building 15. The burnt vessels could well be casualties of the Boudican fire. The date of the coin could indicate activity in the area within ten years of the Boudican destruction. This is however a very small group on which to place any reliance as to dating.

Zone 2

Open Area 22

The personal ornament in this group dates to the early/mid part of the 1st century. A Hod Hill brooch <3500>, one from debris over Building 12, belong to a type frequently worn by the army, or at least often found on military sites. A copper alloy pendant <3284>, is of military type and an ivory handle is from a knife found typically in pre-Flavian contexts <3656>. There are few household articles; two fragments of quern and some glassware, mostly from sieved deposits, but including fragments of Hofheim cup <4057> and a square bottle <4056>.

The coins from this group are more problematical. Most of the identified coins date from the early to mid 1st century, with three Claudian copies, but there is also a coin of Domitian (AD 69–96), and two of the later 3rd century, which must be intrusive (perhaps due to later road disturbance). Could the coin of Domitian be an indicator of a gap in occupation? – most of the material in this group could fit well with the pre-Boudican material and it bears much similarity with the (?underlying) Structure 4 dump (which contained a coin of Vespasian).

Zone 3

Open Area 24

This has been discussed with the pre-Boudican groups as it (group 623) overlies Building 23 (Period 3) and is presumed to be *in situ* fire debris. The artefacts may therefore have been used within the building and could reflect its function. The assemblage might be thought to be domestic, with two lamp fragments, two of the very few ceramic lamps from the site, both imports <A298>, a bone knife handle, glass vessel fragments and miscellaneous fittings. There are however a large number of bone spoons <2791>, comprising fragments of at least nine individual items, several of them burnt.

Zone 4

Open Area 25

The redeposited fire debris, which contained coins of Nero, included a small group of identifiable material some of which is domestic. A pillar moulded bowl <2857>, like all the identified vessels in the Boudican fire debris, must have been among the earliest glassware to have been in use in London. Other finds included a fragment of bell <1527>, for either domestic, animal or ritual use, an iron stylus <1463> and an iron drop handle <1199> from a vessel or a small wooden bucket. There are several unidentified objects of wood and copper alloy.

Open Area 26

Group 307, redeposited fire debris, sealed Building 11. It is a mixed group, containing several fragments of writing tablets and at least one military object, and iron spear butt <5298>. A copper alloy mount with concentric circle decoration <5471> may be from armour and two copper alloy finials could have decorated furniture. Glass vessels consist mainly of small fragments, recovered in sieving, but identified forms include a naturally coloured pillar moulded bowl <5462> and fragments of jars or jugs, one in the strongly coloured blue glass of the mid 1st century. An iron flesh hook <5374> was also found.

As in the pre-Boudican groups there is again an absence of 'feminine' articles in the fire debris, although as before it is difficult to identify such artefacts at this period.

Period 6

P6i

Open Area 41 – Zone 4

Activity in this area (Group 458) commenced with the robbing of the pre-Boudican Walbrook-side revetment. The datable finds are certainly early and include two continental brooches, an Aucissa stamped with the maker's name <5301> and a very distinctive plate brooch in the shape of a boat <4763> manned by three stylised soldiers, for which parallels are known in the Celtic northern provinces. Aucissa brooches are particularly associated with the army during the period of conquest and the plate brooch, which is too small to have served as an effective dress fastener, may well have been a badge (cf Johns 1995, 104). Several items in the large group of finds from this area have military association; a distinctive bone knife handle <4795>, a mount which may be from a belt <5309> and a harness pendant <5299>. The only overtly feminine item is a plain copper alloy earring <4881> and for personal grooming there is a well-preserved set of manicure/cosmetic implements <4764>, an essentially 'Roman' artefact. The group includes one iron needle <4933>, an iron stylus <5352>, a copper alloy ring key <4649> and a bell with characteristic polygonal handle <4651>, together with miscellaneous fittings. An enigmatic iron object <4775> could be part of a vehicle fitting and a small knife <5307> could be either a razor or a miniature tool. At least two fragments of copper alloy appear to be waste, offcuts from objects which were perhaps collected for recycling.

Various fragments of wood were preserved, mostly staves or shingles, but also one writing tablet, on which traces of writing can still be seen <5210>, and vessel stoppers.

There is a small quantity of glassware, comprising four unidentified vessel fragments in natural blue glass, and one jar fragment in blue glass <6326>, all of which could be pre-Boudican in date.

None of the coins are later than Claudius I and this appears to be a consistently pre-Boudican group. When examined by functional category, the overall balance appears to be very similar to the Boudican fire debris in Period 5 and there are some factors which appear to make this a typically 'Walbrook-type' group. The two brooches, both imported, early and distinctive, are in excellent condition and are complete – the boat brooch in particular is undamaged. There are only two military items in copper alloy – but the harness pendant is <5299> is again well preserved. It is possible that one of items identified as copper alloy scrap <4699> may have come from a similar object, although insufficient remains for proof of this. The presence of identifiable scrap is significant as is the presence of artefacts associated with writing. The majority of the finds are however miscellaneous structural and domestic fittings.

Road 3

The construction levels produced only one quern fragment and a coin of Claudius, both typical of the earlier groups.

Period 6 ii

Building 17 -- Zone 1, north of Road 2

One coin of Agrippa, AD 15-30. No other finds

Building 21 – Zone 4 , Terrace 3

One irregular coin of Claudius was found in the layers associated with the use of the building, which also produced one of the finest objects from the site, a mount in the form of a leaping pantheress <2775>. This lively figure which could be from a vessel, item of furniture or wagon is an essentially Roman artefact. The panther is seen in classical art as a member of the Bacchic thiasos and this is a reminder both of the place of items with religious connotations in the everyday Roman society and of the importation of foreign beliefs and cults into Britain alongside staple and luxury goods. Apart from the coin, none of the objects are closely datable, although all are consistent with a 1st-century date.

The building also contained an iron stylus <2780> with a distinctive U-shaped eraser.

Open Area 42 – Zone 4

A small group, with two Claudian coins. Accessioned quernstones are presumably from the cobbled surface (and discussed elsewhere). A wooden barrel is also recorded (report by D Goodburn). Miscellaneous unrecognisable fragments of copper alloy, iron and lead, and a fragment of a vessel in naturally coloured glass.

Discussion

There is no obvious chronological progression in the accessioned finds from Period 6ii, (compared with P5 or P6i), but although Building 21 lies to the south of the Boudican fire debris recorded for Period 5 on Terrace 3, it is apparently stratigraphically later. Unremarkably there are few artefacts associated with the use of Building 21, but the presence of the panther mount and the stylus, both from the internal surface of the building, suggests the re-establishment of a highly Romanised literate society. The quality of these objects is somewhat at odds with the stratigraphic analysis which suggests that this was a 'low grade' timber building. This may not have affected the quality of life within.

Period 6 (iii)

Open Area 28 – Zone 1

A small group, which includes part of a bone scoop (utilised bos scapula) <4198> and two glass sherds, both naturally coloured, one a handle fragment from a jug or bottle.

Open Area 51-- Zone 1

The latest coin from this group (575) is an *as* of Hadrian, although the identification is uncertain. There are two silver denarii of Domitian (AD 81-96) which appear to be later than the overall dating for the group but there is some intrusion also with the pottery in this area which abuts Road 2. Five other coins date from the mid 1st century. Few other objects can be identified, and most of the metalwork is fragmentary, corroded, or as in the case of several lead fragments, burnt. A copper alloy needle <3800> and a handle can be recognised. There are two fragments of glass vessel, one the rim of a collared jar <4816>.

Building 29 – Zone 3

The finds all came from the construction make-up for Building 29, a large timber box-like structure, and are therefore not associated with the use of the building, relating more perhaps to the pre-Boudican groups. Several artefacts, including two Hod Hill brooches certainly date from the mid 1st century <2572>, <2731>, and there are also coins of the Republic, Germanicus, Claudius and Nero, although the latest, from Group 445 is an *as* of Vespasian, AD 69-79. There is evidence of some intrusion in this group, with the presence of a medieval spangle <2598>. With the exception of the brooches there are no items of jewellery, other personal ornament, or toilet implements. Domestic items are similarly lacking, but there are two lead weights and seven items associated with writing, three iron styli and four fragments of wooden tablet. In addition, there is one socketed iron tool of uncertain function as the blade is lost, and several fittings including two copper alloy lock bolts <2463><2571> and a lion-headed stud. Two strap loops belong to a type found on cavalry harness of the 1st century <2435> <2436>. An iron collar from a wooden water pipe was also recovered <2599>.

Three of the five glass vessel fragments date from the mid 1st century, and are similar to vessels found in the pre-Boudican groups. These comprise a pillar moulded bowl <2550>, a dark blue bowl/jar base, which is burnt <2554> and a fragment of blue glass. A wheel-cut fragment of colourless bowl <2551> is of later 1st century date.

The group clearly contains residual material, which is likely to be redeposited Boudican fire debris, although this is mixed with later and undatable finds.

Open Area 32 – Zone 3

The coins include a possible Greek Imperial issue of the 1st/2nd century (see coin report). Few objects survive in recognisable form, but these include a glass gaming counter, one of very few from the site, an ivory knife handle <2449> of pre-Flavian type and an iron bolt.

The Tank

Structure 20 (oak water tank) – Zone 4

The group from the contexts associated with construction of the tank (sgp 120207) consists of a fragmentary brooch of uncertain type, a buckle of a

type found on armour <4892>, copper alloy studs, one military <5405>, a copper alloy mount with repoussé decoration, possibly from a belt plate <5408> and a needle of specialised form with a curved knobbed terminal <5353>. Other examples of this type of needle have been found in Walbrook deposits (eg Wilmott 1991, 121, no.316 from Bucklersbury House) and they are known from other Romano-British sites, noticeably those with a military garrison, as at Cirencester, Castleford and Newstead (Curle 1911, pl 73). At Castleford they are tentatively identified as baling needles (Cool and Philo 1998, 92, nos 429, 433). Several iron objects were found; a stylus <4894> a knife of typical Roman form <5016> and part of an axe or adze head <5215>. The apparent concentration of military items and tools may be significant. A wooden barrel was also found <5450>.

Apart from small vessel fragments the only identifiable glass vessel is a jug, of which only the handle survives <4901>.

The group is difficult to date. The basic range is seen in the mid 1st century contexts, but there is nothing here that is of obviously early/mid 1st century date and the types are all found in the later 1st century groups also.

Open Area 43– Zone 4 surfaces associated with the use of the tank

120208 - earlier surface

A fine copper alloy lamp <14> with its hanging chain, in remarkable condition, came from the make-up/earlier surface below the cobbled surface.

This is likely to date from the mid 1st century and is another imported object, similar to those found in Gaul and Italy and a further example of the high quality of some of the domestic artefacts in use in early Roman London. The small group also included a fragmentary terminal from a military fitting, possibly an apron mount <5225> and a well-preserved iron knife or small saw with a serrated edge <5015>, similar to others from the area (eg Wheeler 1930, pl XXXVI, 5, from the Bank of England). Two iron brackets appear to be fittings from the water tank itself <6403-4> and there are other miscellaneous fittings, a fragment of copper alloy waste and a little scrap lead. A large adult size *carbatina* and some non-shoe leather was recovered and a fragment of Hofheim cup <4939> was recognised among the very few fragments of glass.

120209 – cobbled surface, group 493

The group contained two 1st century brooches, but no other personal ornament or personal items, with the exception of a broken wooden comb <5136>. Apart from quern fragments which are likely to have come from the cobbled surface, the only other domestic artefacts are the handle from a lamp, probably an open form, in an oxidised fabric <6520>, a glass flask <4527> and a phial <5063>. The group includes several studs one of which <5440> is likely to be military. One highly individual stud <5056> has a crudely executed running bird on its face and although unusual, the design is almost identical to one found in Miles Lane (Wheeler 1930, 112, fig 37,4) where it is suggested that the bird is a stylised eagle.

Structure 21 (? water-pipe channel) -- Zone 4

Another stylus of simple form <51> and a fragment of writing tablet were found. The only other identifiable finds were copper alloy studs, one military,

foil and glassware comprising two fragments of cylindrical bottle and an unidentified vessel. The waterlogged conditions preserved adult and children's shoes, but also about 47 fragments of shoe-making waste.

P 6 (iv)

Open Area 43

Gp 462, occupation - remodelling of external area around tank
Many of the finds from these groups, both external surfaces are corroded and unrecognisable ironwork. There is however a complete knife <5048> and an iron needle, several of which have been found in Walbrook and waterfront deposits. Apart from a finger ring <5089> there are no personal items, but the group includes a bone gaming counter <6345>.

As in the earlier phase, there are several fragments of mid 1st century vessels in strongly coloured glass, together with miscellaneous fragments in natural green/blue.

Group 495

The coins are again Claudian and Neronian, and datable finds, such as a small Colchester brooch <4746> belong to the mid to late 1st century. An iron knife blade with copper alloy fittings <5030>, is a typical 1st-century form. There is one iron stylus in the group and a writing tablet <5010>. A variety of fittings include an iron hinge staple. There are also two bone counters <5218> <5217>, and an iron finger ring <5211>.

Building 18 -- Zone 1

Two coins, the latest of Nero and a copper alloy vessel or tripod foot <3797>.

Open Area 29 (well - gp 645) – Zone 1 – adjacent (east) to B18

Coin of 1st century - possibly a Greek imperial issue. The identified finds comprised part of a copper alloy mirror, a strap terminal and a wooden writing tablet <4061>.

Building 26 – Zone 1

No finds

Building 39 (over B15) – Zone 1

Coins of Claudius. The only other artefacts were glass splinters, including one in blue glass and one burnt and melted lead.

Building 42 – Zone 1?

No finds

Building 43 - ?Zone 1

This building produced a fragmentary lamp, glass beads and a glass counter <A310> from levels associated with its use and destruction.

Building 22 (disturbed) – Zone 4 (Terrace 3)

Part of an open lamp in local fine ware was recovered from room B, also a bone handle, probably for a knife, with crudely engraved lattice decoration <2981> and two lead weights, together with miscellaneous fittings and unidentified metal fragments.

A fragment of burnt vessel base in natural green glass was also found in Room B and part of a natural blue beaker. Sieving also resulted in the recovery of other small fragments and splinters, including several in dark blue glass and one of translucent amber glass with opaque white trails. These date from the earlier part of the century and are probably residual from the pre-Boudican occupation.

The identified finds, although incomplete, appear to have been recovered from the floor surface and may have been associated with the use of Room B. They are not distinctive, and it may be significant that the only lamp is made in a local fabric and that the knife handle is relatively crude. The fragments of imported glassware are undoubtedly residual and the surviving assemblage from the building itself lacks the high quality imports of the earlier period. The building is however disturbed and there is very little material on which to make a valid judgement.

Open Area 33 – Zone 4, west of B22

This group produced two coins of Domitian, AD 81-96, a dolphin brooch <2040>, part of an iron stylus <2585>, a bone scapula scoop <2258>, the second example from the site and three leather shoe soles. There is also a waste fragment of antler. These finds could be associated with the occupation of Building 22, but with the exception of the coins, none of the identified artefacts are complete, suggesting that they have been discarded as rubbish.

Building 54 – Zone 2

There were no identifiable artefacts excepting an irregular coin of Claudius.

Open Area 40 – Zone 4 (behind B29)

Two fragments of writing tablet were found.

Open Area 44 – Zone 4 (refuse pit)

The identified coins are all Claudian copies. Two military artefacts were found, a decorative stud <5252> and an iron spear butt <5643>. Another iron stylus <4948> and three writing tablets, one a small 'label' type <5164> was found here and a knife blade <5223> of identical type to <5030> from Open Area 43. One corroded iron tool <5356> may be an awl and there are miscellaneous fittings. In addition to the writing tablets, several wooden artefacts have survived, including a double-sided wooden comb <5200>, and very unusually a shovel <5170>. Part of a distinctive dish in a dark brown is of mid 1st-century date <5984>. A small fragment of mirror was also found <4865>.

Structure 23 – Zone 4

No finds

Structure 24 – Zone 4

A single bone gaming counter was found <6327>.

Building 32 – Zone 2

The latest coin from the construction and usage levels was of Vespasian and the only other metal finds were part of an iron knife and a ring, possibly a ferrule. Glass vessels comprised a single small fragment of pillar-moulded bowl.

Building 34 – Zone 2 (south of road)

Almost all the finds, including the coins, came from the construction layers. The latest coin is a denarius of Titus, AD 79-81, but most of those identified are Claudian. There were several domestic artefacts from the construction levels -, part of the lid of a bone pyxis <3595> and lead weights which could indicate commercial activity <3573><3455>. Quern fragments may be residual, given the large numbers found in contemporary surfaces. The only glass vessel was a fragment of base ring in natural green/blue and glass splinters.

The group lacks the distinctive components of the earlier dumped assemblages from this area (and the waterlogged deposits to the east) namely the writing equipment and military artefacts --- it is, apart from the lead weights, essentially a domestic group, with no objects of distinction or particularly high quality.

Open Area 20 – Zone 2, east of B34

One lead weight <2983>.

Period 6 (v)

Open Area 36

No finds

Open Area 60 – Zone 3

Coins date from the reigns of Claudius, Nero and Vespasian. There are few recognisable artefacts, a fragment of bow brooch, iron key, and two leather shoe soles.

Open Area 64 – Zone 3

The group comprised four glass vessel fragments, including a mould-blown almond lattice beaker <3059>.

Building 30 – Zone 4 (contemporary with the use of the tank)

The identified coins from the construction layers are Claudian. The group also yielded and a fragment of waste leather from the manufacture of one-piece shoes. In an overlying layer, use of Room C, there was a bi-lobed

harness pendant with bird-headed terminal, <5303>, a form of pre-Flavian date, used on cavalry harness.

The organic materials and the mirror are from the construction levels of the building and are typical of the objects found in earlier waterlogged deposits. Could these levels have been dredged from the Walbrook stream/banks in order to make up the ground?

Open Area 45p6 – Zone 4, behind B30

The only recognisable metal find in this small group was a copper alloy stud. There are also three glass vessels, two jars, one of blue glass and a dish.

Open Area 37 – Terrace 2

Several domestic and personal objects were found in this area, perhaps associated with Building ???. A copper alloy earring, of a type worn by a woman, is a rare find on this site <1173>. A small turned box, made of box wood may originally have held trinkets <2022>. Three copper alloy needles, one complete, <1138>, were also found, with miscellaneous fittings, a ring and studs which could be from domestic furniture. An ivory knife handle <2449> is a 1st-century form.

Eight glass vessel fragments, most naturally coloured, but including a pillar moulded bowl and a colourless beaker <1190> <1093> also came from this group.

Period 7 – Development after the Flavian fire

Period 7 i

Open Area 52 – Zone 1 (south of Road 2)

Coins of Claudius and Nero. Miscellaneous finds comprising a colourless glass bead and a stone palette <3824>.

Structure 10 – Zone 3

The only finds recovered were unidentifiable fragments of iron and lead. No glass.

Open Area 45

OA45 is presumed to have functioned with Building 30 (see above). The organic accumulations which lapped the revetment which retained the B31 house platform (Group 478), contained only a few artefacts – a coin of Vespasian and fragments of leather. The rest of the many finds came from Group 463 deposits that initially accumulated to the north and west of the tank. There are two large sub-groups; (120211) includes the earliest fills within the water tank, which suggest that it had gone out of use and was silting up. (120212) consists of substantial accumulations of peaty silt over the external areas around the tank, strengthening the impression that it was no longer in use.

Finds from the primary silting of the tank (120211)

The only coin is an as of Vespasian. The few metal artefacts are well preserved in the waterlogged conditions. The only brooch, a Nauheim derivative <4441> is almost complete but distorted. The type, which has a pre-Roman origin but which was fashionable in the mid 1st century would have gone out of general use by the end of the century. The only item of personal grooming is a broken wooden comb of normal double sided form, but other wooden objects preserved in the silt are more unusual. A turned box <4160> with a recessed rim may have been used for holding trinkets or cosmetics but a wooden brush, with bristles still present in the holes is a household object of a type that rarely survives <5201>. There were two iron styli in the group <5114>, <5171>, both of simple form but no writing tablets. Three artefacts have military association – a decorated buckle plate <4882> and two decorated studs. An iron buckle <5513> may be from horse harness and there are also miscellaneous structural or household metal fittings of uncertain use. One bone object is of uncertain function - <4984>, a circular-sectioned shaft with a knobbed terminal below which are multiple grooves. The decoration is similar to that found on bone hairpins but the object is larger than the normal pins used at this time. The shaft which is broken at the lower end does not taper and the form of the lower terminal is unknown. It is possible that this is a hair ornament.

There is a little domestic glassware in the group, which could be broadly contemporary with the date of deposition. It includes fragments of one good quality colourless beaker of the late 1st century <5069>, three naturally coloured jugs, one square bottle and an amber bowl which although perhaps made earlier, could well have been in use in the second half of the 1st century <4857>.

The group also contained a large number of shoe fragments – at least 16, ranging in size from adult to small adult or child, and where recoverable all nailing patterns are of types A and B. The group appears to represent disposal of worn out footwear rather than cobbling waste. Non-shoe leather was also preserved. One fragment, <4700> which may be part of a furniture cover or hanging is decorated with an impressed design of diagonal crosses within boxes and there are also fragment which may be from a satchel or 'briefcase'. Fragments of the same items were found in the upper fill also.

As this group was found at the bottom of the tank it is reasonable to assume that it represents rubbish that accumulated in the primary silting – and has not been redeposited. The date of the coin is consistent with this interpretation and the earliest find, the brooch could have been discarded as no longer fashionable. Most of the artefacts in this group are broken, and were apparently already broken when dumped.

120212 -- accumulation of peaty silts over the external areas around the water-tank, covering the surfaces to a depth of about 0.30m and filling the tank. The material is landfill comparable to material thrown behind waterfront revetments and has been used to raise and remodel Terrace 4.

The finds from this group are very similar in composition and preservation to those from the major 'Walbrook' assemblages, most the results of less systematic excavations than those carried out at ONE94 (Wilmott 1991; Merrifield 1998).

Analysis of the group by function

Personal items are distinguished by excellent preservation and the seven brooches, six of copper alloy and one of iron cover a relatively wide date range. Three are simple one-piece forms, with a simple wire-bow, seen also in the primary silting. One is a similar example in iron <4503>. These are thought to date from the mid 1st century AD (see catalogue) and may have gone out of general use by the date of filling of the tank, although if the material is presumed to be redeposited, they could have been thrown away or lost much earlier. Iron brooches are regarded as quite early (Olivier 1988, 39) and a pre-Boudican date would not be impossible. No. <4182>, which is wrought, not cast in a mould, dates from later in the 1st century, while two enamelled head-stud brooches are of 2nd century date. The brooches differ in detail and have not been manufactured from the same mould, but may have been used as a pair; part of the linking chain survives. These are the latest datable objects from the group perhaps dropped during the levelling/dumping process itself or redeposited with the levelling material, which would suggest a lengthy period of dumping for the source material.

The group contains three iron finger rings, each originally set with an intaglio, only one of which survives <4687>. The ring, containing an onyx is of a form typical of the first century (Henig 1974/1978, fig 1, type III) and is paralleled by earlier finds from the Walbrook, (eg Henig 1974/1978 no. 381 from the Bucklersbury House site, containing a blue onyx [nicolo]). The intaglio, reported on in detail by Martin Henig (see catalogue) is cut in the classicising tradition of the first century, though showing signs of stylisation which become apparent in the Flavian period and cannot be later than the reign of Vespasian. The device is the muse of comedy, Thalia, a subject which evokes literary culture, and is not very common on gems. It is one of several objects from Poultry and sites in the area with a theatrical subject and raises the question of whether London had a theatre by Flavian times and of its siting, perhaps near the Walbrook.

Iron finger rings, which were popular in the 1st and 2nd centuries are not uncommon in London and there was no prejudice against the use of the metal, which was often set, as here, with intaglios of the highest quality. Manning (1985, 78) points out that there was a tradition of the wearing of iron rings by the aristocracy during Republican times, while the use of gold was restricted to the higher classes. He suggests that by the 1st century iron rings could have been worn by those adhering to ancient tradition and also by the lower orders, who may not have been allowed to wear gold, but who could afford fine gem stones. The decline of the use of iron rings in the 3rd century appears to coincide with the relaxing of the sumptuary laws. It is unusual to find three iron rings within one group of finds, even if two lack their intaglios, and is a further illustration of the unusual preservation qualities of these deposits

The only other items of jewellery or dress accessories from the group are a copper-alloy finger ring, with an integral bezel <5566>, two hairpins, one of copper alloy <5484>, the other iron, and of unusual form with a glass inset terminal <4468>.

A small number of items are associated with personal grooming, four mirror fragments, made from a brittle copper alloy with a characteristic

fracture, one nail cleaner <5198>, which is complete and the well preserved handle of an iron razor <4753>. One boxwood comb <5167> is of a standard form. A surgical probe, perhaps a medical rather than a cosmetic implement, is incomplete <4752>.

Sixteen needles were identified, of which one is bone, six are of copper alloy and nine are iron, the reverse of the proportions normally seen on London sites. The survival of the iron needles is solely due to the favourable waterlogged conditions and they are only found in such contexts (as for example those from the waterfront deposits at Suffolk House, SUF94). The single bone needle <5530> highlights the small numbers of bone objects found on the site generally, although this is not peculiar to Poultry, and is not a problem of preservation, as shown by the survival of large quantities of animal bone. This is a far larger group of metal needles than found on most sites, let alone in a single group and represents 40% of the total number from Poultry (40). One needle <4274> is the specialised form with a curved knobbed terminal, seen in the tank construction levels (<5353>) and in earlier Walbrook collections. Use as a baling needle would be perfectly feasible in a commercial area of London.

Several tools were found in these deposits, including several pristine iron objects, which can be paralleled from the earlier collections. A knife of typical Roman form with an integral ring handle is stamped with the maker's name 'BASILIS' (<4360>). This is the fifth knife from this cutler to have been found in London, all in the general Walbrook area, and the name is interpreted by Collingwood and Wright as BASILIUS (1991; RIB 2428.5-8). Three variants of the stamp are already known and this is another, lacking the central standing figure of the earlier examples. Another knife <5483> is also of classic form with a solid octagonal-sectioned handle and there are other recognisable fragments and incomplete items, including a chisel <5585>. An ivory knife handle <5682> belongs to the form seen in the pre-Boudican groups; the type is not seen in post-Flavian contexts.

There are remarkably few household or domestic items. A fragment of volute lamp is certainly residual <4348> and the only other domestic item, other than glassware, is a broken copper alloy flagon lid <4481>. The glassware covers a wider date range than that seen in the primary fill, but numbers 37 as against 16 fragments. Three drinking vessels, all represented by small fragments, include two Hofheim cups of the mid 1st century <4287>, <4877>. There is only one pillar moulded bowl, but five jugs or flasks, forms used at table from about AD 60 onwards. The handle of one jug was decorated with a medallion in the form of a head <5065>. The use of glass containers for the storage of both solids and liquids increased from the Flavian period and this is reflected in the composition of this group, which includes three jars, seven bottles and one phial. Two fragments of funnel, used for the pouring of liquids are relatively rare survivals <4358> <4286>. The number of storage vessels from Open Area 45 as a whole represents 50% of the total from Period 7 contexts, (itself the largest number from any individual period – see glass report). The glass from the tank fill therefore also appears to be generally of Flavian date, and does not include significant quantities of residual material.

The deposit contained nine iron styli, the largest number from any single group on the site (and 18% of the site total). These include two

distinctive examples, each stamped with a maker's name, now illegible. One <4760> has a very unusual blade-like, point, now damaged, but apparently square-ended originally. Both have large 'tulip-shaped' erasers, in the case of <4641> with inlaid non-ferrous decoration. A stylus of similar form, but without the decoration came from the bed of the Walbrook, exact location unspecified, (Manning 1985, 86, N8; BM 1934.12-10.66), bearing the maker's stamp REGNF, identified as Reginus (RIB 2428.15). Another with an illegible stamp was found in Princes Street (Wheeler 1930, 58, fig10, Acc. no. 29.86). Styli with well-formed erasers of this shape are not common and it is possible that they are all from the local workshop of a London maker (see separate report on styli from Poultry and the Walbrook). Debate as the function of 'ox-goads' continues, but the two from this group would appear to be an unnecessarily clumsy form of pen nib and are more likely to have been used as animal goads <4470> <4621>.

The group also contained nine fragments of writing tablet, in various stages of preservation, but one <5131> retained impressions of writing (awaiting report by R Tomlin). If any prove to be legible the subject of any text, whether commercial, legal or social, will be invaluable in assessing the nature of these deposits.

Numerous fittings and fasteners are likely to be of domestic or structural origin and belong to the classes of object found on any Roman urban site – security equipment, comprising iron keys, wall hooks, clamps and joiners dogs, bolts, ferrules rings and miscellaneous mounts. The burial conditions have ensured their survival, but the presence of such artefacts is unsurprising. Twenty copper-alloy studs were found. These would have been used for a variety of purposes – one in the shape of a lion's head may have decorated a lock plate – but several are military in design, used on leather straps that formed part of infantry uniform or cavalry harness. Apart from the studs, there are several military items, but these do not occur in the quantities seen in earlier deposits. A small circular pendant <4183> is part of a harness fitting and there are two catapult bolt heads <5559> <4471>.

There are many unidentified fragments of metal, copper alloy, iron and lead in this group and at least nine of the copper alloy fragments appear to be waste products from metal working. As discussed elsewhere (see industry), this does not seem to represent the primary working of the alloy – there are no crucibles or hearth fragments, but handcrafting possibly including the reworking of recycled metal. It is possible that the fine scales of which only part of one arm survives <4750> were used to weigh precious metals or other valuable goods – perhaps in a jeweller's or craftsman's premises. There is a close parallel for this implement in the collections from Bucklersbury House (ER 268K, MoL 19107; Wilmott 1991, 122, no. 338). Lead weights could also indicate commercial activity.

The group includes only one object with obvious religious or cult association, an incomplete Venus figurine, <4714>, perhaps discarded from a household shrine.

There is an impressive collection of shoe fragments in this group comprising a variety of styles in a range of adult sizes, with a smaller amount of waste fragments, but this appears to represent discarded rubbish rather than the contents of a cobbler's shop. Further fragments of the decorative hanging or furniture cover <4700> in sgp 120211, showing that the material

in these two groups was mixed. Certainly the finds in each subgroup are of very similar character.

Further discussion of these groups and their significance can be found in Section 2.

Period 7 ii)

Building 19 – Terrace 1, Zone 1

The construction levels contained a circular seal box <3816> while the surfaces associated with the use of the building produced a coin of Trajan and an antler offcut.

The only identifiable glass vessel form from the construction layers was a fragment of cylindrical bottle. Part of a pillar moulded bowl and a green jug handle <3937> found in group 348 (use) are likely to be residual.

Open Area 30- Zone 1, east of B19

Glass splinter only.

Building 40 -- Zone 1?

The latest coin in associated groups is of Vespasian, AD 69-79. An incomplete copper alloy brooch <3897> is an Aucissa variant, dating from earlier in the 1st century. A small (broken) scale pan <3567> may have been used for weighing precious items, but its association with this structure is not clear. The building also produced a mount and a ring fitting. There were two vessel fragments, one part of a Hofheim cup <3934> which is residual.

Building 44 – Zone 1

A distinctive seal box, with an appliqué frog on the lid <3817> was found in the construction levels, also a glass melon bead <6101> and an iron bucket side-mount <4305>. The same group also produced a good quality colourless glass beaker <4064> and an almost complete unguentarium <4063>, together with miscellaneous vessel fragments.

Building 24 – Terrace 2

The latest coin in the construction layers dates from AD 81-93, Domitian. Other finds comprised two lead weights and a lead lampholder <1683> of which there are several examples in the City, for example from Leadenhall Court and Regis House. Structural fittings were also found, comprising a double-spiked loop and other iron spikes.

Open Area 35

The group of finds from this area, which lies behind Building 24, comprised a small selection of domestic material, all fragmentary, some of which could be associated with activity within the building, but which is probably residual. A fragment of rosette brooch <1458> and part of a copper-alloy mirror <1074> were types current in the 1st century. Miscellaneous fittings were found as well as part of a ceramic lamp and figurine. Two lead weights could have been used commercially, while a die <A190> is one of the few recreational items from the site. One structural fitting was found <A191>.

Open Area 37—Terrace 2

This is a larger group, but it contains an uncertainly identified antoninianus AD 260-285, which if correct is intrusive. Overall the group is varied and no object is complete, with one melon bead, a copper-alloy mirror fragment <943>, a needle, part of a lock <1176>, also a Venus figurine fragment <980>. There is much unidentified copper alloy, iron and lead among destruction material.

Twenty-three fragments of vessel glass came from this area, eight of which can be identified, and several can be dated on form or colour to the mid to late 1st century. An olive green bowl or dish <867> is an unusual colour for tableware and there is also a ribbed flagon or jar in amber glass. Other forms include beakers <989> <1906>, a small unguentarium <1126> and utilitarian cylindrical and prismatic bottles.

The group includes residual finds, as indicated by the early date of some of the glass, but the Venus figurine is of 2nd century date, suggesting that the sequence of dumping included redeposition of earlier material. In such a disturbed area the presence of a later coin may be explained by intrusion, but as doubt has been cast on the dating of this open area, it is possible that the dumping, incorporating earlier finds, took place later, perhaps in the 3rd century.

Building 29 – Terrace 3 (Zone 4?)

The few items from this building include a coin of Vespasian and a wooden object, possibly a lid, with two unidentified vessel fragment in naturally coloured glass.

Open Area 40 P7 – Terrace 3, behind Building 29, Zone 4

The latest coin is an issue of Domitian AD 81-96. The group contains a few personal items, a copper alloy mirror fragment <2466>, a glass palette from a jar or bowl in natural green glass, which has been grozed for reuse <2375>, and leather shoes. An oval wooden dish or trough, made of oak, is a rare survival <2392>. Such wooden vessels undoubtedly formed part of the normal kitchen repertoire and could have had a multitude of uses. This form is particularly well suited to the kneading of dough, as the thick walls and enclosed sides would have helped to retain heat during the rising process (P Pugsley pers comm). Some ironwork is well-preserved, including a stylus <2443> and an iron spear-head <1629>, together with miscellaneous fittings.

Nine fragments of naturally coloured vessel glass, are mostly containers, with four bottle fragments and a phial <2378>, but also a bowl <2377>.

The general composition of this has some similarity, although smaller, to that of the OA45 dumps (although lacking the superbly preserved personal ornament) – and the source of this material could well be local. The area lies immediately behind Building 29 and the group may represent rubbish from this building.

Building 31 – No finds

Road 3 (south of Road 1 – Zone2)

There are few finds and a coin of Carausius is clearly intrusive. Several fragments of quern are likely to be residual. The only glass vessel found was the base of a bowl or dish in natural blue glass <3515>.

Building 33 – Zone 2 new building after Flavian fire

The latest coin is an issue of Hadrian, AD 117-138, from an isolated but equivalent construction sequence to the south east. The only other identified artefact is a lead weight <3167> from the floor of Room A.

Five glass vessel fragments included two bottles and part of a good quality colourless wheel-cut beaker or bowl<3327>. The building was destroyed in a fire, probably the Hadrianic.

Building 35 – Zone 2

Finds include one glass bead, a bone pin, a hone and quern fragments. Six glass vessel fragments are all in naturally-coloured glass. All artefacts are from the construction levels or floor slabs and are therefore not necessarily from this building. However two small personal items, a minute blue bead and a broken hairpin, both from the floor slab in Room A are the types of object that may well have been lost during occupation. Both would have been worn by a woman.

Building 36

A coin of Domitian was found, but with the exception of one ring fitting, no other metal artefacts. Four glass vessel fragments all naturally coloured also came from the construction/use groups.

Building 37

No finds

Period 7(iii)

Building 20 – Zone 1, over OA30

Most of the finds are from the brickearth floor slab, subgroup 110635. An encrusted and fragmentary Colchester brooch and a fragment of lamp in Colchester colour coat, dating from the mid 1st century, are residual. A glass vessel fragment is not closely dated. The latest coin, from the same slab is Vespasianic.

Building 41- Zone 1

Two Claudian coins are residual. One undiagnostic glass vessel fragment was found.

Building 45

The coins are Claudian. One fragment of Hofheim cup <3936> and part of an unidentified glass vessel were recovered. All are residual.

Building 27

No finds

Building 52—Terrace 2 (Zone 3)

Two glass vessel fragments came from the occupation levels, one the base of a jug or jar.

Building 38 – Zone 2, south of Road 1

Construction/use layers produced one residual Claudian coin and glass splinters.

Open Area 47 – Zone 2, south of Road 1

There are few finds from this group. Miscellaneous lead fragments are likely to be structural debris which could derive from any period and the few fragments of glass, all very small, include part of a dark green monochrome vessel, possibly a cup, which is certainly residual. The most notable find is a well preserved one-piece brooch <6740>, which is certainly residual.

Period 7(iv)

Road 1

The few miscellaneous artefacts from the road groups, 387 and 388, comprise a military fitting with niello inlay, probably an apron mount <2363><A196>, copper alloy and bone waste and fragmentary glass vessels, all dating to the late 1st century.

Discussion

In general the Period 7 buildings, thought to have been constructed after the Flavian fire, and subsequently destroyed in the Hadrianic fire contained very few artefacts. Most objects were found in construction deposits, but much of this material is very obviously redeposited, some dating back to the mid 1st century. The buildings are remarkably clean and may have been deliberately cleared.

This picture is a marked contrast to the 226 identified artefacts from the fill of the tank and the surrounding deposits. The soil has been deliberately introduced to level the area, but the source of the finds within the levelling material has to be questioned – whether they were introduced with the organic material or whether they have been discarded from local buildings, the tank and its surroundings being used as a rubbish dump.

Period 8 – Roads 1 and 2 Boudican to Hadrianic periods.

Road 1

The finds came from the various roadside drains, most from group 514, a short section of N-W aligned box-drain, containing two coins of Domitian. They included a fine copper alloy cosmetic mortar <3142>, a distinctively Romano-British object and a bi-lobed harness mount <3143>, the latter dating from the 1st century. The group also contained one stylus <3151> and

five fragments of writing tablet. Leather was also preserved, with fragments of three shoes. A spindle whorl <4073> attests the working of yarn. A feeder drain, group 512, contained a copper-alloy fish-hook <2985>. Such implements were undoubtedly commonly used in the rivers of London, but they rarely survive.

Eight glass vessel fragments, all but one in naturally-coloured glass included part of a pillar moulded bowl and the base of a bottle with concentric mouldings <3213>. Both are common forms in the late 1st century. All other fragments, all small, were from unidentified forms.

Much unidentified metalwork was also found, consisting chiefly of iron and melted lead. Hammerscale, found in an environmental sample <5942> suggests the working of iron in the area. A more substantial timber box drain to the west, group 513, contained several fragments of copper- alloy waste, offcut from metal-working and one of the few fragmentary crucibles from the site, together with miscellaneous copper alloy mounts. The material cannot be either sourced or dated, but it may suggest the presence of a copper-worker nearby.

The group reflects the economy and industrial activity in the area at any time in the late 1st/2nd century. The finds are consistent with groups from post-Boudican to the Hadrianic period, but there is a potentially interesting concentration of metal-working debris.

Road 2

A very small group (517), consisted of part of a pillar-moulded glass bowl and a leather shoe-sole. A hinged strap mount from *lorica segmentata* <3659> group 518, from a box drain probably dates from the 1st century.

Period 9 (i) Post-Hadrianic fire disruption

Open Area 54 – Terrace 1 (robbing)

No finds.

Open Area 55 (robbing - groups 336, 422, 425, 428)

No finds in these groups.

Open Area 56

No finds.

Period 9 (ii)

Open Area 50

One fragment of glass bottle only.

Open Area 53

One fragment of colourless glass vessel only.

Open Area 54 – Terrace 1

This area contained redeposited fire debris, overlying B19, B20 and S8. The only metal find was an iron bolt <4040>, probably a structural fitting; two glass vessel fragments were also found.

Open Area 55 – Terrace 1

(groups 442, 624 - fire debris)

A mixed group representing a large number of functional categories, but with few objects or, frequently, only single items in each category. The group is varied, but much is residual or in poor condition. A 4th-century coin is intrusive.

The only item of personal ornament is a residual and distorted Hod Hill brooch <2208>. There are several domestic items, for example a lamp, which could be of 2nd-century date, and quern fragments. A stylus <45> and fragment of writing tablet contribute to the large number of these items from this site. An iron drill <2719> is well preserved - and a possible indicator of craftwork or industry in the area. There is also iron and lead waste, but the latter is probably destruction material from buildings rather than an indication of metal working. A bone die <5707> is one of the very few gaming pieces from the site. An iron T-clamp <1330>, found in building debris, is probably structural as is also a quantity of burnt lead from the same deposits.

There are 22 glass vessel fragments, most small, from which nine forms can be identified. Several are clearly residual, as might be expected in redeposited fire debris. The identified vessels comprise two pillar-moulded bowls, a Hofheim cup, of the mid-1st century, a jug handle and part of a ribbed jug or jar in rather poor quality bubbly glass. The unidentified vessel fragments include both naturally coloured and colourless glass with one 1st century strongly-coloured blue fragment. Group 418 produced a very small fragment of colourless cup <5820>, known as an Airlie beaker, which were made in the later 2nd century.

Open Area 56

No finds

Open Area 48

This is a very small group, with unidentified iron and copper alloy fragments. The only glassware is part of a bottle and a fragment of window glass, one of the few examples from this site.

Open Area 49 (?Hadrianic fire debris)

The only find is a fragment of molten lead.

Period 10

Open Area 75 - dumping -2nd century sequence adjacent to Walbrook, Terrace 4.

A large group containing organics and well-preserved metal work, which seems very similar in character to the composition of Open Area 45 in Period 7, which it overlies. Groups 836 and 482 are discussed separately as there is still some uncertainty as to their relative stratigraphic positions – 482 is discussed (perhaps correctly) in the archive report with OA45, although placed on Oracle with Period 10 deposits.

Group 836

Only fourteen artefacts can be ascribed to functional categories but there are at least thirteen unidentified fragments of iron, and several melted fragments of lead, probably destruction material. Several of the miscellaneous copper alloy fragments however appear to be scrap and may be the stock or residue of non-ferrous metal-working activities nearby. The remaining identified material comprises part of a dark blue melon bead <4808>, an early form, two copper alloy needles, one <4553> in extremely good condition an iron ox-goat <4388> and miscellaneous studs and fittings.

Group 482

A large number of accessions (49) can be ascribed to function, at least nine of which are small fragments of copper alloy residues and scrap from metal working. In other respects the assemblage is very similar to that from OA45, Period 7, certainly in the composition of the metals, but it differs in that there are far fewer organic objects, with only three identifiable leather shoes, one writing tablet and a wooden dish <4323>. There is nothing that would put the date of the group firmly into the second century and the only brooch is a broken fragment of a 1st-century type. With the exception of the glassware, the other artefacts are not closely datable, but like the OA45 assemblage, this group contains several complete metal objects which are in good condition, notably an iron finger ring with scarab decoration on the bezel <4885>, a copper alloy ligula, a double-ended spoon probe <6> and iron styli <45>, <5049>. One iron knife of a common form <5> is well preserved, and there are numerous fragmentary fasteners and fittings.

The glassware comprises a mix of tablewares, none of high quality and utilitarian vessels. The earliest vessel is a Hofheim beaker <4262>, the type seen originally in the pre-Boudican levels, and there are two of the ubiquitous 1st/early 2nd century pillar-moulded bowls. There is one fragment of a conical-bodied jug or flagon, the rim of a collared storage jar <5111>, and one base which could be part of a jug or jar <5110>. All date from the late 1st/2nd century. There are four bottle fragments.

Period 11 (i) (Terrace 4, later 2nd century sequence)

Open Area 76 (Terrace 4)

Dumping/landfill over the area of Terrace 4.

The group produced many unidentified fragments of iron and lead and a much smaller number of identifiable artefacts, among which are some well

preserved coins (of Nero) and individual metal objects. The general range of these is similar to the material found in the stratigraphically earlier dumps in this area and apart from the coins, the metal objects are not intrinsically datable. There are no items of jewellery but two objects associated with personal grooming, a complete ligula and a nail cleaner <4325>, <4581>. Two styli and a writing tablet are familiar artefacts from this area and the other objects are miscellaneous fittings and a small quantity of copper alloy waste.

The group includes eight fragments of glass, one a comparatively rare funnel <4851>, a phial base, and the neck of a thin phial or flask, together with miscellaneous unidentified vessel fragments in naturally-coloured glass. The funnel, Isings form 74, is thought, on comparative evidence, to date from the 1st century so is likely to be residual in this group, all of which could date from the late 1st/early 2nd century.

Period 11 (ii)

Building 67

No finds

Structure 42

No finds

Structure 43

A small group consisting of metalwork only. The only identified artefacts are an iron stylus <4331>, an iron mount, perhaps from a bucket <4369> and a copper alloy ring fitting.

Structure 44

No finds

Period 11 (iii)

Open Area 77 (Terrace 4)

Groups 846 is thought to include fire debris, possibly of Antonine date, but the non-ceramic finds from this group are not closely datable and in fact resemble the earlier dumps in composition. A fragmentary brooch <28> is certainly residual and most items are incomplete, and largely unidentifiable, although they include at least two fragments of copper alloy metal working waste. The exceptions are three iron styli, <24><25><74> which, as seen before, feature prominently among the dumps in this area from the late 1st century. There are also several complete copper alloy studs. Some could have a variety of functions but at least one, <1183> which is decorated with a portrait head, is thought to have been a military type – again dating to the late 1st/2nd century. Another Hofheim cup fragment dates to the mid 1st century. This may indeed be fire debris, but could be redeposited from an earlier period.

This area of dumping is cut by a pit, Group 848, which contained three quality artefacts of some interest. A pair of double-beamed copper alloy scales <1154> in superb condition and almost complete, with compass

scribed decoration on the pans, is an advanced type and the presence of an iron needle at first raised questions about the date of the object. It was however found in a securely stratified late 2nd century context and contemporary parallels are known, as for example from the 2nd century cemetery at Aquincum (Zsidi 1995, 61, no. 303, fig 81). The other objects in the group comprise a fine copper-alloy mount in the shape of a theatrical mask <1524>. There is no obvious sign of attachment, but it is probable that this is an escutcheon from an elaborately-decorated vessel, and it is possible that a fine copper-alloy handle <1471> could be part of the same object. The other finds in the pit consisted of small unidentified fragments of iron and lead. It is likely that the three distinctive and presumably valuable artefacts had a common. A late 2nd century date is possible.

Group 851 (?overlying the above) contained little identifiable material, but this included a military buckle of 1st century form, and coins of Vespasian, but also of the mid 2nd century. Small amounts of metal-working waste were again present. Dumped material further to the west, in group 854, produced a distinctive iron pin, possibly a hairpin <1411>, a needle, more styli <1362>, and an ox goad <1361>.

There is little glassware from the general area. The earliest vessel is the Hofheim cup in group 846, but other groups contained a tubular phial <5320> and part of a square bottle.

The later dumps contain far fewer organics than the earlier groups, with only a small number of shoes and wooden artefacts, but the metalwork, although found in smaller numbers is similar in both date and composition, perhaps suggesting a common source for the levelling material.

Later 2nd century and 3rd century sequence

(Periods 12, 13, 14 which cover roads up to AD250, post-Hadrianic and post-Antonine sequences are discussed together in the stratigraphical precis.)

Periods 12, 13, 14 (i)

Open Area 61 (group 712) P14, Terrace 2

Activity in this (small) area is represented by a pit (Group 712) containing a 4th century coin, which must be intrusive, lead waste and one glass vessel fragment. The pit is said to contain domestic waste but there are too few non-ceramic finds for comment.

Road 1 (P12)

The groups represent post-Hadrianic metalling and resurfacing of Road 1 and the small number of identifiable artefacts come from a number of locations. Apart from coins the only identified artefact is a counter made from a reused pot <4161>.

Structure 48

An associated group (672) contained one coin of Hadrian, lead waste, likely to be building debris, and one fragment of natural blue vessel glass.

Structure 49

No finds

Road 2 (P12)

Miscellaneous finds came from the new surface, Group 643, and associated drains.

Four coins came from this road surface, two residual 1st century issues, one pre-conquest, one which may be 2nd century and an irregular 4th-century issue, which is intrusive. Apart from a fragment of mirror, other metal objects were fragmentary and unidentifiable. A fragment of glass wine-siphon <4828> is an unusual find.

Road 3 (P12)

No finds

Period 12, 13, 14 (ii)**Open Area 55 (P13)**

Glass vessel fragment, natural blue glass. No other finds.

Open Area 62 (P14)

The only non-ceramic finds is a fragment of ribbed colourless glass vessel.

Open Area 56 (P13) Terrace 3

This is a varied group containing several iron artefacts, a stylus <2444>, a spear <2391> and a knife blade <2462> and part of a pipeclay Venus figurine <2346>. The coins recovered date from the 1st century, the latest an as of Domitian, but other copper alloy fragments are unrecognisable with the exception of a 'dress hook' <2456>. The only glass vessel recovered is a large fragment of pillar-moulded bowl <8664>.

The group is adjacent to the truncated area of dumping on Terrace 4 and it is noteworthy that the identified artefacts, none of them complete, are similar to those found in the earlier extensive Period 7 and Period 10 dumps. Is it possible that the material used to raise the level of Terrace 3 in the was redeposited from the Terrace 4 area, or alternatively that earlier (local) material was disturbed in the redevelopment.

Building 68

No finds

Building 69

No finds

Periods 12,13,14 (iii)

Buildings 46/47 (first post-Hadrianic buildings to north of Road 2) (P12)

All coins in the construction levels date from the 1st century. The only other identifiable metal artefacts were a copper alloy stud from B46 and the

catchplate from a brooch, probably also of 1st-century date, from B47. Two glass jar fragments were recovered from B46, <3619> and a piece of window glass from B47, all in the construction levels.

Building 71

Apart from one Claudian coin, there are no metal finds from either the construction or occupation levels. There is one fragment of window glass.

Building 49

No finds

Building 53 (P14)

The only items in the construction/use levels were a fragment of quernstone, probably residual and a glass splinter.

Structure 29

No finds

Structure 37

One quern fragment

Structure 38 (P14) wooden water reservoir

Seven coins were found in the tank fill, all ?post-dating its use. None date before the 3rd century, and the latest is AD 364-378.

Building 56 (P13, Terrace 3)

The construction levels produced a melon bead, iron fittings, a bolt and a ring and miscellaneous lead fragments. One glass bottle fragment was also found. (See P15 for other material in the destruction layers)

Building 70 (P12)

The occupation sequences, Groups 885 and 886, produced one glass bead, part of a bone hairpin and two gaming pieces, one made of bone, <3141>, the other made from a ceramic base. There are relatively few gaming pieces from Poultry. Very little metal survived in these levels and none is recognisable. It is also noticeable that most of the glass retrieved, some of it sieved from sampled contexts, consists of very small fragments and splinters. Two fragments of window glass and four larger vessel fragments, all naturally coloured, were recovered.

Open Area 78

No finds

Period 15 – post-Antonine sequence – Terrace 3

Period 15 (i)

Open Area 65 (overlying B56, P12, 13, 14,iii, Terrace 3)

The latest coin is an issue of M Aurelius, AD 138-161; the others are residual – Vespasian and Claudius I. Apart from the coins, there are several metal objects but few are identifiable. Identified iron objects comprise an incomplete tanged knife <2084> and a fragment of chain. The only copper-alloy object is a ring fitting and there are numerous fragments of lead, generally categorised as waste, most of which could have been melted during the destruction of Building 56. One may be a weight. There is no glass.

Period 15 (ii)

Building 57

The single accessioned find is a fragment of ceramic tile bearing the print of a hob-nailed shoe.

Structure 39

No accessioned finds other than a stamped mortarium.

Road 1

The roadside drains produced a few domestic items – a bone hairpin of early 2nd century type from Group 673 <1933>, and, together with structural fittings and coins, the ranging in date from Republican to the mid 4th century, from groups 673 and 876, both drains, showing that the sequence along the road is disturbed and subject to intrusion. Group 670 contained a bracket from a post-Roman coffin.

The outstanding glass vessel, from Group 670, a recut of the northern roadside ditch, south of Open Area 55, is a fragment of colourless drinking cup or beaker with part of an engraved inscription, possibly the letters SVS, which could be the end of a word <2532>. This dates from the late 2nd/3rd century. Apart from one piece of window glass, all the other (five) fragments are from unidentified vessels in naturally coloured glass.

Period 16 (post-Antonine sequence overlying P15 terrace 3)

Period 16 (i)

Building 59

No finds

Open Area 66, Terrace 3 (group 748, dumping)

Dumping over B57 deposits to raise the level of the lower terrace. All finds are from the levelling material (sgp 80603) rather than the deposits of destruction material which overlay this platform.

The finds are essentially domestic, although one copper alloy harness pendant is of military type <2034>. Coins of Caracalla and Septimius Severus date from the early 3rd century. Specific items of jewellery support the

general date suggested by the numismatic evidence. An enamelled plate brooch in the shape of a sandal <1998> is a form typical of the second century and found also in 3rd-century contexts, while a bone hairpin with a swelling shank and globular head (Crummy type 3) <2229> is a form found only after the mid 2nd century, and into the later Roman period. Two iron styli were found one with non-ferrous inlay <1995> similar to those in the Period 7 deposits – (and perhaps redeposited from a common source) . Much of the other ironwork is unidentifiable but there is one fragmentary knife <2155> and a fragment of what may be a modelling tool <2083>, together with a key, several bindings and fittings, for example hooks and a double spiked loop <2097>. Several fragments of lead were found among the destruction material and while one possible weight can be identified most fragments are likely to be from collapsed buildings rather than any industrial process and several are burnt. There is only one fragment of glass from the area, an unidentified vessel fragment in naturally coloured glass.

The most important artefact in the group is a *defixio*, a folded rectangle of lead on the inner surface of which are several lines of cursive script, which on analogy with other examples is a curse<2120>. Study by R Tomlin has shown that it bears several names, the form of which indicate that it dates from after the reign of M Aurelius.

(ii)

Building 60

No finds

Building 63 (P16)

Molten lead and an antler off-cut from the construction levels.

Building 58

(new construction on the same plot as Building 57, over OA66). The occupational sequence, group 750 produced an irregular denarius of Septimius Severus, AD 200-220, a fragment of window glass and the base of a naturally-coloured beaker or bowl <2234>.

Period 17

(Masonry building phase, NE of room 2 -- ?Antonine)

Building 48

One copper alloy object from the construction levels, a mount or pendant? <3964> (not seen).

See 110703, P31 for robbing of this building – only finds are two residual coins.

Period 18 (i)

Open Area 58 (Terrace 1)

A medium-sized group, of about 40 accessions, but it contains both residual and intrusive material, as can be demonstrated by the presence of 1st century Claudian coins, a post-Roman horseshoe and post-medieval fitting. The dump marks the disuse of Building 48 (P17) and some of the domestic waste could be derived from that building. Apart from the Claudian coins which are certainly residual (redeposited), little is datable, although a fragment of mirror <3506> is more likely to be 1st than 3rd century in date, and a cosmetic mortar <3492> is likely to date from the 1st or 2nd century. Various iron fittings could be of any date and may well have come from Building 48. There is also a fragment of litharge cake <4814> suggesting that the refining of silver was carried out in the vicinity, but the presence of material of both confirmed earlier and later date casts some doubt as to when. Litharge was also found in post-Roman contexts.

Six glass vessel fragments were found, four indeterminate vessels in naturally coloured glass, one a cylindrical or square bottle, and one possibly a fragment of a late Roman bottle form <4137>.

Hammerscale, which is a by-product of smithing, and diagnostic of iron-working was found in group 657, a pit denoting later activity in OA58 perhaps suggesting industrial activity after the demise of the building. Examination of the iron slag by the AML showed a relatively large quantity from this area largely consisting of smithing hearth bottom.

Open Area 82

No finds

Structure 51

No finds

Structure 52

No finds

Period 18 (ii) Terrace 1

Building 73

One tile only

Road 2 (P18)

This period marks the third (and ?fourth) major phase of use of Road 2, but the stratigraphy is complex, with sequences of drains and metalling.

Group 943 – earliest in this sequence, cut by drain group 944

943 Residual 1st century Claudian coin, miscellaneous fragmentary finds, all of which could be residual – quern, hone, shoe fragment, and waste lead.

944 The drain contained a forged denarius of Trajan, also residual, leather shoes, window glass and a stylus as found in earlier features, but a bone pin <3332> is of a type not seen before the mid 2nd century. A

945 Seals the above activity. This is a large and very mixed group, with coins ranging in date from the 1st to the 4th century, the latest, irregular issues of the mid 4th century. There is much miscellaneous unidentified metalwork, most of it iron, but certain personal and domestic items are consistent with a date late in the Roman sequence. These include a shale armet <3490>, and a pewter spoon bowl <3905>. An enamelled button and loop fastener <3594>, perhaps although not certainly, used by cavalry is of second century date. A copper alloy object <3593> in the shaped of a six-spoked wheel may, in view of the lack of any pin or fastening stud, have been an amulet or votive. The wheel was a powerful solar symbol even in pre-Roman society.

Leather shoes and waste include a nailed shoe <3767> inscribed DOSCIOS on the grain surface of the insole.

946 The group contains several leather shoe soles and waste – one piece inscribed FLACCI – ‘the work or property of FLACCUS’ <3145>. The only glass recovered consisted of insignificant splinters from environmental samples. Metalwork is poorly preserved and apart from an copper alloy ring fitting, nails and a little copper alloy waste, unidentifiable.

947 The recut of the roadside drain contained more organic material, with several fragments of leather waste and shoe soles. Three coins ranged in date from Trajanic to the mid 4th century. Little glass was recovered, the only identified form being a bottle.

Drains. Where identifiable, the coins date from the late 3rd and 4th centuries. The other finds are a somewhat miscellaneous collection of household and personal material, including shoe fragments, a bone counter, the occasional fragment of glass and part of a quern.

948 Ditch recut. Small group of undiagnostic material, consisting of leather shoes and fragments, a pewter spoon fragment, miscellaneous unidentified metal and two glass vessel fragments, one of which, a dish or bowl is residual.

The remaining groups from R2, 951, 953 and 959 produced a similar mixture of finds, although with a greater number of 4th century coins. Most of the glass vessel fragments are minute, recovered from environmental samples, but part of an Airlie cup <2667> and a cylindrical bottle with dolphin handles <2639> date from the later Roman period, the former from the late 2nd and the latter from the late 3rd century. Both came from group 253, thought to be a very late recut of the roadside drain.

Road 1 – phase 4 (P18)

912 912 Late Roman recut of a drain on north side of road. This contained a small group of finds, which included a cavalry harness pendant <4118>, incomplete and residual, together with a bone hairpin of 1st-2nd century date, copper alloy bindings and melted lead, probably from the destruction of buildings.

915 Timber-revetted drain, south of road. This contained residual material – a coin of Nero and a fragment of a hinge from 1st-century *lorica segmentata* <3341>. See 918 for finds from fills.

916 Post-pit. Few finds of no significance – glass splinters, quern.

918 Fills – disuse of large drain (915)

The coins include some 1st century issues, but date in the main from the 4th century, the latest a Valentinian copy, AD 365-375. One glass vessel rim <3295> is from a 4th century beaker, and a bone hairpin <6061> is a later Roman form, while a jet bead <6078> is of similar date. There are two other 'feminine' items, a complete copper alloy hairpin <3725> and a fragmentary mirror, but both are likely to be earlier. The other finds are a miscellaneous collection of residual and unidentified material.

921 Fill of drain north of road.

The few finds comprise fragments of leather shoes, unidentified iron and glass splinters.

922 Fill of drain north of road.

Three of the five coins date from the mid 4th century, but most of the other finds, for example a 1st century plate brooch <3534> are residual, or are undatable and probably residual. They include bone hairpins, a needle and shoe fragments, with small fragments of naturally coloured vessel glass.

923 Large late Roman timber-revetted drain, north of Road 1

The finds group is very mixed, containing both 1st century material and one medieval lamp. The coins range in date from Nero to the mid 4th century, with several from the late 3rd century. The other finds are not obviously late Roman – a mirror fragment would probably date from the 1st or 2nd century, while a bone hinge, lead weight and a knife blade are undatable.

924 Late box drain

No significant finds

926 Fill of late Roman timber-revetted drain north of R1

Mix of coins, one of late 4th (House of Valentinian), but most are early – several 1st century. Other finds are undiagnostic, bone hairpins, a counter, shoe fragments and unidentified metalwork. Small group.

677 Late Roman roadside drain, north side of Road 1

Coins all late 3rd to mid 4th century. A shale armlet<2186>and bone hairpin <2002> date after AD 200, and the group also contains a small quantity of

household articles, a quern fragment and miscellaneous fittings, but most is fragmentary and unidentified.

678 Disuse of 677 drain

4th century coins. A pin of Type 5 <1800> <A261> is a late Roman form, but the other finds, chiefly shoe fragments are indistinguishable from those of earlier groups.

927 Intercutting drains on north side of Road 1

Small group, chiefly of unidentifiable metalwork. Hammerscale shows on one of the x-rays <4249> [11992].

Road 3 (P18)

Groups 931, 932. Residual coin and intrusive horseshoe.

Building 72

928 - construction – dumping by R1

Coin –AD 340-6

929 – construction

4th century coins. There are no finds of significance, although T-clamp preserved in the mortar of a brick wall, is of interest, demonstrating the way in which these fittings were used.

Period 19

Open Area 59

One fragment of lead waste only – structural.

Structure 31

Small fragments of naturally coloured glass vessels.

Structure 32

Handle from a glass jug.

Period 20 (i)

No finds

Period 20 (ii)

Building 61

The construction levels produced miscellaneous glass vessel fragments, which included one cup <1976>, and several metal fittings, and iron double-spiked loop, nails and a copper alloy ring. The construction/use levels in Room C yielded an unusual copper-alloy seal box decorated with an enamelled hare <2440>, incomplete and residual, but an interesting form. There were several fragments of waste lead, probably construction/destruction material.

Building 62

Construction levels; one glass vessel fragment -- tile.

Building 65

The construction levels produced ceramic tesserae and fragments of burnt vessel glass.

Building 64

The construction/use contexts in room A contained part of a 4th century glass bowl <3657> which may be contemporary with the use of the building.

Period 21**Building 64, Room A**

Coins date to the late 3rd century.

The glassware in the construction levels is residual, comprising small fragments of pillar-moulded bowl and a ribbed jug or jar and the handle of a storage vessel, all of which date to the 1st or 2nd century.

Building 64, Room E

A fragment of Airlie beaker, which dates from the late 2nd to mid 3rd century, is slightly less residual than the glassware in the other rooms of this building. Nothing else is diagnostic of dating or function.

Building 64, Room G

The construction levels produced miscellaneous fragments of lead and iron, with one bone needle.

Open Area 63

4th century coins

The glassware includes one fragment of 4th century date, <1971> with miscellaneous domestic articles, including a wooden comb <529>, and an iron bucket side mount <2039>.

Open Area 68

Small group containing several fragmentary leather shoes, a bone counter and an iron key; two fragments of opaque vessel glass, of 2nd/3rd century type (as found in Airlie cups).

Open Area 73

Miscellaneous fragments of unidentified metalwork; burnt lead.

Open Area 74

4th century coin and miscellaneous unidentified ironwork, together with residual glassware including a pillar moulded bowl.

Period 22

Building 64rmA- D

The dumps over Room A produced one of the most important finds from the site – a large part of a shale table top <842>. The top surface has laminated, but the underside shows the rebates for the inset legs, of which there would have been three. Surviving fragments of furniture are rare in Roman Britain and this is an important addition to the collection from London. The form of the table is well attested from iconographic references and surviving fragments. It is likely to have had elegantly curved legs, perhaps similar to one found recently at Fenchurch Street (FEC95, Keily in prep), or even carved in zoomorphic style as at Colliton Park (ref). The material is also well known from Roman Britain. Kimmeridge Shale was exploited from early in the Roman period, although the floruit for this type of shale table seems to have been the last two centuries of Roman occupation. The form itself is seen much earlier in the Mediterranean. The table would have been an expensive item of furniture, well suited to use in a substantial property with mosaic floors.

A palette made from imported marble <868> is well worn, and an object of quality. A bone pin <1105> belongs to the type used in the later Roman period, but is only an isolated example and a single bead <5786> is the only item of jewellery. The vessel glass includes at least one fragment of a 4th century vessel <903>.

Building 64rmE – use

There is a large group of finds from groups associated with the use of the room, but apart from coins most of the metalwork is unrecognisable. A fragment of composite comb <979> is a later Roman form and the few vessel glass fragments include two 4th century forms, <905>, <991>.

Building 64rm F

There were only six fragments from the destruction material in the room, comprising a 3rd century denarius, a 4th century copper alloy coin, unidentified glass vessel fragments and lead, which is probably structural.

Open Area 70

This area produced a mixed group of coins, lead fragments, small glass vessel fragments, mostly splinters, one fragment of window glass and an antler offcut.

Open Area 77

A very similar mix to OA70, with coins, undiagnostic and small glass vessel fragments, querns, which are almost certainly redeposited, and lead waste.

Open Area 79

Coins. The vessel glass includes one fragment of good quality late Roman glass from a bowl, <3056>, which has been burnt, but the remainder of the glass assemblage consists of small undiagnostic splinters and fragments. Apart from coins, the group contains few metal objects, but there are several bone pins and needles, all incomplete.

Open Area 80

Very small group; includes one fragment ribbed vessel glass.

Open Area 81

One coin; shoe sole.

Open Area 83

Coins, but little other metalwork, leather shoes, quern fragments; in contrast to OA79, no bone; glass splinters only.

Open Area 84

Coin; glass vessel fragment.

Period 31**Open Area 101**

Two coins and a blue glass tessera.

Open Area 102

Two glass vessels, a wheel-cut cup or bowl <1786> and a bottle <1904> date from the 3rd/4th century. The only other identifiable object is a bone counter, but iron waste shows traces of hammerscale on x-ray.

Open Area 103

Coins only

Open Area 104

One coin, unidentified copper alloy and a bone pin.

Open Area 139

Coin, and a bone pin.

2 Research themes

Early development at Number One Poultry

Discussion of the early assemblages

The pre-Boudican levels at ONE94, (Periods 2-4) produced 89 accessioned finds which could be identified and assigned to a functional category. This figure excludes miscellaneous material, chiefly metalwork, but also wood and leather, which was too corroded or fragmentary for identification. Table 302 summarises the pre-Boudican assemblage and the finds from the Boudican fire debris by functional category (see section 3). Overall the group covers the main categories which one might expect from a town site, but there are some distinctive features which might be characteristic of an early London assemblage. In the following discussion the pre-Boudican finds from the nearby site CID90 are also considered.

Table 302 Finds from the pre-Boudican groups and the Boudican fire debris tabulated by functional category

Firstly there is a marked dearth of 'feminine' articles. The only overtly 'feminine' item of jewellery (Category 1) is the unusual necklace made of graduated wooden beads from Building 23. The remaining items of personal adornment comprise fourteen brooches, all dating no later than the mid 1st century, three bracelets, one made from iron, one copper alloy finger ring and two glass melon beads. Decisions as to whether specific objects were used by men or women are notoriously difficult, but it is noticeable that these groups contain no hairpins, perhaps one of the more diagnostically feminine of Roman dress accessories. Iron Age pin forms seem more likely to have been used primarily as dress fasteners and wearing of hairpins was a Roman introduction to Britain (Cool 1990, 176, 50). As the fashion spread and elaborate hair styles became increasingly popular in the later 1st century, there is a corresponding increase in the loss of hairpins in a variety of materials on all sites. The fact that there are no hairpins on the earliest Roman sites in the Walbrook valley may suggest either that the new settlers were predominantly male or that Roman fashions had not yet spread to the local population. One might expect however to see family groups among the traders, who were undoubtedly present (with or without the army), and indeed the prime reason for the foundation of London appears to have been its potential as a trading centre rather than its strategic position. Discarded footwear in Period 2 contexts attests the presence of children and young adults or women. Were these local entrepreneurs, who had yet to adopt a completely Roman lifestyle? The hairpin argument can however only be very speculative. There are very few hairpins from sites of similar date in London, with only three from a large number of sites in Southwark in a period dated AD 50 –70 and two from a large site in Borough High Street (BGH95) in securely dated pre-Boudican contexts (Wardle in prep). Similarly the strong pre-Boudican assemblage at Regis House (KWS94) also lacked hairpins (Keily in prep).

The presence or absence of pins may be in these circumstances more an indicator of the current fashion, rather than evidence for the identity of the inhabitants of the city.

The evidence of the material culture represented by the remaining pre-Boudican artefacts in fact seems to suggest a Romanised way of life, if one can judge that from the use of 'Roman' artefacts. The numbers of domestic items (Category 4) exclude the numerous small fragments of quernstone from the area, some residual even in the earliest buildings, (Building 1, for example), which would have distorted the count. The presence of quernstones is a recurrent feature of the sites in the area, most spectacularly during the later 1st century, (where the fragments are reused), and may reflect large-scale milling in the vicinity, perhaps at an early period.

There are only two lamp fragments from ONE94, both imports and three from neighbouring CID90, all in Lyon ware, characteristic of groups of the mid 1st century, as for example from Fenchurch Street (FEN83). A motif showing Eros with alabastron and shell (CID90<1334>) is identical in design to a lamp from Southwark (BGH95) imported at a similar date (Wardle in prep). Apart from the trading implications the use of oil lamps suggests a certain standard of living. They would be used by those with sufficient means not only to purchase the lamp in the first place, but also to buy the imported oil with which it was filled. Other means of lighting in the form of candles and tallow dips were of course available, but leave no trace in the archaeological record.

In addition to the domestic artefacts summarised in Table 302, several fragments of high quality imported glassware were found, notably in the construction levels of Building 3 (perhaps relating to activity in Building 2). It is possible that the strongly coloured vessels may have been introduced as personal possessions of the earliest settlers and the early assemblage as a whole has a strong Mediterranean bias (see glass report), with some vessels also from the northern provinces. The general pattern of glass vessel types at Poultry, tablewares as opposed to containers for storage is also seen on other pre-Boudican groups, before the start of mass importation of commodities in glass vessels in the Flavian period. The glass assemblages at both FEN83 and BUC87 also included isolated examples of distinctive high quality vessels.

At both ONE94 and CID90, there are several military items, important perhaps not so much for their presence at this date, but for the fact that they have been discarded. Most were found in dumps, (S4 and Open Area 2 respectively), suggesting deliberate disposal rather than casual loss, and although the metalwork from both areas is in good condition, some of the finds appear to have been damaged before deposition. The range of artefacts is typical of the mid 1st century, with fragments of armour and studs the most numerous types. Several brooches of similar date are also forms which are often found on military sites, although not exclusively so. The source of these and indeed other military finds from the area is problematical. They cannot be ascribed to any specific building and as Bishop and Coulston point out (1993, 34) the probability of the accidental loss of military equipment is remote. Weapons and armour were regularly recycled and there is increasing evidence for clearance and burial of artefacts on the abandonment of a site, as at Newstead (*ibid*). Although large by urban standards, the numbers of

finds in the pre-Boudican groups do not immediately appear to be the result of systematic clearance or collection. The finds groups in both Structure 4 and Open Area 11 are similar in general composition and there is no reason to suppose that the material did not come from the nearby areas. Indeed one of the spears came from Building 8 and the finds from Open Area 11 which lay to the west included a second spear and a mount in addition to a selection of domestic artefacts. It is possible, although it obviously cannot be proved that some of the finds in Open Area 11 were from Building 8.

Iron weapons and tools are relatively unusual finds in London outside the Walbrook valley where the metal is well preserved in the anaerobic conditions. The *dolabra* from CID90 is of particular interest as an example of a classic military implement and as the rake was introduced to Britain by the Roman army, the single tine, also from CID90 is an extremely early example.

Several artefacts associated with the keeping of written records, (Category 7), the first example of wooden writing tablets and styli, which are seen in far greater numbers in later contexts, and several inkwells, one, from Building 6, made of lead alloy. The use of ink and, presumably, parchment suggests the requirement for more permanent records than could be made on wax tablets, indicating administrative activity which may have been either military or commercial. There may not, in the early years of a developing town, have been much distinction between the two.

On most urban sites fasteners and fittings, a very broad category which covers a multitude of functions, generally constitute the largest part of the assemblage. The pre-Boudican groups at Poultry are unusual in that they contain no recognisable objects in this category, although the balance is redressed by the relatively large numbers in the overlying fire debris, comprising over 45% of the assemblage, perhaps simply because by definition the destruction material would naturally contain greater numbers of fragmentary structural and other fittings,

Function and status

With the exception of a few special cases, the distribution of the finds across the site highlights the difficulty of assigning finds to specific buildings. Analysis by the four zones (see above) illustrates patterns of rubbish disposal rather than occupation, with large groups in the Zone 2 and Zone 3 dumps, (S4 and Open Area 11). Preservation of larger numbers of objects was also enhanced by the burial conditions in these deposits. Most objects 'from buildings' were found in construction levels rather than occupation surfaces, and floors, although made of earth, were swept clean. Speculation about the status of the settlement therefore has to be based in most cases on a general assessment of the structures themselves, the overall finds assemblage and the associated environmental evidence.

There are, however, a few exceptions in this early period. Building 23 is a rare example where there is good evidence of its function, as a shop. This is based primarily on ceramic evidence, but is supported by the discovery of artefacts, bone spoons, lamps and glass vessel fragments, within the structure itself and in the overlying fire debris. The wooden necklace found in Room A is a highly unusual discovery.

There is tenuous evidence of relative wealth in Building 2, based on the presence of good quality glass vessels in the construction levels of Building 3 and as discussed above, it is possible that some of the objects found in Open Area 11 came from Building 8. Apart from the military artefacts, these are not however of a distinctive character.

In conclusion, the pre-Boudican finds contribute to the picture of an emerging town. Some of the newly imported goods, may have been brought in by the new settlers and the presence of at least one very old personal artefact (the glass palette) and items of military uniform, suggests that at least some of the early settlers were of continental and possibly Italian origin. The discovery of a few shoes, as worn by a child and small adult, indicates that it was a mixed community, although evidence for the presence of women is otherwise elusive. The lifestyle suggested by the small number of finds is basically Roman.

Post-Boudican development to c AD 120

Table 303 Summary of the finds from Period 5 tabulated by functional group

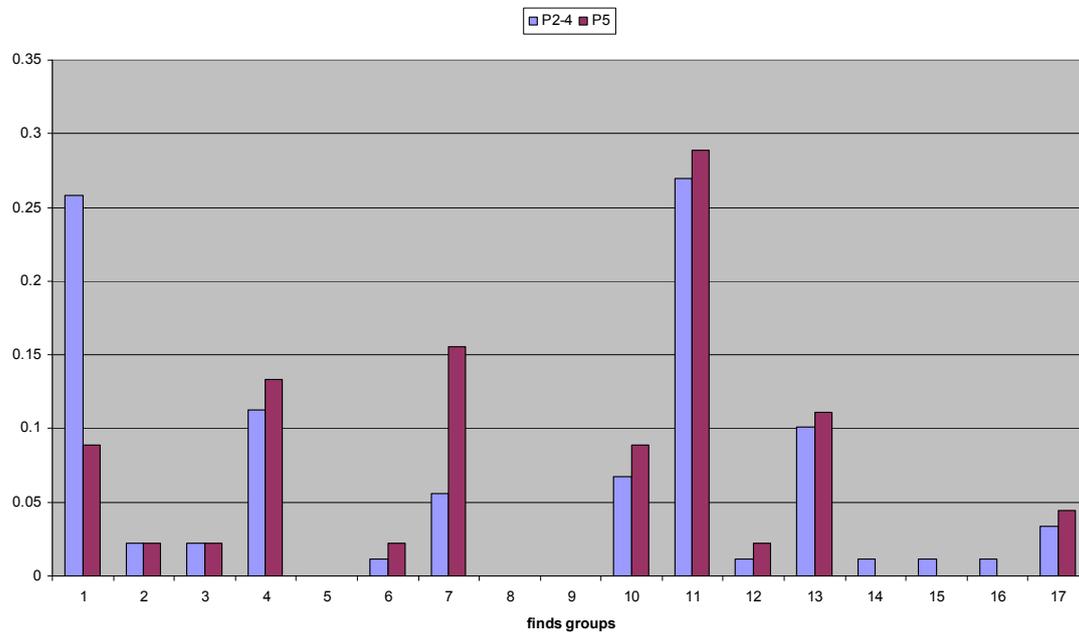


Fig 1 Histogram to show the relative percentages of the finds from Periods 2-4 and Period 5

The distribution pattern of the artefacts in the Boudican fire debris differs considerably from that of the pre-Boudican groups, notably in Zone 4, where there was little material in sealed pre-Boudican contexts (see Table 301). (The numbers in Zone 3 could be increased significantly if a the minimum number of bone spoons was counted, instead of the number of accessions, bringing the total of 'domestic' items to 12 and the total of all accessions to 16.) There seems to have been a greater build up of material in the Zone 4 Terraces 3 and 4 in which case the artefacts could have come from anywhere in the area, rather than from the underlying buildings.

Fig 1 shows the relative percentages of the finds by functional category from the pre-Boudican periods (2-4) and the Boudican fire debris. In the pre-Boudican levels, despite the lack of feminine jewellery already discussed, personal ornament accounts for over 25% of the assemblage, almost the same as the usually far more prolific category of fasteners and fittings. Domestic artefacts comprise about 11% and military items are relatively high at 10%. The picture in Period 5 is different in detail with over 28% of objects fasteners and fittings, with far fewer personal items, and a marked increase in writing equipment. As can be seen from Tables 301, however the actual numbers of objects in each category are very small. Obviously most of the finds in the fire debris would have come from the pre-fire levels and differences in the assemblages can probably be explained by their nature. The pre-Boudican finds consisted of lost or discarded articles, many from dumps, while the fire-debris is essentially destruction material, and would

naturally contain larger numbers of structural and other fittings from the burnt buildings. Broadly, as one might expect, the overall picture is similar.

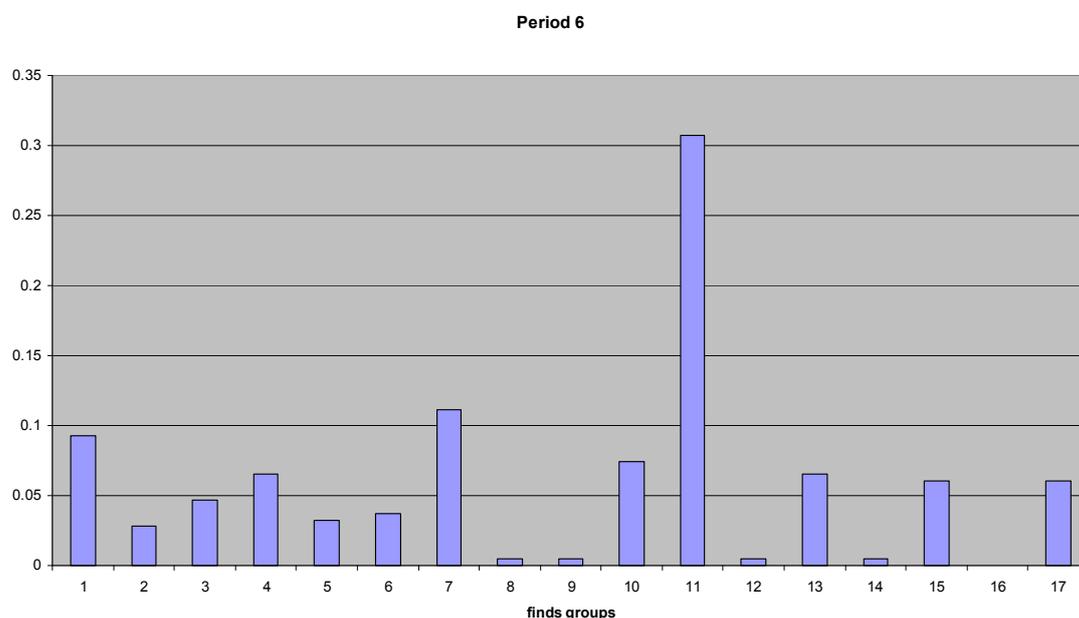


Fig 2 Histogram of the finds from Period 6, by functional category

Many of the finds from the succeeding period, the various phases of Period 6 are likely to have derived from the pre-Boudican phases, for example the fine early brooches and a harness pendant from Open Area 41, all of which show the remarkable preservation of the finds from the Walbrook valley. The overall pattern of the finds by category is broadly similar to that of Period 5, and the largest group is again fasteners and fittings, but there is a slight percentage decrease in writing implements, military items, and domestic items, with an increase in industrial waste in the form of copper-alloy scrap and leather shoes. In absolute terms the number of styli and writing tablets increases dramatically to 24 individual items.

The problem of assessing the speed of recovery after the Boudican fire is complicated by the presence of early material, much of good quality, which is probably residual and the difficulty of assigning precise dates to common artefacts, many of which could date from the mid- 1st to the mid- 2nd century. The continuing presence of styli and writing tablets could suggest swift commercial recovery, but the excellent survival of organic materials, seen also in the large numbers of leather artefacts, could present a distorted picture. It seems reasonable however to compare the numbers of writing implements from the site from all periods (see section 3 for data) and on this basis the increased number in Period 6 does appear to be significant. It is also noteworthy that the styli come from a variety of groups, distributed across the site and are not as in the succeeding period mainly from a single deposit.

The presence of the copper-alloy scrap metal could suggest the presence of metal workers in the area and more is seen in later periods (see discussion of industry). It is possible that the some of the military artefacts

may have been discarded as scrap for recycling although many are apparently undamaged.

In a few cases it is possible to associate finds with a specific building, although most artefacts are from construction deposits and levelling. The occupation layers of Building 21, on Terrace 3, which is stratigraphically later than the Boudican fire debris, produced a stylus with a distinctive U-shaped eraser and one of the finest objects from the entire excavation, a copper-alloy mount in the form of a leaping female panther. The mount may be from a vessel or an item of furniture and is an essentially 'Roman' artefact. The panther is seen in Roman art as part of the Bacchic *thiasos*, and is a reminder both of the place of items with cult or religious significance in everyday life and also of the introduction of foreign cuts and beliefs with the Roman conquest of Britain, alongside the more tangible imports. The quality of the two finds from Building 21 is rather at odds with the stratigraphic analysis which suggests that this was a 'low grade' building. This may not have affected the quality of life within.

Most of the artefacts from Building 29 came from construction levels and appear to include redeposited fire debris with later coins and other objects of uncertain date, which again include several writing implements. Writing tablets were found in Open Area 40 which lay behind Building 29. The sequence continued into Period 7 and finds from the area, notably a wooden trough, well suited to kneading dough may well represent rubbish from the building.

The glassware from the Boudican fire debris is a typically pre-Flavian assemblage with tablewares in strongly-coloured glass and two Hofheim cups, one of them burnt <3871> and few storage vessels. There is a considerable increase in the number of vessel fragments from early Flavian contexts and although some of these are residual there are a few more pillar moulded bowls, the ubiquitous table vessel of the late 1st century and many more jars and bottles reflecting the increased use of glass for storage and importation of preserved goods. The overall numbers are still relatively small but this suggests that there was a steady increase in the importation of goods from the rest of the Roman empire during the recovery period as would be expected in an expanding settlement. With the exception of some of the early (residual) monochrome wares, there are few vessels of quality in the group, two exceptions being a mould-blown almond lattice beaker from Open Area 24 and a colourless wheel-cut beaker from Open Area 32.

The Walbrook in the early Roman period

Finds from the 'Walbrook deposits'

The background

The Walbrook valley has long been the richest source of Roman artefacts from London and finds from earlier excavations form the nucleus of the Roman collections in the Museum of London. Large numbers of artefacts are also held at the British Museum. The nature of the anaerobic deposits has

ensured the survival of metal objects and organic materials, notably wood and leather. The problem is of course that most of these objects were effectively unstratified, most the product of unscientific retrieval, but as Wilmott (1991, 61) points out, they have been used in the past to define the character of this part of Londinium, one of the most influential interpretations seeing the Walbrook as a rubbish dump (RCHM 1928, 16). Investigations at the Bank of England from 1927 and subsequent work by Ivor Noel Hume in the 1940s and 1950s produced vast numbers of artefacts but Hume was the first excavator to question the identity of the thick black deposits as stream silts (*ibid*; Hume 1978, 14). Major advances in understanding the nature of the Walbrook stream were made with the discovery by Grimes of revetments at Bucklersbury House in 1955. He showed that the actual watercourse was narrow and revetted with timbers, and the banks were lined with timber structures (Grimes 1968, **), thus making a distinction between the stream silts and the make-up on the banks, which consisted of levelling and occupation material. Unfortunately as the context of the earlier finds was unclear, it was not possible to distinguish finds originating from the stream bed itself from those found on the banks, but rubbish disposal was still accepted as the prime reason for the presence of the artefacts. It was also suggested that industries operating on the banks, metalworking and tanneries, for example, contributed large, more discrete dumps (*Wilmott ibid*).

As the distinction between the finds from the stream and the banks is clearly of importance, Wilmott re-examined the Bucklersbury House assemblages, placing the finds into five categories according to the amount of recorded stratigraphic detail (Wilmott 1991, 62–3). This made it possible to isolate certain (ER) groups for further study and full details of these and stratified groups from other sites are given in that publication (*ibid* 111–167). Wilmott quite correctly points out the fallacy of assigning objects to the stream bed on the basis of their excellent condition. The finds from St Swithin's House, positioned well away from the stream itself, nevertheless show 'Walbrook condition', with bright shiny copper alloy and corrosion-free ironwork. Certain groups from Poultry show similar qualities (see below) and finds are usually well-preserved, as they would be in any waterlogged deposit.

Wilmott considered that the provenance of an object, whether from the stream bed or from the riverside banks, was of importance because of the different use of each environment and the possibility of different sources for the material. The occupation surfaces on the banks were interleaved with dumps of make-up used for ground levelling, which he assumed to be imported from other parts of the city – and he therefore concluded that the objects within these dumps also had their source in other parts of the town 'casting doubt on whether any object was either used or deposited on the site as an individual object', (Wilmott 1991, 64). This is contrasted with the material from the stream bed, considered to be the result of rubbish disposal by those living on the banks and therefore local to the area, bearing in mind of course that objects could be moved around in the stream itself. Organic materials would be likely to float further downstream, perhaps explaining their dearth in the Bucklersbury House stream bed contexts.

Finally Wilmott discussed the possibility that the old Walbrook assemblages are not valid samples as the collection of artefacts was biased, with an emphasis on those that were most visible and most visibly appealing.

Organic materials in particular are likely to be under-represented in the surviving record, either because they were not retrieved, or because they have not survived. Wilmott's histograms of the finds from various sites recorded by material (ibid, 65, fig 44) show very small quantities of leather from the Bank of England, Bucklersbury House and Kings Arms Yard, although the excavators at the first two sites noted that there were large dumps of leather footwear and even more importantly, waste in the forms of trimmings and hides. The relative percentages of finds by material on more recent controlled excavations show a very different picture, with leather the largest single category (ibid fig 45). This is a good point and the Poultry sample, where all material recovered is from a modern excavation, provides useful comparison.

Wilmott's conclusion, that the finds from the banks were redeposited as rubbish which came from all parts of the city, is strongly challenged by Merrifield (1997, 28) in a persuasive argument. Although there is in fact some evidence (*contra* Merrifield ibid) that rubbish was allowed to accumulate in surface middens, as at Leadenhall Court (Milne and Wardle, 1996), such middens are rarely found. Furthermore, if objects were allowed to accumulate in this way and were then transported any distance prior to dumping, far more damage might be expected, both physical breakage and longer term corrosion caused by changing environmental conditions. The Walbrook groups also show apparent concentrations of specific types of object and although large numbers of could have been deposited at one time, one might expect the groups to be more mixed.

The possibility of ritual deposition in the Walbrook stream was originally raised by Merrifield (1962, 38; 1965,48) and was strongly reasserted more recently (Merrifield 1997). He notes that the Walbrook finds are distinguished from other well-preserved groups of rubbish by their continuing serviceability. Many of the artefacts are not only well-preserved but complete and usable. In addition, much of the metalwork, from the National Safe Deposit Company site (from the stream bed and banks) and from Bucklersbury House (stream bed), for example, falls into a limited number of categories, (ibid, 34, fig 2; 43). The NSDC groups included a greater number of craftsmen's tools, which were thought to have come from local workshops alongside the Walbrook. Merrifield proposes both local and wider sources for the finds, but considers that the latter were brought in by the inhabitants of the city who were passing through this central area and that many of the metal objects were deposited as votives. The deposition of metal objects in water is well attested in the pre-Roman Iron Age, the favoured weapons being replaced by miniatures, personal ornaments and rings, as for example the brooches deposited in the walls of a building at Nor'Nor in the Scilly Isles (Dudley *****) or at temples (Uley; *****). Merrifield argues that the ritual deposition of artefacts in the Walbrook stream, in an area of commercial or industrial activity is quite consistent with the Roman attitude to the fusion of religious practice and daily life.

In analysis of two deposits stratified in the mid 2nd century stream-bed, ER268G and ER268H, which seem to have been deposited by metalworkers, perhaps during clearance of the Walbrook area, Merrifield notes that the majority of the objects recovered possess points, and suggests, albeit tentatively, that this represented some sort of sympathetic

magic designed to aid the stream in penetrating any obstacles that impeded it. One might observe, against this, that the repertoire of the metal-worker included far more tools with cutting edges and points than axes, adzes and hammers, which as Merrifield says are rarely found. It is however, necessary to seek an explanation for the presence of quantities of ironwork, many of them serviceable tools, at a time when metal was valuable and regularly recycled. The large numbers of complete copper-alloy objects also requires consideration and the ritual deposition of metal artefacts in a stream is one possibility.

The evidence from Number One Poultry

It was hoped that the site would provide new evidence from a well-stratified sequence that would contribute to the continuing debate about the nature and source of the Walbrook deposits and shed further light on the function of the Walbrook valley itself. As the excavations did not extend as far as the Walbrook stream, there was no opportunity to contrast the stream bed and bank deposits, but several large groups, almost all at the extreme east of the site, nearest to the Walbrook, contain artefacts typical in preservation and type to those from the earlier excavations in the area. The largest group, comprising over 220 identified objects came from Open Area 45, Period 7, dumped deposits which filled the large tank (S20) and covered the surrounding area. A summary of the objects from this group is given below and is accompanied by a full catalogue. The Period 6 groups associated with the construction of the tank should also be considered as they are very similar in character to the groups previously published. They include for example a distinctive needle of specialised form with a curved knobbed terminal <5353>, tentatively identified as a baling needle (Cool and Philo 1998, 92, nos 429, 433). Other examples have been found in Walbrook deposits at Bucklersbury House (Wilmott 1991, 121, no. 316). Make-up below the cobbled surface surrounding the tank contained one of the finest objects from the site, a copper-alloy hanging lamp, complete with chain <14>. Other finds in the construction levels of several buildings are again of 'Walbrook' type, as two strap loops from cavalry harness in the make-up levels of Building 29 <2435><2436>. This raises questions about the source of much of the construction levelling material on the site. In this case some of the finds are residual and may be redeposited from pre-Boudican levels. The identification of 'Walbrook' finds on grounds of preservation is problematical and the wet nature of the deposits and consequent survival of metalwork both at Poultry and at CID90 might confuse the issue. Not all well-preserved finds are necessarily from the Walbrook stream or banks.

The finds

A detailed account of the finds from OA45 can be found in the chronological narrative. The following summary is intended to be read in conjunction with the full illustrated catalogue.

Finds from the tank can be divided into two groups, those from the primary silting and the subsequent thick peaty landfill deposits that not only filled the pit, but accumulated over and around it. The earlier finds, none of which suggest any function for the tank itself appear to be very mixed, rubbish that perhaps accumulated while the tank was in use. They include a coin of

Vespasian and a virtually complete but distorted brooch <4441> is a mid 1st-century form which would have gone out of general use by the end of the century. Organic objects have been well preserved and besides examples of relatively common combs and a turned box <4160>, there is a very rare fragment of brush with recognisable bristles <5201>. Other domestic articles include part of a copper-alloy vessel <5518> and among the domestic glassware is a good quality colourless beaker of late 1st-century date <5069>. Although there were no writing tablets, two styli were found <5114><5171>. Three artefacts, a buckle plate and two studs have military association <5527><4584>,4882>.

The large group of shoe fragments present appears to represent disposal of worn-out footwear rather than cobbling waste. Non-shoe leather was also preserved. One fragment, <4700> which may be part of a furniture cover or hanging is decorated with an impressed design of diagonal crosses within boxes and there are also fragments which may be from a satchel or 'briefcase'. Fragments of the same items were found in the upper fill also, suggesting that there may have been some mixing of material in the primary and upper fills and that distinction between the two may not be significant.

There is a strong possibility that this material represents rubbish from nearby occupation and Building 30 is thought to be contemporary with the use of the tank. However, although it is not a large group, certain features bear similarities to 'Walbrook' groups.

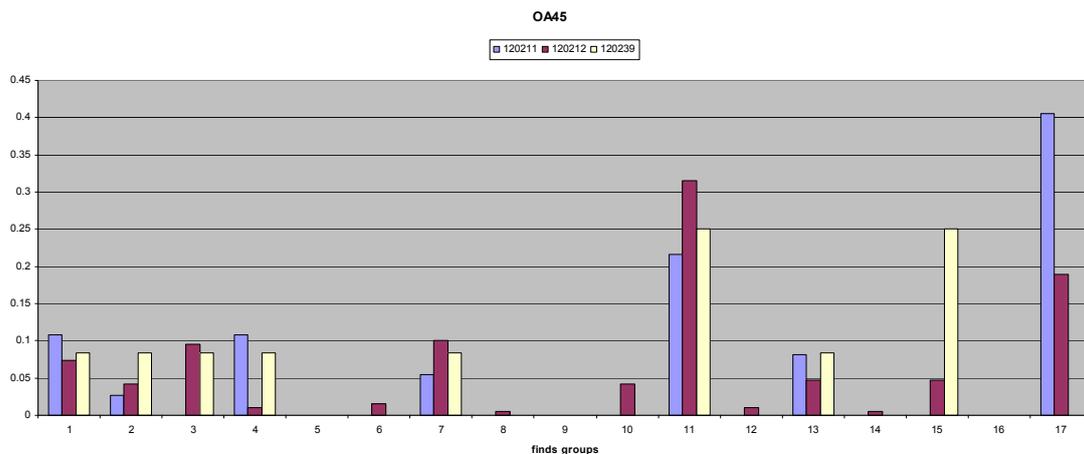


Fig 3 chart OA45

Fig 3 shows the relative quantities of finds grouped by functional category as a percentage of the numbers of identified finds from each subgroup. This enables comparison between the primary and upper fills, 12011 and 120212

There is a limited range of personal ornament but the eight brooches have a wide date range, from a simple iron wire bow brooch <4503> of the mid 1st century to a pair of enamelled head studs of the 2nd century <4180><4181>. A wrought copper alloy brooch <4182> is in particularly fine condition and it should be noted that seven of the brooches are complete and almost undamaged. The enamelled brooches give a *terminus post quem* for the deposit, and suggests dumping over a lengthy period of time for the source

material. The condition of the objects suggests however that they could not have been subject to much movement or change in environmental conditions after initial deposition, both of which could have caused damage. (An even wider date range was found among the brooches from Bucklersbury House (ER268K; Wilmott 1991, 118), a group from the Walbrook stream bed.)

The group contains three iron finger rings, each originally set with an intaglio, only one of which survives <4687>. The ring, containing an onyx is of a form typical of the first century (Henig 1974/1978, fig 1, type III) and is paralleled by earlier finds from the Walbrook, (eg Henig 1974/1978 no. 381 from the Bucklersbury House site, containing a blue onyx [nicolo]). The intaglio, reported on in detail by Martin Henig (see catalogue) is cut in the classicising tradition of the first century, though showing signs of stylisation which become apparent in the Flavian period and cannot be later than the reign of Vespasian. The device is the muse of comedy, Thalia, a subject which evokes literary culture, and is not very common on gems. It is one of several objects from Poultry and sites in the area with a theatrical subject and raises the question of whether London had a theatre by Flavian times and of its siting, perhaps near the Walbrook.

Iron finger rings, often set with intaglios of the highest quality, which were popular in the 1st and 2nd centuries are not uncommon in London, and may have been worn by those who could afford fine gem stones but who were forbidden by sumptuary laws to wear gold. (Manning 1995, 78). There was also a tradition of the wearing of iron rings by the aristocracy in Republican times. It is unusual to find three iron rings within a single finds group, even if two now lack their intaglios, and is a further illustration of the unusual preservative qualities of these deposits.

As in the earlier groups from this site, there are few overtly feminine items among the dress accessories and jewellery. A copper-alloy finger ring may have been worn by a woman and two hairpins, one made of iron with a glass inset, one of copper alloy, certainly were. There are no bone hairpins at a time when fashion demanded the wearing of large numbers of these accessories. There are also very few cosmetic implements or other items of personal grooming, in such a large group of objects, and of these only a nail cleaner <5198>, is complete, although a substantial part of an iron razor survives <4753>. Four of the ten items are small fragments of fractured mirror.

Needles are a consistent feature of the Walbrook assemblages and the group produced 40% of the total from the entire site. The fact that only one is made of bone highlights the general scarcity of bone objects from the site and in particular from the large waterlogged groups. Differential preservation is unlikely to be a factor as animal bone has been well preserved (K Rielly pers comm). Needles were obviously used on a variety of materials and there are no clues as to the precise function of this group although several forms are represented in both iron and copper alloy. The iron needles are consistently smaller and the head size of the copper alloy examples varies considerably. Four are complete but all the others are damaged in some way. No other equipment normally associated with the manufacture or working of textiles was recovered and it is possible that some of the needles could have been used in the working of leather. A large number of shoes and a little cobbling waste was recovered, as on other Walbrook sites, but no other tools

traditionally associated with leather-working were found. It should be noted that large quantities of worn shoes and frequently cobbling waste are found in most waterlogged deposits (for example in the channel at 179BHS89 in Southwark) and although such material is a consistent feature of Walbrook assemblages, whenever it was actually recovered and retained, it is not exclusive to such sites. There are however very large quantities of waste from London Wall, (LOW88), further along the Walbrook valley and it is probable that cobbling was one of the industries associated with this area.

Although several tools were found in these deposits, including a number of pristine iron objects, which can be paralleled from the earlier collections, the number and variety of identifiable craftsmen's tools is much smaller than in the earlier Walbrook deposits, such as found at the Bank of England (Merrifield 19**) or Bucklersbury (Wilmott 1991), with their outstanding collections of smith's tools and knives which form the nucleus of the Museum of London collections. Such tools comprise only about 3% of the identified assemblage in OA45. Indeed there were a greater number of tools and higher percentage of the assemblage in Period 6 deposits, but scattered over several types of deposit rather than in a single dump. The discovery of a fifth knife from the maker Basil(i)us <4360> and another variant of his stamp is further evidence for the activities of this maker, who may have worked in this part of London.

There are many unidentified metal fragments, copper alloy, iron and lead, in the group and several appear to be waste from metal working (see catalogue). As discussed elsewhere, this is not evidence for the primary working of metals, given the absence of hearths, furnaces or crucibles, but rather the handcrafting of metals, perhaps including the reworking of scrap. A fine balance, paralleled in the earlier collections (ER268K, MoL19107, Wilmott 1991, 122, no. 338), may have been used to weigh valuable commodities.

It is possible that some of the military items from the group should be seen as metal scrap. These remain a consistent feature of the assemblage and cover a range of armour, buckles and hinges, harness and other pendants, but mostly copper-alloy studs, one with an embossed portrait head. There are two iron projectiles, bolt heads from catapults. There are no obvious differences in the composition of the group from those in earlier deposits, although military objects constitute a smaller percentage of the number of identified artefacts. Many of the pieces are damaged, some obviously before deposition, and they appear to be discarded rather than lost possessions.

There are comparatively few domestic items, with only one fragment of ceramic lamp, and miscellaneous copper alloy and iron vessel fragments and utensils, although there are further examples, notably <1471> in the overlying dumps of Period 11, which are very similar. There are several wooden utensils, including a large oak dish <4323>, with another also from Open Area 40. Fragments of brushes, retaining plant fibre bristles are very rare survivals <5201>. Glassware covers a relatively wide date range, with three Hofheim cups of the mid 1st century, jugs and flasks dating from AD 60 onwards, but only one pillar moulded bowl, the ubiquitous form of the late 1st century. There are several storage vessels, reflecting the increase in the use of glass

for containers from the Flavian period. Despite the presence of some earlier vessels the group, the largest from any period at Poultry, appears to be generally of Flavian date.

Fasteners and fittings, which form the largest component of this and most other London assemblages are clearly more likely to be conventional 'rubbish', waste from demolished buildings and the like, than ritual deposits, although Merrifield includes keys, (which sometimes appear in burials), among the list of potentially symbolic artefacts. In fact there are surprisingly few locks and keys in this group, with only two iron keys and two lock fragments, one uncertainly identified.

An outstanding feature of the assemblage, which is paralleled at other Walbrook sites is the number of writing implements, notably styli, but also wooden writing tablets and seal boxes. Open Area 45 contained nine styli, 18% of the total from the site, several of distinctive form, and one with a maker's stamp. The Museum of London collections contain approximately 350 additional styli from the area. It is difficult to assess the significance of such large numbers within the Walbrook valley. Extensive record-keeping or communication might suggest commercial or administrative activity, but it is possible that the numbers have been distorted by the high survival rate. Examination of groups from other waterlogged areas, such as the waterfronts at Suffolk House or Regis House, another very large assemblage, where numbers of styli are actually quite small, suggests however that the impression of excessively large numbers from the Walbrook is correct. While the majority of the styli are from OA45 and overlying dumps, other buildings and dumps produced significant numbers. Similarly, writing tablets were found in a number of deposits, including roadside ditches. It is also possible that the activities along the Walbrook included the manufacture of styli and several distinctive forms have been recognised.

Merrifield saw the deposition of styli (pointed objects) in the Walbrook as further evidence of ritual activity (1997, 42), but the presence of the writing tablets would seem to weaken this argument. It is hoped that the transcription and translation of texts on several of the tablets (in progress by R Tomlin) may provide evidence of the nature of the communication, official, commercial or private correspondence.

There are very few items with obvious religious or cult association – and this is a feature of the entire assemblage from Poultry where such artefacts are scattered both spatially and chronologically, with several in post-Roman contexts. One of four incomplete Venus figurines was found in Open Area 45; two of the remaining three and a cockerel came from Period 7 contexts. The figurines may, as suggested by Merrifield (1997, 38) have come from domestic shrines placed near the Walbrook and were discarded when broken, but none come definitely from the Walbrook itself, which might be thought an appropriate resting place for discarded cult objects. Two objects from the site, although not from Open Area 45 can be paralleled in Walbrook contexts, the first an iron rattle, which may be functionally similar to the *sistrum* used in the rites of Isis, although its use as a child's rattle cannot be ruled out. The other object is a lead *defixio*, but the accursed names suggest that it dates from the middle of the 2nd century, and is unlikely to

have been cast originally into the Walbrook, which would be silting rapidly by that date.

Conclusion

The nature of finds in OA45 is very similar to those from Walbrook sites, notably Bucklersbury House, even to the extent that specific forms occur at both, which are not seen elsewhere in London, but it is impossible to say whether these are specific to the area, or have survived simply because of the soil conditions. Groups in several overlying deposits on Terrace 4 are similar in character and have been included in the catalogue.

Fig 4 Finds from OA75, P10 and OA77, P11 - histogram **MISSING**

Obviously the finds from the Poultry deposits should be compared with those tabulated by Merrifield (1997), certainly for the major groups of objects. However, direct comparison of the entire assemblages, the relative proportions of complete and incomplete objects for example, is complicated by the nature of the early excavations, where incomplete objects may not have been recognised or even retained. It is particularly difficult to evaluate the true numbers of fasteners and fittings, which make up nearly 25% of the Poultry assemblage, and are quite certainly 'rubbish'.

To allow for the differences in assemblage size, the numbers of complete artefacts tabulated by Merrifield, from NSDC (many from the bank), Bucklersbury House ER 268K and two other stream bed sites, ER 268G and H, were converted to percentages, each category expressed as a percentage of the total for each site. The finds from Open Area 45 were treated in the same way. Merrifield points out the disparity of the groups, suggesting that the two smaller groups may have been discarded by departing craftsmen from different workshops, perhaps in termination ritual. Local concentrations, the group of iron tools from Bucklersbury House, for example, could reflect the disposal of artefacts from specific workshops and it is certainly unusual, even in waterfront contexts, where metal is equally well preserved, to find large numbers of iron tools. The material would normally have been recycled (?Manning 1972).

The Poultry finds contain no large concentrations of tools and in very broad terms the group resembles the bank deposits from NSDC rather than the stream bed, although, as previously stated, direct comparison is impossible. Consistency appears in the general percentages of styli, and knives, but there are far more items of jewellery from Poultry.

Military objects from Number One Poultry - Military v Civilian

Distribution

The total number of objects with military association recovered from the site is 56, comprising over 5% of the entire assemblage of identified finds. Of these, 53% came from contexts dated to Periods 6 and 7, with 5% from Period 8, generally Boudican to Hadrianic. Sixteen per cent were from pre-Boudican

groups, with in addition almost 9% from Boudican fire debris. This places over 80% of the assemblage in 1st and 2nd-century contexts and this is borne out by the dating of the objects themselves. The remaining artefacts in later 2nd and 3rd-century contexts are residual.

In general the number of objects from individual contexts is very small, generally only one or two, but there is a distinctive group of thirteen from Open Area 45 in Period 7. Period 6 groups contain a similar number of military objects but the distribution is completely different, spread over eight land uses. This serves to emphasize the importance of the large Period 7 dump, but also shows that the objects found within it are by no means unusual in the area (see discussion of Walbrook contexts), although outside Period 7 most artefacts were found in deposits associated with the construction or use of a structure or open area, most redeposited in levelling or make-up, thus making their actual source uncertain.

The range of objects

The artefacts most easily identified as 'military' are fragments of armour, harness fittings and weapons. Eight copper-alloy strap fittings from *lorica segmentata* were found in contexts throughout the sequence (for example <4892>. Fragmentary belt plates and apron mounts came from a variety of contexts, one in an early Period 2 group (<3895>). There are numerous copper-alloy studs, but here there is a problem of interpretation, as some forms could have a number of functions, decorating items of furniture or lock plates for example. Certain forms, which are often tinned and decorated with niello inlay are however commonly discovered on military sites and are thought to belong to military equipment, for example as apron strap mounts. At least 24 of these were found, some in post-Roman contexts (<3883>; <3892>; <5440>). There are a variety of mounts and fittings, some of which definitely belong to harness. Among these are two strap or junction loops <2435-6>, and tear-drop and bi-lobed pendants of mid to late 1st century type (<5299>; <5303>). A particularly fine pendant with a zoomorphic forward-hanging suspension loop of pre-Flavian type came from the make-up levels for Road 1 in Period 8 <3143>.

The site produced a small number of weapons five spear-heads and a spear butt (eg <2742>; <3088>, <5298>), and two catapult bolt heads eg <5559>. Several knife handles made of ivory or bone belong to a form often found on military sites.

The general range is very similar to that found on earlier excavations in the Walbrook Valley, with a concentration of 1st-century material, with large numbers of studs for example at BUC87. It is difficult to make comparison with the overall numbers of finds from sites excavated before 1970 because of differences in methods of recovery and recording, but there is a substantial collection of such artefacts, which seems to comprise up to 5% of the assemblage from the stratified stream-bed deposits (Wilmott 1991, 169, Fig 116). It is significant that the Poultry assemblage contains no military material of the 3rd or 4th centuries, in contrast to discoveries on recent excavations in Southwark (Wardle in Drummond-Murray and Thompson in prep).

The source and significance of the finds

The group of military artefacts from sealed pre-Boudican contexts has been discussed above (early development). There is no reason to suppose that the finds from both ONE94 and CID90 did not come from the immediate area, but the source of both these and the group from the Period 2 dumps at CID90 is in fact unknown. The fragments from CID90 are all damaged or broken from larger objects and could have been discarded as scrap. There are relatively more military artefacts as a percentage of all identified finds in contexts dated before AD60 than at any other time, although the actual number is small. Their presence demonstrates the undoubted presence of soldiers in the new settlement, although nothing of course, of their organisation. There are no obvious differences in the types of artefacts from the later contexts, in particular Periods 6 and 7, where the actual numbers involved are 29, the majority of these decorative studs. Many finds are damaged, some clearly before deposition where the waterlogged conditions in the tank fill, Open Area 45 has ensured good preservation of the metal. Again these appear to be discarded objects rather than lost possessions, perhaps collected as scrap for recycling. It is of course possible that they were brought from military areas of the town (the fort by this time) to metal workshops in the Walbrook valley, (but see discussion of the origins of the contents of OA45).

Evidence has been found recently of an early fort in the Fenchurch Street area at Plantation House (FER97). The date of the Walbrook material is consistent with its being debris from such an early establishment and it is possible, although unproven that scrap or redundant artefacts could have found their way to craftsmen working alongside the stream.

Trade

The range of imports from Number One Poultry

Many of the artefacts from the earliest contexts are imported. There was no glass industry in Britain at this time and all glass in mid-1st century contexts came from the continent. There are several fragments of good quality glassware from the earliest buildings, notably the construction levels of Building 3, and as a whole the early glass assemblage has a Mediterranean bias (see glass report). Sites nearby produced some exceptional glassware, for example a skyphos and other high quality tablewares from St Swithin's House, from a refuse pit dated AD 60-80, includes (Merrifield 1965, fig 122; and Price in Wilmott 1991, 159-65). The presence of the Hofheim cups <GC72-85>, which were made at Cologne to supply the bases in the Rhineland, indicates the routes by which glass was imported into London in the immediate post-Conquest period.

From the later 1st century onwards the increasing number of bottles reflects not only the growing use of glass as a utilitarian commodity, but also the presence of goods imported in bottles, jars and phials, which could be either liquid or semi-solid. There is sporadic evidence of glass working in London in the 1st and 2nd centuries (Shepherd 199*,) but the source of the later vessels is unknown.

The early settlement was dependent upon the continent for the source of another typically 'Roman' artefact, the oil lamp. The fine copper alloy lamp from OA43 (Period 6) is certainly imported from the continent. Although small and quite plain it is the type of artefact found in Italy and France. Several

volute lamps were made in Southern and Central Gaul, but all are fragmentary and the total number of lamps from ONE94 in all fabrics is small (twelve accessions). Imported lamps are outnumbered by local products, the earliest a Colchester early colour coat from Period 7 (Building 20). Open lamps in Verulamium region wares were also found.

Quality imports are seen in metal objects. Several of the brooch types are continental, notably the plate brooch in the form of a boat and the stamped Aucissa. Hod Hill brooches originated on the continent in the late 1st century BC and probably came to Britain for the first time with the conquest of AD43. There is no evidence for the manufacture of brooches in London, although a dolphin brooch, has a repair, and others are of British manufacture outside London, those from Colchester for example.

Several of the more distinctive of the metal artefacts from the site are likely to be imports. On stylistic grounds the panther mount <A79>, the Bacchic figurine, and the theatrical mask escutcheon appear to have been made on the continent, although their precise origin is unknown. The intaglio depicting Thalia, the muse of comedy is very classical in style and certainly imported, but perhaps as a personal possession.

Much of the earliest military metalwork would have been introduced with the army. Bishop and Coulston (1993, 183–5) discuss the evidence for the manufacture of military equipment by the army, within military bases for example. It is true that one of the main ways in which military equipment entered the archaeological record was as scrap for recycling, and much of the equipment from ONE94 appears to be scrap. Much of it consists of broken fragments and taken with evidence of other offcuts and scrap, strengthens the evidence that workshops in the area were engaged in metal working, but at a secondary level, not in primary production (see industry discussion). There is however no evidence that the army was directly involved in this industry.

There is evidence of artefacts coming to London from other parts of Britain, notably shale objects from Dorset, the most notable example of which is the shale table. Shale bracelets were also found in late Roman contexts.

There is no direct evidence for exports – Poultry is not a waterfront site – but the styli and writing tablets suggest commercial activity. (The writing tablets themselves were made from imported wood, perhaps recycled from barrels.)

Imported quernstones are the subject of a separate report by David Williams.

Industrial activity at ONE94 and the middle Walbrook valley

The assemblages at ONE94 produced both direct and indirect evidence for industrial activity and it has long been thought that the Walbrook valley was an important area for metalworking in the early Roman period (Hume 1956,67), with workshops set up along the banks. Wilmott's analysis of the finds (1991, 169-70) shows that metalworking waste was found in the stratified stream-bed deposits and at Bucklersbury House, but was not present on the bank. Many broken tools were found in the stream-bed and complete tools came from Bucklersbury House. Poultry of course lies away from the river itself but examination of the evidence from the site and comparison with the assemblages with the Walbrook deposits was undertaken in attempt to define the general character of the area more closely. Evidence for iron-working has been examined by the Ancient Monuments Laboratory (Dungworth and Bowstead Stallybrass 2000) and is summarised here.

Non-ferrous metal working

Fig 5 Distribution of copper-alloy waste by period - histogram **MISSING**

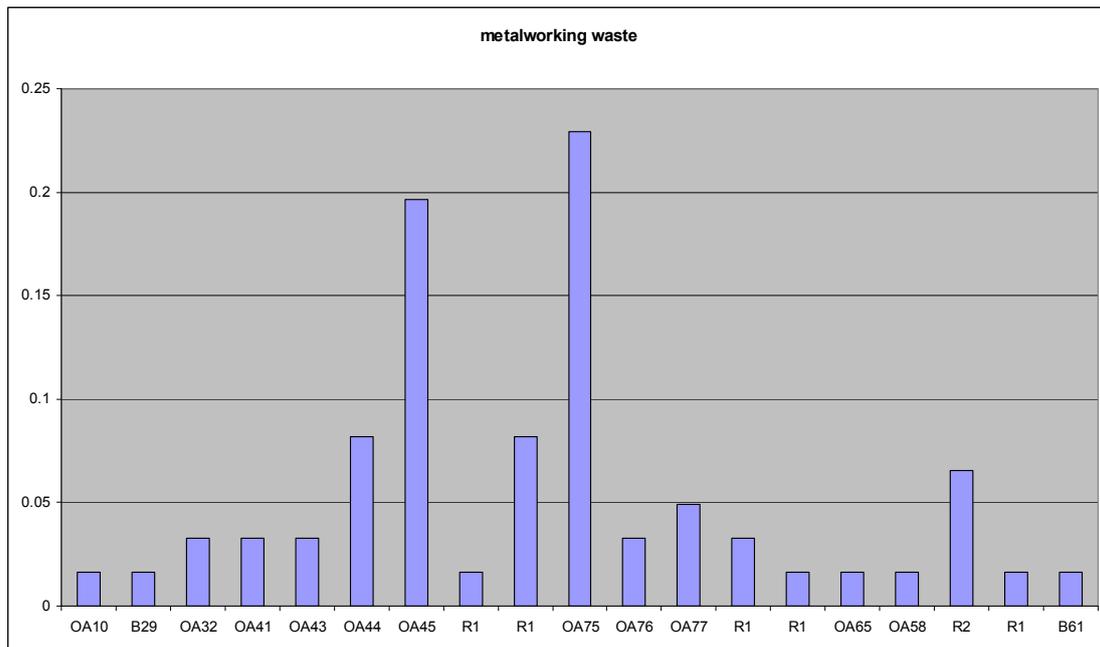


Fig 6 Distribution of copper-alloy waste by land-use - histogram

During analysis copper alloy initially identified as waste and the unidentified fragments were re-examined. Additional waste fragments were identified and these were classified according to type, runnel, spillage, sheet, offcut. Many are indeterminate, but certain diagnostic fragments that are indubitably the by-products of metal working can be identified, for example sprues, offcuts and hammered waste. The total number of waste fragments 199, when compared to the entire Roman copper alloy assemblage is however quite small, even

allowing for the possible presence of further decayed fragments among the unidentified finds, but there are concentrations in specific groups which may have chronological significance. It should be noted that almost all the waste is in dumps or make up levels and no metal-working areas or hearths were identified during excavation.

No waste fragments of any significance were discovered prior to Period 6. The only fragment tentatively identified from a Period 3 context may well have been a burnt object. The first concentration, a total of 13 items from Period 6 groups came from Open Areas 32, 41, 43 and 44, most of the fragments consisting of sheet metal some of which appears to have been deliberately cut eg <5228>. A similar number were found in Period 7 contexts, all but one from Open Area 45 the fill of the 'tank'. Six fragments are sheet metal offcuts or sheet which appears to be deliberately cut for scrap, while <5120> may be primary metal, but there are also fragments which have been burnt or which may be runnels. The large deposit which comprises Open Area 75 (Period 10) contains finds of a very similar character to those in Open Area 45 and again there are several fragments of copper alloy waste. Most of the 14 items are sheet metal as before, but one sprue <5626> was identified, indicating that copper alloy was being cast and there are several runnels and droplets. Open Area 77 (Period 11) contained fragments of bar, one of which had been hammered <4327>, which could have been stock metal and Road 2 (Period 12) yielded amorphous lumps which appeared to contain filings and which could have been sweepings from a workshop floor. Similar fragments, floor sweepings and offcuts were found in small quantities throughout the later Roman sequence, but there are no concentrations or find spots which may suggest a centre for this activity.

The most significant point about this collection of waste is that the majority of fragments are by-products of copper-alloy working with hand-tools, rather than casting or smelting and there are very few crucibles which would suggest the latter activity. Two crucibles analysed by the AML, from Period 8, Road 1 and Period 18 Open Area 58 contained copper alloy, but isolated fragments of crucible are found on most Roman sites and no working areas were located. An early context, the construction levels of Building 3 in Period 3, contained a repaired brooch that could well have been one of the products of such a workshop, although this is much earlier than the majority of the evidence for metalworking. Walbrook deposits from earlier excavations contained similar waste fragments, although these are not illustrated in the various publications.

The presence of metalworkers in the area may explain the presence of the fragments of armour which are perhaps **more** likely to have entered the archaeological record as waste for recycling than in other ways. Many have been damaged, possibly before burial and they are unlikely to have been casual losses. Several of the brooches are also damaged but collection for recycling would not account for the presence of complete artefacts which are also found.

In addition to copper-alloy working, there is a very little evidence for the refining of silver, reported in detail by Dungworth and Bowstead Stallybrass (2000, 13). Two fragments of litharge came from Road 1 in Period 12, and Open Area 58 in Period 18, one of the areas of the site on which there is more persistent evidence for metalworking.

The evidence for ironworking

The iron slag has been analysed by Dungworth and Bowstead Stallybrass (2000). The 22kg from Roman contexts consisted chiefly of smithing hearth bottoms, showing that it was primarily from smithing rather than smelting activities. Most of the slag is from dumps and make-up deposits and there are three peaks by weight, in Period 18, Period 22 and Period 5. Much of the slag is in road make-up which suggests that it was deliberately brought to the site for use as metallurgy. There is perhaps only two periods when metalworking might have been carried out on the site itself. Open Area 58 in Period 18 yielded a variety of metalworking debris, including hammerscale which is diagnostic of the smithing process. This area however also contained intrusive material. Contexts from Period 22 buildings (B64rm E) and associated open areas, at the end of the Roman sequence, yielded debris and hammerscale and the slag in the earliest post-Roman contexts may be associated with late Roman rather than early medieval activity.

Metal-working tools

In view of the previous discoveries in the area and the potential for good preservation of iron in the Walbrook valley, examination of the tools from Number One Poultry was felt to be of particular importance. There are however very few tools which can be ascribed to specific crafts. The largest group are knives, which could have a variety of functions and although several from Open Area 45 are very well preserved, they are not diagnostic of particular activities. A stamped knife <A164> is of the narrow-bladed type thought to be a razor.

Most of the knives, and indeed about a third of the identified tools came from dumps dated to Period 6, but also from the construction levels of Buildings 22, 29 and 32. A range of woodworking tools included drill bits, chisels and an awl, but none are well preserved. A modelling tool from Period 16 context <2083>, is a rare survival, although other examples from the Walbrook are cited by Manning (1985, 31). Such tools were designed for shaping clay, wax or wet plaster and could have been used in a variety of crafts. There are high numbers from London, compared with the rest of the country (ibid) and this might be a result of the location of the crafts for which they were used. Manning does not consider the Walbrook conditions as a factor which would explain the high numbers, as the form is quite robust and recognisable even when corroded. It is however true that even common forms of iron tools are difficult to recognise after burial in many of the London soils.

Neighbouring sites increase the variety of tools from the area. There is a probable jeweller's anvil from CID90 <268> [378], although this is in an unphased pit. Poultry has not produced the wide range of smithing tools seen at earlier Walbrook sites such as Bucklersbury House, where the group from ER 268H is thought to be a hoard collected from recycling by a blacksmith (Wilmott 1991, 132).

Craftsmen

The site has produced new evidence for the work of Basilius, the name whether of craftsman or workshop stamped on a knife of typical Roman form with an integral ring handle <4360>. This is the fifth knife from this cutler to have been found in London, all in the general Walbrook area, and the name is interpreted by Collingwood and Wright as BASILIUS (1991; RIB 2428.5-8). Three variants of the stamp are already known and this is another, lacking the central standing figure of the earlier examples. RIB lists other known makers of knives and styli and most of the objects are from this part of London. Whether tools were actually made here or whether they have simply survived here is of course uncertain. The presence of smithing tools in the early Walbrook collections strengthens the probability of local manufacture.

Other crafts

Many shoes and fragments of leather waste were found on this site as on other sites close to the Walbrook stream. This obviously raises the possibility of leather-working in the area, as has been supposed from earlier excavations. The Roman leather from Poultry is discussed by J Keily, who concludes that it is waste from cobbling and the manufacture of other articles, and not a by product of the tanning process. The source of the material, as with most of the objects from the various dumps, including the fill of the tank (OA45), which produced a large quantity, is uncertain. It cannot be associated with any specific building on the site and in the absence of identifiable leather-working tools, one can only say that the craft was carried out in the general area. It is unlikely however that such waste would have been carried any great distance. There are even larger quantities from London Wall (LOW88) (??tanning here) and persistent evidence of this activity in the valley.

Bone working

There is in contrast to the early medieval period little Roman bone-working waste from the site, 12 accessions in total, and most is scattered throughout the sequence in secondary deposits with few obvious concentrations. Seven fragments of sawn red deer antler could be waste from the manufacture of tool handles while antler crowns were used in the manufacture of pendants as <1965>. The long-bones of cattle were used for many purposes in the Roman period. Ox bone waste came from two Period 7 groups and a roughly-cut rectangular shaft <3956> could be a stage in the working of pins or needles for which three are parallels in the assemblage from Fenchurch Street, FEN88 (Keily in prep). The nearest to a concentration of waste material is a group of six ox metatarsals from Road 2 in Period 18, perhaps waste from a workshop. While local bone-working was undoubtedly a feature of Roman urban life, there is insufficient evidence to suggest any organised activity in this area.

The later Roman sequence at Number One Poultry

Fig 7 Histogram showing relative percentages of finds by category from the later periods, P18-22 **MISSING**

It is clear from the chronological narrative covering Periods 18 onwards, broadly the mid 3rd century to the end of the Roman sequence, that most finds groups are very mixed, with much intrinsically datable residual material and a few intrusive finds. The structural sequence however is strong at Poultry and an attempt has therefore been made to identify artefacts of undoubted 3rd and 4th century date and to examine their associated groups. Spatial analysis has also been used to examine their distribution.

Apart from coins, there are a few specific types of artefact that are of certain late Roman date. Many of these are items of jewellery and dress accessories, objects that would be expected to undergo regular change at the whim of fashion. Certain brooch forms can be dated with relative precision; the wearing of sets of copper alloy bracelets was a late Roman practice; the shape of hair pins altered with changes in hair-styles and late Roman combs are distinctive. Late Roman military equipment can be recognised and the wearing of military-type belts is thought to denote rank in some instances. Certain later Roman glass forms are also well dated.

Unfortunately most of these diagnostic artefacts have been found in cemetery sites, which are obviously less subject to disturbance than urban contexts. The presence of 4th-century groups on urban sites is extremely difficult to detect, due in all probability to efficient methods of rubbish disposal - (houses with solid floors, as Building 64, were regularly swept). Subsequent building activities have also in many cases destroyed the later Roman stratigraphy. The Poultry assemblage includes none of the truly distinctive artefacts, but there is a small, nonetheless persistent, group of personal and domestic objects which belong to the later periods. These include bone hairpins with swelling shanks, which are generally dated after AD250, jet and shale jewellery, which was fashionable in the later Roman period and distinctive forms of glass.

Fragments of 'Airlie cups', colourless glass drinking vessels with distinctive double base rings, which were in use from the late 2nd century and throughout most of the 3rd century were found from Period 9 onwards, but at least three of the five fragments are residual. An engraved colourless cup <2532>, also of 2nd-to 3rd-century date came from the Period 15 road surface, but vessels of this date are rare on the site. The most unusual 3rd-century vessel, a very small fragment of colourless snake-thread beaker was found in a post-Roman context (Period 34). This is only the second example of such a vessel to be found in London and the first was also found in a medieval context, at Leadenhall Court (J Shepherd pers comm).

There are several bowls and beakers of 4th century forms, made in naturally coloured pale green or yellow/green glass, typical of the period, which occur from Period 18 onwards. Several were found in groups associated with the construction and use of the large and substantial Building 64 in Periods 20 and 21 and in the destruction material overlying the building, Period 22. Further examples came from Open Area 105, a post-Roman group which overlay the Roman building. Spatial analysis of late 3rd and 4th

century glass, shows a relative concentration in this area, suggesting that finds were in general displaced vertically rather than horizontally and that at least some of the artefacts in the post-Roman groups could have been used by the occupants of Building 64.

Examination of the other artefacts from the Building 64 construction groups in Period 21 reveals nothing of significance, miscellaneous domestic items of uncertain date and fragmentary fittings. The groups associated with construction and use may contain objects used in the building, but an Airlie cup <4003> is residual. Other glass fragments belong to the late 1st or 2nd century and poorly preserved metal fragments are unidentifiable.

The dumps over Room A produced one of the more important finds from the site, large part of a circular shale table top <842>. Although the upper surface has laminated, the underside shows rebates for two of the three legs.

Although surviving fragments of furniture are rare in Roman Britain, this is a familiar form, well-known from contemporary illustrations and excavated fragments, for example from Silchester (Lawson 1975, 269). The legs may well have been elegantly curved, perhaps similar to a recent discovery at Fenchurch Street (FCC95, Keily in prep), or may even have been carved in zoomorphic style as at Colliton Park (Liversidge 1958, **). Kimmeridge shale was used for a variety of artefacts throughout the Roman period, and tables seem to have been especially popular during the last two centuries of Roman occupation, although the form is known much earlier, for example at Pompeii. The table from Number One Poultry would have been an expensive item, well suited to an elegant room with mosaic floor in a substantial property.

The only other recognisable artefacts from the occupation and destruction deposits are personal possessions, bone hairpins, a glass bead and a fragment of composite comb, all later Roman forms.

There is a complete absence of military artefacts of the later Roman periods – in contrast to the finds from Southwark, where more harness fittings and fragments of armour of the 3rd- and 4th- century date has been detected recently.

There is limited evidence for some industrial activity in the later period, with various metal-working debris, chiefly iron slag and hammerscale from Open Area 58 (see above).

3. Specialist finds studies/supporting data

Introduction and methodology

The site produced over 3500 accessioned finds. This figure includes all types of material, samian stamps and other ceramic accessions for example, metalwork, coins, and glass and the range is one of the largest ever recorded from the city. Leaving aside such items as samian stamps, building material, coins, glass and unidentified objects, over 1000 artefacts have been identified and can be assigned to a functional group. All finds were recorded on the MoLAS Oracle database in accordance with Museum of London practice and the database was then used as a tool for linking artefactual and stratigraphic data. These data were also used for spatial analysis of specific forms and groups, using a geographic information system.

All finds have been linked to their stratigraphic group and have been discussed in context in the earlier part of this report. The broader analysis here examines the finds by cross-material functional group, a method that has frequently been adopted for Roman artefacts over the last 20 years, following Nina Crummy's publication of the finds from Colchester (Crummy 1983). There are inevitably some problems with this approach. Modern perceptions of function may not be the same as those of the ancient world and when undertaking any statistical analysis, multi-functionality is a problem. The simple names given to artefacts on the database are necessarily broad and the term 'mount' for example may cover items used on vessels, furniture, armour, to name only a few possibilities. The advantages, however, in providing an overview of the assemblage, and in broad comparison of groups, outweigh these difficulties. The analysis of the individual functional groups enables more detailed discussion.

Analysis of the finds from Number One Poultry by functional group

Fig 8 Histogram to show the relative percentages of finds from all the functional groups (1033 objects) - all periods **MISSING**

Table 304 Table of artefacts by functional category and period

Table 305 Artefacts by functional category and period, expressed as a percentage of each period group

The chart shows that over 27% of the assemblage fall into the very broad category of fasteners and fittings. This includes the many artefacts classified as mounts and attempt has been made to ascribe a more precise function wherever possible. Mounts and studs attached to military uniform are therefore included with category 13, for example. The high proportion of fasteners and fittings (which includes security equipment) is usual on urban and indeed on most, if not all, Roman sites. By comparison with the villa assemblages in the area of St Albans, studied by K Spradley (1999), this

figure is actually quite low, but it is reasonably consistent with comparative assemblages from Southwark.

Personal ornament and dress account for a further 11% and if shoes were included in this category, as they are by Nina Crummy (1983) the combined percentage would be 25%. The numbers of shoes are of course exceptional among Roman assemblages generally, although not in parts of London, and reflect the waterlogged soil conditions. Unusually, and again this is largely due to the preservation of large numbers of writing tablets, category 7 is placed next, at about 9%. Styli are a consistent feature of the Walbrook groups in the area, and the presence of so many writing implements and associated objects must reflect activity in the town. The presence of such artefacts confirms both the existence of literacy and the requirement to keep permanent records, perhaps in a commercial area of the town. Conversely the absence of such items cannot prove illiteracy, merely that such records were not needed. Tools, 'military items' and metal-working waste were found in almost equal proportions. The Walbrook has long been thought to lie at the heart of an industrial centre and most of the waste takes the form of copper-alloy scrap and offcuts. No production sites have been identified. In view of the large numbers of well-preserved tools from earlier excavations the numbers of tools are disappointingly small (see below). Domestic artefacts comprise only 5%, only slightly outnumbering objects used in textile-working, mostly needles and cosmetic and medical implements.

Personal ornament and dress accessories

The site produced 114 items of personal ornament, comprising jewellery and dress accessories, representing 11% of the entire assemblage of identified artefacts, although in certain periods they comprise over 25% of the period assemblage (P2-4 and P22).

There are 47 brooches, the largest single group, of which fourteen are complete or almost complete and in good condition. The dating of the group is heavily biased to the 1st century, with fifteen mid 1st-century forms, including simple one-piece brooches in both copper alloy and iron, several Hod Hill forms, and an Aucissa <5301> which is stamped with the maker's name. Other 1st-century types include Colchester forms, early plate brooches, one with stylised swan heads <3607> and a repaired dolphin brooch from a Period 3 context that has had its catch plate replaced in a contrasting alloy <3724>. The most unusual form, from a Period 6 dump, is the plate brooch in the shape of a boat, which is in pristine condition <4763>. The latest brooches are the pair of enamelled headstuds on which part of the connecting chain is preserved <4180><4181> from the fill of the tank and the surrounding area in Period 7, and an enamelled plate brooch in the shape of a nailed shoe <1998>, this from Period 16 dump.

Seventeen of the earliest brooches were found in pre-Boudican contexts or Period 5 Boudican fire debris. These included four of the Hod Hills, two Nauheims, a lion-bow, early Colchester forms and several of the early plate brooches. The largest number, four, came from the Period 2 dump, Structure 4, and there were two brooches, one the repaired Dolphin, from the construction levels of Building 13. Hod Hills, a distorted one-piece and the Aucissa were among the early forms found in Period 6 and 7 contexts, but there were more contemporary Colchester brooches in the Period 6 dumps.

The boat-shaped plate brooch came from Open Area 41 in Period 6, but this group appears to represent redeposited pre-Boudican material. The extensive Period 7 deposits, notably Open Area 45, produced several brooches, including three residual one-piece forms, but the general dating is later, seen particularly in the two enamelled head-stud brooches for which the earliest possible date is the early to mid 2nd century, while penannular brooches as <4660> have a wide date range. These are well-preserved as is <4182>, a distinctive wrought brooch with a T-shaped head. Apart from the enamelled shoe, all brooches from the later periods are residual and there are no very late Roman forms.

Most brooches cannot be regarded simply as jewellery, as they served an essential purpose as garment fasteners, notably the cloaks worn by men, although they would have provided an opportunity for conspicuous display on occasions. Bow forms on which it was possible to gather up a substantial amount of material are clearly functional, but some small plate brooches are more likely to be purely decorative or perhaps symbolic, used as badges. Both the shoe and the boat brooch appear to fall into this category, and perhaps also the small early plate brooches. The question of the function of plate brooches was raised by Catherine Johns (1995, 103–109) where she points out that some may be decorative souvenirs and badges which reflect the tastes and beliefs of various sections of the ordinary population.

In classic Italian fashion brooches were worn almost exclusively by men (Croom 2000, 51) and it is noticeable at Poultry that there is a marked predominance of male dress accessories and jewellery. Most of the nine finger rings found on the site, were to judge by their sizes, also worn by men. Five are made of iron, their preservation ensured by the waterlogged conditions, chiefly in Open Area 45. Sumptuary laws in the 1st century restricted the wearing of precious metals to certain classes and iron rings, which could be set with extremely fine and expensive gemstones, as <4687> were very popular. This ring is paralleled by earlier finds from the Walbrook at Bucklersbury House. Two other iron rings of similar size from the same group have lost their gemstones and another, a little smaller has an unusual applied bezel in brass and iron depicting a stylised Satyr mask flanked by scarabs <4888>. One copper-alloy finger ring has a key on the bezel <4649> while <5089> and <5566> are smaller, with more delicate designs and were probably worn by women.

The range of female jewellery included two earrings, both of types with simple loops intended for permanent insertion in the ear, and both from Period 6 contexts. There are very few hairpins in 1st and 2nd century contexts, with four, in a variety of materials from Period 7, chiefly Open Area 45. Twenty two of the 27 hairpins are of bone and all but two of these are from contexts dating to Period 12 and later, most of the type with swelling shaft dated after AD 200. Bracelets are normally among the more common types of late Roman jewellery, as shown by the excavation of late Roman burials throughout the country, but there are no examples of late Roman strip bracelets from the site and only two shale armllets. This can probably be explained by the nature of the late Roman deposits and not in terms of the character of the late occupation of the site. Houses were swept clean and there were no discoveries of rubbish dumps in close association with buildings. Necklaces were worn and apart from the numerous occurrences of

isolated beads, there was the most unusual discovery of 27 charred wooden beads in the Boudican fire debris over Building 23. The use of wood generally in Roman society is likely to be underestimated due to its perishable nature. Many utilitarian household articles were certainly made from wood and wooden jewellery was undoubtedly more common than the archaeological record might suggest.

In summary, the site produced a good range of dress accessories and ornament, but there is a surprisingly small number of feminine items, especially in the earlier periods. Most of the material can be paralleled elsewhere in the city but there are some unusual items, notably the wooden beads and the boat brooch and it is perhaps the peculiar burial conditions that have ensured their preservation, rather than the nature of the occupation that accounts for their presence on the site.

Personal grooming – cosmetic and medical implements

Organic materials were well preserved on the site and there are six wooden combs, all made of box (*buxus sempervirens*). All are double-sided, with either curved, or less usually, straight side arms. Five came from the Period 6 and 7 dumps, the other from a later Period 21. A bone comb with iron rivets, of late Roman form, came from Building 64 at the end of the sequence. Other items used for personal grooming and introduced to Britain at the time of the conquest, included two complete manicure sets, one very well preserved (Fig <A208>), two nail cleaners and two small cosmetic spoons (earpicks). The earliest of these came from a Period 2 context (Road 1), the others throughout the stratigraphic sequence. Mirrors were luxury items and fragments of both rectangular and circular forms were found in contexts from Period 6 onwards, chiefly in the Period 7 dumps, although most are likely to date from the 1st and 2nd centuries. A rare fragment of lead mirror case came from Open Area 45 also <4578>, suggesting the existence of small glass mirrors which have not survived. One iron razor of classic form with an integral handle came from the Open Area 45 dump and is typical of finds from the Walbrook. Palettes, for mixing cosmetic and medicines were found in stone, with an exceptionally fine example in marble, from Building 64, and glass. One naturally coloured vessel base appears to have been grozed carefully for use as a mixing palette, and the base of a remarkable early blown vessel in green glass from the construction levels of Building 3, may have been used in the same way. Two cosmetic mortars, thought to have been used in the same way as palettes, belong to a class of object that is, so far, only found in Britain (Jackson 1985). Both came from dumps and are residual. No mortars were recovered in the earlier Walbrook excavations, although Jackson recognised two end-looped pestles in the Bucklersbury House and London Wall collections (1985, 183, nos 46, 49).

Finally there are seven ligulae, multipurpose cosmetic or medical spoons and spatulas, with one implement of probable surgical use <4752>, all from 1st- and 2nd-century contexts.

The general chronological distribution of this class of object, which overall comprises nearly 5% of the identified assemblage, mirrors the overall site distribution with a peak in Period 7, caused almost entirely by the large deposit in Open Area 45 which contained numerous mirror fragments. A

smaller peak in Period 18 is due to redeposited residual material, largely mirror fragments, and the actual numbers are quite small. There are very few artefacts in the pre-Boudican levels, in contrast to the category 1 items, where the pre-Boudican totals, in absolute numbers, rival those of Period 7. With the exception of the comb and palette from Building 64, all these artefacts were found in dumps or in construction levels and their use cannot be associated with any specific structure.

Textile production and sewing

There are very few items associated with the production of textiles and no indication that this was carried out anywhere on the site itself. Implements in this category comprise just under 5% of the total identified assemblage. Two incomplete wooden rods from the Period 7 dumps appear to be spindles <5139> <5163> and there is one (broken) spindle whorl made from a pot sherd. The remaining 44 artefacts are needles, 24 of copper alloy, 13 of iron and 7 of bone, all but one of the latter in contexts dated to Period 18 and later. Iron needles, which tend to be smaller and finer than the examples in copper alloy were undoubtedly very common but survive only in favourable conditions. Others have been found on the Roman waterfront and in earlier Walbrook collections. The types of needles cover the basic range seen on Romano-British sites, although in copper alloy there are more of Nina Crummy's type 2, with a flat expanded head than the pointed-head form. Many are too damaged for identification of the type.

One form, found also in earlier Walbrook collections, which has a curved knob terminal is distinctive and must have had a specialised use. At Castleford they are described as baling needles (Cool & Philo 1998, 91) (see catalogue entry). In view of the large numbers of writing tablets and styli found in the Walbrook contexts, the possibility that they could have been used for stitching documents is an attractive one, but their design is of no obvious advantage in securing wooden tablets. It is more likely that they were used for textiles, and from their size, coarse ones. Commercial use in baling is perhaps more probable.

The majority of needles of all materials and forms were found in the Period 6 and 7 dumps. Open Area 45 produced 40% of the site total, with 43% from all Period 7 groups and various open areas in Period 6, another 21%. The Period 10 dumps overlying Open Area 45, which are very similar in composition yielded over 10% of the total.

Needles are among the artefacts which Merrifield suggested were thrown into the Walbrook stream as a deliberate act of propitiation (Merrifield 1998, **) and he makes the point that many of them are complete and still serviceable. Eleven of the Poultry needles are complete and virtually undamaged, including the specialised curved example and most are from contexts to the eastern end of the site. Several are damaged, but it is difficult to assess how much of this is post-burial. No. <1678> seems to have been bent deliberately. Needles form, however, only a small component of the overall Walbrook assemblage and like styli and tools in general their deposition can be accounted for in more prosaic ways, as rubbish or losses from a variety of occupations.

Domestic utensils and furniture

Forty nine items fall into this general category, a relatively small number in such a large assemblage, comprising only 5% of finds to which a category can be given. This might suggest that the bulk of the artefacts from the large dumps, especially those of Period 7, are not from the buildings in the immediate area, but to evaluate this it is important to look at the overall assemblage, to include glass, pottery and animal bone. It is of course probable that some of the fittings and mounts classified as category 11 could be from items of furniture and the overall number may therefore be underestimated. One remarkable piece of furniture was found, a substantial part of a shale table top, the form familiar from numerous contemporary illustrations, which appears to have been used in one of the latest structures on the site, Building 64. The remarkable panther mount <2775> may well have been a furniture attachment. A wooden chest from Structure 11, Period 3, might also be classed as furniture as such objects were commonly used for storage in ordinary houses. Other wooden artefacts provide some insight into the use of the material for common domestic utensils. Two substantial troughs made from cleft oak, <2392><4323> may have been used, among other things, for raising dough, the thick heat-retaining sides suitable for this purpose. A wooden bowl was recovered from a Period 3 context <3087> and small cylindrical wooden boxes from the Period 6 and 7 dumps, but the most unusual finds were fragments of brushes with traces of the plant fibre bristles still in place <5201> <5128>. These must have been in common use, but are very rarely found due to their fragility. A wooden scoop or small shovel <5170> is another form that is rarely discovered but must have been in common use. Bone scoops, made from scapulae, as found on several City sites, were also present <2258>. Other utensils included copper alloy, pewter and bone spoons, the latter found in some quantity inside Building 23 and in the overlying destruction material. In a rare case when individual artefacts can with some degree of certainty be ascribed to a specific building, these are thought to have been either part of the stock of a shop, or spoons used to dispense commodities such as dried herbs. An iron flesh-hook <5374> would have been used in food preparation.

There are a few miscellaneous fragments of copper alloy vessels, including a fine handle <1471> but metal vessels are rare in the archaeological record, in part, probably, due to recycling and the ceramic evidence will always be of greater importance. Wooden stoppers were used to seal containers, both ceramic and glass, although a few are likely to be barrel bungs.

An important category in this class is lighting. One of the finest objects from the site is a complete copper-alloy lamp with its hanger <14>. This is of classic form, even to the lunate handle which provided a shield from the flame for the bearer and held the lamp away from the wall when on its hanger. One lamp is made of lead <1683> and there are a few such examples from London. Fragments of ceramic lamps in Lyon ware were found in the Boudican fire debris, but there are only twelve fragments from the entire site, including those found in post-Roman contexts. Other imported lamps in Period 6 and later contexts are from central Gaul, but they are outnumbered by local products, the earliest a Colchester early colour coat from Period 7 (Building 20). The implication must be that lighting in the buildings at Poultry,

or from whichever buildings are the source of the Period 6 and 7 dumps was provided by alternative means, such as candles or tallow dips. A mica-dusted lamp from an early medieval context is a type known to have been made in the general area in the 2nd/3rd century AD.

Leisure and recreation

For such a large site there are remarkably few items directly associated with leisure activities, the 29 items comprising only 2% of the total number of identified Roman finds. The objects which all belong to board games or games of chance consist of one bone die, and counters in glass, bone and ceramic, all standard forms, although some of the bone counters are particularly small <6345>. None is inscribed, nor can any sets or groups be identified, as the largest number from any one group is three.

None of these artefacts are from the pre-Boudican levels, although some of the six counters from Period 6 deposits may be residual. The remainder are scattered at random in dumps dating from the 2nd to the 4th century. Although the best sources of gaming equipment are Roman burials, where as at Mansell Street complete sets have been found, counters and dice have been found in greater numbers on other urban sites -- for example at Toppings Wharf in Southwark. The emphasis of the collections at Number One Poultry appears to be on commercial activity.

There are indirect references to other leisure activities, perhaps those of the more leisured classes, in some of the other artefacts from the site. The intaglio on the iron ring <4687> shows Thalia, the Muse of Comedy and the mount or escutcheon <1524> which might be from a vessel, takes the form of a theatrical mask. No theatre has yet been found in London but the symbolism of the theatre is a persistent theme in domestic finds. Two lamps with theatrical masks on the discus were found at CID90. Whether or not a theatre was located in this part of London is an as yet unanswered question.

Weights and measures

The 29 items in this category comprise just under 3% of the assemblage. In a commercial part of the city one might expect good evidence for the various types of balance used at the time, but there are no examples of the normal form of steelyard, made of copper alloy or iron which is well known in London, (although examples of elaborate steelyard weights have come from the Walbrook, Merrifield 1965, ***).

The most elaborate scales are the remarkable set from a late context, a pit in open Area 77, Period 11, <1154>. They were found in association with other quality Roman metalwork, an elaborate vessel handle and a mount, which could be from a vessel. The large scale pans have compass scribed decoration and the folding arms with iron needle pointer suggested at first that the object was post-Roman in date, but the context appears to be secure and parallels for this form of balance have been found in Roman contexts on the continent. The only other balance discovered is a fragment of more conventional form Open Area 45 <4750>. It now lacks the central suspension loop, but is very similar to an example from Bucklersbury House (Wilmott 1991, 118, 338). <3567> is a very small scale pan, also from a

Period 7 context, which could have belonged to a balance of this size and form. The size suggests that it was used for weighing items of small size, but perhaps of high value, as might be found in a jeweller's workshop for example.

The weights found on the site are of several types, some for use in pans, others suspended as steelyard weights. Small circular weights in copper alloy as <4886> were used in scale pans, and probably the smaller ones in other shapes. Many are now damaged and absolute weights are likely now to be inaccurate, but in general they range between 3 and 300gm, most 25–60gms, the weights with obvious suspension loops the heaviest. At least nine are now of indeterminate type.

The overall number is quite small in terms of the site assemblage and as we have seen weights and measures comprise only 3% of the total assemblage. However this is larger than the percentages cited by Wilmott for finds from all types of Walbrook contexts (1991, 169, fig 116). It appears that more weights (relatively) were identified at Poultry. This is likely to be as a result of more scientific excavation techniques and particularly the use of metal detectors. Dull lead objects were unlikely to catch the eyes of the workmen on the early building sites or emergency excavations and the older finds catalogues show very few lead objects.

Most of the objects in this category (nearly 65%) were found in Period 6 and 7 contexts, the later 1st and early 2nd centuries, a time when industrial and commercial activity in the Walbrook is thought to have flourished.

Written communication

Writing implements form an important part of this assemblage, comprising almost 9% of the identified finds. There are several different types of object, wooden writing tablets, preserved in waterlogged deposits, iron styli, an inkwell and three seal boxes.

The largest group of writing tablets came from Open Area 45, Period 7, but six were found in Period 6 contexts, with four from Building 29 construction levels, perhaps originally from pre-Boudican levels. A notable complete leaf, preserved by charring rather than in water, was found in Boudican fire debris. Several tablets carry writing impressions, where the stylus has marked the wood through the wax.

Fifty iron styli were recovered from the excavations. Over half came from contexts dated to Periods 6 and 7, the late 1st/2nd century and the majority of these come from areas of dumping and land fill in the vicinity of the Walbrook, notably OA45. Three are from pre-Boudican contexts, but of course some of those in Period 6 groups, particularly building construction groups may, like the writing tablets, be residual. There are small numbers from later periods, with the exception of Period 10 (OA75) and Period 11 (OA77), which overlie the earlier OA45 and constitute parts of the same dumps. The number, the largest from any site excavated within the last 30 years, is consistent with the huge numbers of styli found in the Walbrook stream and banks in the 19th and 20th centuries and prompted a more detailed study of the forms represented.

The styli were initially classified according to the typology proposed by Manning (1976, 34; 1985, 85). Type 1 is a simple form, slender, tapering uniformly to a point at one end and flattened to a small eraser, with or without

shoulders, at the other. Type 2 is more developed, with a distinct point separated from the stem by a shoulder. The eraser is similar to that of Type one, but sometimes more carefully made. On styli of Type 3 the point and eraser are distinctly formed, the stem sometimes showing a distinct swelling. Erasers vary in shape but can have concave sides and a convex edge. Type 4 styli are similar to Type 3, but have decoration on the stem, such as mouldings or inlays in other metals. Manning also identifies variants of all types which have a larger blade-like eraser.

The identifiable (complete and largely complete) styli in the Poultry group fall well into this classification. Type 1 constitutes the largest group, with 31 examples, (65%) followed by Type 2 with 6 (13%). There are no certain examples of Type 3, but 5 are decorated, placing them within Type 4 (21%). The remainder are fragmentary or of uncertain form. Many of the examples are very well preserved, in common with much of the ironwork from Walbrook contexts in this part of London, but the degree of corrosion on some styli has made it difficult to differentiate between Types 1 and 2.

There appears, as Manning stated, to be no chronological significance in the use of the different forms, although decorated styli were only found in Period 6 and 7 contexts, from which the majority of the artefacts came. In fact the styli from ONE94 are in general less highly decorated than many of those in the large Museum collections from the Walbrook (eg Merrifield 1965, pl 138).

Certain forms are distinctive, in particular one with a 'tulip' shaped eraser. There are four erasers of this shape in the Poultry collection, one of which has inlaid decoration on the eraser. No. <4670> is undecorated but bears a maker's mark or stamp on the stem, now illegible. A similar stylus in the British Museum collection, (of Type 1), bears the stamp REGNF (Manning 1985, 86, S7; RIB 2428.15) identified as Reginus. Another with an illegible stamp was found in Princes Street (Wheeler 1930, 58, fig 10, acc no. 29.86). Styli with well-formed erasers of this shape are not common and it is possible that they are all from the local workshop of a London maker. The form is however also seen on the continent (V Obrecht pers comm). The Museum of London collections contain 14 styli of this basic form, of which 11 are from the Walbrook area, one stamped BONOSUS (RIB *****). They are found in Types 1, 2 and 4.

The inkwell, made of lead alloy, is a fine example of typically Roman form, with continental parallels (see catalogue) and comes from a pre-Boudican context. Seal boxes, which contained wax impressed with the seal from a signet ring, held cords binding the tablets and were used to ensure the security of documents. Despite the large numbers of writing tablets only three seal boxes were found, none in association with tablets or styli. Two are unusual. one has an appliqué frog on the lid and another an enamelled hare, less common than the usual geometric designs.

This is a far larger collection of writing materials than is found on most London sites, an observation that may simply reflect the favourable preservation conditions for wood and iron. It is interesting, however, that both writing tablets, styli, and the inkwell were found in some of the earliest groups, showing that literacy skills were important from the beginning of Roman settlement in the area. There is persistent and considerable evidence in this part of the Walbrook valley for both styli and writing tablets. It is possible that

styli were manufactured in the area, but that would not explain the numbers of writing tablets, many of which show signs of use. Commercial activity of all sorts, whether manufacturing or trading would necessitate the keeping of records, and it seems most probable that the concentration of writing materials in this area reflects its function.

Transport

There are no securely identified cart fittings from the site, although it is possible that some of the many fittings and mounts in Category 11 could have come from carts or wagons. Similarly harness fittings thought to be of military type are included as cavalry harness with the military fittings. This highlights one of the problems of assigning functional categories, where an object can be assigned to more than one category, neither of which are necessarily of course its ancient function.

One hipposandal, the Roman form of temporary horseshoe was unstratified and a fragment which may be part of the wing of a hipposandal came from Open Area 45 <5151>.

Building Services

The only artefact in this category is a fragment of iron water pipe collar from the construction levels of Building 29 <2599>. Large sections of oak water pipes were found on the site, as on earlier sites in the Walbrook Valley (eg Bank of England, Wheeler 1930, PI XII).

Tools

In view of the previous discoveries in the area and the history of industry in the Walbrook valley, examination of the surviving tools from Poultry was felt to be of particular importance, but the results were at first sight disappointing. The 63 items comprise only about 6% of the identified assemblage. About half are iron tools, most of them knife blades and only a few of these display the classic 'Walbrook' preservation. The best preserved come from Open Area 45, the group that most resembles the earlier Walbrook finds and includes the knife stamped BASILIS. Knives could have a variety of functions. Uses include butchery, food preparation and consumption as well as craft work and several are of the narrow-bladed type that appear to be razors.

The largest number of tools, about a third of the total, came from Period 6 contexts, mostly from dumps in Open Areas, but also from the construction levels of Buildings 22, 29 and 32 and most of these are knives. The range of woodworking tools includes drill bits, chisels and an awl. A modelling tool from a Period 16 context <2083> is a form that rarely survives in recognisable condition, although other examples from the Walbrook are cited by Manning (1985, 31). These were designed for shaping clay, wax or wet plaster and were used by a variety of craftsmen, from sculptor to potter (ibid). Manning notes the high numbers of modelling tools found in London as compared with the rest of the country and concludes that the trades for which they were used were concentrated in London in the 1st and 2nd centuries and

does not see the Walbrook conditions as a factor which would explain the abnormally high numbers as the tool is sufficiently robust to be recognised even in a corroded state.

There are no tools from Poultry which are specifically associated with either leather-working or smithing, unlike earlier Bank of England discoveries. It is quite possible that some of the degraded and unidentifiable iron fragments were tool blades of various kinds, but the relatively small number that have been recognised is not surprising in view both of the ancient practice of recycling iron and in its propensity to decay. This makes the presence of complete tools in earlier Walbrook deposits even more unusual. One of the most rare finds from Poultry is a copper alloy fish hook, but whether or not this was used in the Walbrook stream is uncertain.

Stone hones were used to sharpen iron blades and several found in Roman contexts are included in this category. The most unusual implement, noteworthy for its preservation rather than its rarity in the Roman London, is a wooden spade, complete with the iron sheath which served to protect the wooden blade and acted as a cutting edge. This is one of the most complete from Roman Britain and only lacks the upper part of the handle. It was found in a Period 16 context, appropriately in a roadside ditch. The iron-sheathed spade was introduced to Britain by the Romans and spade-cuts made by such an implement were recorded in a late 1st-century garden bed at Warwick Square, near St Paul's (Marsden 1983, 67).

Fasteners and fittings

As on most urban sites, this is the largest category, comprising nearly 28% of the assemblage. It covers a very wide range of material, from security equipment to studs and mounts that could be used for a variety of purposes. There are in fact, comparatively few locks and keys from ONE94, with only nine iron keys and five copper-alloy lock bolts. Most of the keys are tumbler-lock slide keys but lift keys are also represented. One is a key finger-ring, more commonly found in copper alloy.

The assemblage includes numerous fittings such as rings or ferrules. Some, joiner's dogs and clamps are structural, as are the few iron hinges. Bone hinge fragments are from smaller items, such as chests and boxes, although the same method of hinge construction is seen on cupboards in Pompeii. Most of the studs in this category are probably from furniture. Attempt has been made to separate those which are of military design. Studs with decorative heads would grip a leather surface effectively and it is known that boxes, for example were sometimes covered in leather (Watson 1997).

Another large component of this category are objects described loosely as 'mounts', the majority of the 54 items made of copper alloy. Mounts for which a definite function, as part of military dress or harness for example, have been assigned to other groups. Most of the fragments included here are sheets of copper alloy or iron, pierced with one or more holes that were probably used as bindings or reinforcements for a great variety of articles.

The distribution follows the general chronological pattern of finds distribution with over 50% of the group from Periods 6 and 7. Nearly 30% comes from Open Area 45 in Period 7 and the presence of a large number of miscellaneous fittings emphasises the very mixed character of the OA45

deposits, which contain as much ordinary urban waste as objects characteristic of earlier 'Walbrook' collections.

Agriculture and animal husbandry

The debate on the function of 'ox-goats' has been summarised elsewhere (catalogue) and in view of their size, the traditional interpretation, as goads for prodding animals has been adopted here for the examples from this site. These are the only objects which could be interpreted as possessing any association with animal husbandry, used for driving cattle, but they could equally well have been placed with items associated with transport, given that all transport was animal powered.

Bells could have been used on animals, in the household, or for religious purposes, and the larger examples have been included in this category.

13 Military

The significance of the military items from the site is discussed elsewhere. The 56 military artefacts comprise over 5% of the entire assemblage of identified finds and over half came from Periods 6 and 7, 25% from Open Area 45. All artefacts date from the 1st or 2nd century and the majority are from 1st and 2nd century contexts, equally spread between pre-Boudican groups, Period 6 and Period 7. The largest individual group was, as always, from Open Area 45. Outside this group, most of the objects were from construction or levelling deposits and could not be assigned to specific buildings.

The good preservation conditions permitted the recovery of a small number of iron weapons, spear heads and a spear butt and two catapult bolt heads as <5559>. Eight copper-alloy strap fittings from *lorica segmentata* were found in contexts throughout the sequence (for example <4892>). Fragmentary belt plates and apron mounts came from a variety of contexts, one in an early Period 2 group (<3895>). There are numerous copper-alloy studs, but here there is a problem of interpretation, as some forms could have a number of functions, decorating items of furniture or lock plates for example. Certain forms, which are often tinned and decorated with niello inlay are however commonly discovered on military sites and are thought to belong to military equipment, for example as apron strap mounts. At least 24 of these were found, some in post-Roman contexts (<3883>; <3892>; <5440>). Various mounts and fittings belong to harness and are commonly thought to be of cavalry form. Among these are two strap or junction loops <2435-6>, and tear-drop and bi-lobed pendants of mid to late 1st century type (eg <5299>; <5303>). A particularly fine pendant with a zoomorphic forward-hanging suspension loop of pre-Flavian type came from the make-up levels for Road 1 in Period 8 <3143>.

The general range is very similar to that found on earlier excavations in the Walbrook Valley, a concentration of 1st-century material, with large numbers of studs, as for example at BUC87. The Poultry assemblage contains no military material of the 3rd or 4th centuries, in contrast to

discoveries on recent excavations in Southwark (Wardle in Drummond-Murray and Thompson in prep).

The possible source and significance of the group is discussed elsewhere (aspects).

Religion

There are remarkably few items from the site (only nine in stratified contexts), which have obvious ritual or cult significance, although the question of whether complete artefacts such as brooches, coins and pointed objects were placed in the Walbrook as votive offerings and found their way into the dumps, is considered elsewhere. Certain objects are however known to have religious or cult associations, figurines for example. There are five ceramic figurines from the site, all from the Allier district of central Gaul and typically made in the 2nd century. Four are fragmentary Venus figurines, probably the most common type, while the other is a small fragment of a cockerel, the bird sacred to the god Mercury <1880>. Four of the figurines come from Period 7 contexts, but only one is from Open Area 45. The cockerel is from Open Area 35, while the remaining Venus is residual in Period 12. The finest copper-alloy figurine from the site, a Bacchic male figure carrying buckets filled with grapes came from post-Roman context, but is probably of 2nd-century date at the latest. A copper-alloy wing, <1055> also residual, may be from an eagle. The earliest amulet, made of lead is from a Period 2 context and an antler crown pendant is a form, perhaps of pre-Roman origin found on several sites in London (Greep 1994). A wheel amulet also has pre-Roman ancestry, the spoked wheel appearing as cult symbol long before the period of Roman influence (Green 1989, 117).

A seal box bearing the image of a frog is a utilitarian object, but one which bears apparent reference to the cult of Sabazios.

One object that would certainly have been ritually deposited is a lead curse tablet, from Open Area 66, Period 16. The names, read by Roger Tomlin, indicate that it dates from the middle of the 2nd century, and it is unlikely therefore to have been cast originally into the Walbrook, which would have been silting rapidly by this time.

Three bells of Roman form were found at Number One Poultry, one in a post-Roman context. It is impossible to be certain in what circumstances these were used. Some bells were undoubtedly hung around the necks of animals, other were used as door chimes, but some may have had a place in religious ceremony, although they have not been included in this category.

An unstratified rattle (*sistrum*) was found for which there are parallels from London (Wheeler 19030, 103, pl xlvi). *Sistra* were used in the ceremonies of Isis, while rattles (*crepitacula*) were used as children's toys. Confusingly the same name is sometimes applied to the religious *sistra*.

In summary, this group is typical of the types of artefact with religious association found in London. The objects are scattered both spatially and through time and there are no concentrations that could suggest specific ritual practice or the site of any religious structure. The group does however illustrate the way in which religion or superstition permeated Romano-British life.

Metalworking

The subject of metalworking has been covered in the general discussion of industry in the area. Table 306 summarises the types of copper alloy waste fragments from the site by period and land use.

Table 306 Copper alloy waste

Bone working waste

There is little Roman bone-working waste from the site, 12 accessions in total comprising less than 1.5% of the identified assemblage, and most is scattered throughout the sequence with few obvious concentrations. Seven fragments of sawn red deer antler could be waste from the manufacture of tool handles while antler crowns were used in the manufacture of pendants as <1965>. The long-bones of cattle were used for many purposes in the Roman period. Ox bone waste came from two Period 7 groups and a roughly-cut rectangular shaft <3956> could be a stage in the working of pins or needles for which three are parallels in the assemblage from Fenchurch Street, FCC95 (Keily in prep). The nearest to a concentration of waste material is a group of six ox metatarsals from Road 2 in Period 18, perhaps waste from a workshop. While local bone-working was undoubtedly a feature of Roman urban life, there is insufficient evidence to suggest any organised activity in this area.

Chronological trends

Tables 304 and 305 show not only the differing numbers of identified objects within each chronological period, but also the differing compositions of each group assemblage, which reflect the activity on the site.

Finds catalogues

ONE94_regcat01.doc - catalogue of all illustrated artefacts, except those from the Walbrook dumps

ONE94_regcat02.doc - catalogue of all finds from the 'Walbrook' dumps, including finds that have been identified but not illustrated

Comparative data (Archive)

During the course of the study several comparative assemblages were examined. These came largely from sites in the immediate vicinity of Poultry and the Walbrook, but also from sites from elsewhere in the city with well dated groups. Reference is made to these throughout the discussions and only the principal groups are described below.

CID90 – Cheapside- the Pre-Boudican groups - Archive catalogue

The following is a brief catalogue of the accessioned finds from the groups selected for ceramic quantification and is followed by a general discussion.

P2 Open Area 2

Personal ornament

Brooches

<1198> [936] 6, 301 QP

Copper alloy. L 54mm. Complete. Hod Hill variant, Hull Type 66.

The hinge is formed in the continental tradition by curling the end of the head upwards; hinge bar missing. The bow, which has a single central notched rib, is openwork, with terminal knobs on the apex of each arm. Plain leg with ribs at the top and foot, just above knob; transverse ribs also at top of head. The type, which has a continental origin, was brought to Britain at the time of the Conquest and was in use for about 20 years. AD 40-60

<1233> [930] 6, 307 D

Copper alloy. L 45mm. Complete. One-piece (Nauheim derivative), with single curve to the bow, which has a narrow D-shaped section. Four-turn spring. AD 40-60.

Personal grooming and medical

<1333> [922] 6, 309 QP

Copper alloy mirror; incomplete; l 30 x 21mm; th 1.5mm. Fragment of rectangular mirror, part of the edge remaining.

<1235> [936] 6,301 QP

L 144mm. Copper alloy spatula probe (cyathiscomele), with long oval spoon and mouldings at the junction of spoon and handle. Handle broken below the (missing) olivary probe.

<1192> [930]] 6,307 QP

Wood comb.

Textile production (craft)

<1454> [930] 6, 307 D

Iron needle; only part of the shaft remains, but on analogy with others from similar waterlogged contexts, this is likely to be from a needle.

<1443> [922] 6, 309 ED
Iron needle; broken below the eye. L at least 140mm.

Lighting equipment

ceramic

<948> [1699] 3, 202 D
Lamp; incomplete, three fragments; closed form. Lyon ware, AD 40-70

<1334> [936] 6, 301 QP
Lamp; closed form, probably Loeschcke IV, with an Eros on the discus. Although incomplete, this is probably Eros with scallop-shell and alabastron. The figure type, which may be a libation scene, is well known throughout the empire (Bailey 1988, 11 Q3047) and another example was excavated recently in Southwark (Wardle in Drummond –Murray and Thompson in prep). Lyon ware, AD 40 –70.

<1473> [930] 6, 307 D
Fragment of closed form, wall and base only; discus lost. Lyon ware.

Weights and measures

<1362> [922] 6, 309 ED
Lead weight; diameter **mm; h **mm; weight **gm. Small circular domed weight for use in a scale pan.

Writing implements

iron

<1492> [948] 3, 202 D
Stylus; fragment of eraser; type uncertain.

wood

<1191> [932] 6, 308 QP
Writing tablet

Tools

<1240> [922] 6, 309 QP
Iron knife; complete, l 230mm. The back of the blade curves up from the tang to the upturned point, which is at a higher level. The edge is stepped down from the tang and rises to the pointed tip. The curve of the blade was originally convex, but is now partly concave, through wear. There is a marked shoulder between the back of the knife and the tang on this well-made tool, which has a cutler's mark on the blade. The rectangular stamp is placed at the widest part of the blade, near the back, and is a mark rather than a signature, consisting of a series of upright and diagonal lines, possibly NM (?).
The knife is a large variant of Manning type 23 (1985, 118), an Iron Age form that continued to be produced in the Roman period to the end of the 1st century, the latest dated example found in a Flavian context at Newstead. Other examples have been found in London, but they are not common and Manning suggests that they were unable to maintain their popularity in a Romanised context (ibid).

Fasteners and fittings

iron

<933> [1461] 6, 301 QP

Joiner's dog

<1460> [932] 6, 308 QP

Ring

copper alloy

<1485> [936] 6,301 QP

Binding; L 44.5mm; w 3.5mm. Formed from a strip, folded lengthwise.

<1365> [922] 6, 309 ED

Stud

<1366> [922] 6, 309 ED

Stud

<1476> [936] 6, 301 QP

Diameter 17.5mm. Copper alloy ring with D-section.

<1477> [936] 6, 301 QP

Iron bucket side mount – fragment.

Military fittings and armour

Weapons

<1009> [936] 6,301 QP

L 20mm; w 18mm. Iron mount from a dagger sheath. The loop has a rectangular cross-section and internal scrolls, but is now distorted so that the loop forms a point. The hinged plate, which would have been attached above the scrolls, is lost. The plate and mount was riveted to the sheath itself and provided the means by which the dagger was suspended from the belt.

There are several examples of such mounts in both iron and copper alloy from Walbrook contexts. See Grew and Griffiths 1991.

Armour

<1207> [936] 6, 301 QP

L 47mm. Copper alloy hinged strap fitting from a cuirass, *lorica segmentata*; both elements well preserved. Each of the four rivet holes has a single incised concentric circle around it and one rivet remains. Both rivet and plate are of similar golden colour, but the spindle, which hinges the plates is made from a different alloy.

One end of the fitting, the free end, has a rounded terminal, while the fixed end perhaps torn from the strap, has squared ends.

<1209> [930] 6, 307 D

L 45mm; w 15mm; th 15mm. Copper alloy strap mount, with golden patina. Rectangular frame with a large rectangular slot; lobate extensions at either end, each with a rivet hole; one rivet remaining *in situ* with its circular washer

which is made in a different alloy. Fine embossed decoration on the frame may represent overlapping pairs of leaves. Published in Bishop in prep, 1H59.

Studs

Copper alloy

<1367> [960] 4, 204 ED

Diameter 16mm. Outer flange with central design in niello; eight-branch foliate design, with alternating triangular terminals.

Tools

<1200> [932] 6, 308 QP

Iron pickaxe or *dolabra*. Complete. L 280mm; max w axe blade 101mm; l 135mm; th 12 – 4mm; w pick blade 30mm; handle socket 40x 27mm; th at socket 41mm. Axe blade with opposing tine; central oval socket in which there are the remains of a wooden handle. The tine swells a little at the socket but although corroded there appear to be no lugs. This is a fine, although small, example of the classic military tool, the *dolabra*, used for clearing ground, digging and entrenching. The tool could of course also be used in a civilian context, but, although it is not stamped with any unit identification, as is sometimes the case (Bishop and Coulston 1993, 104), the early date of the context in which it was found, strengthens the possibility that it is military. Bishop (in prep) cites one other unprovenanced example from London (4001), which is rather larger.

The axe blade was usually protected by a metal sheath guard, which was fastened over a leather sheath. The *dolabra* sheath guard consisted of two side pieces, with hooked terminals, hinged to a base. Several of these hooks are known from London (Bishop in prep 1J01/2; Stevenson 1993, 82, no.3, fig 20).

Glass

Pillar moulded bowls

<932> [1606] 6, 309 QP

NG. Body fragment with one narrow rib; ground and polished on interior with trace of wheel-cut lines. The cast vessel is one of the most common forms of 1st-century tableware, with a strong pre-Boudican presence on such early sites as Colchester (Cool and Price 1995, 17). AD 40-100

Drinking vessels

<1474> [930] 6, 307 QP

Yellowish dirty green. Body sherd, form uncertain; possibly from a jug, bowl or cup, tableware as opposed to storage. The colour is very similar to <1136>, but while the possibility that it is from the same vessel cannot be excluded, this cannot be proved.

<1471> [936] 6, 301 QP

NGB. Fragment from the base of a phial, Isings form 8.

The tubular unguent bottle is a very common form, frequently found on mid 1st-century sites in Britain. The standard early form had a slightly out-turned rim with sheared edges, replaced during the Flavian period by bottles with

rolled rims (Cool and Price 1995, 159-60; Price and Cottam 1998, 169). Only the base of this and one other pre-Boudican example, thicker and more robust than the rim, survives from CID90.

AD 40-70

<1475> [930] 6,308 QP

NB. Fragment from the base of a phial, Isings form 8, as above.

<1398> [922] 6,309 QP

NB. Fragment of bottle, Isings form 50/51. The body sherd is an unusual shape and appears to have a moulding defect.

Glass from other pre-Boudican groups

<1453> [929] P2 B1 7, 303

NG. Pillar moulded bowl; body fragment with part of one rib. Isings form 3, AD 40-100

<1136> [892] P3 OA4 11, 410

Yellowish dirty green. Base of a convex thin-walled jug with base ring and slightly pushed-in centre. Good quality glass, consistent with a pre-Boudican date. Isings form 52, mid 1st century.

<1397> [877] P3 OA4 11,422

Colourless. Fragment of thick-walled convex base from beaker or bowl.

Selected finds from other pre-Boudican groups

<1141> [2781] P2 R1 2, 104

L 84mm. Fragment of a four-ribbed bone sword handle.

L 53.5mm. Fragment of a four-ribbed bone sword handle.

The two fragments, which are from different weapons come from a common form of sword handle, which is known in both bone, ivory and wood and is found throughout the Empire, but particularly in the northern provinces, during the early Roman period (Bishop and Coulston 1993, 70, fig 37, a-c). There are now eleven fragments from London (Bishop in prep) and the examples from CID90 are those from the earliest contexts. An example from Aldgate is from a Neronian – early Flavian context (Chapman and Johnson, 1973, fig 22,12).

Three of the other examples cited in Bishop in prep are from the Walbrook area, 1B06, from 'Poultry', 1B07 from 'Walbrook' and 1B08 from Bucklersbury House.

<773> [3641] P2 OA7 22,503

Iron rake tine. L 14.5mm. Stout, slightly curved tapering stem with stepped tang, bent where it was inserted into the clod. This is a classic example of a rake tine, a series of which were set into a wooden beam or clod, to make the standard hay rake (Manning 1985, 59). A Flavian example preserved at Newstead still retains its seven prongs (Curle 1911, 283, pl LXI, 7). The type

is well known in the northern provinces and is likely to have been introduced to Britain by the Romans with the scythe. Rees (1979, 738) cites numerous examples in the Museum of London, but few have excavated from stratified contexts in recent years. The CID rake prong must be one of the earliest found in Roman Britain, although others have been found in earlier Walbrook excavations.

<760> [3641] P2 OA7 22,503
 Iron stylus. L **mm. Manning (1985) Type 1, with plain point; slight shoulder between stem and simple eraser.

<1698>[928] P2 OA3 8,305
 Ceramic lamp. Fragment of closed lamp; Lyon ware.

Table 1
 Artefacts from Group 6, tabulated by functional category

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6	2	3	2	4		1	2			1	6		5				4

The most noticeable feature of this group is the high number of military artefacts, comprising one sixth of the total number of identified objects and almost equalling the number of fixtures and fittings which is, as always, the largest category. Although it could equally well be used in a civilian context, the *dolabra* is so frequently associated with military activity that it has been included in the military total. The remainder of the assemblage is less surprising, although the preservation of metals and organics is outstanding, but it is of interest that both brooches, both in pristine condition, are types which have often been found on military sites and may have been introduced into Britain with the Roman army. The cosmetic implements and articles used for personal grooming are typically Roman artefacts, and could have been used by either sex. There are few domestic items, but the four lamp fragments, all imported from South Gaul (Lyon), and closely dated to the period of conquest, are also good representatives of a Roman way of life, with implications for a lifestyle that extended the hours of daylight and contained the wealth to afford the imported fuel oil. Writing tablets, styli and weights could all be indicative of commercial or administrative activity, but all occur in single numbers, while the various miscellaneous fittings are found on all urban sites. The well-preserved iron knife is of interest. This is basically an Iron Age form which persisted into the Roman period but which is not found after the beginning of the 2nd century and our example is securely dated to the mid 1st. In the absence of known parallels for the maker's mark nothing can be said about its origins, apart from pointing out that the type is also found on other Roman-British and also continental sites, for example Zugmantel in Germany (Manning 1985, 118). It too could have been imported, although this cannot be proved.

The material from the Group 6 dumps cannot unfortunately be ascribed to a specific source, like much of dumped material in this part of London. The importance of the military finds lies in their early date, a time when London

may not have been officially garrisoned. The objects were discarded before the Boudican revolt, not as its result and may be less likely to be from neighbouring properties than at ONE94 – which could account for differences in the assemblage. The fragments of armour and weapons are all damaged, or broken from larger objects, as for example the dagger scabbard mount, the strap hinge and the studs. The strap mount appears to have been prized apart, perhaps ripped from its strap. These could have been discarded as scrap and might normally have been collected for recycling. The *dolabra* is however complete, and it is unusual for large (and probably valuable) tools to enter the archaeological record at such an early period in normal circumstances. Quite apart from the intrinsic value of such an object, it was normal practice to recycle iron. It is of course possible that there might have been a lack of recycling facilities in London at the time of the earliest settlement, before local industries were established. There may be a parallel here in the disposal of glass, which was normally recycled, but where deposition of large dumps of complete vessels, as at Leadenhall Court (Shepherd 1996), might suggest that there were special circumstances which dictated abnormal methods of disposal -- in this case clearance before the construction of the basilica.

Table 2

Artefacts from all pre-Boudican groups at CID90, grouped by functional category (including Boudican fire debris from P5)

CID																	
P2	3	3	4	8		1	3			2	18	1	7			5	55
P3	1	1	1	2		1				2	2						10
P5	4			18		1				1	3			1			28
	8	4	5	28	0	3	3	0	0	5	23	1	7	1	0	0	93

When the finds from Period 2 are looked at as a whole, those from the pits and dumps in group 6 are not so distinctive, with the balance between fasteners and fittings and military artefacts completely changed, although the overall number of military finds is still high. The additional artefacts from the remaining groups comprise two bone sword grips, both from a pit under the first surface of Road 1.

Table – histogram - percentages of finds by category from CIDp2 and gp 6
MISSING

Bucklersbury - BUC87

The pre-Boudican assemblage at BUC87 is small, but has some features in common with the Poultry groups. There are no military objects, but in the very small area there are two styli, both from Building 1, among five from the total site assemblage. Writing tablets were also found in the later groups, one in the construction levels of Building 2 (Period 5). There is a little glassware from the pre-Boudican buildings, including a pillar moulded bowl and a flask in

naturally coloured glass. A distinctive amber jug with white flashed decoration from the Boudican destruction material in Open Area 4, Period 5, may have been in use in the earlier period. This is a good quality vessel and reinforces the pattern of quality imported tableware seen also at ONE94.

The associated open area (OA2) produced several quern fragments, again, as seen at Poultry and a feature of all the sites in this area.

As is the case with many of the Walbrook sites, iron was well preserved and the original assessment (Moore 198?) discusses a group of tools and fittings. The presence of five styli on the site has already been noted and an awl from a sill in the construction levels of Building 2 may either be pre-Boudican or associated with the post-Boudican reconstruction. Another was found in Building 4 (Period 6). The other iron artefacts recovered were structural fittings.

Fenchurch Street - FEN83

Glass: Groves (1984, 11) notes the extremely low proportion of glass to pottery from both FEN83 and GPO, a situation which is paralleled at ONE94 (certainly by sherd count). The general pattern of tablewares, pillar moulded bowls, jugs and flasks as opposed to containers for storage is similar to the Poultry assemblage, and is a general characteristic of such early groups, before the start of mass importation of basic commodities in glass vessels in the Flavian period. Like Poultry and BUC there are one or two vessels of high quality from FEN83. An unusual vessel in light blue with opaque marbled white blobs is thought to be part of an askos (Isings form 59), and a cast millefiori bowl is also rare and expensive to produce.

The lamps from FEN83 are all closed forms. Three are volute lamps, either Loeschcke Type I (angled) or Type IV (rounded), four in Lyon ware, two 'South Gaulish'. The volute forms appeared in the late 1st century BC and are found in London as late as AD100, but the Lyon fabric is characteristic of groups of the mid 1st century AD. One lamp is a L. V or VIII, forms which are thought to have been introduced in the mid 1st century AD, and which is distinguished from the early volutes by its broad slanting shoulder – the nozzle which would enable distinction between the two types has not survived. There are no *firmalampen* from FEN83, which is significant in dating the group. It had developed in Italy by the AD70s, but is not common in London until the end of the century.

The remaining artefacts cannot be dated so closely, but include one brooch of the mid 1st century and two military items, a fragment of *lorica segmentata* and an iron spear. Other household items and fittings include keys and furniture stud, and a weaving tablet suggests the presence of craftworkers (?male or female). There are also three glass gaming counters, a category of object which is, surprisingly completely absent at Poultry.

The Fenchurch Street assemblage is thought, largely on the presence of the vessel glass, the lamps and the ceramic groups in general (Chadburn and Tyers 1984; ?B Davies later), to be of relatively high status, particularly when contrasted with GPO75, where there was a noticeable lack of vessel glass from sealed pre-Boudican contexts.