

**By River, Fields and Factories**  
The Making of the Lower Lea Valley  
Archaeological and cultural heritage investigations  
on the site of the  
London 2012 Olympic and Paralympic Games

**Metal Objects**

(Section 5)



*by Grace Perpetua Jones  
and Andy Brockman*

## **Metal objects**

by Grace Perpetua Jones, with a contribution by Andy Brockman

Almost all the metal objects recovered from the evaluations and excavations of the Olympic Park sites date to the 19th and 20th centuries. A small fragment of sheet copper alloy was recovered from the final fills of Late Bronze Age ditch 2177 in Trench 9. It measures 10 x 6.5 x 0.3 mm, has no distinguishing features, and is probably intrusive in this feature. The vast majority of finds came from Trench 75 (Temple Mills), with a smaller assemblage from Trench 59 (Nobshill Mill). Very few finds came from the other sites, and those that were undiagnostic are not presented here, but details may be found in the relevant assessment reports (Trench 118, one nail; Trench 95, copper alloy disc; Trench 9, threaded copper alloy fitting; Trenches 96–108, iron wire, strip and handle; copper alloy washer, sheet and safety pin fragments). All objects reported on in the text are from Temple Mills, unless otherwise stated.

### *Personal objects*

#### **Dress**

A small number of objects came from articles of dress. They included two copper alloy buttons: one round and flat, with a loop at the back for attachment (<43>, Phase 3 metallated surface), and one with four central perforations (Trench 105, <2>, ditch 6). Two small but complete copper alloy dress hooks, formed from a wire bent into a U-shape and bent out at each end, were recovered from the drains of Building 3 (<53>, Phase 3; <11>, Phase 4). Part of a heel iron, designed to prevent wear to the heel of a shoe, was recorded from the fill of revetted channel 1003 in Trench 59 (<1006>). A complete heel iron was also recovered from Trench 53.

#### **Jewellery**

A complete copper alloy two-piece oval locket frame with suspension loop came from the silted up drains of Building 3 (<16>, Phase 4).

### **Watch key**

Part of a watch key was recovered from the fill of quarry pit 97 (Trench 103, <1>). Although worn, it appears to have been decorated with a flower. Part of the suspension loop and the actual key section are missing. This key is probably of 18th century date, and rarer than the more commonly found plain and more robust examples from the 19th and 20th centuries (Bailey 1995, 26).

### *Textile working*

#### **Dressmaking**

A total of 70 copper alloy dress pins was recovered, all approximately 25 mm in length, with flat heads. Most came from the Phase 4 silting of the Building 3 drains (<12>, 49 pins), while 19 were recovered from the Phase 3 use of these drains (<52>), and two from a Phase 3 surface next to Building 4 (<54>). Two copper alloy pins with domed heads came from Phase 3 posthole 722; and one from Phase 3 posthole 399 (<48>).

#### **Weaving**

A possible bobbin came from a Phase 3 surface next to Building 4. It consists of an iron rod of rounded section; one end has working traces (lines) and appears hollow but is broken, and the other end widens. An X-radiograph suggests it had two arms, with an oval ?copper alloy fitting between them.

### *Household*

#### **Cookware**

An oval-shaped iron frying pan came from the fill of revetted channel 1003 in Trench 59 (<1001>, **Photo 1**). The pan has a long handle of rectangular section, with rounded terminal, perforated for suspension. The length of the handle suggests it was used over a stove rather than an open fire, while the style of the frying pan suggests a date within the Victorian period, with a similar example from a trade catalogue of the 1880s (Bosomworth 1992, 220, no. 9883) in enamelled ironware. However, most frying pans were made in wrought iron and were relatively cheap, both in terms of

their purchase cost and the amount of fuel required to use them (Eveleigh 2001, 20). Their shape was particularly suited to cooking fish. An S-shaped iron hook, from the same context as the frying pan, is of a type that may have been used to suspend such a pan (<1002>), and a double hook, comprising a U-shaped circular-sectioned bar, bent up to form a hook at each end, may have been used for a similar purpose (Trench 58, <1011>). A second S-shaped iron hook was recovered from Temple Mills (<68>), from the Phase 4 infill of barrel 182. This hook could have been used to suspend a variety of things in the kitchen, from pots to herbs.

### **Containers**

Fragmentary remains from two small tin cans were recorded. Part of the base of one was associated with Building 4 (<59>, Phase 3). All that remains of the second (<51>, Phase 4 drain infill, Building 3) is the tin coating of a can, but nothing has survived of the iron wall.

### **Curtains**

Three copper alloy curtain rings were recovered, 28–35 mm in diameter, two from Phase 4 contexts (<40>, infill of barrel 182; <46>, Tumbling Bay Stream), while one was unstratified (<34>). A possible curtain, or dress, lead weight was recovered from Phase 3 surface next to Building 3 (<20>). It has two small perforations in a central recess. A possible copper alloy curtain ring also came from a 19th/20th century dump layer in Trench 107.

### **Cutlery**

A range of cutlery was recovered from the site, including a tablespoon, two dessert spoons, a teaspoon, a knife and bone handles. Of particular interest is a spoon from Trench 53 (**Photo 2**). It is a fiddle pattern dessert spoon, made from a copper alloy, possibly with silver plating but this could not be confirmed. Most of the handle is magnetic and an X-radiograph has shown that the handle has a square-ended iron shaft that runs through it and the spoon appears to have been cast around it. The iron shaft does not run to the tip of the handle, finishing 15 mm before the tip, and continues into the start of the bowl. The more typical method of manufacture during the 19th and 20th centuries ‘was by stamping and pressing. A small bar of metal,

usually a base metal if it was to be plated, was hammered thin at both ends. The bowl end was cropped to shape and the 'fiddle' end also. The bowl end was thinned by passing it between rollers and then dished. Any decoration to the handle was stamped on it. Then it was electro-plated' (J. Unwin pers. comm.). On the underside of the handle there is an oval stamp that reads NOELL'S / ALBALOID / MADE IN GERMANY. The Noelle manufacturers were based in Lüdenscheid, Germany, and produced pewter and Britannia metal goods from 1892 until the 1930s. Britannia metal is an alloy of 93% tin, 5% antimony and 2% copper widely used for electroplated flatware.

A complete Old English dessert spoon, in copper alloy, was recovered from the Phase 5 final infill of the Tumbling Bay Stream (<37>). It measures 175 mm in length; the bowl is cracked, and has the remains of the burr on left side of the bowl and the start of handle, creating a slight flat lip. A silver-plated copper alloy flatware fiddle pattern teaspoon, stamped 'pluro silver' and hallmarked SL 8S within a shield, was unstratified (<35>). It probably dates to the first half of the 20th century, *c.* 1910–1940. Part of a copper alloy tablespoon was recovered from the layer sealing the 19th century timber boat in Trench 59. The leaf-shaped bowl has been flattened, and the oval-sectioned handle is incomplete (<1010>).

A near-complete iron scale-tang knife, with simple rectangular section bone handle, was recovered from unphased drain 571 (<61>). The knife is straight-backed and the haft plate is visible. Two scale-tang bone handles were recorded. One came from an unphased levelling layer front of Building 3 (<4>; **Photo 3**). The flat iron tang is visible throughout, and two bone plates ('scales') have been riveted onto the iron to create the pistol-shaped handle. Two crudely carved initials 'T' and 'N', are visible on the well-polished surface. Handles of this style were a reflection of a 'change in flatware pattern to Hanoverian with the accession of George I in 1714' (Moore 1999, 207). The pistol handle declined in use during the 1760s and 1770s, and although still in use today it is likely that this handle is of 18th century date. The second handle from this site (found unstratified) again comprises bone scales on either side of an iron strip, held with three small rivets, creating a round-sectioned, tapering handle, probably from a fork (<60>). In addition, a rectangular scale-tang handle, probably part of a knife, came from a late 19th/20th century channel fill in Trench 46 (<2>).

The tang is encased by two polished bone (possibly a cattle metapodal) scale plates held together by three small rivets.

### **Other household objects**

The door of a birdcage was recovered from the Phase 4 infill of barrel 182 (<62>). The exterior is of wood, and seven iron wires formed the bars. Two flattened and twisted pieces of lead window came were recovered from the Phase 4 infill of barrel 277 (<50>).

### *Tools*

Three tools were identified. A mason's pointing trowel was recovered from the Phase 4 infill of barrel 255 (<65>). The tip of the blasé is missing but this was presumably a 7 by 3 inch flat blade. An X-radiograph indicates it was stamped 'I. H. S' then below probably 'I & H SO[N?]'. The tang is present but the handle has not survived. A curved iron cutting tool (with a crescentic blade) came from a final infill layer within the Tumbling Bay Stream (Phase 5). The presumed wooden handle has not survived. A large iron chisel with a rectangular burred head came from a surface next to Building 4 (<66>, Phase 3). The tip is present, although part of the surface is missing. This was probably a blacksmith's chisel, used to cut hot metal, although the object is heavily corroded and other uses, such as by a mason for stoneworking, or as a wedge to split wood, cannot be ruled out. Part of another possible tool is represented by an 80 mm length of twisted wire, bent back on itself into an eye at one end; the other end was encased in a rubber tube, presumably to form the handle. It was recovered from a Phase 4 revetment of the Tumbling Bay Stream.

### *Toys*

A nearly complete miniature lead figurine of a smiling lady with was recovered from Temple Mills, but was unstratified (<1>; **Photo 4**). She is wearing a long dress, a bonnet and an apron, tied at the back. She carries a basket in her left arm, her right arm is missing, as are her feet. A pivot joint at the top of her missing arm indicates that this arm was movable. The figurine is hollow-cast, a technique that post-dates 1893. She would originally have been painted, although little evidence survives of this, other than a minute trace of an orange-red colour in the area of the mouth. She is

probably a villager designed for the Model Home Farm series, introduced in 1921 by William Britain Ltd, as the appetite for toy soldiers waned after World War I. Part of a farm set, now housed in the Powerhouse Museum in Sydney, Australia, contains an almost identical lady. This farmer's wife (Britain no.503, registration number 2002/58/3) has a yellow bonnet, long yellow dress and white apron. The apron appears to finish at the same point as the Temple Mills figure, above the bottom of the skirt. She holds a brown basket in one hand and in the other, movable arm, an umbrella. The set in the Powerhouse Museum is part of a collection of Britain's farm figures and Australian buildings, amassed by two sisters between the late 1930s and early 1940s. As was the case for collectors in Britain, many were bought as individual pieces. The Temple Mills figure is therefore likely to date to the 1930s.

The fragmentary remains of a crude iron-based toy sword were recovered the fill of revetted channel 1003 in Trench 59 (<1012>; **Photo 5**). The metal is now corroded and it is no longer possible to ascertain if it was made from iron or an iron alloy such as steel. The sword was made from a strip of metal, tapering at one end to a point and is incorporated into the handle at the other end before breaking. The handle was formed from a strip of the same width, curved into a C-shape, and slots cut into the top and bottom; the 'blade' was then slotted through them. The excess metal from these slots was not removed, only pushed out of the way. The end of the handle is damaged. The blade is of even thickness on each side but curves slightly towards the top. It is covered in corrosion products and the appearance of the original surface, and any covering of the handle, cannot be ascertained. A similar example in the V&A Museum of Childhood was made from steel and dates to the 1950s–1960s; however, iron swords may be earlier in date (I. Hopkins, pers. comm.). Whilst many swords were mass-produced, the rough nature of the handle from the Olympic Park sword suggests it may have been made for a specific child to play with, or was a mass-produced toy that was repaired.

### *Recreation*

A group of 789 pieces of lead shot was found in the 19th century clinker-built wooden boat in Trench 59, all of 0.3 mm diameter, and presumably relating to the use of the boat to shoot waterfowl.



## *Fastenings and fittings*

### **Locks**

A small copper alloy lock plate, complete with two rectangular openings for bolts and a countersunk hole for fixing at either end, may have come from a casket or small chest. It was recovered from a layer associated with Building 5 (<57>, Phase 3).

### **Nails**

Iron nails form the largest category of metal objects from the Olympic Park sites, with 175 nails recovered. The biggest groups came from Phase 3 surface deposits next to Building 4. These include part of a large bolt, originally *c.* 250 mm in length.

Mineral-replaced wood survives on the shank. The other nails are of varying sizes.

### **Miscellaneous fastenings and fittings**

#### *Copper alloy*

A range of other copper alloy fastenings and fittings were recovered, including part of a safety pin (<49>, Phase 1); a riveted strip, possibly part of a mount, from a surface next to Building 4 (<58>, Phase 3); a length of bent wire and a clip from the new revetment of the Tumbling Bay Stream (<44>, Phase 4); a paper fastener from the silting of the Building 4 drains (<11>, Phase 4); a domed cap with internal threading (<39>) and a stud from the final infill of the Tumbling Bay Stream (Phase 5).

#### *Iron*

A group of four sunken barrels had been set within circular pits in Trench 4. Located between a row of terraced cottages (Building 3) and the Tumbling Bay Stream, they are thought to have fulfilled a commercial or industrial role. The wooden staves had not survived, but several sections of the iron strips that were used to bind them were recovered. A complete hoop survived from barrel 255. It was between 640 mm and 660 mm in diameter, and 63 mm wide; mineralised wood is present on the interior. There is an overlap in the strip of 200 mm, and here the strip is held together with two rivets. A second ring of 740 mm diameter, 41 mm wide, was also recorded from this barrel. Again the ends overlap, for a length of 70 mm, secured with one rivet. Part of a



third is represented by a bent and twisted strip, 64 mm wide. A nearly complete iron hoop came from barrel 277, measuring 730 mm in diameter and 60 mm wide. A partial hoop survived from barrel 691, the original diameter is estimated at 740 mm, the band is 56 mm wide, and mineralised wood is present on the interior. Two hoop fragments survived from barrel 249, one appears to have been approximately 530 mm in diameter and 63 mm wide, the ends of the strip were overlapped and an additional strip fragment was riveted to it, perhaps to strengthen the join.

Sections of iron binding, 10–33 mm wide, came from a Phase 2 made ground deposit, a Phase 3 deposit associated with Building 5, and a Phase 3 surface next to Building 4. Such bindings may have been used for a number of different purposes, perhaps to bind stave-built buckets or barrels.

An L-shaped strip, 18 mm wide with arms of 100 mm, was probably used as a corner binding (Phase 4 revetment of the Tumbling Bay Stream). A complete L-shaped fitting, 160 mm in length, was recovered from a posthole external to Building 2 (Phase 2). It had been made from a circular-sectioned rod, angled at one end, with both ends tapering to a flat point, presumably for fixing into a beam or similar. Part of square-section bar, with one expanded end, may have been part of a door fitting. It was recovered from Building 4, Phase 3. Other finds include part of a collar and an incomplete staple (Phase 2, millrace) and a washer from the Phase 3 surface next to Building 4.

Iron fittings from the layer sealing the wooden boat in Trench 59 included an iron hook that appears to have been hammered flat. It has an openwork diamond-shaped plate, looped for suspension from/ attachment to, a chain, three links of which remain (<1007>). The hook may have been used to secure the shot locker on the boat, or was perhaps associated with the chain located in the boat. An iron strap hinge, with two triangular plates, may have been used for a cabinet or box (<1009>). Part of a T-shaped hinge was also present (<1008>). One countersunk nail hole is visible at one end of its rectangular fixing plate; the strap is bent back against the plate but little has survived. Other fittings from the boat fill include an incomplete iron strip, bent at approximately 100°. It may have been used as a binding or strap, although no evidence of holes for fixing was visible. A D-sectioned strip had traces of perforations at each end but was incomplete; it may too have been used as some form of binding.

A thin, curved iron strip may have been part of a bucket or barrel hoop. Another strip fragment, with one rounded end and one broken end, held two rivets and displayed traces of mineralised wood. The original function of an iron rod of circular section, 280 mm in length (incomplete) and 15 mm thick, is unknown.

A number of structural fittings were recovered from the fill of channel 1003 in the same Trench. One had an almost a trefoil-shaped fixing plate, and would therefore have been relatively ornate and designed to be seen (<1004>). Three perforations provided the means to fix it, with rivets, nails or screws. From this came a square-sectioned spike, up to 8.5 mm wide but tapering and curled at the end, clearly designed to be driven into a plank or post, while mineralised wood on the spike indicates the spike was actually used in this way. The fixing plate of another (<1003>) was sub-rectangular in shape, with rounded corners, with a single, central perforation (<1003>). A rectangular-sectioned arm, is at right angles to the plate. The arm tapers to a point and a single perforation is present at the final bend; however, other perforations are probably present but obscured by corrosion. The arm is too thick (4 mm) to have been accidentally bent. An L-shaped iron corner brace has two fixing holes were visible in each arm. A penannular ring, 90 mm in diameter and approximately 10 mm thick, from brick well 2000, may have been part of a door knocker.

Other iron fittings from channel 1003 include two incomplete large rods of circular cross-section. The largest is 450 mm in length, one end is hooked and terminates in a point, the other end also curves round (in the opposite direction to the first), but is incomplete. The second rod also has one hooked and pointed end, but the other end is missing. Associated with these rods were two iron rings, one circular, 65 mm external diameter and 7.5 mm thick, the other is oval, 75 x 50 x 5 mm. They may have been used for suspension. A small number of other strip, ring and bar fragments were also recorded.

### *Drainage and sewage*

A cast iron perforated drain cover covered a vertical ceramic drain, set into metallised surface 461 (Phase 5). It is circular with a central opening of 125 mm in diameter and two concentric rows of perforations, each with 12 holes.

### *Craft and industry*

A small lead stamp, with 'S.B. & Co.' in relief, was probably a maker's stamp (<56>, Building 5, Phase 3). It has not been possible to assign this to a particular industry, although similar stamps have been noted on Edwardian silver models and have been assigned to European barrel makers.

### *Funerary practices*

A disc-shaped escutcheon, that would have decorated a Victorian coffin, was recovered from the fill of revetted channel 1003 In Trench 59 (<1000>; **Photo 6**). It was made from thin lead cut into an openwork design (ajouré), and appears to have been gilded. A similar example was recorded from a coffin in the crypt of Rycote Chapel in southern Oxfordshire (Boston 2008, plate 19, coffin 72). Examples also come from a coffin in the Sackville Vault at Withyham, Sussex (Litten 1988, pl. 61), and at St Augustine the Less, Bristol (Boore 1998, fig. 6.8c).

### *Transport*

A nearly complete wooden hame, edged with iron, was unstratified (**Photo 7**). This would have formed part of a harness of a draft horse, used when pulling a carriage, with a pair of hames fitted on either side of the collar, attached with leather straps. The collar would allow the weight to be distributed around the neck and shoulders, with the hames taking the strain. The fixing for the upper leather straps is missing. The lower end of the hame terminates in a loop, through which was placed an oval ring and through this in turn are two smaller rings, one with part of a link. The lower strap would have been attached here. Two side loops are present towards the lower end of the hame, and the remains of a third is visible further up, these would have been used to attach the harness traces, probably in association with iron rings.

Fragments from two iron horseshoes came from a Phase 3 bedding layer of Building 5 and the Phase 4 infill of barrel 182 (<67>). Both had rectangular holes that were not countersunk, and can be broadly dated as post-medieval (Clark 1995, type 4). A complete iron horseshoe was recovered from the fill of revetted channel 1003 in Trench 59 (<1005>). It is of broad web and large in size. One nail remains through

the shoe. It was a handmade heel shoe with toe rather than side clip, probably of 19th century date and made for a draught horse.

### *Weights*

One iron weight and four lead weights were recovered from Temple Mills. The largest was a solid cylindrical lead weight with rectangular iron suspension loop, weighing 11.3 kg. It was unstratified. The iron weight came from the Phase 5 channel infill (<64>). It was rounded, almost biconical in form, with a flattened top and bottom, with a weight of 2.1 kg. It has a central perforation. Both of these large weights probably had a structural function, such as counterbalance weights for doors. Three smaller weights may have been used as fishing weights (**Photo 8**). A conical lead weight came from a Phase 3 layer of the channel (<47>). It is longitudinally perforated, and the base is internally dished. Although similar in form to a sounding lead, at 132 g it is unlikely to have been used as such. The other two lead weights were oval in shape with flattened ends, longitudinally perforated. One came from the Phase 4 in fill of barrel 182 (<41>) and weighed 43 g. The second weighed 48 g and was unstratified (<36>).

### *War*

#### **World War II helmets, by Andy Brockman**

Four helmets dating to World War II were recovered during building recording. A detailed specialist report on these objects, including a full discussion of their historical context, is held in the project archive; a summary is presented here.

Three of the helmets are recorded as being found in made ground above the HAA (Heavy Anti-Aircraft) gun emplacement ZE21 to the south of the Eastway, and immediately to the west of Temple Mills (Robertson 2008, 109, pl. 45); despite their provenance, they were almost certainly associated with the use of the gun emplacement during World War II. These three helmets were not retained for further analysis, but comment has been made, based on the photograph reproduced in Robertson (2008, 110, pl. 45). Two of the helmets, and possibly all three, are of a type manufactured from 1941 onwards as the 'Civilian Protective Helmet', issued to

civilian fire guards and other civilian services such as the Women's Land Army, as well as being sold to the general public.

No contextual details survive for the fourth helmet, which was retained (**Photo 9**), but it is assumed to have come from the same site. It takes the form of a bowl-shaped metal pressing. The surface is heavily corroded and there is no obvious surviving indication of surface paint. At the crown of the bowl of the helmet is a fixing screw which passes through the fabric of the helmet bowl to attach the remains of a (formerly cruciform) rubberised pad. The bowl of the helmet is edged with a metal strip which has the effect of rounding the edge. The interior of the helmet also preserves a riveted fixing retaining its bent steel wire 'bail' to which are attached two low tension springs. The opposite fixing and 'bail' are missing.

Taken together, the evidence of the surviving form and fabric of this helmet and its component parts show that it is a British-made Mark 2 helmet, which was standard issue from 1938 to the British Armed Forces and many civilian services, such as the police, fire-fighters and ambulance personnel. Internal evidence, in particular the type of liner pad and chin strap fitted, shows that this particular helmet was almost certainly manufactured after 1939. The Mark 2 helmet continued in use even after the introduction of the Mark 3 helmet in 1943.

The lack of any surviving paint on this example prevents any definitive comment as to the service to which the original wearer might have belonged. However, on balance and given the location of the find, it is reasonable to speculate that the wearer was most likely to have been a member of the Army or Home Guard crewing Anti-Aircraft Gun Site ZE21.

### **Button**

A slightly convex copper alloy button was recovered from Trench 118 (<1>). It is corroded and worn, but the obverse is decorated with the profile of a man's head with an inscription around the edge. Although no longer visible, it included the letters ...VS V D.... when first seen. An identification as a 19th century military button had been suggested (Egan cited in Richardson 2009, 34).

### *Miscellaneous*

Three pieces of lead waste were recorded from the Phase 2 millrace, a Phase 3 metallised surface (<42>) and a Phase 4 demolition layer (Building 2). Unidentified copper alloy fragments included a disc of 22 mm diameter (<45>, Phase 2 external surface); two sheet fragments (<55>, Phase 3, Building 5) and a flanged disc (<43>, Phase 3 metallised surface). Unidentified iron objects include three short lengths of wire; one rod/bar and seven amorphous lumps.

### *Discussion*

The late 17th/early 18th century metal objects (Phase 2 at Temple Mills) were predominantly structural, mostly nails but also including a collar, an L-shaped fitting, a staple and binding fragment. These probably relate to the use of Building 2 as a foundry. During the late 18th/early 19th century (Phase 3), the site became part of a calico printing works and a row of terraced cottages (Building 3) was built, probably for the workers. The number of metal objects recovered during this Phase greatly increased. Copper alloy dressmaking pins and a small dress hook came from the Building 3 drains. The metal objects from Building 4 were mostly structural, comprising eight nails and a possible door fitting. A small fragment from a tin can was also recorded there. The surface next to Building 4 produced 91 nails and a washer, but also evidence of domestic activity in the form of two dressmaking pins, a curtain weight and a possible bobbin. From Building 5 came a small copper alloy lock plate, probably from a small box or casket; a lead stamp ('S. B. & Co. '); and part of an iron horseshoe. A copper alloy curtain ring; copper alloy dressmaking pin; lead fishing weight and three nails were recovered from the Tumbling Bay Stream. Iron hoops were all that survived of the four sunken barrels set in pits between the cottages and the stream. A few iron nails relate to the demolition of the foundry.

As the cottage drains went out of use they became filled with sandy silts (Phase 4) that incorporated a number of household and personal objects. These included 49 copper alloy dressmaking pins; a small copper alloy dress hook; a two-piece copper alloy locket frame; part of a tin can and two paper fasteners. From the infill of the barrels came further evidence of the daily lives of the families who lived in the cottages, including a copper alloy curtain ring; a lead fishing weight; an iron S-shaped

hook, probably from the kitchen; the door of a birdcage; a trowel and part of an iron horseshoe. Associated with the new revetment of the Tumbling Bay Stream were copper alloy and iron wire fragments (one with a rubber ?handle) and an L-shaped iron strap, possibly a binding.

Most of the Phase 5 objects came from the final infill of the Tumbling Bay Stream, comprising three substantial nails; a sickle/scythe; a large iron weight; a dessert spoon; a copper alloy stud and fitting. A drain cover and iron wire fragments were associated with a metallised surface; two nails came from a pavement associated with Building 3 and a nail from a cobbled road.

Amongst the unstratified finds, evidence for the use of draft horses was provided by the presence of a wooden hame from a harness. A substantial lead weight may have been used as a counterbalance, a smaller lead weight would have been suitable for fishing. Household items included a copper alloy curtain ring, a silver plated teaspoon and a bone scale-tang handle, probably from a fork. A lead figurine, part of a farm set, dates to the 1930s.

The metal objects from Trench 59 came predominantly from the fill of the revetted channel, and most are Victorian in date. They include a child's toy sword; an oval-shaped frying pan; a S-shaped hook (such as was used to suspend a range of items in a kitchen); a coffin fitting; a heel iron; the handmade horseshoe of a draft horse and several iron structural fittings. From the boat came a group of lead shot; part of a leaf-shaped copper alloy tablespoon and a range of fittings, including a hook that had been hammered flat and was attached to, or suspended from a chain. It may have been used to secure the shot locker on the boat.

Few metal objects came from the other areas of development. A World War II helmet was retained from the radar station complex, although at least three other helmets and a metal circular object were encountered in the field. These helmets were probably used by the military, although similar protection was also used by the civilian defence. A German fiddle pattern dessert spoon, with an iron-cored handle, dating from the early 20th century, came from Trench 53. A knife with scale-tang bone handle came from Trench 46 and an 18th century watch key from Trench 103.



## *Acknowledgements*

Thanks go to Joan Unwin at the Cutlers' Company, Sheffield for commenting on the German spoon; the Powerhouse Museum in Sydney for supplying an image of the lead figurine; Ieuan Hopkins from the V&A Museum of Childhood for commenting on a photograph of the toy sword; and Andy Brockman, 'Digging Dad's Army Project', and Richard Osgood, Ministry of Defence, for commenting on the World War II helmet.

## *Catalogue of images*

### **Household objects**

Photo 1: oval shaped iron frying pan with rectangular-sectioned handle. Trench 59, <1001>, context 1000, fill of revetted channel 1003.

Photo 2: fiddle pattern dessert spoon, copper alloy with iron-core to handle, and detail of maker's mark on underside of handle, Trench 53, context 10.

Photo 3: scale-tang bone pistol-grip handle, probably from knife, with detail showing incised initials 'T N'. Trench 75 (Temple Mills), <4>, layer 193.

Photo 4: lead figure of a farmer's wife, part of a farm set, dating to the 1930s. Trench 75 (Temple Mills), <1>, unstratified.

Photo 5: iron toy sword. Trench 59, <1012>, context 1000.

Photo 6: Victorian coffin fitting, gilded lead. Trench 59, <1000>, fill of revetted channel 1003.

Photo 7: wooden hame from horse harness. Trench 75 (Temple Mills), <1000>, unstratified.

Photo 8: lead fishing weights. Trench 75 (Temple Mills); (from left): <47, context 376; <41>, barrel 182; <36>, unstratified.

Photo 9: World War II steel helmet. OL-1907.

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Plate 1: Oval shaped iron frying pan with rectangular-sectioned handle. Trench 59



Plate 2: Fiddle pattern dessert spoon, copper alloy with iron-core to handle, and detail of maker's mark on underside of handle, Trench 53

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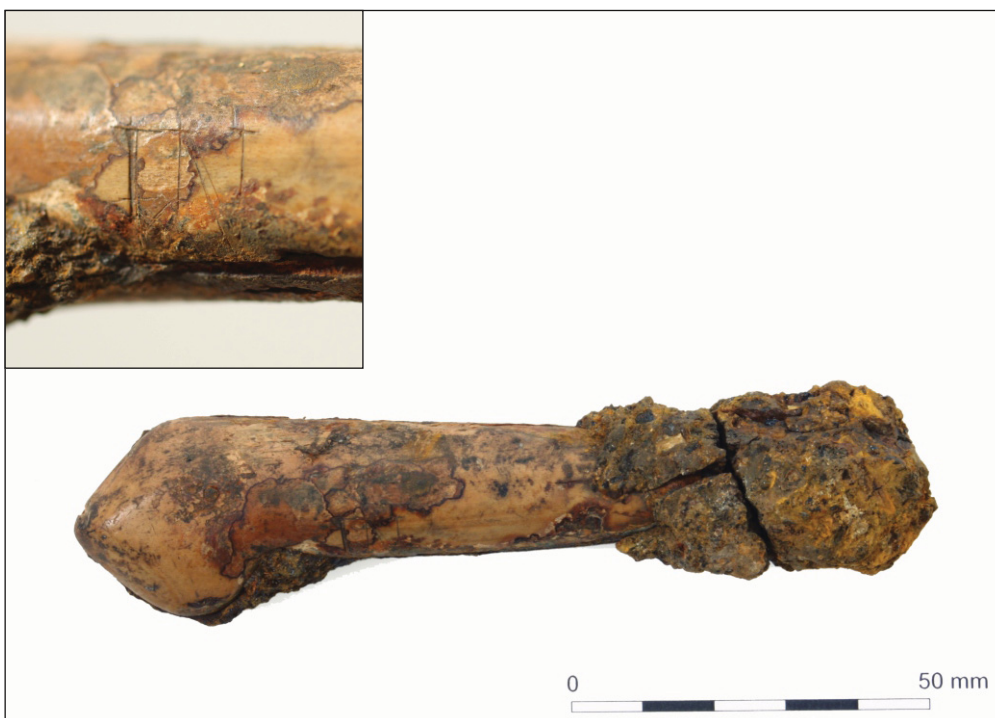


Plate 3: Scale-tang bone pistol-grip handle, probably from knife, with detail showing incised initials 'T N'. Trench 75 (Temple Mills), <4>, layer 193



Plate 4: Lead figure of a farmer's wife, part of a farm set, dating to the 1930s. Trench 75 (Temple Mills), <1>, unstratified

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Plate 5: Iron toy sword. Trench 59, <1012>, context 1000



Plate 6: Victorian coffin fitting, gilded lead. Trench 59, <1000>, fill of revetted channel 1003

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Plate 7: Wooden hame from horse harness. Trench 75 (Temple Mills), <1000>, unstratified





Plate 8: Lead fishing weights. Trench 75 (Temple Mills); (from left): <47, context 376; <41>, barrel 182; <36>, unstratified



Plate 9: World War II steel helmet. OL-1907



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