

# FURTHER PREHISTORIC FINDS FROM GREATER LONDON

*Jonathan Cotton and Adrian Green*

*With a contribution from Bill White*

## SUMMARY

*This paper rounds up a further selection of prehistoric finds from Greater London which have been reported to the Museum of London. 30 of the 42 objects or groups of objects were recovered from the modern foreshores of the Thames or areas adjacent (with a clear majority from the Surrey bank). Many remain in private possession. Notable finds include two antler-beam mattocks (Nos 12–13) from Mortlake, a Neolithic ground axe of ‘near-jadeite’ (No. 14) from Enfield, a possibly later Neolithic or Early Bronze Age serrated barbed and tanged bone point (No. 25) from Chamber’s Wharf, Bermondsey, and an Early Iron Age iron dagger in a composite wooden sheath (No. 34) from the same locality. In addition, the opportunity has been taken to bring together a number of antiquarian finds, some of which — like the group of Mesolithic flint adzes (No. 11) recovered during river dredging and the two Neolithic ground axes (Nos 16–17), one from King’s Cross and the other probably from the Thames at Chelsea — hark back to the early days of archaeological endeavour in the capital. A concluding discussion places these finds within their regional context and draws attention to the importance of the Portable Antiquities Scheme for the capital.*

## INTRODUCTION

This is the third in an occasional series of contributions designed to round up stray prehistoric finds from Greater London reported to the Museum of London. As before, the majority of the finds dealt with were recovered from the foreshores of the Thames and areas adjacent (Fig 1). Unless otherwise stated, they remain in private hands.

Unlike the two previous roundups (Cotton

& Merriman 1991; Cotton & Wood 1996), the present one also incorporates items from historic collections of finds which, for one reason or another, have only recently resurfaced. Otherwise the same chronological arrangement as before is followed. The paper concludes with a brief consideration of the importance of these stray finds for the region’s prehistory.

## PALAEOLITHIC

1. Fragmentary pointed flint biface (Fig 2) found in the garden of 94 Fairholme Crescent, Hayes, Middlesex and reported by the owner, Ron Vickers, in 1997. Fairholme Crescent is centred on TQ 100 824 and overlooks the Yeading Brook, a tributary of the River Crane.

The implement measures 94mm in length and weighs 86.12g. It forms part of a pointed biface worked on a small river cobble. It is in rolled condition and lightly olive-stained. Although the findspot appears to lie on London Clay, it is likely that the piece derives from one or other of the various gravel deposits in the locality: the nearest comprise the Boyn Hill terrace to the west, and the Lynch Hill terrace to the south.

2. Small pointed flint biface (Fig 2) from the ‘Boyn Hill terrace, West Drayton’. Together with No. 3 below, this formed part of a teaching collection donated to the Museum of London by Queen Mary and Westfield College, University of London in 2002 (MoL 2002.58).

The implement measures 75mm in length and weighs 138.6g. It is heavily worn and of

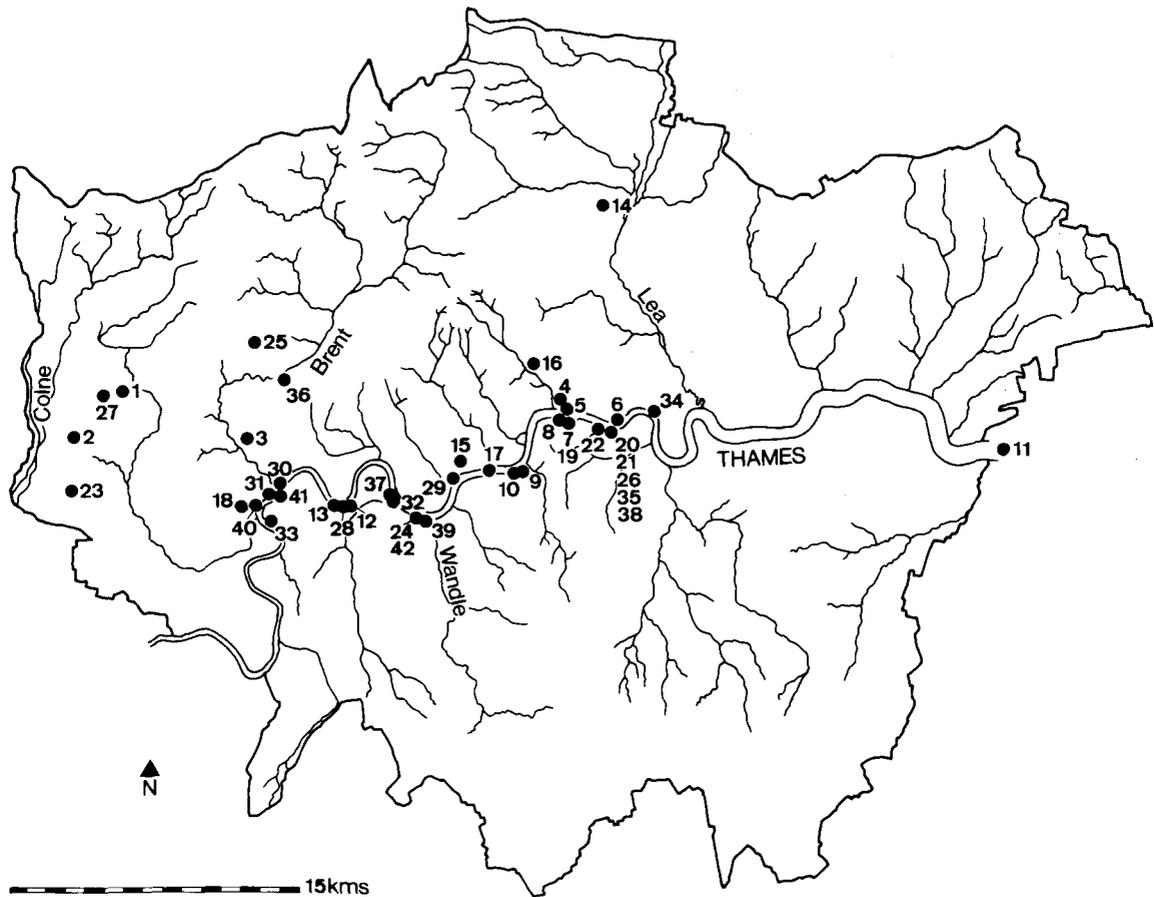


Fig 1. Location map

grey flint. Large numbers of bifaces have been recorded from the area of West Drayton and Yiewsley.

3. Small pointed biface (Fig 2) from 'Taplow Terrace, Hanwell, Middlesex'. As No. 2 above, this formed part of a teaching collection donated to the Museum of London by Queen Mary and Westfield College, University of London in 2002 (MoL 2002.58).

The implement measures 96mm in length and weighs 201.42g. It is worn and stained a dark ochreous brown. There were a number of gravel pits in this area, including Seward's Pit in Boston Road, where the River Brent cut through a sequence of former Thames terrace gravels (Gibbard 1985, 37).

#### Discussion

These first three pieces were all recovered from

the terrace gravels in west London, an area well known for its Palaeolithic finds (eg Wymer 1968; Collins 1978). Moreover, the two pieces from Queen Mary and Westfield College formed part of a teaching collection, a majority of whose pieces originated from Milton Street (Barnfield Pit), Swanscombe and were collected by James Cross prior to 1908. Other pieces include a further small pointed biface from 'Southall', and several Mesolithic adzes from the Thames at or near Windsor formerly in the L V Venables Collection.

4. Pointed flint biface (Fig 3) donated to the Museum of London (MoL 98.5) by Mr Wright in 1997. Reportedly found prior to the Second World War by his father, a plumber by trade, 'during the digging of foundations close to St Paul's Cathedral' (possibly those belonging to Faraday House on its south side?).

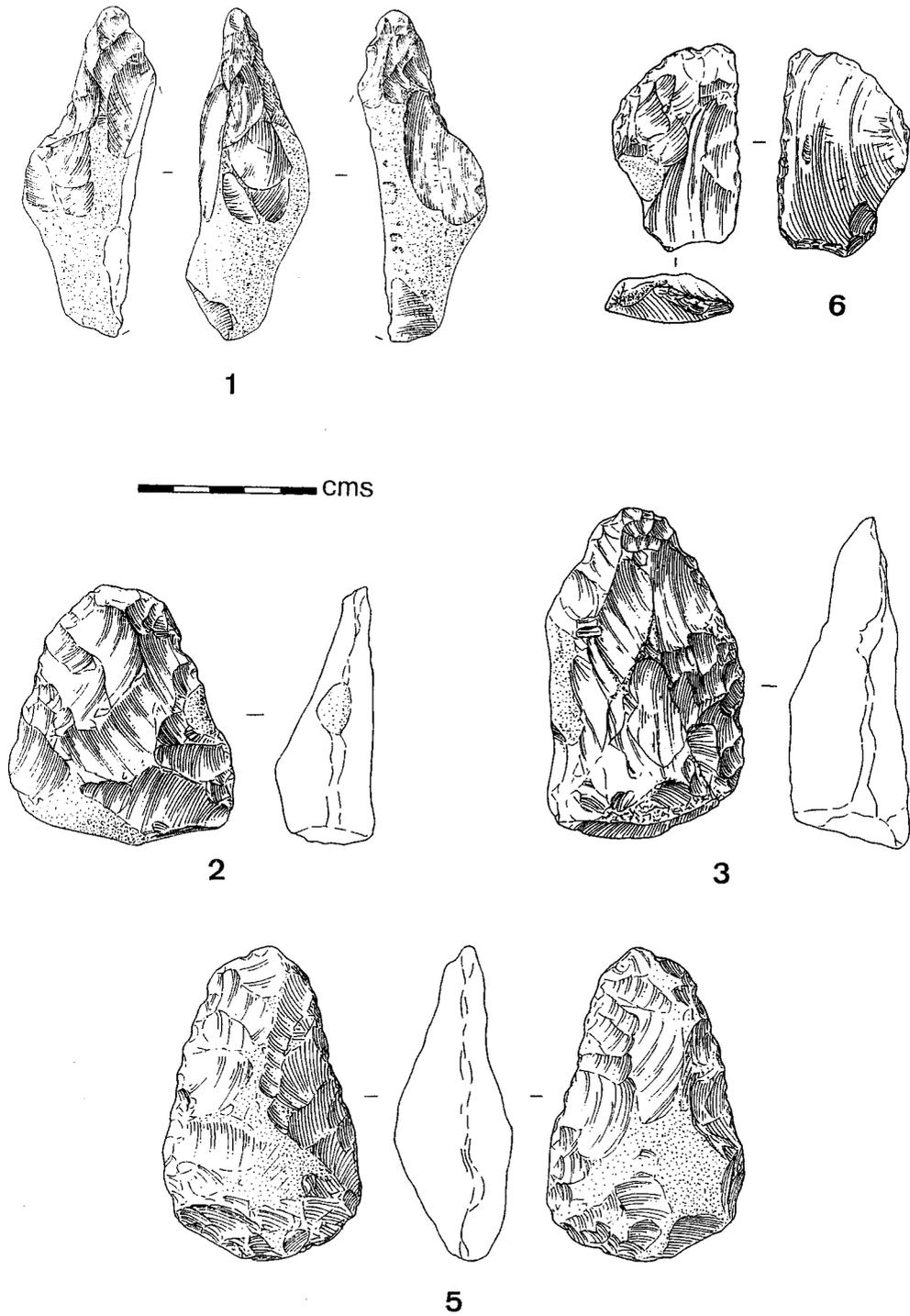


Fig 2. Palaeolithic flint artefacts (Nos 1-3, 5 & 6). Scale 1:2



Fig 3. Palaeolithic flint biface (No. 4) from the area of St Paul's, City (Photo: John Chase, Museum of London)

The implement measures 170mm in length and weighs 570.8g. It is fashioned on a nodule of mottled dark grey cherty flint. An expanse of worn dark cortex has been retained at the butt, extending up one face. The butt gives the impression of having been used as a hammerstone, which has resulted in localised crushing and bruising of the surfaces. These have also been affected by fire, and this has produced some localised spalling and crazing. Otherwise the piece is in a relatively fresh, unrolled condition, unlike many of the other Palaeolithic finds from the area of the City, which are heavily rolled and stained.

5. Small pointed flint biface (Fig 2) found by Anita Freeman on the Middlesex foreshore of the Thames at Bull Wharf, City, and reported in May 2000. The findspot lay on the surface of the foreshore some 15m south of the river wall, and at a point 30m west of Queenhythe in front of the Samuel Pepys Public House (TQ 3223 8075).

The implement measures 89mm in length, 54mm in breadth, is 31mm thick and weighs 158.48g. It has been radially and invasively flaked across both faces; all high points and lateral edges are heavily worn and rolled.

The 'dorsal' face (left) has light olive-brown ochreous staining; the flatter 'ventral' face (right) appears to retain a patch of heavily worn cortex, and has been stained a dark brown/black.

#### Discussion

These two pieces can be added to other Palaeolithic finds recovered from the area of the City (*eg* Wymer 1968, 287–8). It is clear from their reported provenances that neither piece was recovered from an *in situ* context (*eg* Holder & Jamieson 2003, illus 5). The condition of the Bull Wharf piece suggests that it was either eroded from a higher gravel terrace or imported with other material to make up a barge bed. Either way it can be added to a number of heavily rolled pieces recovered from the Thames foreshores (*eg* No. 6 below). The St Paul's biface is in somewhat fresher condition and it is possible that it was brought into the area in Roman or later times, either accidentally or — perhaps more likely — as a curio. Palaeolithic artefacts have, for example, been recovered on Roman cult sites both in France and in Britain (Merrifield 1987, 16; Turner & Wymer 1987).

6. Small rolled flake (Fig 2) found in spring 2004 by Richard Read on the Middlesex foreshore of the Thames near the River Police Station at Wapping (c.TQ 3485 8000).

The flake comprises a small squat blank measuring 35mm in length, 60mm in breadth, 13mm thick, and weighing 29.67g. It is rolled and stained a light olive-brown. There is a small patch of cortex surviving on its dorsal face.

The findspot lies just upstream of Execution Dock, from whence came a small Palaeolithic flake struck from a prepared core published in an earlier roundup (Cotton & Wood 1996, 2, fig 2 no. 4).

## MESOLITHIC

7. Mesolithic flint tranchet adze (Fig 4) found in March 1995 by Richard Hill on the Surrey foreshore of the Thames at St Mary Overie Dock, Southwark (TQ 3262 8044). It lay close to low water slightly upstream of the mouth of the dock and c.20m from another adze reported previously (Cotton & Merriman 1991, 38–9, fig 6 no. 7).

The implement measures 147mm in length, 47mm in breadth, is 30mm thick, and weighs 267.05g. It is made of lightly peat-stained cherty grey-brown gravel flint, with a tranchet removal at the blade on one face, and a large expanse of smooth cortex at the butt. It is in very fresh, sharp condition.

As noted above another, somewhat larger, adze was recovered ten years earlier by the same finder towards the back of the foreshore at this same general location; he suggested that this piece may have been disturbed during dock construction. Part of a third adze has since been found 100m further upstream by Fiona Haughey (see No. 8 below).

8. Incomplete Mesolithic flint tranchet adze (Fig 4) found during spring 1998 by Fiona Haughey on the Surrey foreshore of the Thames at Winchester Wharf, Southwark (TQ 3252 8045). The implement lay close to the base of a gravel deposit over peat and about three quarters of the way down the foreshore on a low tide.

The implement measures 135mm in length, 50mm in breadth, is 35mm thick, and weighs 279.80g. It is made of cherty mottled grey flint with light orange-brown surface staining. There are patches of smooth cortex surviving on one face. The butt is missing

and the blade has been re-sharpened with a tranchet blow. It is in fresh condition.

## Discussion

These two adzes (and the third piece from St Mary Overie reported previously) can be added to the growing evidence for Mesolithic activity noted in this area since Lacaille's (1966) pioneering survey. Although adze-sharpening flakes have been recovered from various locations away from the river here (eg Sidell *et al* 2002, 70–1, table 4), there are no complete adzes. These appear to be restricted to the modern river and its foreshore and may even hint at deliberate deposition, an explanation more usually invoked with regard to Neolithic and later material.

9. Mesolithic flint tranchet adze (Fig 4) found in March 2004 by Richard Read on the Surrey foreshore of the Thames at Nine Elms, Vauxhall (TQ 3000 7794). The adze was found at low water on a 0.1m tide and lay some 10–15m upstream of the Bronze Age wooden 'bridge' or 'jetty' recorded previously (eg Sidell *et al* 2002, 29–30).

The implement measures 118mm in length, 45mm in breadth, is 25mm thick, and weighs 182.70g. It comprises a small slender adze of cherty flint stained a glossy black, with a resharpener, tranchet, cutting edge; a large thinning flake has also been removed from one edge on the flatter 'ventral' face (right). To judge from surface encrustation, the 'dorsal' face (left) had been lying uppermost on the foreshore.

10. Mesolithic opposed-platform bladelet core (Fig 4) found at low water by Richard Read on the Surrey foreshore of the Thames at Nine Elms, Vauxhall, a few metres further upstream from, and subsequent to, No. 9 above (TQ 2896 7794).

The core measures 77mm in overall length, 50mm in breadth, is 28mm thick, and weighs 110.22g. A minimum of eight main bladelet scars are visible on the core, a majority of which were detached from a single carefully prepared platform. The core is of mottled dark grey river cobble flint and the unillustrated face retains expanses of smooth cortex and thermally-altered surfaces.

## Discussion

A number of such bladelet cores have been

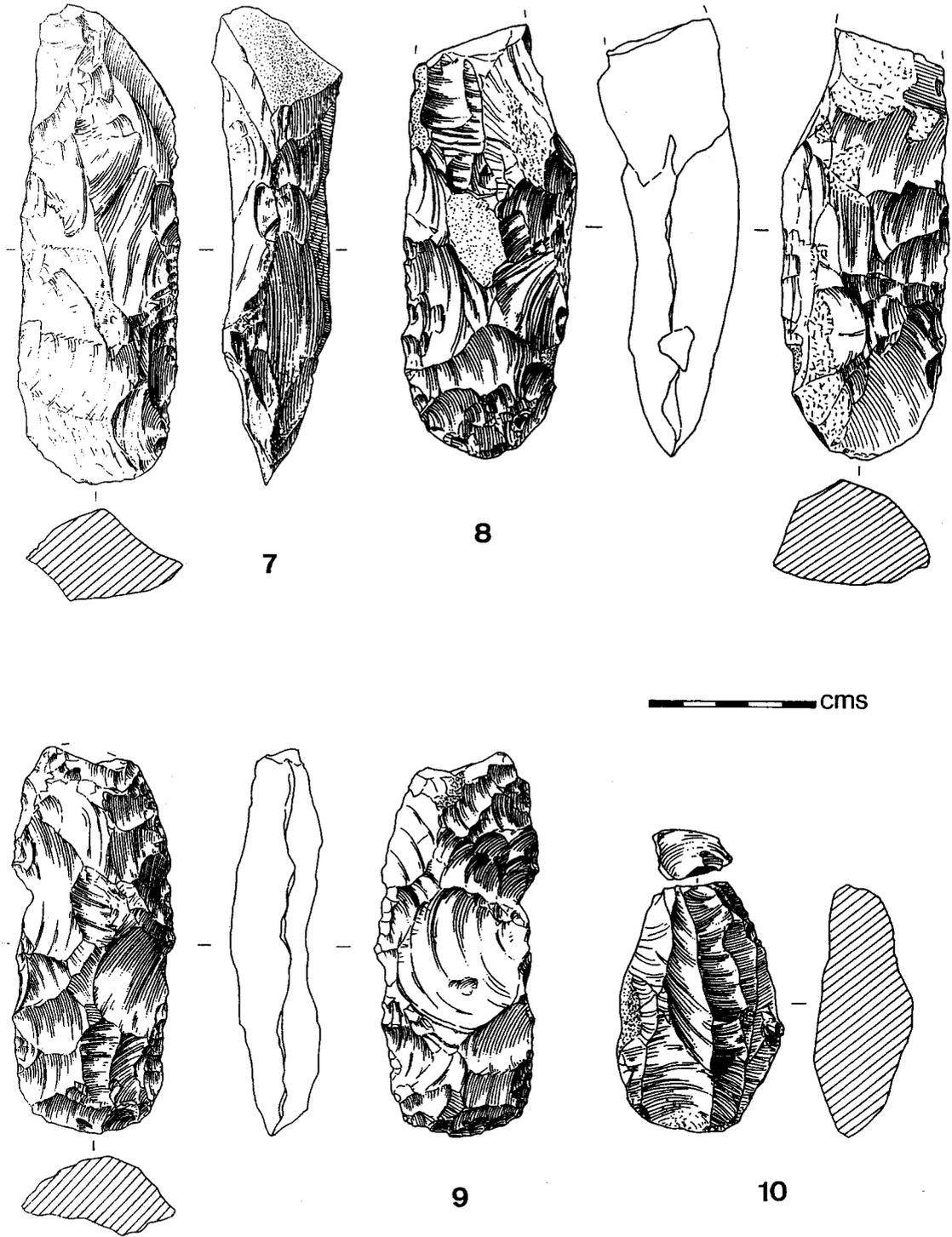


Fig 4. Mesolithic flint adzes (Nos 7-9) and opposed-platform core (No. 10). Scale 1:2

recovered from this reach during recent work associated with the Bronze Age 'bridge' or 'jetty' immediately downstream (eg Cotton & Wood 1996, 5, fig 3 no. 8). These two latest pieces from Vauxhall can be added to a growing body of lithic material recovered from this stretch of the foreshore, much of which appears to be of Mesolithic character. It seems likely that the flintwork was originally strewn across a series of low sandy eminences overlooking the Effra/Thames confluence.

11. A group of Mesolithic flint adzes and a single Neolithic flaked axe have recently come to light in the collection of the Croydon Natural History and Scientific Society (CNHSS). These formed part of the collection belonging to Walter Hellyer Bennett (1892–1971), having been purchased by him at the sale of the Corner Collection in 1948.

Frank Corner, son of the well known antiquarian George Corner, was a medical doctor and a collector with eclectic tastes. He lived in the Manor House, Poplar, and was a major early benefactor of the London Museum (Sheppard 1991, 50, 57). Following his death, the residue of his large collection of local prehistoric flintwork and other artefacts, together with the original manuscript copy of the collection catalogue, was sold off in

180 separate Lots by Puttick & Simpson Ltd at their galleries in 22 Dering Street, New Bond Street, W1 in April 1948. Three of the Sale Lots of flint artefacts were purchased by Bennett, whose large and equally eclectic collection was left to the CNHSS on his death in 1971.

The artefacts bought by Bennett comprise Lots 4, 19, and 53 in the Corner Sale Catalogue. Lot 4 is described as 'A fine collection of large [Palaeolithic] tools from Protheroe's Nursery, Bent's Farm, etc (12)' in east London. Lot 53 is described as 'Another collection [of Palaeolithic tools and other specimens], from Milton Pit, Swanscombe (60)' in Kent. Lot 19 is described as 'A similar lot [of Mesolithic Thames picks], mostly dredged (21)', and it is this latter Lot that concerns us here.

The following table lists all 21 Mesolithic pieces contained in Lot 19, with the addition of a single flaked Neolithic flint axe (B512) which, while not apparently included within the original Sale Lot, probably also formed part of the Corner Collection. One piece, B404, is now missing. The surviving pieces are variously marked in pencil, black ink, and white block lettering. All have the CNHSS accession numbers marked in white ink; five have original numbers (?Corner) marked in black ink.

Table 1. Contents of Lot 19 from the Corner Collection Sale, Monday 5 April 1948

CNHSS Acc no.	Description	Provenance as marked	Original no. (black ink)
B400	Flint adze	Thames dredged Northfleet	-
B401	Flint tranchet adze	Thames at Richmond	-
B402	Flint tranchet adze	Blakehall Road Wanstead	-
B403	Flint adze	Thames Long Reach	2972
B404*	Flint adze	Thames Long Reach	-
B405	Flint tranchet adze	No provenance surviving	-
B407	Flint tranchet adze	Thames dredged Long Reach Oct 96	-
B408	Flint adze	Thames dredged Long Reach May 94	-
B409	Flint tranchet adze	Thames dredged Broadness with Bronze	-
B410	Flint tranchet adze	Thames Alluvium below peat Becton Gas Works Oct 93	-
B411	Flint tranchet adze	Thames dredged Erith Oct 90	5
B412	Flint pick	Thames Reading	-
B413	Flint adze	Footings for new iron bridge Poplar	2025
B414	Flint tranchet adze	No provenance surviving	543
B415	Flint tranchet adze	Thames dredged Long Reach Ap 99	-
B416	Flint adze	Thames dredged Broadness with Bronze Hord ( <i>sic</i> )	-
B417	Flint tranchet adze	Thames dredged Long Reach	-
B418	Flint pick	Thames dredged Putney	-
B419	Flint pick	Thames dredged Hammersmith May 07	-
B499	Flint tranchet adze	Thames Battersea	-
B500	Flint tranchet adze	Clements Reach 12.7.08	-
B512	Flint flaked axe	Thames dredged Hammersmith 97	2435

(\*Missing)

*Discussion*

In terms of provenance, a number of the artefacts come from the Thames downstream of the City, particularly Long Reach. (To judge from the Sale Catalogue the latter locality seems to have been very well represented within the Corner Collection.) One example (B410), from Beckton Gas Works, appears to have been stratified within Thames alluvium sealed by peat. Others come from locations further upstream at Richmond, Hammersmith, Putney, and Battersea, all areas known to have produced similar finds in the past (eg Field 1989, fig 7; appendix II).

Though not local finds, two pieces (B409 and B416), from Broadness, Kent, are of particular interest as having been found at the same time as the hoard of bronze spearheads dredged from the Thames in 1892. This large Late Bronze Age 'Broadward' hoard passed into three separate collections: those belonging to Canon William Greenwell (now in the British Museum), William Lloyd junior, and Frank Corner (both now in the Museum of London). In his original publication of the spearheads R A Smith (1910, 161) noted the presence of 'neolithic (*sic*) flints, which numbered several hundreds and comprised flakes as well as finished implements' brought up from a lower level to that of the spearheads.

The two Mesolithic adzes now in the CNHSS collection appear to be the first of these flints to have been positively identified.

Two other Lots from the Corner Sale (Nos 27 and 151) were purchased by the London Museum, and are now in the collections of the Museum of London. Lot 27 comprised a group of 16 'polished celts' from various London localities, while Lot 151 comprised a series of finds from Baker's Hole in Kent, including a human skull and a collection of Palaeolithic (Levallois) cores and flakes. Finally, part of another Corner Sale Lot surfaced briefly in the trade following its discovery in Birkenhead School on the Wirral in 1994 (Cotton 1997). This comprised a group of 15 Palaeolithic artefacts from various localities in east London, but it has since been split up and sold on by its purchaser (Bonhams of Knightsbridge, Sale of Antiquities, Tuesday 7 October 1997, Lot 17). The rediscovery of the original Corner manuscript catalogue would no doubt allow further similar purchases to be identified in other public and private collections.

**12.** Red deer antler-beam mattock (Fig 5) found in October 2004 by Peter Bryan one third of the way down the Surrey foreshore of the Thames and 'two hundred metres or so downstream



Fig 5. Antler mattock (No. 12) (Photo: Richard Stroud, Museum of London)

from the Ship Inn' at Mortlake (TQ 2075 7610). The piece was initially thought to comprise a natural unworked antler until closer inspection by the finder revealed the presence of the chamfered cutting edge. The piece has now been acquired by the Museum of London (2004.170/1). (The same finder also recovered part of another perforated antler mattock a little further downstream on the same reach some three years prior to the present piece at *c.*TQ 213 762. This had been allowed to 'air dry', and had cracked and split apart as a result.)

The mattock measures 244mm in length and has an oval shaft (or 'beam') 48mm by 38mm in circumference; it weighs 440.97g in its wet state. An oval perforation 28mm by 24mm has been neatly drilled through the beam. The short 'blade' of the mattock has been created with a single angled axe strike. The piece is in fresh condition, though the surface lying uppermost on the foreshore appears to have suffered some wear and tear, which has resulted in the production of a series of striae seemingly unrelated to the object's manufacture and use.

13. Red deer antler-beam mattock (Fig 6) found in the late 1970s by Frank Berry on the Surrey foreshore of the Thames about '100 yards upstream from the Ship Inn' at Mortlake (TQ 2037 7616). The finder noted that the antler was picked up on an abnormally low tide which had 'uncovered parts of the river bed not usually seen'. It has since been donated to the Museum of London (MoL 2004.167) by its finder.

The mattock measures 235mm in length and has an oval shaft (or 'beam') 47mm by 35mm in circumference; it weighs 242.26g. An oval perforation *c.*21mm by 17mm has been drilled through the beam in broadly the same plane as the tines. This had clearly replaced an earlier failed perforation some 36mm further along the beam; the implement was, therefore, originally much longer. The 'blade' of the mattock appears to have been created with a single angled axe strike, though the worn condition of the surface in this area makes its original extent difficult to determine with precision. Wear aside, the piece is in reasonably good shape, with some traces of cracking around the perforations and slight surface loss towards the cutting edge.

### Discussion

Antler-beam mattocks Nos 12 and 13 fall within Smith's (1989, 278) 'unbalanced or laterally perforated' Type D, a majority of which have been recovered from the Thames. Smith regarded the antler-beam Types C and D as typologically later than his antler-base Types A and B, a view borne out by a subsequent programme of radiocarbon dating (*eg* Bonsall & Smith 1989) which produced dates spanning the Mesolithic and Early Neolithic. Further dates, however, for example on an antler-beam mattock from a silted channel/ditch feature at Beddington, Surrey (Adkins *et al* 1987, 349; Isca Howell pers comm), would appear to extend the manufacture and use of such objects down into the earlier Bronze Age.

The function of these pieces has also been much discussed, with the general consensus on this side of the Channel being that they were probably used for digging rather than wood-working or flenching (Smith 1989, 282). However, experiments conducted at Lejre, Denmark, have demonstrated the efficiency of such tools when hafted and used as axes to split and trim wood (Jensen 1991; Damian Goodburn pers comm), so their function is perhaps best left open.

The two (possibly three) beam mattocks from Mortlake noted here can be added to the single antler-base mattock and three antler-beam mattocks already known from this wide southerly loop of the Thames (*eg* Lawrence 1929, 82-4; Lacaille 1966, 16-17, fig 3 no. 5; Smith 1989, 274). These form part of a concentration of over fifty such finds from the west London Thames which is unparalleled anywhere else in the country. Other recent mattock finds from the London area include a single example retrieved from the Middlesex foreshore of the Thames at Richmond Bridge as part of the Thames Archaeological Survey (Cowie & Eastmond 1997, 120), together with the radiocarbon-dated example from Beddington, Surrey, mentioned above, found during the excavation of a Roman villa and bath house (Adkins *et al* 1987, 349; Isca Howell pers comm).

### NEOLITHIC

14. Neolithic ground stone axe (Fig 6) found in 1985 by a British Telecom employee during cable-laying operations in Pretoria Road, Enfield N18. The axe was reported to have been lying in the top of the brickearth at a

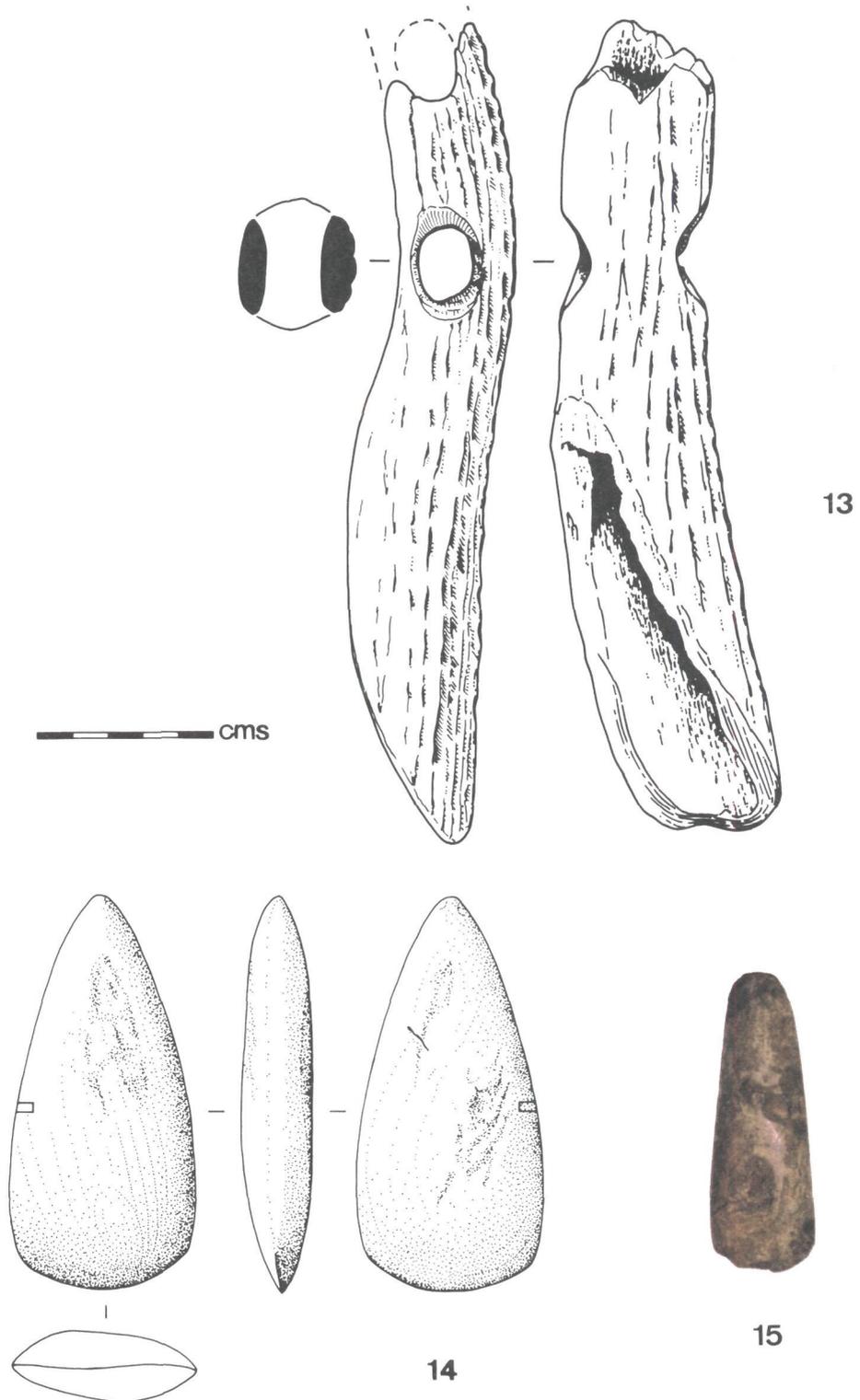


Fig 6. Antler mattock (No. 13) and Neolithic stone (No. 14) and flint (No. 15) axes.  
Scale 1:2 (Nos 13-14) and 1:4 (No. 15)

depth of 2ft 6in (0.75m) during the digging of a new trench in previously undisturbed ground (Les Whitmore pers comm). Pretoria Road runs north–south between TQ 338 922 and TQ 337 913; the findspot is situated between the 10m and 20m contours to the south of the Pymme’s Brook. The latter flows into the River Lea 1.5km to the east. The axe is currently in the possession of Forty Hall Museum.

The implement measures 113mm in length, 53mm in breadth, is 19mm thick, and weighs 182.53g. It comprises an axe worked on a small nodule of banded, fine-grained grey-green rock characterised as ‘near jadeite’ following thin-sectioning at the Natural History Museum (Valerie Jones pers comm). One face (left) has a smooth glassy surface, with the remains of the parent nodule’s original surface present towards the butt where it has not been fully ground out. The other face (right) is paler in colour and has a matt surface. Here the original nodular surface has survived in two areas, one close to the centre point, and the other towards the butt. A thin brownish surface deposit is present in patches close to one lateral edge. The cutting edge is sharp and undamaged, save for one tiny chip.

### Discussion

Jade axes, which encompass those made from jadeite or nephrite, are still unusual finds in Britain and have an uneven distribution (Pitts 1996, 319–20). Jadeite occurs in restricted outcrops across Europe from Glenely in Scotland to Brittany and in the French, Swiss, Italian, and Austrian Alps. Nephrite is slightly more widespread and can also be found in nodular form in stream beds. Overall, jade is scarce in Britain and would have been highly valued. It was selected for its robustness and visual appearance, but was difficult to work.

Four true jadeite axes have been recorded from the London region hitherto: two from the Thames, at Mortlake (MoL 31.48) and Vauxhall Bridge (BM 1907,6-19,1), one reworked example from a Roman context in King Street, City (MoL 29.121) (Jones *et al* 1977), and one broken example from Staines Moor in the Colne valley (Field & Woolley 1983). Remarkably, the first three all passed through the hands of G F Lawrence, the well known dealer in antiquities of West Hill, Wandsworth. (A further example,

purporting to have come from the Thames at Strand-on-the-Green (MoL O701) (Adkins & Jackson 1978, no. 244), may be an ethnographic import.) In addition, a single nephrite axe has been recorded from Hendon, close to the River Brent (Jones *et al* 1977, 290, *contra* HADAS 1977, where the axe is described as ‘jadeite’).

15. Partially-ground Neolithic flint axe (Fig 6) found ‘about 1930’ in the back garden of 36 Danvers Street, Chelsea, by the grandfather of James Reid, who reported the discovery in 1998 (it had been shown to staff at the British Museum some time before this). Danvers Street is centred on TQ 2695 7760 and runs north-west off Chelsea Embankment at a point a little downstream from Battersea Bridge on the Middlesex bank of the Thames. Prior to the construction of Chelsea Embankment in 1871–74 (Weinreb & Hibbert 1983, 149), the area would have formed part of the river foreshore and floodplain.

The axe measures 180mm in length and weighs 380g. It has been fashioned out of cherty grey flint and is of slender lenticular form with markedly faceted sides; the cutting edge bears traces of recent damage.

The present piece can be added to a number of other axes recorded from this stretch of the river and its floodplain (*eg* Adkins & Jackson 1978, 67). Recent archaeological excavations have recovered evidence of the area’s topographic development and of low level flint knapping activity conducted within it (*eg* Farid 2000, 119; Divers 2001, 4), some of which may be referable to the Neolithic.

16. Reworked blade section of a Neolithic ground flint axe (Fig 7) (Northampton Museum Inventory I, c.1893, 1A 166; now MoL 2000, 287/1). The original label is illegible, but the axe was subsequently marked ‘Kings Cross, London, Bateman Collection’.

The implement measures 135mm in length, 67mm in breadth, is 40mm thick at the midpoint, and weighs 448.81g. It comprises a substantial portion of a ground flint axe with faceted sides and re-flaked butt. A number of the original flake scars on the body of the axe have not been fully ground out. A modern chip at the cutting edge indicates that it was fashioned out of mottled cherty grey flint, which was stained an ochreous yellow-brown subsequent to the re-flaking of the butt.

Its provenance and likely date of discovery

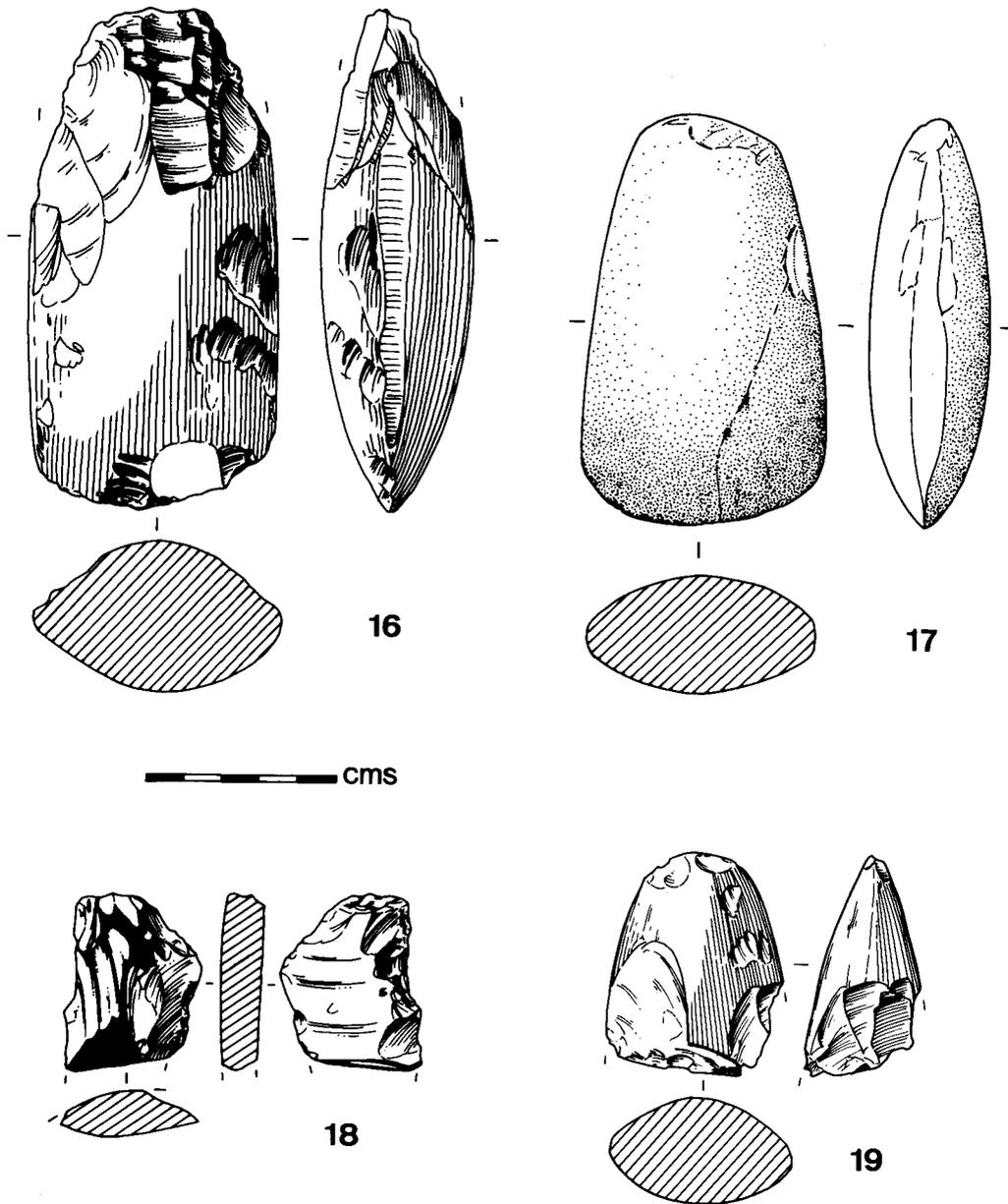


Fig 7. Neolithic axes of flint (Nos 16, 18 and 19) and stone (No. 17). Scale 1:2

(which must have occurred prior to August 1861, when Thomas Bateman died after a short illness aged 40 (DNB)) suggest that it could have been recovered during the construction of the terminus of the Great Northern Railway at King's Cross in 1851-2 (Weinreb & Hibbert 1983, 448). King's Cross lies on the left or east bank of the now

culverted River Fleet and opposite the point at which a western tributary stream joined the main channel (Barton 1962, 27-8).

17. Small Neolithic ground stone axe (Fig 7) (Northampton Museum Inventory I, c.1893 1A, 164; now MoL 2000.287/2). The axe is marked 'Thames' and has a worn label which (under x20 magnification) reads '97. P. Celt

4¼" long, [variega]ted green stone like signite. Found with huma[n? skulls] in the Thames. 1854'. Also 'Thames 1854. Bateman Collection'.

The implement measures 110mm in length, 65mm in breadth at the blade, is 32mm thick at the midpoint, and weighs 367.9g. It comprises a complete stone axe of plump 'hachette' type, with ground facets at the edges and slight damage to its rounded butt. The rock comprises a smooth, fine-grained, speckled dark green material and remains unsorted.

The reference to 'huma[n? skulls]' and the date '1854' given on the label provides a clue as to the implement's original provenance, for a number of collectors, Bateman among them, were known to have been obtaining objects dredged from the river during the building of Chelsea Bridge between December 1854 and October 1855. These objects comprised various items of Bronze Age and later metalwork including the Battersea Shield (Cuming 1858, pl 23) — the latter now in the British Museum — together with large numbers of human skulls. Indeed, so many of the latter were found here that it led the Walworth antiquarian H S Cuming to dub the reach 'our Celtic Golgotha' (1857, 238).

### Discussion

The two Neolithic axes, Nos 16 and 17, one of flint and one of stone, both originally part of the collection belonging to Thomas Bateman of Youlgrave, Derbyshire, were transferred to the Museum of London from Northampton Museum in 2000 (MoL 2000.287/1-2). They formed two thirds of Lot 16 in the sale of the Bateman Heirlooms held at Sotheby, Wilkinson and Hodge on Wednesday 14 June 1893. The third axe in the Lot was from Northampton, and has been retained by the museum there.

An annotated copy of the Sale Catalogue held in the British Museum records that Lot 16 was purchased for 15 shillings by 'Fenton' (presumably the London antique dealers Fenton & Sons Ltd), who may have been acting for Northampton Museum. Whether or not this was so, all three axes were certainly quickly incorporated into the collections of the museum, as they feature in its Inventory which was compiled around this time.

Although resident in Derbyshire and best known for his archaeological fieldwork in the

Peak District, Thomas Bateman was an active collector on the London scene throughout the 1850s. In addition to the axes (Nos 16 and 17 above), a number of other London antiquities were amongst the objects on offer at the 1893 sale, principally pieces of Bronze Age metalwork, including swords and spearheads dredged from the Thames. Several of these passed into the collection of Canon William Greenwell and are now in the British Museum.

**18.** Broken blade/narrow flake (Fig 7) from a ground flint axe found by Margaret Woolridge of the West London Archaeological Field Group during site watching on the south side of North Street, Isleworth (c.TQ 163 759) in the early 1970s.

The blade/flake measures 47mm in length, 33mm in breadth, 10mm in thickness, and weighs 21.94g. Originally struck from a partially-ground axe of good quality mottled grey flint it has been reflaked at its butt and along both lateral edges for use as a knife, before being snapped at its distal end.

Another flake from a ground flint axe was recovered during excavations on the site of Richard, Earl of Cornwall's moated manor house in Church Street, Isleworth (site code CSI86; Thompson *et al* 1998, 95) a little to the east, while various complete axes have been dredged from adjacent reaches of the Thames (*eg* Lawrence 1929, 78; Adkins & Jackson 1978, 64).

**19.** Butt of a Neolithic ground flint axe (Fig 7) found in 1992 by Richard Hill on the Surrey foreshore of the Thames at St Mary Overie Dock, Southwark (c.TQ 3263 8044). The piece lay 'close to the mouth of the dock at low water'.

The fragment measures 59mm in length, 45mm in breadth, is 30mm thick, and weighs 85.9g. It is of mottled light grey/dark grey flint. There are traces of ground facets at the lateral edges.

The piece can be added to a small body of Neolithic material recorded from the area of north Southwark and Lambeth, at least some of which appears to reflect sedentary activity (*eg* No. 20. below; see also Sidell *et al* 2002, 21), as opposed to short-stay hunting or foraging.

**20.** Eleven sherds of Neolithic pottery (Fig 8) collected independently in 2001 and 2002 by Fiona Haughey, Andy Johannesen, and Mike Webber from the same confined area (c.2m

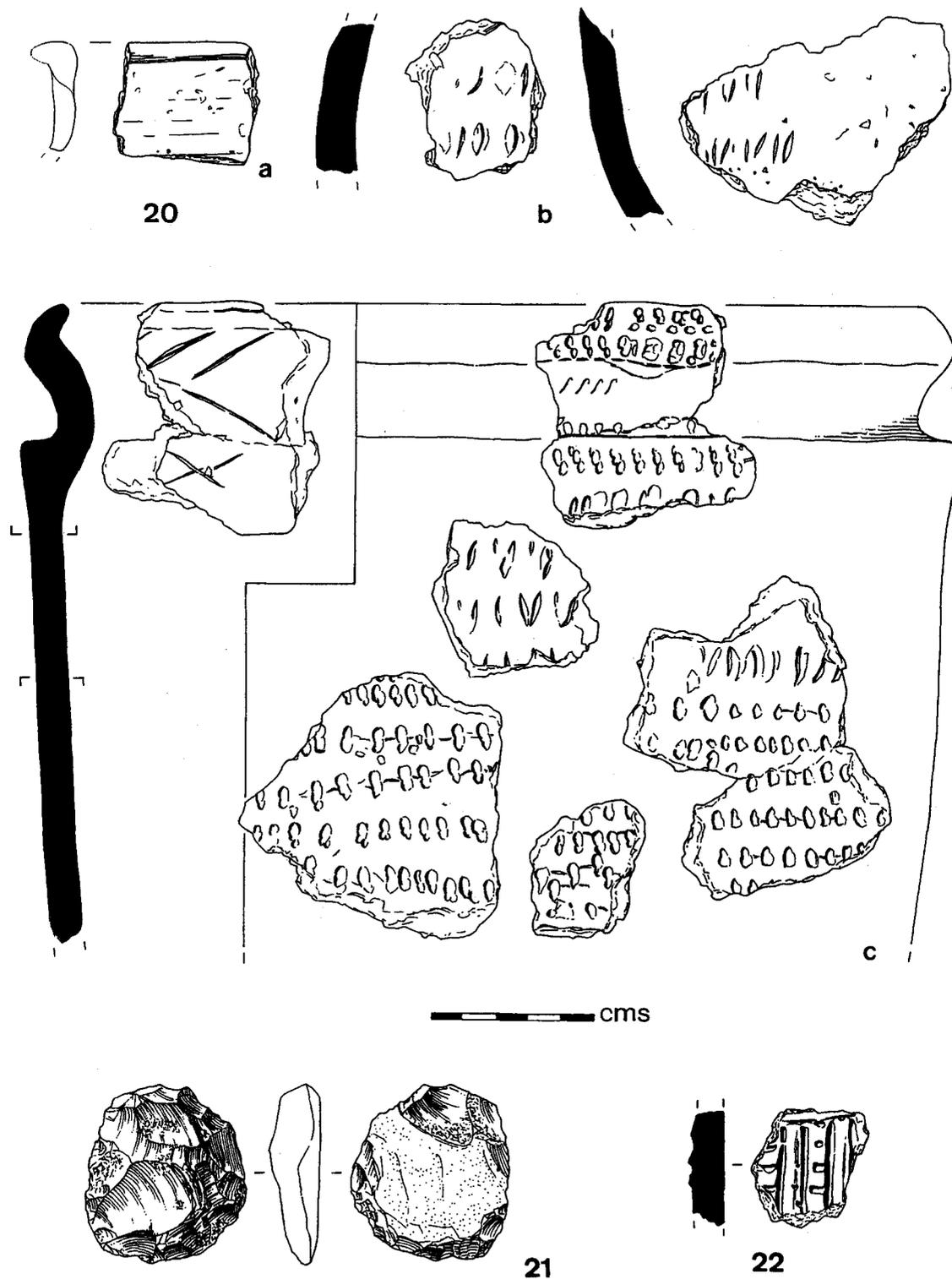


Fig 8. Neolithic pottery (Nos 20 and 22) and flintwork (No. 21). Scale 1:2

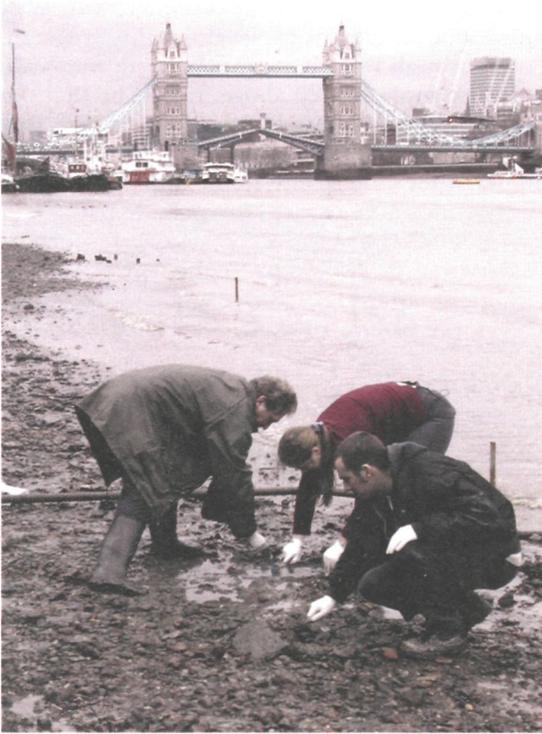


Fig 9. The Thames foreshore at Chamber's Wharf, Bermondsey, looking upstream. The findspot of the Neolithic pottery is marked by the vertical stake behind the three figures engaged in excavating a post-medieval human burial (Photo: Robert Whytehead, English Heritage)

in diameter) close to low water on the Surrey foreshore of the Thames at Chambers Wharf, Bermondsey (TQ 3430 7975). Several other sherds have already been reported from this same locality (Cotton & Merriman 1991, 43, no. 14; Cotton & Wood 1996, 10–12, no. 16). (A partial, articulated, human burial initially thought to have been associated with these sherds — but in reality some metres distant, see Fig 9 — has since been radiocarbon dated to the post-medieval period (Baylis *et al* 2004).)

At least three vessels appear to be represented by the sherds: an apparently undecorated 'open bowl' (1 sherd; weight 19.43g); the lower section of a decorated Peterborough Ware bowl of Mortlake type (3 sherds; combined weight 121.79g); and a decorated Peterborough Ware bowl of Mortlake/Fengate type (7 sherds, several conjoining; combined weight 288.45g). The sherds are as follows:

(a) Worn, undecorated rim sherd of necked open bowl with upright, externally expanded rim, weight 19.43g. Hard sandy fabric fired grey/black internally and brown/black externally, tempered with moderate amounts of sub-angular crushed burnt flint up to 4mm in size. A coil junction is visible just below the rim; there are traces of wiping on the interior.

(b) Three sherds representing the lower wall/base of a round-based bowl with an external zone of finger-tip/finger-nail decoration, combined weight 121.79g. Hard, laminated sandy fabric fired grey internally and grey/brown externally, tempered with sparse–moderate amounts of sub-angular crushed burnt flint up to 8mm in size. Contraction cracks are visible on the interior wall surfaces. Peterborough Ware: Mortlake/Fengate type.

(c) Seven sherds of a large, upright, voluminous straight-sided bowl decorated with horizontal zones of finger-tip/finger-nail and 'bird-bone' type impressions arranged in rows, the latter predominating, combined weight 288.45g. The rim and shoulder have been carefully but firmly decorated with overlapping oval motifs (?coarse twisted cord) and 'bird-bone' type impressions, although — four small finger-nail impressions apart — the neck itself has been left plain. Interior decoration is confined to a zone below the rim and comprises a herringbone/diamond pattern lightly incised with a bone or wooden point. Hard, laminated fabric fired grey/brown, tempered with sparse–moderate amounts of sub-angular crushed burnt flint up to 8mm in size. The exterior surfaces have been smoothed prior to decoration and the interior surfaces have been wiped. Peterborough Ware: Mortlake/Fengate type.

#### Discussion

Neolithic pottery has now been recorded both from the foreshore and from a number of localities in north Southwark (*eg* Sidell *et al* 2002, 21; Cotton 2004, 141–2, fig 15.5). Given the restricted distribution of the material from Chamber's Wharf, it is conceivable that it was originally deposited within a pit (or pits) under active erosion by the tide. Moreover, 'bird-bone' type impressions were noted on a sherd published previously from the Bermondsey-

Rotherhithe area; this could even belong with vessel 'c' above, though its reported NGR is slightly different (Cotton & Merriman 1991, 43, no. 14).

**21.** Neolithic discoidal flint scraper (Fig 8) found on the Surrey foreshore of the Thames in front of Chamber's Wharf, Rotherhithe by Fiona Haughey in 2001 (TQ 343 797). The findspot lay a few metres downstream from the Neolithic pottery described above, and close to a partial human skeleton radiocarbon dated to the early modern period (Baylis *et al* 2004).

The implement measures 55mm in length, 48mm in breadth, is 15mm thick, and weighs 44.52g. It has been radially worked on a sturdy cortical flake of dark black-brown flint, and has patches of a calcareous deposit (Thames 'race') adhering to both faces.

Prehistoric flintwork of Mesolithic to Bronze Age date is a recurrent find along this stretch of foreshore (*eg* Cotton & Wood 1996, nos 7 and 15). The present piece is probably of Neolithic date.

**22.** Body sherd of later Neolithic Grooved Ware pottery (Fig 8) picked up at low water in August 2004 by Andy Johannesen on the Surrey foreshore of the Thames a little downstream from the mouth of St Saviour's Dock, Bermondsey (TQ 3418 7987). (A small portion of brown stained adult human cranium measuring 80mm by 60mm had been recovered from the same general area the previous December.)

The sherd measures 35mm by 30mm and the vessel wall is 11mm thick; the sherd weighs 15.3g. Hard sandy fabric with ?grog filler, fired grey-black. External decoration has been deeply scored with the point of a stick or a bone, and comprises a series of overlapping horizontal and vertical grooves.

The deeply scored 'plastic' decoration falls within the Clacton style of Grooved Ware, as defined by Longworth (Wainwright & Longworth 1971, 236–8). Garwood (1999) has since suggested that the Clacton style falls relatively early within the overall Grooved Ware sequence, *ie* early–mid 3rd millennium BC.

### *Discussion*

Grooved Ware is an unusual find from the Thames and its foreshores, though a few sherds have been

recognised previously from Hammersmith, with individual sherds from several other reaches. Peterborough Ware is more commonly met with, as for example No. 20 above. It may be that the present sherd was eroded out of a feature dug into Horseleydown, closest of a sequence of higher, drier sand islands in the north Southwark and Bermondsey areas. Moreover, a few scraps of Grooved Ware have been reported from landward sites elsewhere in the Horseleydown locality, *eg* Three Oak Lane adjacent to Dockhead (Proctor & Bishop 2002, 8).

**23.** Flint arrowhead of later Neolithic transverse 'chisel' form (Fig 12). Found in 2001 during an evaluation carried out by Sutton Archaeological Services at the junction of New Road and Bath Road, Heathrow (TQ 0840 7695) (NED01 [003]).

The piece measures 45mm in length, *c.*50mm in breadth at the (now incomplete) leading edge, is 5–6mm thick, and weighs 13.23g. It is fashioned on a broad flake of handsome mottled dark yellow-brown 'gravel' flint, with invasive retouch used to achieve straight, thinned, lateral edges.

Large numbers of transverse arrowheads have been recovered from the west Middlesex area in association with both Peterborough Ware and Grooved Ware, though few are as large or fine as the present example. The choice of yellow-brown coloured flint for the most elaborate pieces is a recurrent feature, and presumably deliberate (*eg* Elsdon 1997, 4).

### **?NEOLITHIC/BRONZE AGE**

**24.** Part of a human skull (Figs 10–11) spotted in October 2003 by Bob Wells towards low water on the Surrey foreshore of the Thames at Putney (TQ 2430 7562). It was subsequently lifted by Jane Sidell and the first writer and deposited with the Museum of London (MoL 2004.97).

The cranium was lying upside down within the foreshore and was filled with river silts, from which a further fragment of bone was later recovered in the laboratory. On excavation the skull was found to be lying within a black-grey silty sand deposit.

A report on the skull was prepared by Museum of London osteologist Bill White, who writes as follows:



*Fig 10. The Thames foreshore at Putney, looking downstream. The findspot of the human skull (No. 24) is marked by a cross (Photo: Bob Wells)*



*Fig 11. Jane Sidell holding the human skull (No. 24) (Photo: Bob Wells)*

The remains comprised two pieces of human cranial bone. The larger one was a calotte, the vault of the skull with frontal, parietal and occipital bones united; the minor fragment was a portion of temporal bone (see below). The bone was stained deep brown and there were patches of a calcareous concretion, typical of 'Thames race'.

The features of the surviving part of the cranium were strongly suggestive of the male sex. These included principally well defined supra-orbital ridges, a sloping forehead, marked temporal lines, and a nuchal crest.

Unfortunately the reduced state of integrity of the skull did not permit accurate estimation of the age at which this individual died. The coronal and sagittal sutures were fused but not obliterated and fusion of the lambdoid suture had commenced but was incomplete. This individual was fully adult and the state of fusion of the cranial sutures suggests a mature adult, rather than a young adult, but because of the known variation within populations it is impossible to state the age at death with greater precision.

The maximum length (L) of the skull was 198mm and the maximum breadth (B) was 148mm. These figures allow the calculation of the cranial index ( $B/L \times 100$ ) as 74.7, interestingly just within the dolichocranic ('long-headed') range <75.0 (Brothwell 1981, 87). Once again, considerable variation in skull shape is seen within populations, nevertheless the 'long-headed' shape in the London region is rather characteristic of the prehistoric skulls known or, to a lesser extent, the Anglo-Saxons.

The non-metric traits still visible on the skull concerned were bilateral supra-orbital grooves and multiple Wormian bones on the lambdoid suture. Apart from the central ossicle at Lambda there were at least nine ossicles on the right lambdoid suture and at least ten on the left (because these were unfused a number have fallen out and been lost in antiquity).

The interior of the cranial vault showed well-marked impressions of blood vessels and sulci. In particular there was a pronounced sulcus on each side of the internal occipital crest. However, the only significant indicator of pathology was on the frontal bone, about 50mm above the margin of the left orbit. Here a slightly raised section of bone about 12mm in diameter represented the sequel to trauma. Although it was roughly circular this bony eminence did not resemble a benign ('button') osteoma as there was a slight excavated area to its left side and inspection of the interior of the cranial vault showed a corresponding minor depression. Accordingly this seemed to be healing of an injury caused to the front of the head. Where this rounded part of the head is concerned, for such a wound to occur by accident would require collision at speed with a hard and edged obstacle, such as the external corner of a brick building or a stout wooden post of square or rectangular cross section. This would tend to rule out accidental injury and make a deliberate act of violence much more likely.

Little can be deduced from the minor fragment

of bone (c.47mm long) found. It is part of the petrous portion of a temporal bone, probably from the left side. However, as the squamous part of the same temporal bone by which it would have been attached to the cranium is missing, one cannot be certain that this piece is from the same individual.

The recovered skull is that of a mature man. It is classified as dolichocranic and therefore may be of great antiquity, as is also suggested by the type of deposit from which it was retrieved. Only dating by radiometric methods could resolve this matter but if it proved to be of remote date then here would be evidence of ancient inter-personal violence.

### Discussion

The Putney skull can be added to numerous others recorded from the Thames and its major tributaries (see also the fragment of human cranium located close to the mouth of St Saviour's Dock in December 2003, No. 22 above). Cuming (1857) and Lawrence (1929), for example, have drawn attention to skull finds from localities such as Kew, Hammersmith, Strand-on-the-Green, and Chelsea. Few of these Thames skulls have been independently dated, but those that have seem to cluster within the Bronze Age (eg Bradley & Gordon 1988, 507-8); to these latter can be added a trepanned male skull fragment recovered recently from the Thames foreshore at Chelsea (Yvonne Edwards, Alison Weiskopf and Fiona Haughey pers comm and in prep).

The evidence of trauma identified on the present skull is noteworthy too, though the current lack of any independent dating for the skull makes its full significance difficult to assess. Nevertheless, the recent recovery of an alder wood club of Neolithic date from the modern foreshore at Chelsea (Webber 2004) provides a tantalising hint of one means by which 'ancient inter-personal violence' could be meted out.

### BRONZE AGE

25. Small Late Neolithic or Early Bronze Age plano-convex flint knife (Fig 12) found in 1979 by Barbara Eastop and Tony Lewis of the West London Archaeological Field Group on the lower south-western slopes of Horsenden Hill, Ealing (c.TQ 161 842) during the monitoring of a waterboard trench. Other finds from the slopes included a scatter of struck flint and scraps of prehistoric and later pottery. Further finds were recovered from

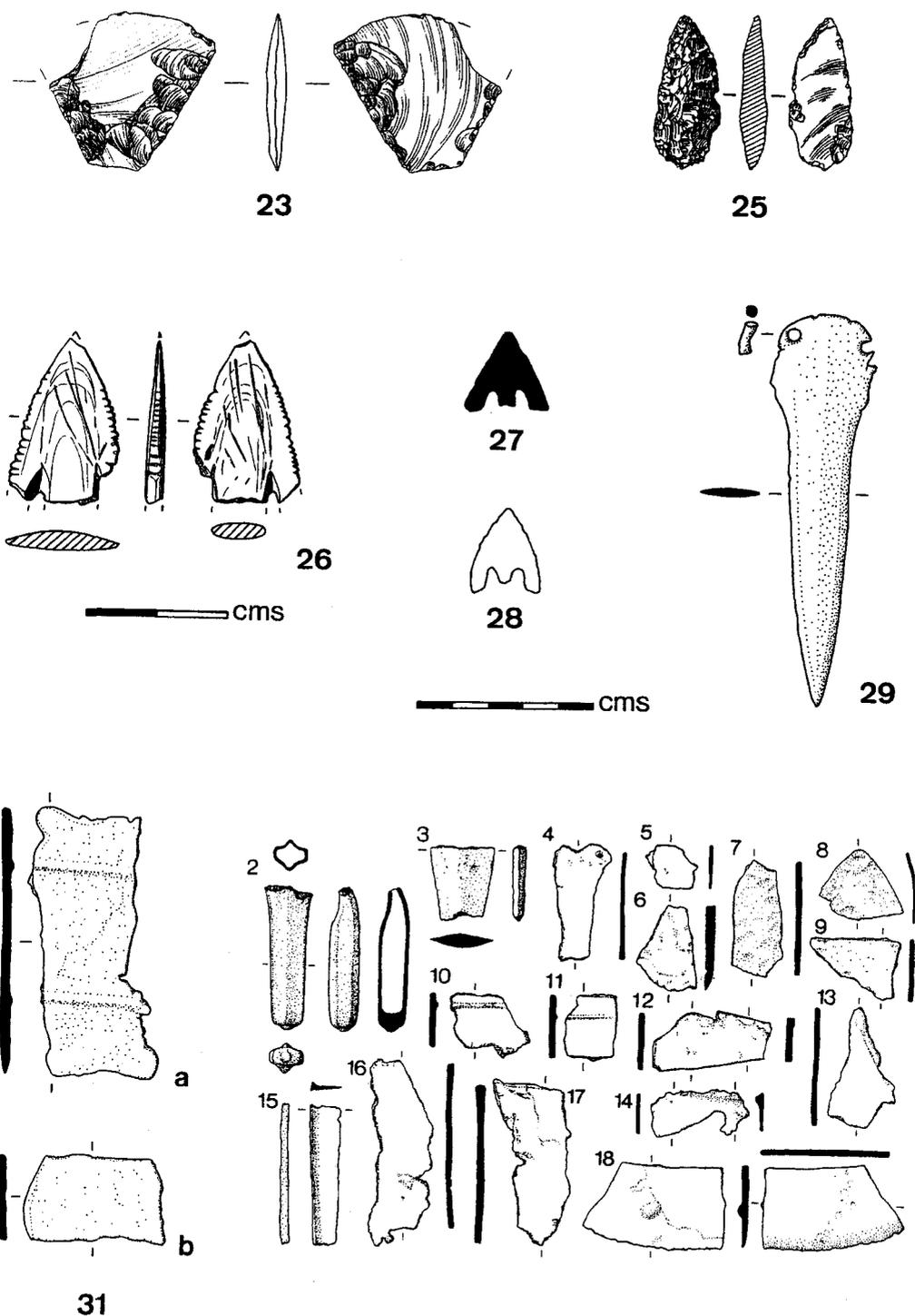


Fig 12. Neolithic and Bronze Age artefacts of flint (Nos 23, 25, 27 and 28), bone (No. 26) and copper alloy (Nos 29, 31a-b and 31.2-18). All scale 1:2 except No. 26 (1:1) and 31.2-18 (1:3) (Drawn by Stuart Needham)

the summit of the hill during the excavations carried out by the Wembley History Society from 1973 onwards (Bloice 1974, 134; 1976, 370). These included pottery of later prehistoric type, together with a fragment of Late Iron Age enamelled strap junction (Ian Stead pers comm).

The knife is 43mm in length, 18mm in breadth, 5mm thick, and weighs 5.37g. It has been fashioned on a small narrow flake/blade of glossy, semi-translucent light brown flint. Neat, invasive retouch covers the dorsal face; retouch on the ventral face is confined to the tip, one edge and the butt.

The form of the piece suggests that it should be characterised as a small plano-convex knife rather than as an asymmetric leaf arrowhead. As such, it is likely to date to the end of the Neolithic and earlier part of the Bronze Age. Most of the few other plano-convex knives known from the London region appear to be distributed along the Thames and its floodplain or on the brickearth-capped terrace gravels around Heathrow.

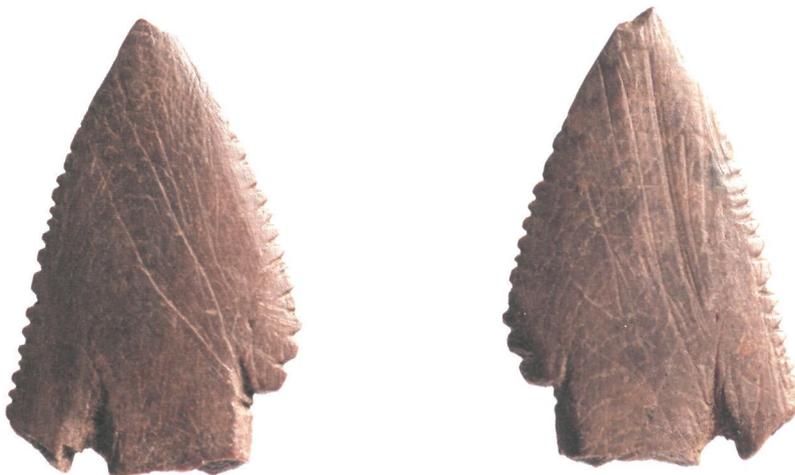
26. Tip of a serrated barbed and tanged bone point (Figs 12–13) reported in May 1998 by Richard Hill as having been found close to low water on the Surrey foreshore of the Thames at the downstream end of Chambers Wharf, Bermondsey (c.TQ 344 798). A wide

range of other prehistoric (and later) finds has been recovered from this same stretch of foreshore in recent years.

The point measures 23mm in length, 15mm in breadth at its widest surviving point, is 2mm thick, and weighs 0.86g. It has been fashioned from bone (as opposed to antler), although its small size and polished surfaces have made it impossible to identify to species (Alan Pipe and Kevin Rielly pers comm). A series of fine, rounded, but unevenly spaced serrations have been worked along both lateral edges starting some 7mm from the tip. The latter is slightly chipped, possibly the result of an impact fracture. The tang and one of the barbs appear to have been broken off; the other barb seems to have been deliberately foreshortened, which may have given the original object a somewhat asymmetric form. Surface scratches are visible on both faces, at least one of which appears have been the result of a loss of control of the ?flint blade used to work the barbs.

#### *Discussion*

There are no immediate parallels for this piece, which makes dating a somewhat hazardous exercise. However, if it was intended as a copy of an asymmetrically barbed arrowhead (as Sidell *et al* 2002, 21, fig 17) or — perhaps more likely



*Fig 13. Serrated barbed and tanged bone point (No. 26). Scale approx 3:1 (Photo: John Chase, Museum of London)*

— of a serrated barbed and tanged arrowhead, then a later Neolithic to Early Bronze Age date would be appropriate.

Green (1980, 53) regarded serration on barbed and tanged flint arrowheads as 'primarily a decorative rather than a functional trait' and it occurs most often on his fancy Green Low and Kilmarnock types. The best known group of serrated pieces are the thirteen fine arrowheads that accompany a burial at Breach Farm, Llanbleddian, Glamorgan (Grimes 1938, 115, fig 6). These are dated to the latter part of the Early Bronze Age. A similar date is also usually ascribed to the small series of bone daggers assumed to be copies of bronze originals (*eg* Gerloff 1975, 175–6, pl 28). While it is possible that the present piece shared a common inspiration with these bone skeuomorphs, it was presumably perfectly functional in a way that the daggers were not.

**27.** Early Bronze Age barbed-and-tanged flint arrowhead (Fig 12) found by Patrick Wright approximately 1ft below the surface in the garden of 8 Heath Road, Hillingdon, and reported to Hillingdon Library Service in April 1999. Information, including a colour photocopy of the object, was recorded by Maria Newbury at Central Library, Uxbridge and passed on to the Museum of London. Recent attempts to contact the finder at the address have been unsuccessful.

The arrowhead measures 23mm in length and 24mm in breadth across the square-shaped barbs. It appears to have been fashioned out of banded yellow-brown flint. Damage is evident at the tip and along one edge just below the tip. It appears to be a variant of Green's (1980, 123, fig 46) fancy 'Conygar' type, the finest examples of which he notes to have Food Vessel associations (*ibid.*, 130, 138–9).

Heath Road lies on the north side of the Uxbridge Road between Hillingdon and Hayes End (centred TQ 081 823), close to the junction of the Boyn Hill terrace gravels with the London Clay. Little relevant material has been recorded from the immediate locality hitherto, although a group of six 'Conygar' type flint arrowheads were found associated with the dismembered remains of an aurochs at Holloway Lane, Harmondsworth some 4.5km to the south (Cotton 1991).

**28.** Early Bronze Age barbed-and-tanged flint arrowhead (Fig 12) reported to Nick Merri-

man at the Museum of London in May 1987 as having been found on the Surrey foreshore of the Thames at Mortlake (TQ 206 761). The findspot indicated lies 100m or so downstream of The Ship Inn.

The arrowhead measures 22mm in length and 20mm in breadth across the pointed barbs. No information survives as to the colour of the raw material or the quality of the knapping. However, a photocopied outline of the piece survives and this makes it clear that it belongs to Green's (1980, fig 46) fancy 'Green Low' type with barbs projecting beyond the tang. According to Green (1980, 130) the type has exclusively late Beaker associations.

**29.** Small Middle Bronze Age copper-alloy dagger or dirk (Fig 12) found in August 1978 by Mr J Toms on the Middlesex foreshore of the Thames off Cheyne Walk, Chelsea, and subsequently acquired by the Museum of London (MoL 79.17). The findspot lay just upstream of Battersea Bridge and at a point 'c.200 yards out from the embankment' (TQ 2680 7738).

The piece measures 115mm in length with a maximum surviving width at its butt of 30mm, and weighs 22.9g. It has a low, lozenge-sectioned blade with a poorly defined mid-rib and bevelled edges terminating in a rounded, trapezoidal butt pierced by two rivet holes. One rivet hole survives intact; the second has torn through. One loose twisted rivet of circular section weighing 0.8g survives, though this was in place in the undamaged rivet hole when the finder discovered the blade.

### Discussion

Blades of this type fall within Burgess and Gerloff's Group II (1981, 19–20), a number of which have been recovered from the Thames 'in and near London' (*ibid.*, 46, pls 119–20; Rowlands 1976, 406–14). They are broadly dateable to the early phases of the Middle Bronze Age in Britain, *ie* during the currency of 'Acton-Taunton' metalwork (c.1500–1300 BC) (Rowlands 1976, 66–7; Needham *et al* 1997, 84–6).

**30.** Middle Bronze Age copper-alloy, basal-looped spearhead (Fig 14) found in the summer of 2004 by Andy Horwood on the

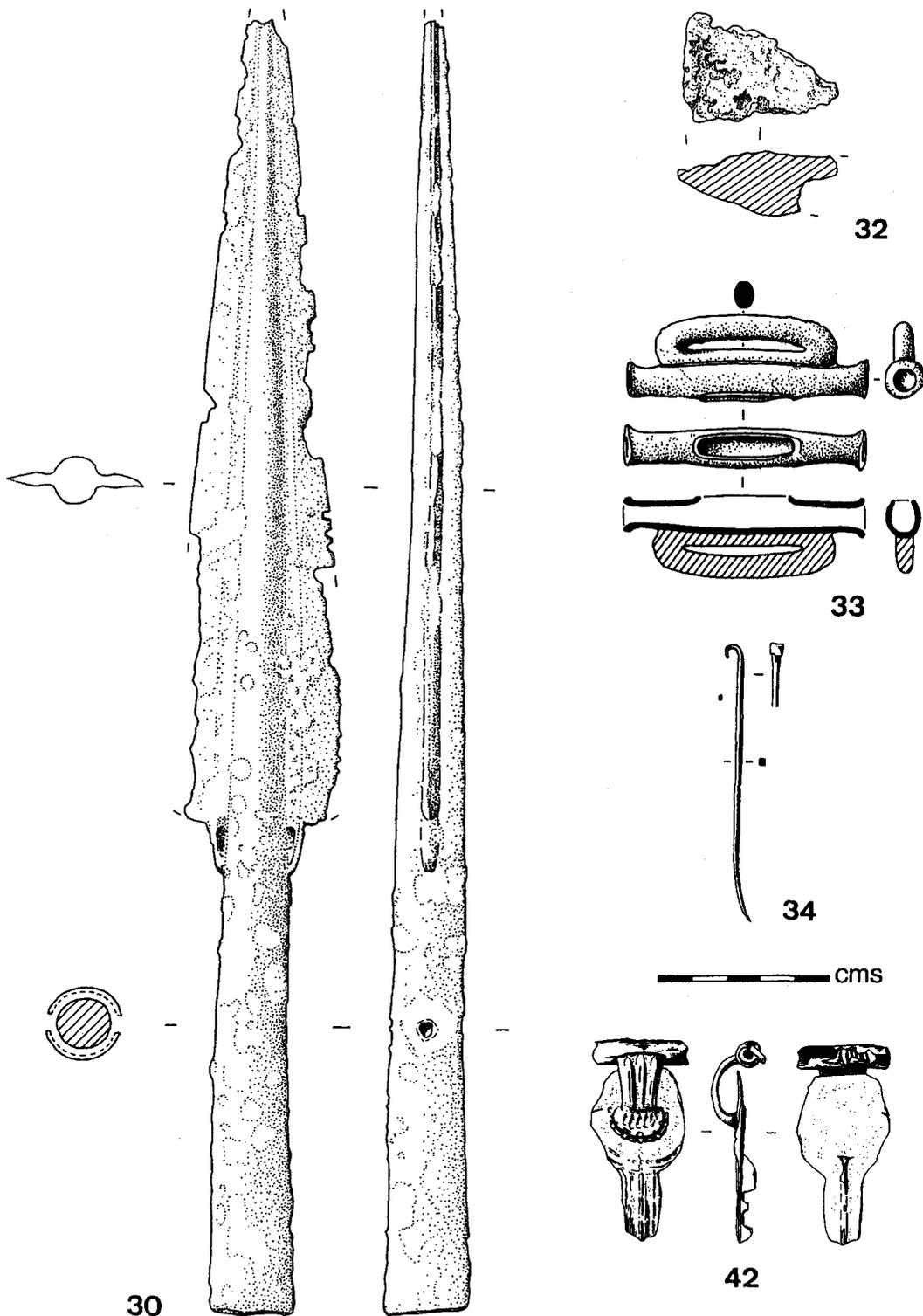


Fig 14. Bronze Age (Nos 30 and 32-34) and Iron Age (No. 42) artefacts of copper alloy. Scale 1:2

foreshore of Brentford Ait, which lies off the Middlesex bank (TQ 1844 7765). The find lay on the outer or riverward foreshore halfway along the upstream or smaller Ait and hard by the modern sheet-piling which protects it from erosion. It is possible that the piece had been disturbed during the works associated with the insertion of the piling.

The spearhead has a surviving length of 390mm (original length *c.*410mm), a surviving width of 41mm across the blade wings, and a socket diameter of 25mm at the mouth. The remains of a wooden shaft tip (species not determined) survives in the socket. In its current state the spearhead/shaft tip weighs 341.4g. The spearhead conforms to Rowlands' (1976, 58) Group 3 in having a triangular blade with straight, right-angled base, internal bevels to the blade wings, a rounded mid-rib, and string loops set at the blade base on the socket side. Traces of blocked pegholes *c.*5mm in diameter are visible in the same plane as the blade wings and loops at a point 81mm from the mouth of the socket.

Though the underlying metal is solid enough, the spearhead is in poor condition: the tip of the blade and portions of both blade wings are missing and there is much surface pocking and localised evidence of bronze disease. There are also traces of older damage in the form of three nicks on the surviving original edge of one of the blade wings.

### Discussion

Damage to the blade wings notwithstanding, the piece clearly comprises a triangular basal-looped spearhead of Middle Bronze Age 'Penard' type, whose currency is currently centred *c.*1275–1140 BC (but is of probably longer duration) (Needham *et al* 1997, 87). A number of spearheads of this, and of the earlier 'Taunton' leaf-shaped basal-looped type have been recovered from the Thames between Staines and Vauxhall in west London (*eg* Rowlands 1976, 386–90, map 28). One triangular-bladed piece in the Museum of London's collection (Acc No. A27600) was found 'opposite one of the islands between Kew Bridge and Brentford Ferry', *ie* close to the findspot of the current spearhead.

**31.** Two fragments of Late Bronze Age copper-alloy plate scrap (Fig 12) found some time

after 1976 or 1977 by John Gibson on the Middlesex foreshore of the Thames at Syon Reach (TQ 175 764). They were picked up at the foot of an erosion scarp towards low water, and subsequent to the discovery of a small hoard of scrap bronze at this same spot by the same finder (Needham & Burgess 1980, 443, fig 2, 445; Needham 1987, fig 5.15, nos 2–18). Other finds reported from the findspot include a ground stone axe and a perforated quartzite pebble macehead (Cotton & Wood 1996, 9, nos 12 & 14).

(a) Rectilinear fragment of flat plate scrap with two low ribs on one face. The piece measures 78–80mm in length, 26–30mm in breadth, 2–3mm thick and weighs 41.34g.

(b) Rectilinear fragment of flat plate scrap which measures 40mm in length, 24mm in breadth, 2–3mm in thickness and weighs 20.26g.

It is reasonable to regard these two pieces of plate scrap as strays from the 17-piece hoard recovered in 1976 or 1977 (MoL 93.13/1-17). The original find comprised 15 fragments of plate scrap, together with a fragment of sword blade and the tip of a tongue-shaped chape (Fig 12). The two new pieces have been donated to the Museum of London by the finder and re-united with the rest of the hoard (MoL 2004.146/1-2).

### Discussion

Hoardings of this type are diagnostic of 'Wilburton' stage metalwork (*eg* Burgess 1968, 36–7), and can be of very large size, as at Isleham, Cambridgeshire (Britton 1960). The Syon hoard is something of an outlier in the London area. Wilburton metalwork as a whole has been back-dated to within a focal range of *c.*1140–1020 BC following a recent radiocarbon programme (Needham *et al* 1997, 90).

**32.** Fragment of Late Bronze Age copper-alloy ingot (Fig 14) found around 1972 by David Pearson on the Surrey foreshore of the Thames in the Barn Elms locality. The object was lying on the surface about 20ft out from the embankment wall.

The fragment comprises part of the edge of a plano-convex ingot. It measures 47 by 32mm by 19mm in maximum thickness, and weighs 79.71g. Such ingots often form part of so-called 'founder's hoards' alongside

scrapped objects, although there is nothing to indicate that the present piece is anything other than an isolated stray find.

- 33.** Late Bronze Age copper-alloy 'bugle-shaped object' (Fig 14) found in June 2001 by Peter Bryan on the Surrey foreshore of the Thames on the downstream side of Richmond Lock and Weir (TQ 1700 7510). The piece lay on a small sandy portion of foreshore at the foot of the second set of river stairs below the lock. It has now been acquired by the Museum of London (2004.170/2). The spot is well known for artefacts of all periods, many of which were dredged from the riverbed during the construction of the lock and weir in 1891–2 (Thacker 1920, 487–8).

Cast, tubular 'bugle-shaped' fitting with hollow, gently barrel-shaped body and sharply-expanded terminals; overall length 70mm, diameter of expanded terminals 11–12mm. In its current, unconserved, state it weighs 47.93g. The barrel-shaped body is pierced by a narrow elongated rectangular hole, 26mm in length and 6mm wide, defined by a low collar which lies opposite a solid side-loop 52mm in length. The side-loop is of rounded-oval section and its recurved ends lead into a crease on the main body to form a neat moulding flanking a narrow, curving, parallel-sided slot. Although there are no obvious traces of wear along the slot consonant with its suggested use as a strap-housing, both of the expanded terminals of the object have markedly flattened worn facets indicating an 'angle of rest' for the object when in use.

#### *Discussion*

'Bugle-shaped objects' are generally thought to comprise strap junctions or fasteners, though as noted above their precise method of use remains obscure. O'Connor (1980, 194–5) has defined several different forms including solid tubular and hollow-backed types, with a distribution that is centred on northern France and south-eastern Britain. The present piece belongs to his solid tubular type. Local hoard associations for bugle-shaped objects are of Carp's Tongue/Ewart Park type and include Cassiobridge Farm, Watford (Coombs 1979, 215–16, fig 11.6, no. 50) and Petters Sports Field, Egham (Needham 1990). Local parallels include the group of four hollow-backed pieces from the Thames at Syon Reach in the collections of the Museum of London (Acc

nos A11947-8; A15467 & A19001), which can be matched by a single hollow-backed example in the Petters hoard just mentioned.

- 34.** Late Bronze Age or Early Iron Age copper-alloy roll-headed pin (Fig 14) found at low water in August 2003 by Andy Johannesen on the Middlesex foreshore of the Thames at Limehouse (TQ 3670 8060).

The pin measures 82.5mm in overall length and weighs 2.47g. It is formed of a tapered length of wire of squarish section which has been flattened and turned over to create the head.

#### *Discussion*

Such pins are usually only loosely dated to the Late Bronze Age or Early Iron Age (O'Connor 1980, 200), though one from a ditch at Petters Sports Field, Egham, is securely dated to the Late Bronze Age (Needham 1990, 62–3). A number of pins of this form have been recovered from the river previously, all from reaches well upstream of Limehouse (*eg* Cotton & Merriman 1991, 49–51, fig 10, nos 25–26).

### **IRON AGE**

- 35.** Early Iron Age iron dagger in a wooden sheath (Fig 15) found in December 2003 by Andy Johannesen on the Surrey foreshore of the Thames in front of Chambers Wharf, Bermondsey (TQ 343 797). A post-medieval human burial was found close by (Baylis *et al* 2004). The dagger has now been acquired by the Museum of London (MoL 2003.120). Full publication will follow once conservation work has been completed.

The dagger itself measures 439mm in overall length (blade 350mm; tang 89mm); the dagger and sheath are 47mm in breadth at the hilt and 16mm in overall thickness; the combined weight of the two objects is currently 403.03g (though removal of further concretion is likely to reduce this measurement). Both dagger and sheath are in a reasonable state of preservation, although the dagger's organic hilt-plates and pommel, and the sheath's decorative outer cover, suspension loop(s) and chape are all missing.

Initial cleaning of the surface corrosion products on the wooden sheath in the laboratory by Rebecca Lang has revealed



Fig 15. Iron Age dagger in wooden sheath (No. 35), held by its finder (Photo: John Chase, Museum of London)

negative traces that clearly demonstrate the former existence of a series of overlapping, probably copper-alloy strips decorated with horizontal bands of punched repoussé dots. It is possible that these strips copied leather originals. X-rays have also revealed the positions of a number of pins arranged in a broadly linear fashion down the back of the sheath, by which means the now-missing decorative strips were presumably secured. A further series of three narrow ?iron bands clasp (rather than encircle) the sheath, and these may have been the means by which the missing suspension loop(s) were attached.

The wooden sheath itself appears to have

been constructed of two separate slender plano-convex leaves of ash cf. *Fraxinus excelsior* (Anne Davis pers comm), effectively bound together by the (missing) overlapping ?copper-alloy strips. It is hoped that further conservation work will be able to confirm other constructional details.

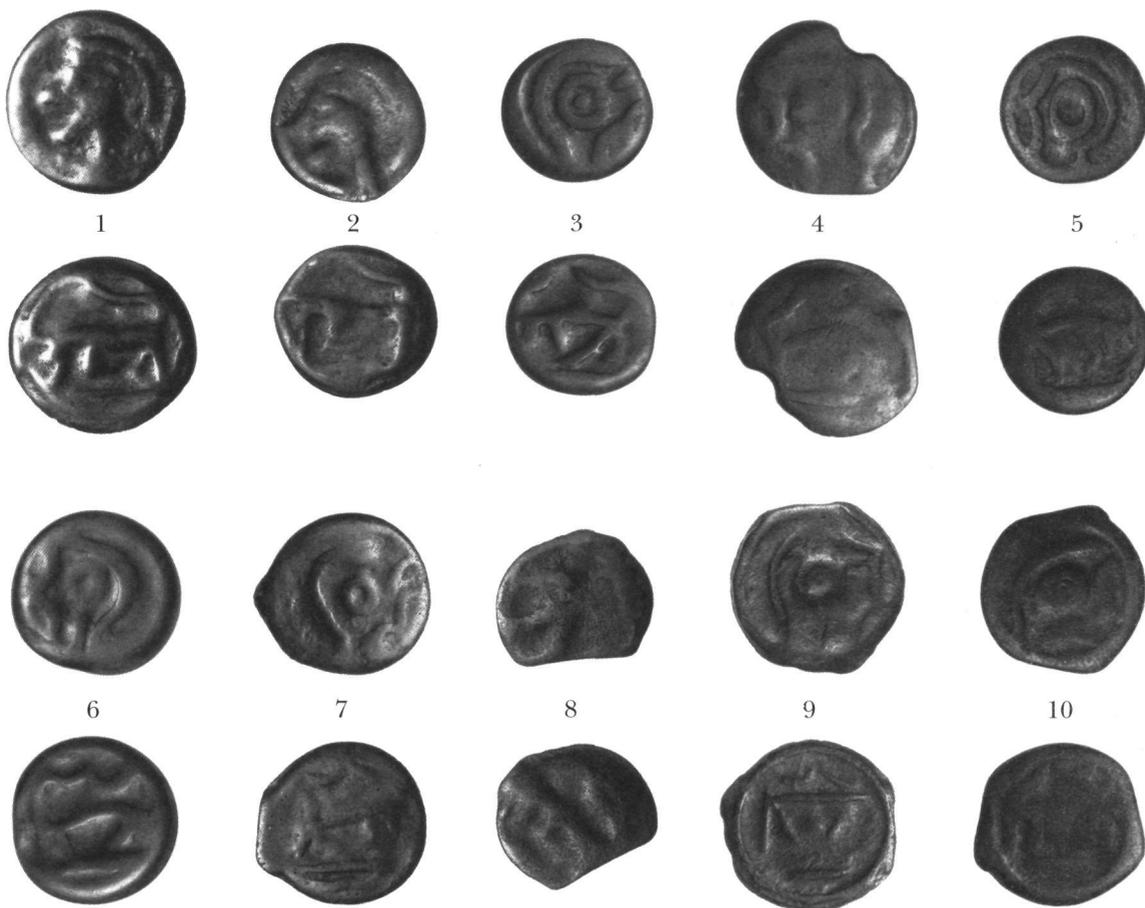
#### Discussion

The Chambers Wharf dagger and sheath can be added to a small group of slender late Hallstatt sheathed examples of likely British manufacture, all but one of which were recovered from the west London Thames (Jope 1961; 2000, 17–18;

Macdonald 1978). (The group also includes a broad-bladed dagger of continental origin from Mortlake apparently resheathed by a British armorer (Jope 1982).) The single outlier in the group, from Luttre in Belgium, may be a British export. As a group, these daggers and sheaths are usually dated to the later 6th century BC; it is possible that radiocarbon dating of the wooden Chambers Wharf sheath will be able to supply independent corroboration.

**36.** Group of ten Late Iron Age potin coins (Fig 16) deposited with Gunnersbury Park Museum in 1997. Said to have been dug up in the 1930s on an allotment in Brunswick Road, Sudbury. The reported findspot lies just south of the Western Avenue (A40) on the left (south) bank of the river Brent in Brentham Allotments (*c.*TQ 177 826).

1. Potin Class I, Allen (1971, 134) type A. Weight 2.37g.
2. Potin Class I, Allen (1971, 134) type A. Weight 1.88g.
3. Potin Class I, Allen (1971, 134) type ?B. Weight 1.78g.
4. Potin Class I, Allen (1971, 134) type ?C2. Weight 3.05g.
5. Potin Class I, Allen (1971, 134) type ?D1. Weight 2.57g.
6. Potin Class I, Allen (1971, 134) type D2. Weight 3.36g.
7. Potin Class I, Allen (1971, 134) type E. Weight 2.05g.
8. Potin Class I, incomplete, Allen (1971, 134) type ?F1. Weight 1.25g.
9. Potin Class I, Allen (1971, 135) type ?H2. Weight 2.26g.
10. Potin Class I, Allen (1971, 135) type ?J4. Weight 2.69g.



*Fig. 16. Possible cache of ten Class I potins (No. 36). Scale 1.5:1 (Photo: John Chase, Museum of London)*

*Discussion*

The range of coin types and weights is diverse, as is the condition of the individual coins, and doubts surround the integrity of the group as a complete and closed cache (John Kent pers comm). However, other potin hoards have been recovered from the Thames and areas adjacent in west London: the closest to Sudbury comprises a now lost hoard of twelve Class I coins found in Gunnersbury Lane, Acton, in 1955 (Allen 1960, 205). Potins comprise a class of 'chill-cast high-tin bronze' coinage thought to have originated in the north Kent area in the late 2nd or early 1st century BC.

37. Two Late Iron Age gold coins (Fig 17) found about 'four feet (c.1.2m) apart' in 1976 or 1977 by John Gibson on the Surrey foreshore

of the Thames between Putney and Barn Elms (TQ 2350 7634). The coins were discovered on a very low tide some 40m upstream of the mouth of the Beverley Brook and in an area which had also produced a number of potins, including one or more caches (see Cotton & Wood 1996, no. 36). There are unconfirmed reports that further gold coins of unspecified age had been found here at low tide 'long ago' (John Gibson pers comm). Neither coin is now available for study; the information is derived from surviving photographs and the finder's recollection. They are recorded in the Celtic Coin Index at Oxford as CCI 04.1293 and CCI 04.1294

(a) AV stater of Gallo-Belgic E 'uniface' type (Allen 1960, 113-16; Van Arsdell 1989, no. 52-1). Obv. Blank. Rev. Disjointed horse r.

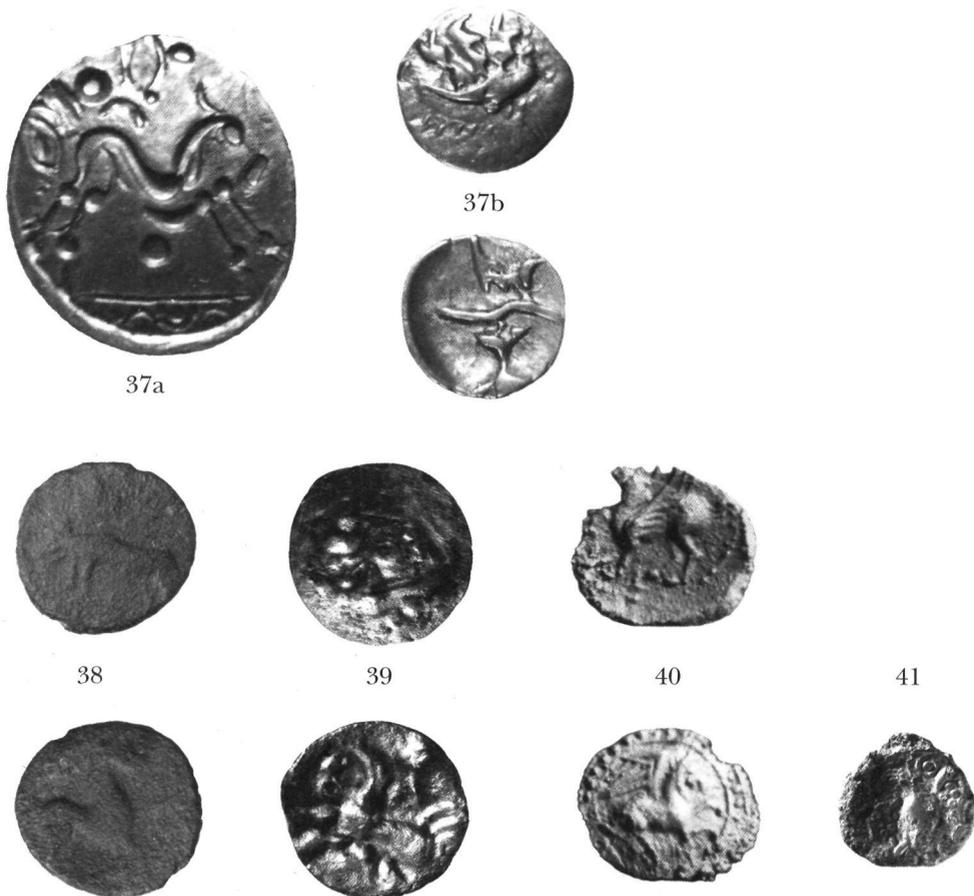


Fig 17. Iron Age coins of gold (Nos 37a-b), silver (Nos 39-40), silver-plated copper alloy (No. 41), and copper alloy (No. 38). Scale 2:1 (Photos: John Gibson (Nos 37a-b and 40) and John Chase/Richard Stroud, Museum of London (Nos 38, 39 and 41))

with pellets in field and pellets and crescents beneath a continuous exergual line.

(b) AV quarter stater of Gallo-Belgic D 'geometric' type (Allen 1960, 110–13; Van Arsdell 1989, no. 69-1). Obv. ?boat with three occupants. Rev. ?tree, crescent and wavy line.

### *Discussion*

It seems likely that the two coins described here originally formed part of a larger cache, now dispersed. The presence of one or more potin caches from the same general area is also noteworthy.

The uniface stater (a) is traditionally thought to have been struck under the authority of the Ambiani. Uniface staters appear to have been imported into Britain in large quantities in the mid-1st century BC, possibly as payment to British mercenaries engaged across the Channel against Julius Caesar (de Jersey 1996, 17–18). John Kent (1978, 55) pointed out that the London area is 'in no way significant' in terms of the distribution of the type, which clusters in north Kent, and arcs round London to the north and east.

The quarter stater (b) was struck 'by an uncertain Belgic authority' and imported into Britain, again perhaps as payment to British mercenaries engaged across the Channel against Julius Caesar (de Jersey 1996, 18). Allen (1960, 111) suggests two routes of entry into Britain for such coins: via Kent and the Sussex coast.

**38.** Small Late Iron Age bronze unit (Fig 17) found in February 2002 by Andy Johannesen on the Surrey foreshore of the Thames in front of Chamber's Wharf, Bermondsey (TQ 343 797). The coin lay close to the dagger already described (No. 35, above) and to a partial human skeleton of post-medieval date (Baylis *et al* 2004).

Uninscribed South-Eastern AE unit (Hobbs 1996, nos 2480–3; Van Arsdell 1989, no. 154-1). Diameter 12mm; weight 1.47g. Obv. Wolf? l, above ?, above tail ring, below pellet, pellet border. Rev. horse r., foreleg raised, above animal 'I', below ring, above tail 2 pellet-in-rings and pellet, pellet border.

### *Discussion*

Coins of this type are often described as Kentish on the basis of their distribution pattern, and are dated *c.* 50–30 BC by Van Arsdell (1989, 95).

Hobbs notes an example in the British Museum Collection from 'the site of Old London Bridge' (1996, no. 2483) a little upstream from Chamber's Wharf.

**39.** Small Late Iron Age silver unit (Fig 17) found in June 2002 by Bob Wells on the Surrey foreshore of the Thames at Wandsworth (TQ 2466 7547).

Uninscribed AR unit of ?Western 'Regular' type (as Hobbs 1996, 165–7). Diameter 12mm; weight 0.55g. Dished flan. Obv. Head r. with pellets. Rev. horse l. with pellets.

### *Discussion*

The general type has been dated *c.* 30–15 BC by Van Arsdell (1989, 273). Several of these coins were recovered from the Wanborough (Surrey) Roman temple hoard (*eg* Hobbs 1996, nos 2961–2), the latter probably deposited sometime around the middle of the 1st century AD (O'Connell & Bird 1994, 57).

**40.** Late Iron Age silver unit of Tasciovanus (Fig 17) found in 1976 by John Gibson on the Middlesex foreshore of the Thames off the downstream tip of Isleworth Eyot (TQ 1685 7598). The coin is no longer available for study; the information is derived from the surviving photographs and the finder's recollection. It is recorded in the Celtic Coin Index at Oxford as CCI 99.0268, based on information contained in Seaby's Coin & Medal Bulletin for August 1976, where it was reported to have been found 'in the Thames near Sion Reach' (Philip de Jersey *pers comm*). Other objects from the same location include a lipped terret ring and a multiple find of potin coins (Cotton & Wood 1996, no. 35).

AR unit. Obv. Winged griffin r. inside ring, pellet ring and ring. Rev. winged horse? l., below 'TA', between forelegs 'S', pellet border (Hobbs 1996, no. 1660; Mack 1953, no. 159; Evans 1864, no. VI6; Van Arsdell 1989, no. 1790). Type dated *c.* 15–10 BC by Van Arsdell (1989, 378).

**41.** Late Iron Age silver-plated, copper-alloy inscribed unit of Epaticcus or Caractacus (Fig 17) said to have been found on the Surrey foreshore of the Thames at Kew, opposite Old England, in or about 1977 (TQ 182 773). An unknown finder gave it to Mr Frank Mellish who donated it to the Museum of London (MoL 77.219).

AE/AR unit. Diameter 9mm; weight 0.47g. Dished flan, much worn with traces of silver plating on reverse; obverse virtually obliterated. Obv. Traces of head r. Rev. Eagle standing, ring ornament above. Variant of Mack 1953, no. 263 ('EPATI' on obverse; date c.AD 25–35) or Mack 1953, no. 265 (as no. 263 but 'CARA' on obverse; date c.AD 35–40). Such coins are often regarded as contemporary forgeries.

### Discussion

The present coin may have been one of a number of silver units purporting to have been found on the Brentford/Kew foreshores of the Thames around this time. According to Robinson (1978) most went unrecorded, though five coins of Verica (Mack 1953, nos 115; 118; 120; 123; 128), three of Eppillus (Mack 1953, nos 107; 108), and two of Caractacus (Mack 1953, no. 265) were said to have been in the possession of Mr H Mossop of South Humberston. It is possible that some of these coins were originally from the hoard found at Waltham St Lawrence in Berkshire in 1977 (Burnett 1990).

42. Copper-alloy (probably brass) brooch (Fig 14) found in July 1995 by Bob Wells 100m downstream of Putney Road Bridge on the Surrey foreshore of the Thames at Putney (TQ 2430 7561). The brooch lay 10cm deep in gritty, iron-stained silt, at a point two-thirds of the way down an eroded area of the foreshore on a 0.7m tide.

The piece comprises a composite Rosette brooch (Hull Type 26A), 60mm in overall length and weighing 13.60g, with a reeded, P-shaped bow terminating in a cylindrical spring-cover, 7mm in diameter and 28mm in length, within which five spring-coils survive. The bow is soldered to a separate thin flat plate comprising a disc and reeded tapering foot and a catch-plate with parts of two cut-outs remaining. The disc has traces of concentric decoration at its outer edge and a central semi-circular raised ridge which marries with the base of the bow. The base of the bow itself is decorated with a series of triangular punched impressions; there are a further set of rounded punched impressions at the junction of the bow and disc plate. The piece is heavily worn and has a very distinctive golden surface.

### Discussion

Rosette brooches are common in Gaul and along the German frontier (eg Bayley & Butcher 2004, 150), where they appear in 1st-century BC contexts. They circulated somewhat later in Britain and Mackreth (1995, 973) notes that practically all British brooches of this type had passed out of use by AD 45/50, while any in contexts dated later than c.AD 65 'can be discounted as residual' (Mackreth 1999, 219). A clear developmental sequence has been established (*ibid*, 218); the present piece falls relatively late within it and can probably be dated to the decade or so leading up to (and beyond) the Roman conquest.

Though present on settlement sites and in cemeteries around London, as at King Harry Lane, St Albans (Stead & Rigby 1989, 93–4), for example, Rosette brooches are not common within the London area itself. Apart from a handful of dubiously documented or unstratified strays therefore, only two examples have been excavated from the urban centres either side of the river hitherto: one fragmentary piece from a pre-Boudican context in Borough High Street, Southwark (Drummond-Murray & Thompson 2002, 218, <R3>), and another (presumably residual) from a Trajanic context at No. 1 Poultry in the City (<1485> [3837]) (Angela Wardle pers comm).

Beyond the confines of *Londinium* and north Southwark, there are single examples from a 'late first century pit' at Keston (Philp *et al* 1991, 171, fig 51, no. 92) and from the Thames at Kingston (Alderman Gould Collection, Kingston Museum acc no. 615; Cheryl Smith pers comm). Other material of Late Iron Age date (including coins such as No. 39 above) has been recovered from the Putney/Wandsworth reaches of the Thames previously, although the nagging possibility remains that the present piece was introduced amongst material dumped on the foreshore from further downstream.

### CONCLUDING DISCUSSION

This latest selection of prehistoric finds can be divided into those found and reported to the Museum of London recently, those known since the 1970s but only reported recently, and those found and/or recorded many years ago. Like the two previous roundups, however, the objects fall most conveniently into one of two groups: those

recovered from the modern foreshores of the River Thames and its adjacent floodplain; and those recovered from findspots further inland.

It is noticeable that the latter, smaller, group (Nos 1–3, 14, 16, 23, 25, 27 & 36) is almost entirely made up of flint/stone objects: and doubt even surrounds the reported provenance of the one metal exception (potin coin cache, No. 36). This squares with the picture emerging from the large-scale excavations conducted in the hinterland: examination of a vast expanse of prehistoric landscape ahead of the construction of Passenger Terminal 5 at Heathrow, for example, has produced only a handful of metal objects (John Lewis pers comm). The three Palaeolithic bifaces (Nos 1–3) and both Neolithic/Bronze Age flint arrowheads (Nos 23 & 27) can be comfortably accommodated within the general run of lithics known from the brickearth-capped terrace gravels of west Middlesex. The two Neolithic ground axes (Nos 14 & 16) were both found close to tributary streams of the Thames (the Pymme's Brook/Lea and Fleet, respectively). It might also be noted that the 'near jadeite' No. 14 is the third exotic axe to have been found away from the Thames in recent years (*cf* others of 'jadeite' from Staines Moor in the Colne valley and of 'nephrite' from Hendon, close to the River Brent). This leaves the small plano-convex flint knife from Horsenden Hill as something of an outlier from a small group of such knives from the west Middlesex terrace gravels.

The majority of the larger group of 'river' finds were recovered from the Surrey shore of the Thames, although, as has been noted previously, many may not actually have been deposited in the waters of the river itself, but may have been strewn across or buried within eyots or low eminences of its floodplain. This seems particularly likely with regard to the objects recovered from the modern foreshore in front of Chambers Wharf, Bermondsey: the group of fresh, unabraded Peterborough Ware sherds (No. 20) are best explained as the eroded contents of a small pit cut into the northern edge of one of the many sand islands in the locality. It is possible that other pieces, such as the iron dagger in its composite sheath (No. 35) and the Rosette brooch (No. 42), may have been redeposited on the foreshore following dredging operations carried out elsewhere.

By and large, these 'river' finds are consistent with the previous selections published in 1991

and 1996. Notable amongst them, however, are two (probably originally three: one having disintegrated) antler-beam mattocks from Mortlake (Nos 12 & 13) whose function and dating remain somewhat equivocal (*pace* Smith 1989). Their survival in the river must surely in part at least reflect the benign nature of the burial environment, which makes the presence of a further similar mattock in a silted feature at Beddington all the more remarkable. It can be noted too that no pieces of worked bone or antler were recovered on either of the recently excavated Mesolithic sites in the Colne valley at Uxbridge (John Lewis and Craig Halsey pers comm) — and this despite a favourable burial environment which had preserved quantities of unworked animal bone (some cut-marked), and the presence of flint burins usually associated with bone working.

Equally significant are the small serrated barbed and tanged bone point from Bermondsey (No. 26), here suggested to be a copy of an Early Bronze Age flint arrowhead, and the Early Iron Age dagger in its wooden sheath (No. 35). This latter piece will form the subject of a separate publication once conservation work is complete. Other organic finds include the (undated) human skull from Putney (No. 24), which can be added to the numerous human skulls already recorded from various stretches of the river. Finally, the various coin finds gathered together here seemingly proffer a tantalising glimpse of activity either side of Caesar's expeditions in the mid-1st century BC and beyond. However, any reassessment of the local Late Iron Age evidence will need to take careful and critical account of the dubious circumstances under which a number of these finds appear to have been made (*eg* Nos 36 & 41). This latter task will be rendered doubly difficult without the wise counsel of the late John Kent.

Prehistory is now regarded as a legitimate concern by archaeologists working in London. Its study has been greatly aided by the provisions of Planning Policy Guidance note 16 at sites such as Heathrow Passenger Terminal 5 and along the A13 in east London, for example, and by the publication of an archaeological resource assessment (MoLAS 2000) and research framework (Nixon *et al* 2002). With the inception of the Portable Antiquities Scheme and the establishment of a Finds Liaison Officer post at the Museum of London we might also reasonably anticipate — given continuance

of the necessary funding — that the future recording of stray finds such as those noted here (and by Burdon *et al* 2000) has been placed on a surer footing too.

Furthermore, during its short but influential life the Thames Archaeological Survey (1996–1999) successfully refocused attention on the archaeology of the Thames and its foreshores (Webber 2000). The Survey is surely worth reviving. Among many other initiatives, for example, it prompted a renewed interest in the gentlemen antiquaries responsible for amassing antiquities dredged from the Thames and its foreshores (*eg* Cotton 1999). Two of them, Dr Frank Corner and the Derbyshire antiquary Thomas Bateman, collected finds represented amongst the current selection (No. 11 and Nos 16–17 above). These ineluctably transport us back to the dawn of scientific archaeological enquiry in London — something that seems singularly appropriate in LAMAS's sesquicentenary year.

## ACKNOWLEDGEMENTS

Thanks are due to all of the finders for allowing their discoveries to be incorporated in this latest round-up; special thanks are due to Frank Berry and John Gibson for donating finds to the Museum of London. We are also grateful to Dr W French for facilitating the transfer of material from Queen Mary and Westfield College; to Les Whitmore and Jan Metcalfe of Forty Hall Museum for their help regarding the stone axe from Enfield; to Jeff Perry (Sutton Archaeological Services) for allowing us to incorporate the transverse arrowhead from Heathrow herein, and to Graham Reed for his illustration; to Bill White for his report of the human skull from Putney; to Stuart Needham for sanctioning the use of his drawings of the scrap hoard from Syon; to Rebecca Lang for her conservation work on the Chambers Wharf dagger and to Anne Davis for her identification of the wood; to Philip de Jersey and the late John Kent for their help and advice regarding the Iron Age coins; to Nina Crummy, Angela Wardle (MoLSS) and Cheryl Smith (Kingston Museum) for commenting on the Rosette brooch; and to John Chase and Richard Stroud (Museum of London), Robert Whytehead (English Heritage), John Gibson, and Bob Wells for providing the photographs.

## BIBLIOGRAPHY

ADKINS *et al* (1987), L Adkins, R Adkins & J G Perry 'Excavations at Beddington 1984–87: the final interim' *London Archaeologist* 5 (13), 349–52

- ADKINS & JACKSON (1978), R Adkins & R Jackson *Neolithic Stone and Flint Axes from the River Thames* British Museum Occasional Paper 1
- ALLEN (1960), D F Allen 'The origins of coinage in Britain: a reappraisal' in S S Frere (ed) *Problems of the Iron Age in Southern Britain* University of London Institute of Archaeology Occasional Paper 11, 97–308
- ALLEN (1971), D F Allen 'British potin coins: a review' in Jesson & Hill (1971), 127–54
- BARRETT & BRADLEY (1980), J Barrett & R Bradley (eds) *Settlement and Society in the British Later Bronze Age* British Archaeological Reports 83
- BARTON (1962), N J Barton *The Lost Rivers of London*
- BAYLEY & BUTCHER (2004), J Bayley & S Butcher *Roman Brooches in Britain: A Technological and Typological Study Based on the Richborough Collection* Report Research Committee Society of Antiquaries London 68
- BAYLIS *et al* (2004), A Baylis, P Marshall & J Sidell 'A puzzling body from the River Thames in London' *Radiocarbon* 46 (1), 285–91
- BIRD *et al* (1978), J Bird, H Chapman & J Clark (eds) *Collectanea Londiniensia: Studies in London Archaeology and History Presented to Ralph Merrifield*
- BLOCKLEY *et al* (1995), K Blockley, M Blockley, P Blockley, S Frere & S Stow *Excavations in the Marlowe Car Park and Surrounding Areas* Canterbury Archaeological Trust vol 5
- BLOICE (1974), B Bloice 'Excavation round-up 1973' *London Archaeologist* 2 (6), 133–5
- BLOICE (1976), B Bloice 'Excavation round-up 1975' *London Archaeologist* 2 (14), 370–2, 375
- BONSALL & SMITH (1989), C Bonsall & C Smith 'Late Palaeolithic and Mesolithic bone and antler artefacts from Britain: first reactions to accelerator dates' *Mesolithic Miscellany* 10 (1), 33–8
- BRADLEY & GORDON (1988), R Bradley & K Gordon 'Human skulls from the River Thames, their dating and significance' *Antiquity* 62, 503–9
- BRITTON (1960), D Britton 'The Isleham Hoard, Cambridgeshire' *Antiquity* 34, 279–82
- BROTHWELL (1981), D R Brothwell *Digging Up Bones: the Excavation, Treatment and Study of Human Skeletal Remains*
- BRUCE & BIRLEY (1987), J Bruce & M Birley *Horsenden Hill: Archaeological Survey Report 1987*
- BURDON *et al* (2000), N Burdon, A Green & C Smith 'Portable antiquities from the Thames foreshore' *London Archaeologist* 9 (5), 123–8
- BURGESS (1968), C B Burgess 'The Later Bronze Age in the British Isles and North-Western France' *Archaeol Journ* 125, 1–45
- BURGESS & COOMBS (1979), C Burgess & D Coombs (eds) *Bronze Age Hoards: Some Finds Old and New* British Archaeological Reports 67
- BURGESS & GERLOFF (1981), C B Burgess & S Gerloff *The Dirks and Rapiers of Great Britain and Ireland* Prähistorische Bronzefunde series Abt IV, Band 7

- BURNETT (1990), A M Burnett 'Celtic coinage in Britain III: the Waltham St Lawrence Treasure Trove' *Brit Numismatic Journ* 60, 13–28
- COLLINS (1978), D Collins *Early Man in West Middlesex*
- COOMBS (1979), D Coombs 'A Late Bronze Age hoard from Cassiobridge Farm, Watford, Hertfordshire' in Burgess & Coombs (1979), 197–233
- COTTON (1991), J Cotton 'Prehistory in Greater London' *Current Archaeology* 124, 150–3
- COTTON (1997), J Cotton 'Some "new" Palaeolithic flint artefacts from metropolitan Essex' *Essex Archaeology & History* 28, 267–70
- COTTON (1999), J Cotton 'Ballast-heavers and battle-axes: the "Golden Age" of Thames finds' in *Mark Dion: Archaeology*, 58–71
- COTTON (2004), J Cotton (with R Johnson) 'Two decorated Peterborough bowls from the Thames at Mortlake and their London context' in Cotton & Field (2004), 128–47
- COTTON & FIELD (2004), J Cotton & D Field (eds) *Towards a New Stone Age: Aspects of the Neolithic in South-East England* Council for British Archaeology Research Report 137
- COTTON & MERRIMAN (1991), J Cotton & N Merriman 'Some recent prehistoric finds from Greater London' *Trans London Middlesex Archaeol Soc* 42, 33–57
- COTTON & WOOD (1996), J Cotton & B Wood 'Recent prehistoric finds from the Thames foreshore and beyond in Greater London' *Trans London Middlesex Archaeol Soc* 47, 1–33
- COWIE & EASTMOND (1997), R Cowie & D Eastmond 'An archaeological survey of the foreshore in the Borough of Richmond upon Thames, part 2: down by the riverside' *London Archaeologist* 8 (5), 115–21
- CUMING (1857), H S Cuming 'On the discovery of Celtic crania in the vicinity of London' *Journ Brit Archaeol Assoc* 13, 237–40
- CUMING (1858), H S Cuming 'On further discoveries of Celtic and Roman remains in the Thames, off Battersea' *Journ Brit Archaeol Assoc* 14, 326–30
- DE JERSEY (1996), P de Jersey *Celtic Coinage in Britain*
- DIVERS (2001), D Divers 'Excavations at 552 Kings Road, Chelsea' *Trans London Middlesex Archaeol Soc* 52, 1–9
- DRUMMOND-MURRAY & THOMPSON (2002), J Drummond-Murray & P Thompson with C Cowan *Settlement in Roman Southwark: Archaeological Excavations (1991–8) for the London Underground Limited Jubilee Line Extension Project* MoLAS Monograph 12
- ELSDEN (1997), N J Elsden 'Excavations at Nobel Drive, Harlington, and six sites to the north of Heathrow Airport, Hillingdon' *Trans London Middlesex Archaeol Soc* 48, 1–13
- EVANS (1864), J Evans *The Coins of the Ancient Britons*
- FARID (2000), S Farid 'An Excavation at 6–16 Old Church Street, Royal Borough of Kensington and Chelsea' *Trans London Middlesex Archaeol Soc* 51, 115–41
- FIELD (1989), D Field 'Tranchet axes and Thames picks: Mesolithic core tools from the West London Thames' *Trans London Middlesex Archaeol Soc* 40, 1–26
- FIELD & WOOLLEY (1983), D Field & A Woolley 'A jadeite axe from Staines Moor' *Surrey Archaeol Collect* 74, 141–5
- GARWOOD (1999), P Garwood 'Grooved Ware in Southern Britain: chronology and interpretation' in R Cleal & A MacSween (eds) *Grooved Ware in Britain and Ireland*, 145–76
- GERLOFF (1975), S Gerloff *The Early Bronze Age Daggers in Great Britain and a Reconsideration of the Wessex Culture* Prähistorische Bronzefunde, Abt VI, Band 2
- GIBBARD (1985), P L Gibbard *The Pleistocene History of the Middle Thames Valley*
- GREEN (1980), H S Green *The Flint Arrowheads of the British Isles: A Detailed Study of Material from England and Wales with Comparanda from Scotland and Ireland* British Archaeological Reports 75
- GRIMES (1938), W F Grimes 'A barrow on Breach Farm, Llanbleddian, Glamorgan' *Proc Prehist Soc* 4, 107–21
- HADAS (1977), Hendon & District Archaeological Society 'A jadeite axe from Hendon' *Trans London Middlesex Archaeol Soc* 28, 271
- HOBBS (1996), R Hobbs *British Iron Age Coins in the British Museum*
- HOLDER & JAMIESON (2003), N Holder & D Jamieson 'The prehistory of the City of London: myths and methodologies' *Archaeol Journ* 160, 23–43
- JENSEN (1991), G Jensen 'Unusable axes? An experiment with antler axes of the Kongemose and Ertebolle cultures' *Eksperimentel Arkæologi* 1, 10–21
- JESSON & HILL (1971), M Jesson & D Hill (ed) *The Iron Age and its Hill-Forts: Papers Presented to Sir Mortimer Wheeler* University of Southampton Monograph 1
- JONES *et al* (1977), V Jones, A C Bishop & A R Woolley 'Third supplement of the catalogue of jade axes from sites in the British Isles' *Proc Prehist Soc* 43, 287–93
- JOPE (1961), E M Jope 'Daggers of the Early Iron Age in Britain' *Proc Prehist Soc* 27, 307–43
- JOPE (1982), E M Jope 'Hallstatt D daggers: Britain and Europe' *Bull Inst Archaeol* 19, 83–9
- JOPE (2000), E M Jope *Early Celtic Art in the British Isles*
- KENT (1978), J P C Kent 'The London area in the Late Iron Age: an interpretation of the earliest coins' in Bird *et al* (1978), 53–8

- LACAILLE (1966), A D Lacaille 'Mesolithic facies in the transpontine fringes' *Surrey Archaeol Collect* 63, 1–43
- LAWRENCE (1929), G F Lawrence 'Antiquities from the middle Thames' *Archaeol Journ* 86, 69–98
- MACDONALD (1978), J Macdonald 'An Iron Age dagger in the Royal Ontario Museum' in Bird *et al* (1978), 44–52
- MACK (1953), R P Mack *The Coinage of Ancient Britain*
- MACKRETH (1995), D F Mackreth 'Pre Roman and Roman brooches' in Blockley *et al* (1995), 955–83
- MACKRETH (1999), D F Mackreth 'The Brooches' in Niblett (1999), 216–22
- MERRIFIELD (1987), R Merrifield *The Archaeology of Ritual and Magic*
- MOLAS (2000), Museum of London Archaeology Service *The Archaeology of Greater London: An Assessment of Archaeological Evidence for Human Presence in the Area now Covered by Greater London*
- NEEDHAM (1987), S Needham 'The Bronze Age' in D G Bird & J Bird (eds) *The Archaeology of Surrey to 1540*, 97–137
- NEEDHAM (1990), S Needham *The Petters Late Bronze Age Metalwork: an Analytical Study of Thames Valley Metalworking in its Settlement Context* British Museum Occasional Paper 70
- NEEDHAM & BURGESS (1980), S Needham & C Burgess 'The Later Bronze Age in the lower Thames valley: the metalwork evidence' in Barrett & Bradley (1980), 437–69
- NEEDHAM *et al* (1997), S Needham, C B Ramsey, D Coombs, C Cartwright & P Pettitt 'An independent chronology for British Bronze Age metalwork: the results of the Oxford Radiocarbon Accelerator Programme' *Archaeol Journ* 154, 55–107
- NIBLETT (1999), R Niblett *The Excavation of a Ceremonial Site at Folly Lane, Verulamium* Britannia Monograph 14
- NIXON *et al* (2002), T Nixon, E McAdam, R Tomber & H Swain *A Research Framework for London Archaeology 2002*
- O'CONNELL & BIRD (1994), M G O'Connell & J Bird 'The Roman temple at Wanborough, excavation 1985–1986' *Surrey Archaeol Collect* 82, 1–168
- O'CONNOR (1980), B O'Connor *Cross-Channel Relations in the British Later Bronze Age* British Archaeological Reports International Series 91
- PHILP *et al* (1991), B Philp, K Parfitt, J Willson, M Dutton & W Williams *The Roman Villa Site at Keston, Kent: First Report (Excavations 1968–1978)*
- PITTS (1996), M Pitts 'The Neolithic axe in Britain' *Proc Prehist Soc* 62, 311–71
- PROCTOR & BISHOP (2002), J Proctor & B Bishop 'Prehistoric and environmental development on Horsleydown: excavations at 1–2 Three Oak Lane' *Surrey Archaeol Collect* 89, 1–26
- ROBINSON (1978), A Robinson 'Silver coins found on the banks of the Thames' *Surrey Archaeol Soc Bulletin* 148, 3–4
- ROWLANDS (1976), M J Rowlands *The Production and Distribution of Metalwork in the Middle Bronze Age in Southern Britain* British Archaeological Reports 31
- SHEPPARD (1991), F Sheppard *The Treasury of London's Past: An Historical Account of the Museum of London and its Predecessors, the Guildhall Museum and the London Museum*
- SIDELL *et al* (2002), J Sidell, J Cotton, L Rayner & L Wheeler *The Prehistory and Topography of Southwark and Lambeth* MoLAS Monograph 14
- SMITH (1989), C Smith 'British antler mattocks' in C Bonsall (ed) *The Mesolithic in Europe: Papers Presented at the Third International Symposium, Edinburgh 1985*, 272–83
- SMITH (1910), R A Smith *Proc Soc Antiq London* 2nd series 23, 160–71
- STEAD & RIGBY (1989), I M Stead & V Rigby *Verulamium: The King Harry Lane Site* English Heritage Monograph 12
- THACKER (1920), F S Thacker *The Thames Highway Volume II: Locks and Weirs*
- THOMPSON *et al* (1998), A Thompson, A Westman & T Dyson (eds) *Archaeology in Greater London 1965–90: a Guide to Records of Excavations by the Museum of London*
- TURNER & WYMER (1987), R Turner & J J Wymer 'An assemblage of Palaeolithic hand-axes from the Roman religious complex at Ivy Chimneys, Witham, Essex' *Antiq Journ* 67, 43–60
- VAN ARSDELL (1989), R van Arsdell *Celtic Coinage of Britain*
- WAINWRIGHT & LONGWORTH (1971), G J Wainwright & I H Longworth *Durrington Walls Excavations 1966–1969*
- WEBBER (2000), M D Webber *Report on the Thames Archaeological Survey 1996–1999*
- WEBBER (2004), M Webber (with H Ganiaris) 'The Chelsea club: a Neolithic wooden artefact from the River Thames in London' in Cotton & Field (2004), 124–27
- WEINREB & HIBBERT (1983), B Weinreb & C Hibbert (eds) *The London Encyclopaedia*
- WYMER (1968), J J Wymer *Lower Palaeolithic Archaeology in Britain: As Represented by the Thames Valley*