

## CATALOGUE OF FINDS FROM THE 'WALBROOK' DUMPS

### Personal ornament

Brooches

iron

W\*\*\* <4503> [18087] P7 OA45 463, 120212

Complete; l 46.5mm. One piece, Nauheim derivative with spring of four turns; narrow elliptical-sectioned bow, tapering to the foot; plain catchplate.

W\*\*\* <4465> [18089] P7 OA45 463, 120212

Complete; l 43.5mm. Hinged pin, concealed in a solid tube; details unclear; plain tapering bow.

copper alloy

W\*\*\* <4441> [18117] P7 OA45 463, 120211

Complete; L 45mm. One piece Nauheim derivative with a slight reverse curve to the round-section wire bow (Hull type 10). Complete, but bent - spring distorted.

W\*\*\* <5482> [18094] P7 OA45 463, 120212

Almost complete; L 54mm. One piece Nauheim derivative; out-turned foot; plain catchplate; half of spring and pin missing.

W\*\*\* <4428> [18081] P10 OA75 482, 120326

Incomplete; L 50mm. ?Colchester. Part of bow with single rib at top and pierced catchplate; slanting grooved decoration at the base of the rib.

W\*\*\* <28> [1112] P11 OA77 846, 120414

Spring and part of head - possibly Colchester

W\*\*\* <4181> [18087] P7 OA45 463, 120212

Complete; l 49mm. Head stud brooch

Short rectangular wings with semi-cylindrical hinge cover, one end plugged, one open. Two deep grooves on the front of each wing give the effect of mouldings; head surmounted by a cast circular chain loop. The bow is rectangular in section, flat on the underside, and tapers slightly to the out-turned foot knob. Cast head stud on the upper bow; blue enamel in the centre, surrounded by an outer ring of red. Front of bow has a rectangular enamelled panel with diamond shapes in the centre, filled with blue and triangular cells containing red enamel along the edges. Three horizontal ridges across the lower bow separate it from the semi-circular foot knob; solid catch plate. Bow section 6 x 5 mm; pin 1.5mm.

W\*\*\* <4180> [18087] P7 OA45 463, 120212

Complete; l of brooch 45mm; l of chain (incomplete) 77mm. Headstud brooch with chain.

Short rectangular wings with semi-cylindrical hinge cover, one end closed as above; three vertical grooves on the front of the wings; circular chain loop on top of head which retains a section of square-sectioned loop-in-loop chain.

This is fastened to the head loop with a short hook, the junction between hook and chaine concealed by a ribbed ferrul made from a strip of copper alloy, the edges abutting. The bow has a cast headstud with a central metal circle surrounded by a ring of enamel now appearing black (?red originally). The front of the bow has a groove parallel to each side and a series of metal diamonds running along the centre; the space between the diamonds and the grooves is enamelled forming a series of triangles. The enamelling again appears black (?red). Two ridges and a deep groove separate the lower bow from an oval-sectioned foot; plain catchplate. Bow section 7 x 3mm; pin 2mm.

Section of chain with fastening hook and ferrule; L 43mm.

The two headstud brooches illustrate the superb preservation of much of the metalwork from Poultry - it is quite rare for the chain which connected a pair of brooches to survive. They are typical of the robust and rather gaudy brooches worn by both sexes in the 2nd century AD. The two brooches were found in the same deposit and in the same area, although not in very close proximity and are not identical. However, in view of their context and considering also that they are the only headstud brooches from this site, also that both ends of a connecting chain were found, it seems likely that they formed a pair. The style, if not the detail, is similar, but it is interesting that if intended as a pair, two brooches from the same mould were not chosen. Perhaps, as with the mixing of beads of different styles, materials and colour in a single necklace, this was not thought to matter, and only the overall effect was significant.

W\*\*\* <4182> [18087] P7 OA45 463, 120212  
Complete; l 44mm. T-shaped, (?type). Spring of eight turns concealed by T-shaped head, on which there are two small bosses, which have been applied separately from the main casting; flat strip bow with central groove and two rows of punched dot decoration on its upper part; below the decoration is another boss, also a separate component which has been riveted to the bow; lower part of the bow is plain and terminates in an elegant curled foot. Complete, very good condition (bright yellow metal) and very well made.

W\*\*\* <4660> [18089] P7 OA45 463, 120212  
Complete, but pin missing; dia 35mm; dia of terminal knob 8mm.  
Penannular brooch with knob terminals, (Type A3), common throughout the Roman period, but on this site probably 1st century.

#### Copper-alloy chains

W\*\*\*<7> [1108] P10 OA75 482, 120326  
Indeterminate; L 220mm; w 2.5mm. Loop in loop chain, giving a square section. Possibly a brooch chain, but in view of its length likely to be part of a necklace.

W\*\*\* <4505> [18087] P7 OA45 463, 120212  
Fine loop in loop chain giving a square section; two fragments each c 5mm; w 2mm; probably a brooch chain.

W\*\*\* <4345> [18101] P7 OA45 463, 120212

Indeterminate; L 76mm; w 2.5mm. Section of loop in loop chain, with a square section, similar to that joining the head stud brooches above.

## Finger rings

iron

Ring with intaglio *by M Henig*

W\*\*\* <4687> [18089] P7 OA45 463, 120212

Onyx intaglio in iron ring, shape of gem F4. Dia of ring 17.5 x 13.5 mm int; 20.5mm ext; gem upper face 7mm x 5mm.

The iron ring is of a form typical of the first century ( Henig 1974/1978, fig 1, type III) and paralleled by earlier finds from the Walbrook, (eg Henig 1974/1978 no. 381 from the Bucklersbury House site, containing a blue onyx [nicolo]).

It is set with a small, neatly cut intaglio in the classicising tradition of the first century though showing signs of stylisation which become apparent in the Flavian period and has been called the 'small grooves style' (Henig 1988, 147); this gem cannot be later than the reign of Vespasian. The device is the muse of comedy, Thalia, enthroned in profile to the left on the actual gem (reversed in the impression). She seems to have an elaborate coiffure, though detail at this scale is highly schematic, and wears a chiton and mantle, She supports the weight of her body with her left hand and holds out a mask in her right hand. There is a ground line.

The subject, which evokes literary culture, is not very common on gems and this is an attractive addition to the corpus. The finest portrayal of Thalia, showing her semi-draped and seated on a rock, holding a mask with prominent *onkos*, is a cornelian of Augustan date in Vienna (Zwierlein-Diehl 1973, 92, Taf 39, no 224; Lancha 1994, 1018 and pl 731, no 34). A red jasper from Xanten, assigned to the early second century AD likewise shows Thalia only semi draped, though she sits on a similar throne to that of the muse from Poultry (Platz-Horster 1994, 109, Taf 19, no 103).

Iconographically the best parallels, all depicting Thalia fully clothed and enthroned, include a first-century AD plasma from Umm Qeis, *Gadara*, Whiting 1987, 28, no 273) and a cornelian and a plasma from Grand, Vosges and Mandeure, Doubs in France (Guiraud 1988,92 and pl iv, nos 56 and 57) assigned to the second century AD and the first century AD respectively. The only example of the type hitherto published from Britain was found in the Roodee, Chester in 1882 and has been dated to the first or second century AD (Henig1976; idem 1978, no App 147). None of these gems is so precisely cut or on such a minute scale as is the muse on the intaglio from Poultry.

Amongst other finds from Poultry is a copper alloy mount in the form of a mask from comedy ( ). While in itself decorative and, like the Poultry ring, portable, it does raise the question of whether London had a theatre by Flavian times and of its siting, perhaps near the Walbrook.

W\*\*\* <4571> [18087] P7 OA45 463, 120212  
W 26 x 21mm. Oval hoop with oval setting for a stone or intaglio which is missing.

W\*\*\* <5587> [18089] P7 OA45 463, 120212  
Dia 23 x 19mm (ext). Oval hoop, with oval setting for stone or intaglio, which is lost.

W\*\*\* <4888> [18088] P10 OA75 482, 120326  
Complete; dia (ext) 18.5mm; (int) 15.5mm; w of bezel 14.5mm. Finger ring. Circular iron hoop with applied bezel in brass and iron. The central motif, made of iron, appears to be a very stylised satyr mask, perhaps Silenus. This is flanked by two scarabs in a copper alloy identified as brass (XRF), which would have contrasted with the silver colour of the iron when new.

copper alloy

W\*\*\* <5566> [18089] P7 OA45 463, 120212  
Complete; int d \*\*mm. Decorative bow-shaped bezel.

Hairpins

copper alloy

W\*\*\* <5484> [18087] P7 OA45 463, 120212  
Cool Group 6, with 'button' head over two cordons. L (bent) c 101mm. 1st/2nd century.

iron

W\*\*\* <4468> [18089] P7 OA45 463, 120212  
Complete; l 118mm. Hairpin. Iron stem with waisted cylindrical head, made from lead/tin alloy, with incised decoration, with an inset glass bead at the top.

W\*\*\* <1411> [18027] P11 OA77 854, 18027  
L \*\*mm .....

Buckles

iron

W\*\*\* <5512> [18149] P10 OA75 482, 120327  
l 65mm. Buckle pin, with rolled terminal which pivoted on the axis bar.

Personal and medical implements

Wooden combs

W\*\*\* <5167> [18094] P7 OA45 463, 120212  
Incomplete, one end missing; surviving w 68.5mm; h 52mm; th 11mm; l of fine teeth 22mm; l of coarse teeth 22mm. Double-sided one piece comb with curved ends; narrow median ridge. Fine teeth set at 11 to 10mm; coarse teeth at 5 to 10mm. *Buxus sempervirens*

W\*\*\* <5127> [18172] P7 OA45 463, 120211

Incomplete; h 41mm; th 7.5mm; l of fine teeth 22mm.

Fragment of double-sided comb with straight side arm. Few teeth remain but the fine teeth are set at approximately 10 to 10mm; coarse teeth at 3 to 5mm, which is coarser than any other examples from the site. *Buxus sempervirens*

Copper-alloy cosmetic set

W\*\*\* <4654> [18081] P10 OA75 482, 120326

L nailcleaner 54.5mm; l tweezer 55mm. Part of cosmetic set, comprising plain tweezers (one arm detached) and a narrow leaf-shaped nail cleaner, set on a small ring. Corroded.

Copper –alloy nail cleaner

W\*\*\* <5198> [18089] P7 OA45 463, 120212

Complete; l 47.5mm. Leaf shaped. Suspension loop in same plane as body, decorative grooves below loop.

W\*\*\* <4581> [18161] P11 OA76 839, 120507

L 50mm. Leaf-shaped; suspension loop twisted at 90 degrees to the blade.

Copper-alloy mirrors

W\*\*\* <4598> [18089] P7 OA45 463, 120212

Edge fragment from rectangular mirror, undecorated, the reflecting surface clearly distinguishable from the back. L 38 x 34mm; th 1,2mm, th at edge 2mm

Mirror fragments – not illustrated

W\*\*\* <4336> [18087] P7 OA45 463, 120212

Small irregular fragment; concentric turning marks visible on one side; from circular mirror. 22.5 x 12 x 1mm.

W\*\*\* <69> [1112] P11 OA77 846, 120414

Small edge fragment from rectangular mirror, small section of bevelled edge on one side; all other edges broken. Th 1mm.

W\*\*\* <4758> [18089] P7 OA45 463, 120212 Th 1.5mm

W\*\*\* <5199> [18089] P7 OA45 463, 120212 Th 1.4mm

W\*\*\* <5024> [18203] P7 OA45 463, 120239 Th 1.2mm

Lead mirror frame

<4578> [18089] P7 OA45 463, 120212

Incomplete; surviving L 39.5mm. Mirror frame. Part of a decorative plate; straight, moulded edged, with repoussé decoration within it, bounded by a single raised circle. The frame would originally have been square, with a hole cut into the centre for a circular mirror, made of glass. Glass mirrors, minus their frames, have occasionally been found in London, preserved in burials as at Mansell Street (Wardle in Barber & Bowsler 2000, 155, B197.6). Lead mirror cases are even more rare. Lloyd-Morgan cites only three examples

from Britain in her paper of twenty years ago, from Ospringe, Verulamium and Chester (Lloyd-Morgan 1977, 237) but they occur in greater numbers on the Continent for example at Aquincum (Zsidi 1995, 71, no. 468, fig 104) or at Nijmegen (Lloyd-Morgan *ibid*). Glass mirrors and therefore mirror cases were produced in the Balkans and at Cologne between the 2nd and 4th centuries AD.

#### Ligulae and probes

W\*\*\* <6> [1108] P10 OA75 836, 120325

Incomplete; l of spoon 31mm; total surviving l c 120mm. Double-ended instrument (*cyathiscomele*) with a long oval spoon. The shaft above has a series of mouldings which would have formed a handle grip and there was probably a probe at the other end, now missing - the handle narrows just above the break.

W\*\*\* <4426> [18081] P10 OA75 482, 120326

Incomplete; L 75mm; w handle 2.5mm. Plain handle, which swells in the middle to form a grip, where it is pentagonal in section and circular spoon, set at a slight angle. The faceted handle is typical of medical implements.

W\*\*\* <4554> [18139] P10 OA75 482, 120328

Incomplete; surviving L c 100mm. Plain faceted handle (encrusted), with small oval spoon - handle now bent and incomplete but widens slightly above the spoon, where the faceting is more distinct. The handle, which is long, becomes circular in section at the opposite end (away from the spoon) and it is possible that the implement was originally double ended.

W\*\*\* <4270> [18039] P11 OA77 851, 120428

Almost complete; L 116.5mm. Plain handle, swelling from terminal to its mid point; trace of spoon, broken.

#### Surgical implements

copper alloy

W\*\*\* <4752> [18089] P7 OA45 463, 120212

Incomplete; surviving l c 85mm. Square-sectioned handle tapering at one end where it terminates in an olivary probe. At the other end the handle also tapers and is bent above a series of mouldings and the instrument is broken just below this point. Possible double-ended originally and could have terminated in a spoon, spatula or less probably a needle. It seems probable, on analogy with other implements (Jackson 1990) that the bend in the shaft is accidental. The octagonal-sectioned handle is characteristic of surgical implements.

#### Razors

Narrow-bladed iron knives, which may have been used as razors and which would therefore belong to this category have been listed below under 'Tools', Nos W\*\*\*-W\*\*\*.

## Textile production and sewing

Wood

spindles - to add

Needles

iron

W\*\*\* <4622> [18089] P7 OA45 463, 120212  
Complete; l 69mm. Oval eye and pointed head.

W\*\*\* <4564> [18087] P7 OA45 463, 120212  
Incomplete. Pointed head and oval eye. l 56mm

W\*\*\* <4791> [18089] P7 OA45 463, 120212  
Corroded, oval eye; l 75.5mm

W\*\*\* <5537> [18089] P7 OA45 463, 120212  
Incomplete; l 33mm. Rounded head and rectangular eye, broken.

W\*\*\* <5027> [18203] P7 OA45 463, 120239  
Corroded. ?Long oval eye. l 101mm

W\*\*\* <5043> [18113] P10 OA75 836, 120321  
Complete. Pointed head, with oval eye. L 97mm

W\*\*\* <5594> [18087] P7 OA45 463, 120212  
L 108mm. Square head and rectangular eye, Type 2. Point missing

W\*\*\* <5392> [18089] P7 OA45 463, 120212  
Complete. ?Squared head and rectangular eye; corroded l 110mm

W\*\*\* <4789> [18124] P10 OA75 482, 120328  
Incomplete; l 53mm. Part of shaft and of long rectangular eye.

W\*\*\* <4565> [18087] P7 OA45 463, 120212  
Incomplete. Shaft with trace of eye. l 35.5mm

Fragments –

W\*\*\* <5197> [18089] P7 OA45 463, 120212

W\*\*\* <4186> [18087] P7 OA45 463, 120212

W\*\*\* <5595> [18087] P7 OA45 463, 120212

copper alloy

W\*\*\* <4694> [18089] P7 OA45 463, 120212  
Almost complete; l 150mm; w of head 4.5mm; point broken. Type 2

W\*\*\* <4553> [18083] P10 OA75 836, 120324  
Complete; L 145mm; w head 4.5mm. Well made with neat rectangular eye.

W\*\*\* <4735> [18089] P7 OA45 463, 120212  
L c 85mm. Head damaged, but is flattened with rectangular eye. Bent.

Fragments –

W\*\*\* <4185> [18087] P7 OA45 463, 120212  
Broken below the eye; surviving L 121mm

W\*\*\* <4561> [18087] P7 OA45 463, 120212  
Broken at base of eye; surviving L 140.5mm

W\*\*\* <4756> [18089] P7 OA45 463, 120212  
L 105mm; Broken at the base of the eye.

W\*\*\* <4427> [18181] P10 OA75 482, 120326  
Incomplete; shaft only; c 107mm

W\*\*\* <552> [1107] P10 OA75 482, 120328  
Broken at base of eye, ? Type 1. Surviving L c 103mm

W\*\*\* <1353> [18027] P11 OA77 854, 120513  
Incomplete; surviving L 103.5mm. Shaft only, broken just below the eye;  
probably Type 1 with pointed head.

Baling needle?

W\*\*\* <4274> [18089] P7 OA45 463, 120212  
Incomplete; L c 107mm; width at forked end 2mm

Needle, a less robust example of No \*\*\* (main catalogue) <5353>. Slender handle, corroded, with mouldings forming a grip c 30mm below a diamond-shaped terminal, also curved into a U-shaped loop. The other end terminated in an eye, now broken.

[Implements of this type are already known from the Walbrook (Wilmott 1991, 118, no.316) and on other sites in Britain, eg Cirencester (museum display) and Newstead (Curle 1911, pl 73). Clearly the curved knobbed terminal would make it impossible for the needle to pass through the material being sewn, whatever texture it was, and the implement must have had some specialised use. A surgical function has been considered but is thought unlikely (Ralph Jackson pers comm). Current research suggests that they were baling needles and this convenient term is used of the examples from Castleford by Hilary Cool (Cool & Philo 1998, 91). In use they would be pushed through the layers of material and then withdrawn from the same side. Cool cites work by Biddle and Elmhirst (1990, 807) on similar tools with perforated tips and elaborated heads from medieval contexts in Winchester where it is suggested that they may have been used for a couching technique or for stitching documents. At Castleford the baling needles are found in contexts associated with the occupation of the fort and it is possible that they may have a basically military association.

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.]

bone

W\*\*\* <5530> [18089] P7 OA45 463, 120212

Complete; l 130mm; l of eye 6.5mm. Rectangular eye ?formed by cutting two parallel grooves, as part of the spur between each groove remains at top and bottom of the eye. Flat spatulate head (pared, rectangular head), the edges worn away at the top. There are distinct scratches (wear marks) above the eye, perhaps caused by pulling the implement through coarse material. The point is asymmetrical and may have been reworked. Type 3. 2 (Greep) Type 2, (Crummy ).

### Domestic utensils and furniture

Ceramic lamps

W\*\*\*<4348> [18087] P7 OA45 463, 120212

Fragment of volute lamp; part of the nozzle, its upper part missing; w 30mm. Heavily sooted. Colour Coat.

Copper-alloy mount

W\*\*\* <1524> [18008] P11 OA77 848, 120417

L 33m. Mount in the shape of a theatrical mask; cast male head with stylised curls low on forehead and in front of ears, bushy eyebrows and widely gaping mouth, creating an opening; typical of the mask of comedy. The back of the casting is hollowed. The mount, which is classical in style and of continental, possibly Italian manufacture, is likely to be an appliqué for a vessel. It would have been soldered to the body of the vessel although there is now no trace of solder or any other attachment.

Vessels

copper alloy

W\*\*\* <1471> [18008] P11 OA77 848, 120417

Incomplete; w 75mm; h 54.5m. Handle from a bowl, which would have been soldered to the vessel by the curved end-plates. The central section of the handle has three heavy mouldings on each side of which there is stylised foliate engraving. One terminal survives; this is in the form of a stylised bird head and is also engraved with an eye and lines representing feathers. The bird somewhat resembles a chicken, but is more likely to be an aquatic fowl. Crummy, (1983, 72, no. 2046) notes that similar handles have been found on 1st century military sites (Webster 1958, fig 3,11); examples from Belgium have terminals decorated with hippocamps (Faider-Feytmans 1979, pl 132, nos 350-351).

W\*\*\* <5518> [18172] P7 OA45 120211

Incomplete; dia 38.5mm. Cylindrical ?box/vessel base or lid, made from thin copper alloy sheeting. Very corroded and height not recoverable.

W\*\*\* <4481> [18087] P7 OA45 463, 120212  
L 54mm; w 52mm. Tri-lobed flagon lid, part of hinge surviving; (eg Colchester, Crummy 1983, 72, no. 2049).

iron

W\*\*\* <4472> [18089] P7 OA45 463, 120212  
Incomplete; l 80mm; w 7.5mm. ?Bucket or vessel handle. Section of curved rod.

Wood dish

W\*\*\* <4323> [18081] P10 OA75 482, 120326  
Check HSL

This is very similar to the dish or trough from Open Area 40, which is thought to be suitable for the kneading of bread.

boxes

W\*\*\* <4160> [18172] P7 OA45 463, 120211  
Incomplete; d (ext) 59.5; (int) 51.5mm; h 66mm; th of base 15mm.  
Turned circular box. The base is complete, with turning marks on the underside and a conical lathe mark on the interior, d 10mm. The sides of the box are severely damaged, but the full height is preserved at one point, with a recessed area at the rim, h 4mm, which forms a seating for a lid. At the bottom of the box is a very small external foot ring, a slightly raised area 2.5mm in height. Boxwood, *buxus sempervirens*.

Spoon

copper alloy

W\*\*\* <5018> [18023] P7 OA45 463, 120239  
L 110mm. Round bowl, tinned. Corroded otherwise complete, but bowl is bent.

Brushes

wood

W\*\*\*<5201> [18117] P7 OA45 463,120211  
Three fragments of box wood, the largest 100 x 200mm, set with a series of circular holes, each 5mm in diameter, still containing bristles. Analysis by J Hather (Institute of Archaeology) has shown these to be plant fibre, possibly a moss.

Brushes are very rare in the archaeological record. A robust brush with an oak frame and bristle holes of a similar size has survived at Vindolanda (Blake, 1999, 52, no. 3981) appears to be a form of scrubbing brush, with about 15-20 bristles in each hole (material not stated). The form of the Poultry brush is not recoverable, but it may well have been rectangular.

W\*\*\*<5128> [18172] P7 OA45 463, 120211

Fragments of brush, consisting of parallel layers of boxwood, pierced with regular circular holes, as above. No bristles remain.

## Furniture fittings

iron

W\*\*\* <39> [1108] P10 OA75 482, 120326

Complete; but distorted. Dia of hoop 24mm. Ring key, for use with a box. Plain circular sectioned hoop, with remains of rectangular or square bit, pierced with central hole.

W\*\*\* <4573> [18089] P7 OA45 463, 120212

Dia 45mm. Disc mount, secured by five studs, one of which retains a washer. The upper surface is slightly domed with a narrow outer flange, a damaged central hole and a decorative circle of raised dots and a single groove defining an inner zone. Possibly from a large chest or furniture.

## Stopper

Wooden stoppers, made of silver fir or unidentified softwood are thought to have been used for amphorae (cf Billingsgate Buildings, Chapman 1980, 131; New Fresh Wharf, Weeks & Rhodes 1986, 230). They are squat, circular and of greater diameter than those obviously intended as barrel bungs, but as they are in general no greater in diameter than c 60 mm they were clearly intended for use with narrow necked amphorae, such as the Gaulish examples which contained wine. It should be remembered that the interior of the amphora was coated with pitch or resin - this would further narrow the aperture and improve the seal (R Symonds pers comm).

W\*\*\* <5138> [18094] P7 OA45 463, 120212

Incomplete; d 59.5mm; th 10mm. Stopper or lid, three quarters remaining. This example is considerably thinner than the others and may have been used for stopping a jar rather than an amphora. *Abies alba*.

## Recreation and leisure

Ceramic ?counter

<666> [1102] P11 OA77 846, 120414

Incomplete; diam approx 47mm. BB1. The object has been cut from the base and is very flat, but the edges are deliberately smoothed. Possibly a counter, but could also be an incomplete spindle-whorl, or a disc of uncertain function.

## Weights and measures

copper alloy

W\*\*\* <4750> [18089] P7 OA45 463, 120212

Incomplete; surviving l 116mm. Balance. One arm from an equal armed balance. Hexagonal tapering handle, becoming circular towards the terminal, a point below which is a circular eye with rectangular moulding below the eye. The other end is broken but a small (2mm) projection is a part of the pivot loop. This is a very fine example, well preserved, and would have been used for weighing very small precise quantities -- possibly a jewellers/goldsmith's balance.

W\*\*\* <1154> [18008] P11 OA77 848, 120417 L of  
beam 120mm; L of central section of beam 25mm; h of suspension frame  
49mm.

The beam of the equal-armed balance is jointed to allow the instrument to be folded for easier transportation. It terminates at each end in a series of four decorative cordons and a small circular suspension hole through which is threaded a ring, d 5mm, made of copper alloy wire. The central suspension loop is of similar shape, but is set on a rectangular frame. This pivots around an iron pointer set into the centre of the beam.

Bowl-shaped scale pans, with elaborate compass scribed decoration on the underside, each with four circular suspension holes drilled at the rim. D of bowl a) 66.5mm; h 25.5mm; b) 65mm, 23mm. The inscribed decoration is in a series of concentric bands, in filled with lattice.

The scales were found in a secure Roman context but the date was originally disputed as the double beamed balance has a pointer, a feature seen on Saxon and medieval instruments (Scull 1991). The more typical Roman form is the steelyard or a simple balance without pointer (Ward-Perkins and Claridge 1976, 248,249). An example, apparently very similar to the Poultry scales, with jointed beams and pointer, was found at Aquincum (Budapest) and has been dated to the 2nd century AD (Zsidi 1995,61, no 303, fig 81; inv no. 50540).

weights

copper alloy

W\*\*\* <4576> [18089] P7 OA45 463, 120212  
Circular pan weight, worn. Dia 17mm; th 2.3mm

W\*\*\* <4886> [18088] P10 OA75 482, 120326  
Dia 15mm; th 2.5mm; 2-3gms. Small circular pan weight.

lead

W\*\*\* <5384> [18089] P7 OA45 463, 120212  
Circular pan weight. Dia 16mm; th 3mm; wt 4.1gm

W\*\*\* <5531> [18089] P7 OA45 463, 120212  
Circular pan weight. Dia 15mm; th 2.5mm; wt 3.5gm

ironFig <A211>

Complete; l 40mm. Length of wire, looped at one end, expanding at the other into a cylinder; possibly a weight.

## Writing implements and associated finds

Writing tablets

wood

W\*\*\* <5000> [18089] P7 OA45 463,120212

W\*\*\* <5132> [18094] P7 OA45 463, 120212

Incomplete; l 136mm; max w 61mm; th 8mm; 4mm. part of an inner leaf, about half remaining, with a raised border on both sides and an additional recess in the middle of one side, where there is also a hole for the cord.

W\*\*\* <5131> [18089] P7 OA45 463, 120212

W\*\*\* <5002> [18089] P7 OA45 463, 120212  
Incomplete; 139 x 52mm; th 5.5mm. Fragment of outer leaf, with raised border on two sides; one hole for the cord remains and the groove at the centre of the outer side where the cord was secured.

W\*\*\* <5004> [18089] P7 OA45 463, 120212  
Incomplete; 73 x 36mm; th 6mm. Corner fragment from an outer leaf; slightly raised border and one hole for the cord remaining. Fine-grained.

W\*\*\* <5283> [18089] P7 OA45 463, 120212  
Incomplete; 145 x 44mm; th 6.5mm. Fragment of outer leaf with well-defined raised border on two opposite sides, indicating that the full length (probably) is preserved. Wide grain, but very flat.

W\*\*\* <5134> [18094] P7 OA45 463, 120212  
Incomplete; 70x 46x 8mm.; th 8mm. Corner fragment from an inner leaf, raised border on both sides and one stitching hole.

#### Fragments

W\*\*\* <5161> [18024] P7 OA45 463, 120212

W\*\*\* <5001> [18089] P7 OA45 463, 120212

W\*\*\* <5003> [18089] P7 OA45 463, 120212

W\*\*\* <528> [1108] P10 OA75

#### Styli

iron

W\*\*\* <5114> [18172] P7 OA45 462, 120211

Complete; l 151mm. Type 4, with decorative mouldings below eraser and at junction of stem and point which tapers sharply. The mouldings are elaborate with two groups of four ribs separated by a rounded collar, with facets on the side nearest the point. The eraser is wedge-shaped and slightly flaring, with spurs on both side. Both blade and point are very sharp and the stylus could be unused.

W\*\*\* <5171> [18172] P7 OA45 462, 120211

Incomplete; l 95.5mm. Type 4, decorative mouldings below the well formed eraser; point damaged.

W\*\*\* <4641> [18089] P7 OA45 463, 120212

Complete; l 138mm. ?Type 4. Although the eraser is of typical Type 3 shape, with concave sides (tulip shape), the point and the stem are not clearly separated. The eraser is decorated on both sides with a six point star pattern. each arm terminating in a triangular head, inlaid in a non-ferrous metal. The design is similar to that seen on military studs.. The stem of the stylus is

stamped below the eraser, but the rectangular stamp is too corroded for legibility.

RIB list two stamped styli both from the Walbrook area. No. 2428.15 records Reg(i)nus a well-known Celtic name (see Manning 1985, 86) and no. 2428.9, Bonosus (Wheeler 1930, 58, fig 10). The form of the new stamped stylus is very similar to the both examples, but neither have inlaid decoration.

W\*\*\* <5470> [18089] P7 OA45 464, 120212  
Complete; l 100mm. Type 1. Small wedge-shaped eraser with distinct collar at its junction with the stem, this line continuing on one side to form a spur. Plain stem, with no distinction between stem and point.

W\*\*\* <5629> [18089] P7 OA45 463, 120212 Complete; l 125mm. Type 1, with no obvious line between stem and point. Wedge-shaped eraser with slightly angled edge.

W\*\*\* <4760> [18089] P7 OA45 463, 120212  
Complete, but point damaged; l 134mm. Type 2, with distinctive tulip-shaped eraser, (not decorated) and an unusual point. There is a shoulder between the stem and point, which is circular in section at the top and flattens to a narrow edge. This edge is now bent and split, but it seems to have been a narrow blade rather than a conventional point. The flat of the blade is set at angle to the point of the eraser.

There appears to have been a maker's stamp below the eraser, the form of which is similar to a rare stamped example from the Walbrook (Manning 1985, 66, N7).

W\*\*\* <4761> [18089] P7 OA45 463, 120210  
Complete; l 149mm. Type 1, shoulder between neat wedge-shaped eraser and stem. Possible grooving under eraser and tooling visible on shaft. Good condition

W\*\*\* <4588> [18089] P7 OA45 463, 120212  
Complete; l 142mm (bent). Type 2. Plain wedge-shaped eraser with angled upper edge; narrow stem, widening above the point, with a slight junction between stem and point. Undecorated.

W\*\*\* <4599> [18089] P7 OA45 463, 120212  
Complete; l 134mm. Type 2. Plain, stubby, wedge-shaped eraser with slightly angled upper edge; marked line at junction of stem and point.

W\*\*\*<4467> [18089] P7 OA45 463, 120212  
Complete; l 126mm. Type 1, with plain stem and small collar above the eraser, which is wedge-shaped, with a spur on both sides.

W\*\*\*<4759> [18089] P7 OA45 463, 120212  
Complete; l 107mm. Type 1, with no clear line between eraser and stem. Small wedge-shaped eraser with straight edge.

W\*\*\* <5028> [18203] P7 OA45 463, 120212

Incomplete; l 81.5mm. Point only, probably Type 1.

W\*\*\* <45> [1108] P10 OA75 482, 120326

Complete; l 111.5mm. Type 1, well preserved with tooling on stem, which is very slender, 3.5mm. Small wedge-shaped eraser and very sharp point; possibly unused.

W\*\*\* <5049> [18152] P10 OA75 482, 120327

Complete; l 113.5. Type 1, well formed wedge-shaped eraser with shoulder and sharp point; tooling marks on stem.

W\*\*\* <40> [1108] P10 OA75 482, 120327

Complete; l 99mm. Type 1. Small example, very encrusted. Plain straight wedge eraser.

W\*\*\* <24> [1112] P 11 OA77 846,120414

Complete; l 102mm. Type 1. Large plain wedge-shaped eraser, wider than the stem, but without a junction between the stem and the eraser, or the point.

W\*\*\* <25> [1112] P11 OA77 846, 120414

Complete; l 104.5mm. Type 1. Small neat eraser of same width as stem, with one spur. Well made and very slender; dia of shaft 4mm.

W\*\*\* <74> [1103] P11 OA77 846,120414

Complete, l 142mm. Type 4, with series of mouldings at junction of point and stem. The point is bent. Wedge eraser, encrusted.

W\*\*\* <1359> [18027] P11 OA77 846,120414

Fragment --check

?Stylus/pen

bone

W\*\*\* <4984> [18127] P7 OA45 463, 120211

Incomplete; l 74mm; th 6.5mm. Circular-sectioned rod of uniform thickness broken at one end, the other terminating in a roughly carved knob below which are grooves and cordons.

These object and another (No \*\*) found in a Period 3 context, resemble medieval parchment prickers or styli in form (Egan 1998, 272), but as the lower end of both is broken it is impossible to say whether, like the later implements, they ended in a metal point. There is no sign of this, nor any indication that the rods tapered at the lower end in the manner of Roman bone styli, although equally, no definite proof that they did not. The unprovenanced implements, now accepted as medieval, published by Wheeler (1930, pl xxix, 6, 8) taper sharply only at the very end, where the iron point is inserted. Bone styli with iron points are considered to appear only in medieval contexts (MacGregor *et al* 1999, 1975), on both secular and ecclesiastical sites and they are thought to have been used with wax tablets. The dating of both implements at Poultry appears to be secure and if these

are indeed styli, they would seem to be the first stratified Roman examples, certainly from London. They differ in detail from the published medieval styli in that the shafts are of more uniform section, but as noted above, both are incomplete.

Recent excavations at Plantation House (FER97) have recovered at least twelve more of these objects, found together, in what appears to be a bag. Several retain a socket at the lower end, which in some cases is plugged, but there is no trace of any metal point. They are made of ivory and would therefore have been artefacts of some value.

## Transport

iron

W\*\*\* <5513> [18172] P7 OA45 463, 120211

Complete; h 57mm; (int 46mm); w 48mm. Buckle, probably from harness. Flat D-shaped frame with separate axis bar, in the shape of an open rectangle, held in position by pins set through the buckle frame.

## Tools

Knives

iron

W\*\*\*<4753> [18089] P7 OA45 463, 120212

Incomplete; l handle 78mm. Razor; approximately septagonal rod handle terminating in a loop, with a groove between the handle and the narrow blade, which is broken. Type 4 (Manning 1985).

W\*\*\* <5483> [18087] P7 OA45 463, 120212

Complete; L 138mm. Razor, Type 4 (Manning 1985); narrow blade and integral hexagonal handle, with additional ridge on each side; terminates in an oval loop; as type 1A.

W\*\*\* <4360> [18089] P7 OA45 462, 120212

Razor, Type 6A. L 145mm. Narrow hooked blade; handle takes the characteristic form of a short solid bar ending with a wide ring. The blade, which retains a sharp edge is stamped BASILIS. Bent at junction of blade and handle. Very similar, although the blade is narrower, to another from London in Roach Smith collection (stamped OLONDVS F - Manning 1985, 111, Q11; Smith 1854, 73, no 326).

W\*\*\*<5> [1108] P10 OA75 482, 120326

Complete; l 120mm. Thin knife, tanged, the back continuing the line of the tang and falling to the tip; straight edge, stepped down from tang.

W\*\*\* <4755> [18089] P7 OA45 463, 120212

Incomplete; l 81mm; w 14mm. Fragment of blade with straight edge and back and sharp angle at the point. Probably Type 1.

W\*\*\* <26> [1112] P11 OA77 846, 120414



Knife or razor ?Type 4. Straight parallel sided blade, with an angular tip; trace of a tang survives (unlike Type 4). l 96mm

Handles

wood/iron

W\*\*\*<5008>> [18089] P7 OA45 463, 120212

L 160mm; w 35mm; d of iron collar 30mm. The handle has a flattened oval section and there is a stout iron collar at each end. An iron pin or tang is driven into the centre of the wood at one end. Probably a tool handle.

ivory

W\*\*\* <6582> [18089] P7 OA45 463, 120212

L 25mm. Fragment from the end of a one-piece knife handle as <2449> (main catalogue).

copper alloy

W\*\*\* <4779> [18182] P7 OA57 628,120310

L 17mm, w 14mm; Chape, strap mount or terminal. Two shaped plates, rounded at the lower end, separated a strip which extends about three quarters of the way up each plate - 8mm apart at the base. The side pieces terminate in a horizontal moulding and the two plates are held together above this with a neatly made rivet, which is in a different alloy to the main body of the object and has been hammered flush with the outer surface. The entire object is well finished. In shape it resembles a terminal from a bone handled knife with copper alloy mounts (eg from Verulamium, Waugh & Goodburn 1972, Fig 55, no. 209), although it is much smaller.

Iron chisel

W\*\*\* <5585> [18089] P7 OA45 463, 120212

Incomplete; l 48mm. Stout bar, one end broken; bevelled chisel edge at the other; probably for metal working

Miscellaneous possible tools

W\*\*\* <38> [1108] P10 OA75

l 92mm. ?Tool. Tapering square sectioned tang made in one piece with a ?blade set at 90 degrees - expanding from the handle, rectangular section; broken.

W\*\*\*<4774> [18089] P7 OA45

?Chisel with square nail-like head, ?battered, and stout rectangular sectioned stem, which narrows, without tapering to a chisel edge. l 46mm

W\*\*\*<5630> [18089] P7 OA45 463, 120212

Indeterminate; l 126mm. Square sectioned bar, tapering at both ends, one end complete - ? awl or spike.

## Fasteners and fittings

Locks and keys

iron

W\*\*\* <4569> [18087] P7 OA45 463, 120212

Complete; l 71mm. Tumbler-lock slide-key; six square-sectioned and one D-sectioned teeth on a rectangular bit, arranged in two rows.

W\*\*\* <5562> [18089] P7 OA45 463, 120212

Complete; l 60mm Tumbler-lock slide-key, Manning Type 2 (1985,93), with a straight bit on which are seven rectangular teeth arranged in two rows; flat handle with circular eye at top.

W\*\*\* <5053> [18145] P10 OA75 482, 120328

Complete; L 73mm; w 42.5mm. Diamond-shaped plate, one end extended, squared and pierced with a single circular rivet hole; the other extended and terminating in a conical knob, the shape seen more commonly in copper alloy fittings. The terminal is similar to those found on some copper alloy horse pendants and it is possible that this mount had a similar function. Alternatively this could be part of a lock. This function has been suggested for a similar diamond-shaped plate from Castleford, although this lacks the conical knobbed terminal (Cool & Philo 1998, 139, no. 134, fig 49).

copper alloy

W\*\*\* <5592> [18087] P7 OA45 463, 120212

L 64.5mm Lock bolt, with one large rectangular perforation Possibly complete, cf Colchester example, Crummy 1983, 124, no. 4134.

Structural and other fittings

iron

W\*\*\* <4418> [18081] P10 OA75 482, 120326

Arms complete; stem broken. Width of arms at top 66mm. Stout square sectioned shank.

W\*\*\* <4480> [18087] P7 OA45 463, 120212

L 51mm. U-shaped wall hook, terminal missing.

W\*\*\* <4479> [18087] P7 OA45 463, 120212

Narrow U-shaped hook on long stem; l 84mm Apparently complete, it may have been driven into a wall to act as a cleat.

W\*\*\* <4885> [18089] P7 OA45 463, 120212

Joiner's dog. Complete; w 135mm (bent); l of arms 77mm. Well preserved. The central bar is bent through a right angle, making the arms offset.

W\*\*\* <4309> [18087] P7 OA45 463, 120211

Complete; width 80mm; l of arms 86mm

W\*\*\* <4575> [18089] P7 OA75 463, 120212

Incomplete; l 123mm. Dog or clamp with at least three prongs set at different angles. The arms at each end are bent and there is trace of a third at about the mid point of the bar.

W\*\*\* <4591> [18166] P11 OA77 858, 120429 d  
Complete; w 25mm; l of arms 29mm. The arms are set in one plane; very small example.

W\*\*\*<4391> [18071] P10 OA75 482, 120328  
Complete; l 60mm. Double-spiked loop; the arms are twisted below the head. Good condition.

W\*\*\* <4332> [18087] P7 OA45 463, 120212  
Complete; l 58mm; dia of head 16mm. Small bolt with globular head.

W\*\*\* <4568> [18087] P7 OA45 463, 120212  
L 34mm. Collar ferrule with open socket, with at least two nail holes in the side. Wood/organics in the centre.

copper alloy

W\*\*\* <9> [1108] P10 OA75 482, 120326  
Indeterminate; L 35mm; w 5mm. Ferrule made from a single sheet of metal rolled to form a tube with a long central seam.

W\*\*\* <4387>[18066] P10 OA75 836, 120325  
L 53mm; w 4.5mm  
Ferrule. Sheet folded lengthwise to form a binding or chape, with a second tube inside it.

W\*\*\* <11> [1108] P10 OA75 482, 120326  
Complete?; l 15mm; w 17mm. Staple or binding cut from thin sheet; cross bar with two tapering arms of unequal length.

Bone hinge

<2> [1101] P11 OA77 851, 120419  
L 25.5mm; diameter ext and int 19 and 8.5mm. Section from a composite bone hinge; one hole.

Mounts

copper alloy

W\*\*\* <4466> [18089] P7 OA45 463, 120212  
Complete; d 50.5mm. Circular mount made of thin sheet copper alloy with mouldings around the edge and around a central zone which has a single rivet hole for attachment, set within a Y arrangement of grooves. Between the circular mouldings is a series of eleven small bosses. Likely to be a strap mount, perhaps from a belt, ?possibly from furniture. Good preservation; bright yellow metal.

W\*\*\* <4482> [18087] P7 OA45 463, 120212  
Complete; L 31mm. Oval plate with single, deeply indented nail hole; bright yellow metal.

W\*\*\* <4475> [18089] P7 OA45 463, 120212

?Complete; 17 x 16mm. Square sheet in bright yellow metal, pierced with a crudely made hole in which is a rough rivet with irregular head and flat strip shank in a pink alloy. The rivet has been punched through the sheet giving the aperture ragged edges; it has not been pre-cut. The squared edges of the plate appear to be complete. Possibly a crude repair or patch.

W\*\*\* <4665> [18089] P7 OA45 463, 120212  
D c 27mm. Circular mount or stud, thin sheet metal, now folded; trace of concentric circle decoration and perhaps a central hole. Possibly scrap.

iron

W\*\*\* <5179> [18089] P7 OA45 463, 120212  
Incomplete; l 76m. Mount with wide open eye formed by a looped bar and tapering strap -- possibly a handle mount.

W\*\*\* <4754> [18089] P7 OA45 463, 120212  
Strap, split for a distance of 67mm at one end, with single nail hole. L 141mm. Possibly part of a lock?

W\*\*\* <5249> [18089] P7 OA45 463, 120212  
Riveted sheeting ?bindings

W\*\*\* <4889> [18088] P10 OA75 482, 120326  
W 30mm. Strap with nail hole; rounded terminal.

Rings

copper alloy

W\*\*\* [18089] P7 OA45 463, 120212  
Complete; dia 15mm. Small fine ring; circular section; worn on one side. possibly from a military fitting.

W\*\*\* <4734> [18089] P7 OA45 463, 120212  
Complete; dia 15mm. Small ring with elliptical section.

W\*\*\* <5560> [18089] P7 OA45 463, 120212  
Complete; dia 30mm. Faceted section, with grooves on one surface and outside edge. Possibly decorative ring from vessel or box.

W\*\*\* <4563> [18087] P7 OA45 463, 120212  
D 23mm. D-section, flattened top and bottom.

W\*\*\* <4496> [18089] P7 OA45 463, 120212  
D 19mm. Made from circular sectioned wire, the ends overlapping.

W\*\*\* <5191> [18089] P7 OA45 463, 120212  
Complete; d 15mm; 12mm. D-section, very fine ring, possibly from a military fitting.

W\*\*\* <5567> [18089] P7 OA45 463, 120212

Complete; D 19mm. Narrow plain hoop. Function uncertain; rectangular section.

W\*\*\* <4690> [18139] P10 OA75 482, 120328

Complete; d 23mm; 18.5mm. D-section, well preserved bright metal.

W\*\*\* <4691> [18139] P10 OA75 482, 120328

Complete; d 12mm; 10mm. Thin fine ring, circular section; possibly from a military fitting.

iron

W\*\*\* <5540> [18089] P7 OA45 463, 120212

Complete; dia 19mm. Small ring made from thin gauge wire, the ends now open, probably joined originally.

W\*\*\* <5158> [18172] P7 OA45 463, 120212

Complete; dia 43mm. Heavily worn on one side; square section.

W\*\*\* <4389> [18066] P10 OA75 836, 120325

Incomplete; l 26mm; approx dia 30mm

<4655> [18081] P10 OA75 482, 120326

Complete; dia 50mm; square section, well preserved.

Studs

copper alloy

W\*\*\* <5192> [18089] P7 OA45 463, 120212

D 16mm. Lion-head mount, as above, cast in high relief. The mount is very well cast and detailed, the hairs of the mane and muzzle clearly shown.

W\*\*\* <41> [1108] P10 OA75 482, 120326

Complete; d 16mm. Lion-headed mount or stud. The features are cast in high relief but concealed by corrosion.

*Domed head*

W\*\*\* <5190> [18089] P7 OA45 463, 120212

Dia 13mm; l 16mm. Plain, square sectioned shank. ?Furniture stud.

W\*\*\* <4273> [18089] P7 OA45 463, 120212

D 19mm, h 16mm. Strongly domed head, with outer flange, central hole for shank. Lead infill.

W\*\*\* <4664> [18089] P7 OA45 463, 120212

Plain, distorted, shank missing. D c 17mm

W\*\*\* <5568> [18089] P7 OA45 463, 120212

Plain, poor condition. D c 14.5mm; shank fractured.

W\*\*\* <5633> [18089] P7 OA45 463, 120212  
D 12.5mm. Concave centre, with hole; shank missing.

W\*\*\* <4431> [18092] P7 OA45 463, 120212  
D 14mm. Similar to <5633>

W\*\*\* <4732> [18143] P10 OA75 482, 120328  
Similar to <5633> D 10.5mm

W\*\*\* <29> [1112] P11 OA77 846, 120414  
D 18mm. Plain, heavy.

*Flat head, often with concentric mouldings for additional grip*

W\*\*\* <5203> [18089] P7 OA45 463, 120212  
D 18.5mm. Flat Single groove around edge; shank missing.

W\*\*\* <5480> [18328] P6 OA45 478, 120312  
D 17mm. Plain, corroded, square sectioned shank broken.

W\*\*\* <4792> [18172] P7 OA45 463, 120211  
D 15mm. Single groove around edge; square sectioned shank bent and incomplete.

W\*\*\* <5544> [18087] P7 OA45 463, 120212  
D 15mm; L of shank 8mm. Single groove around circumference. Bright metal.

W\*\*\* <4307> [18087] P7 OA45 463, 120212 d  
Single groove around the edge. D 18mm; L shank c 12mm. Bright metal

W\*\*\* <4276> [18089] P7 OA45 463, 120212  
D 22mm. Single groove around circumference; square sectioned shank, broken.

W\*\*\* <4646> [18089] P7 OA45 463, 120212  
D 19m; l 8mm. Plain head, turned over at edge; square sectioned shank.

W\*\*\* <4666> [18089] P7 OA45 463, 120212  
Single groove around circumference; corroded; square sectioned shank 6mm

W\*\*\* <5117> [18089] P7 OA45 463, 120212  
D 14mm. Single groove around circumference. Shank missing.

W\*\*\* <5193> [18089] P7 OA45 463, 120212  
Single groove around edge; square sectioned shank broken. D 16.5mm

W\*\*\* <5195> [18089] P7 OA45 463, 120212  
D 14mm. Badly corroded, ?burnt. Flat head possibly decorated; ?circular sectioned shank, broken.

W\*\*\* <5561> [18089] P7 OA45 463, 120212  
Plain. D 18mm; l 19mm

W\*\*\* <4430> [18092] P7 OA45 463, 120212  
D 20mm. Single groove around edge; square sectioned shank broken.

W\*\*\* <4346> [18094] P7 OA45 463, 120212  
D 12.5mm; L c 12mm. Single groove around circumference; square sectioned shank.

W\*\*\* <4444> [18113] P10 OA75 836, 120321  
D 11mm; L c 10mm. Plain; square sectioned shank.

W\*\*\* <4445> [18113] P10 OA75 836, 120321  
D 13mm; L 10mm. Plain, slightly concave head, turned under at the edge; square sectioned shank.

W\*\*\* <4415> [18081] P10 OA75 482, 120326  
D 16mm. Flat head; edge turned under; square sectioned shank – l 8mm

W\*\*\* <5052> [18145] P10 OA75 482, 120328  
D 20mm; l 5mm. Plain, circular, very slightly convex; circular -sectioned shank with foot ring.

W\*\*\* <31> [1112] P11 OA77 846, 120414  
Concave top, d 8mm, L shank 20mm

W\*\*\* <32> [1112] P11 OA77 846, 120414  
Plain. D 8mm L 15mm

W\*\*\* <34> [1112] P11 OA77 846, 120414  
Plain. D 11mm

iron

W\*\*\* <4507> [18089] P7 OA45 463, 120212  
Large domed head; shank broken. Dia 32mm

W\*\*\* <5182> [18089] P7 OA45 463, 120212  
Complete; L 16mm. Dome headed; square-sectioned shank.

W\*\*\* <5520> [18094] P7 OA45 463, 120212  
Complete; L 24mm; L of head 28mm. Conical head with leaf-shaped projection, on a circular sectioned shaft. ?Furniture stud.

W\*\*\* <4585> [18118] P7 OA45 463, 120211  
Complete; L 14mm. Conical head; shank bent.

W\*\*\* <5173> [18172] P7 OA45 120211  
Fragmentary. Domed head, still set into leather fragment. diam 10mm; l 11mm

W\*\*\* <5021> [18203] P7 OA45 463, 120239  
Complete; diam 15mm, l17mm. Domed head

W\*\*\* <4280> [18089] P7 OA45 463, 120212  
Almost complete; shank broken; diam 12mm. Conical head, sharply pointed, perhaps from furniture.

Copper alloy and enamel

W\*\*\* 2060> [18010] P11 OA77 851, 120419  
Almost complete; d 17mm; l shank 3mm. Enamelled with a champlévé technique. Outer ring of enamel, now decayed and appearing white, which contained ?contrasting spots. Enamel missing from inner ring; a fragmentary foot ring on the shank shows that this was a leather fitting.

Hinge

bone

<2> [1101] P11 OA77 851, 120419  
L 25.5mm; diameter ext and int 19 and 8.5mm. Section from a composite hinge with one hole.

Chains

copper alloy

<8> [1108] P10 OA75 482, 120326  
Indeterminate; L of link 18mm; overall L 59mm. Four links from a heavy chain, possibly used for hanging a lamp or similar. Each link is composed of a single loop which has been pinched in the middle, and folded in half.

iron

<5073> [18212] P7 OA45 478, 120318  
Seven figure of eight links, each 31mm in length.

## **Agricultural implements and animal husbandry**

Ox-goads

Ox-goads are found in two forms, spiral and plain socketed (see Gadebridge?), both with an integral spike which projects upwards. They are traditionally interpreted as goads, the spike slipped on to the end of a narrow pole, and used for driving animals (Manning ?Gadebridge/Verulamium). Their presence at Vindolanda, among large numbers of inscribed writing tablets, the inscriptions being made with pen and ink, has raised the question of their being simple pen nibs, the socket functioning as an ink reservoir. There are large numbers of wooden writing tablets from Poultry, all designed for use with wax and an iron stylus, although inkwells have also been found, both ceramic and lead alloy, which certainly implies the use of ink and parchment or paper. There are five 'goads' from Poultry, most from the groups which produced large numbers of styli, but all seem too clumsy to have functioned as pen nibs. In the absence of further evidence the case for



their use as nibs in this case remains unproven and their identification as animal goads appears to be more probable.

iron

W\*\*\* <4470> [18089] P7 OA45 463, 120212  
Complete; l 36mm; dia 17mm. Goad. Spiral socket, two turns, with projecting spike.

W\*\*\* <4621> [18089] P7 OA45 463, 120212  
Complete; l 46mm. Goad. Plain cylindrical socket, the edges abutting; long, slightly bent spike.

W\*\*\* <4388> [18066] P10 OA75 836, 120325  
Complete; l 33mm; dia 18mm. Goad - spiral socket, very corroded.

W\*\*\* <1361> [18027] P11 OA77  
Add description .....

## Military Equipment

Weapons

iron

W\*\*\* <5559> [18089] P7 OA45 463, 120212  
Complete; L 10.5mm; dia of socket 10mm; L of socket 49.5mm. Catapult bolt head, with conical socket and conical socket with one rivet hole on the side opposite to the seam. Although the bolt has a pyramidal rather than a conical socket, this equates to the Type 1 bolt-heads in the collection from Hod Hill described by Manning (1985, 170-1) and Manning cites conical forms from other sites (ibid 175, V252-3), which are functionally similar. Manning also notes that round-sectioned bolt heads are known from other sites in the north of England, on Hadrian's Wall, and may represent a form later than the Hod Hill type, which dates from the mid 1st century. The bolts were fired from catapults (*catapultae*), (Bishop & Coulston 1993, 81).

W\*\*\* <4471> [8089] P7 OA45 463, 120212  
L 6mm. Bolt-head, probably for use with a catapult (see Manning 1985, 170). Well-made head, faceted on a conical socket, which is incomplete. It is rather smaller than examples given by Bishop and Coulston 1993, 114, fig 75, 2 & 4) but of similar form.

Armour

copper alloy

W\*\*\* <1366> [18006] P11 OA77 851, 120419  
H (int) 11.5mm. Buckle, probably from *lorica segmentata*; the strap, now broken would have been hinged.

W\*\*\* <4882> [18117] P7 OA45 463, 120211  
Incomplete; l 37.5mm x 21mm. Rectangular plate with an inscribed rectangle defining the central area and punched chevron decoration within it; the plate is shaped for the buckle attachment on one side. Four rivet holes with two rivets

remaining *in situ*; these are of a contrasting colour (pink) and therefore a different alloy to the plate (yellow).

W\*\*\* <10> [1108] P10 OA75 482, 120326

L 37.5mm. Tongue from an ornamental military belt buckle. The tongue is curved, flanked by two curving projections at the lower end, which is broken. 1st century type.

#### Studs

copper alloy

W\*\*\* <1183> [18016] P11 OA77 846, 120416

Dia head 13.5mm; th of head 0.5mm; thin tapering square sectioned shank - L 8mm

Embossed portrait stud of Feugère's Type \*\*\*, garlanded and facing left; flange surrounding the flat head is broken.

Possibly a 'barbarous' portrait of a 1st century emperor, such as Domitian, for which there is a parallel at Verulamium (Goodburn 1984, 45, No. 138). Such studs are found on Britain and the Continent, (Wheeler 1930 fig 37.2) and they may be based on coin types, although some are far removed from the originals. Often found on military sites and may have been used as apron mount and another London example was attached to a small pendant (Bishop *et al* in prep 1H01). They are included in the London military corpus, which list nine further examples, on the grounds of their association with military sites and because their diameters match those of apron studs, although it is not certain that they were used on 'aprons'. As Goodburn points out however, they are also found in civil contexts and although it is clearly difficult to differentiate military and civilian on some early sites, the type seems to have originated in the Flavian period, later than the proven military occupation of some sites on which they are found.

W\*\*\* <5527> [18101] P7 OA45 463, 120211

Dia 15mm. Domed head with outer flange; incised radial decoration on dome; shank fractured.

W\*\*\* <4584> [18118] P7 OA45 463, 120211

Dia 16.5mm. Type C, but without straight lines between petals. Four-petal rosette in centre - niello inlay; shank fractured.

W\*\*\* <5194> [18089] P7 OA45 463,120212

Complete; d 13.5mm; th of head 0.5mm; L shank c 6mm

Flat head decorated with design C (Webster 1960); incised decoration -four petals each with four punched dots, but no trace of straight line between the petals. Square sectioned shank, bent, suggesting it was attached to something 4mm thick

W\*\*\* <5543> [18087] P7 OA45 463, 120212

Serrated edge, single moulding around the circumference, otherwise plain; ?from apron. Shaft, ?would have been riveted is broken off. Dia 16mm.

W\*\*\* <5526> [18094] P7 OA45 463,120212

Dia 13.5mm; th 0.5mm; l of shank c 9mm  
Flat headed stud decorated with design ?D. Inner zone with stylised rosette decoration - three crossing lines which terminate in triangles and a series of punched dots around the circumference. Probably an apron mount (see Bishop *et al* in prep).

The shank is bent, suggesting that it was attached to a strap 4mm thick.

W\*\*\* <5013> [18203] P7 OA45 463, 120239

Flat head with serrated edge. Dia 20mm. Square sectioned shank fractured

W\*\*\* <4307> [18087] P7 OA45 463, 120212

Single groove around the edge. D 18mm; L shank c 12mm. Bright metal

#### Pendants

copper alloy

W\*\*\* <4183> [18087] P7 OA45 463, 120212

Complete; l 21.5mm; w 16mm. Circular pendant with central boss and small flange at edge; wire suspension loop at top. From a pendant suspended from a phalera (cavalry) or from an apron mount terminal (infantry).

#### Miscellaneous

copper alloy

W\*\*\* <5389> [18089] P7 OA45 463, 120212

Ferrule. Cylindrical tube; l 30.5mm; int d 0.8mm, ext d 10mm. The entire outer surface is ribbed with a series of parallel grooves around its circumference. There is a raised moulding on the outer surface 7mm below the top, also ribbed. The internal diameter of the pipe is constant, although it is slightly flattened at one end.

The function of the tube is unclear, but such artefacts are relatively common finds on military sites of the 1st century AD (Bishop in Cool & Philo 1998, 81) and they are therefore presumed to be military equipment. Examples from Britain include one from Castleford (ibid 81, no 343), Sheepen (Niblett 1985, 72, fig 72) and they are found on such continental fort sites as Hoffheim (Ritterling 1913, Taf XVI, 29.9).

W\*\*\* <4277> [18089] P7 OA45 463, 120212

Incomplete; surviving L 17mm; w 10mm. Double-eyed mount, with concentric circle decoration around each eye; probably from a junction strap loop.

W\*\*\* <5611> [18111] P11 OA77 858, 120429

Complete; l 26mm, w 9.5mm. Double ended mount, with two rivet holes surrounded by concentric mouldings, with a plain slightly domed section between them. It looks very similar to the top section of a junction loop but is apparently complete; probably a harness mount or strap fitting.

Not illustrated

Incomplete; surviving l 30mm. Fragment of openwork plate, with one circular hole that may have held a rivet. Appears to be military in style.

## Religion, cult and superstition

Figurine

ceramic

W\*\*\* <4714> [18089] P7 OA45 463, 120212

Incomplete; l 83mm. Head and upper torso of a Venus figurine, broken at the waist. The facial features are poorly modelled with prominent staring eyes, the irises indicated by dots. The hair is arranged in a stiff row of curls surrounding the head and drawn into a bun at the nape of the neck, with four tresses falling over the shoulders. Venus' right arm is raised to her hair, the hand shown very schematically.

## Metal-working

<4469> [18089] P7 OA45 463,120212 Offcut. Curved strip – cut from heavy plate, possibly an object; notch in each end; 72 x 17mm

<4647> [18089] P7 OA45 363, 120212 sheet, thick, broken edges, ?scrap

[18089]<5196> sheet, ?offcut

[18094]<5547> sheet, ?offcut

<5525> [18094] P7 OA45 463, 120212 sheet, strip

<5547> [18094] P7 OA45 463, 120212 ?waste, sheet

<5524> [18094] P7 OA45 463, 120212 ?waste, sheet

<5120> [18094] P7 OA45 463, 120212 Irregular lump of pure copper (XRF), possibly part of an ingot. The lump is very crude and of poor quality. JB suggests used either for alloying or for using with thin sheet metal, as found on boxes etc.

<5046> [18113] P10 OA75 836,120321 Sheet, irregular cut marks visible on edges; 35 x10mm

<4442> [18126] P10 OA75 482, 120328 runnel

<6526> [18130] P10 OA75 482, 120328 runnels/molten objects or sheeting

<6527> [18130] P10 OA75 482, 120328 Fig <A286> Sprue.

<5626> [18130] P10 OA75 482, 120328 molten lump