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**Small Finds from Eyhorne Street, Hollingbourne,
Kent (ARC 420 68+100-68+500 99)**

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TABLE OF CONTENTS

1	THE IRON IMPLEMENT.....	3
1.1	Introduction	3
1.2	Description	3
1.3	Discussion	4
2	THE FIRED CLAY	4
2.1	Introduction	4
2.2	Provenance	5
2.3	Description	5
2.4	Discussion	7
2.5	Catalogue of Illustrated Fired clay objects (Fig. 2)	8
3	BIBLIOGRAPHY	9

LIST OF TABLES

Table 1: Quantification and provenance of fired clay	4
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LIST OF FIGURES

Figure 1: Eyhorne Street Small Finds, Iron implement

Figure 2: Eyhorne Street Small Finds, Fired Clay

1 THE IRON IMPLEMENT

by Vanessa Fell

1.1 Introduction

A fragmentary iron implement comprising part of the tang (1 fragment) and part of the blade (in 7 fragments) was recovered from the upper fill (178) of pit 175. The blade is double edged. This may be part of an Iron Age short sword or dagger. The illustration can be found on Figure 1.

1.2 Description

1.2.1 Condition

The two small fragments of the blade do not seem to join with any other piece, nor does the main fragment of blade join the tang.

All fragments are thickly accreted and severely corroded. There are some large stones attached to the blade fragments. Examination of the recent fractures does not suggest that any evidence survives for organic materials. Nevertheless, the accretions immediately adjacent to the iron have a different texture from that further away – with numerous small pores, which could be an indication of decayed organic material in close proximity to the iron blade.

1.2.2 Method of examination

Fragments were X-rayed and examined under a binocular microscope.

Dimensions are taken from the x-radiograph. Cross-sections are recorded from the recent fractures across the blade and tang. Accretions were not removed owing to their thickness and density, and possible destabilisation which might arise if interfered with.

1.2.3 Tang

Part of the tang survives as one fragment, length 50 mm from the distal tip to the modern fracture. The cross-section at the fracture is rectangular, 8 mm x 4 mm. The distal end is corroded and complete. The tang tapers towards its tip, to *c.* 6 mm x 4 mm and the tip is burred over to *c.* 7 mm across. Below this there is a 'washer' *c.* 9 mm across.

1.2.4 Blade

The blade survives as one main fragment plus six smaller pieces.

The main fragment is 110 mm long with recent breaks at both ends. At the broader end, the width of the blade is 40 mm and the thickness is 7 mm maximum including a slight midrib on both sides of the blade. At the narrower end, the width of the blade is 23.5 mm and the thickness including midrib is 6 mm. The cross-section suggests that this was a double-edged implement. There is a slight curve along the length of the blade towards the broader end.

Of the smaller pieces, five have been attached with adhesive to make a fragment 60 mm long and maximum width 40 mm at the broader end, which has a pronounced curve longitudinally. The narrower end is straighter, width 39 mm. This group of fragments is too fractured to measure the thickness of the blade at either end.

1.3 Discussion

The blade reduces in width over a short distance which suggests that this may be part of a dagger rather than a sword. The blade is double edged.

The blade is bent along its length. The repaired piece is bent to almost a right angle whereas the single fragment of blade has a more gentle curve along its length. The recent fractures are partly a result of soil sample processing and the present fragmentary condition makes it uncertain whether this weapon was complete at burial. Nevertheless, this was clearly a deliberately bent and damaged weapon and one which most probably formed a ritual deposit. It may have been placed as a discrete item, possibly complete including its handle, and it may conceivably have been placed with other materials for which no evidence survives.

It was from the upper fill (178) of pit 175, which contained sherds of early and middle Iron Age pottery and triangular loomweights. The adjacent contemporary pit (pit 170) contained part of a horse skeleton and was also therefore a probable structured deposit and ritual in deposition.

2 THE FIRED CLAY

by Emily Edwards

2.1 Introduction

A total of 137 fragments of fired clay were recovered. Two triangular loomweights, of early to middle Iron Age date, and a spherical, decorated ceramic object were identified. This latter object is unparalleled in England. Table 1 below gives quantification and provenance for the complete assemblage. The two more complete loomweights and the spherical object were submitted to further analysis and are discussed below.

Table 1: Quantification and provenance of fired clay

Feature	Context	Count	Weight (g)	Type	Period	Comments
Layer (buried soil)	11	8	21	Triangular Loomweight	E-MIA	Fragments of P1
Layer (buried soil)	11	80	124	Triangular Loomweight	E-MIA	Fragments of P1
Layer (buried soil)	11	6	217	Triangular Loomweight	E-M-LIA	- P1
Pit 114	114	34	116	Amorphous Fired clay		
Pit 170	172	1	946	Triangular	E-MIA	P2

Feature	Context	Count	Weight (g)	Type	Period	Comments
				Loomweight		
Pit 175	178	1	4	Amorphous Fired clay		
Pit 175	178	1	52	Amorphous Fired clay	E-MIA?	Loomweight? Small fragment, similar to that in [172]
pit 19	18	3	24	Amorphous Fired clay		
Pit 19	18	3	32	small spherical object	LN	P3. Fragments including a possible spindlewhorl
Total		137	1536			

2.2 Provenance

The two loomweights were recovered from a subsoil layer (context 11) and pit fill 172 (pit 170). Pit fill 178 from pit 175 also contained a loomweight fragment of similar firing and fabric to that from pit 170. A bent iron dagger or sword was found in the same context. The spherical object was recovered from pit 19 which also contained 27 sherds of Durrington Walls Grooved Ware.

2.3 Description

2.3.1 Fabrics

The spherical object was manufactured from fine, closed clay containing no visible inclusions; this can be common within pottery assemblages of this period. Some of the Durrington Walls Grooved Ware associated with this object have been manufactured using such fabrics. The two loomweights were each made of sandy clay containing organic material, flint and ferruginous iron pellets. Two separate fabrics were identified:

- FAO1 - P1. Context 11. Finely textured and closed clay, relatively clean containing few inclusions. Tendency to flake. $\geq 5\%$ poorly sorted sub angular flint. Common poorly sorted rounded sand, $\geq 2\%$ quartzitic sand and $\geq 15\%$ glauconitic sand. Rare organic material $\geq 2\%$, and $\geq 2\%$ ferruginous iron pellets.
- AF1 - P2. Context 172. Finely textured closed clay. Micaceous clay containing $\geq 10\%$ Glauconite. Rare subangular calcinated flint, $\geq 2\%$.

2.3.2 Sources of raw material

The two fabrics are considered to be indications that the clay derives from a gravel source and that the inclusions noted are naturally occurring. It is interesting, therefore, to note that there are Fourth Gravel Terrace deposits close to the site.

2.3.3 *Method of manufacture*

The two loomweights appear to have been placed in an oxidised environment during firing. One face of the more complete loomweight (P2) is blackened from the exterior to the sub-exterior of the clay. This is slightly peculiar. The weight may have been partially covered during firing and cooling or it may have been charred during a fire. The spherical object is unoxidised throughout and may have been fired for a very short amount of time.

2.3.4 *Form and type*

The loomweight from context 11 (P1) is unusual in that the piercings include one which travels diagonally from the centre of the base through one corner. The two surviving corners are also each marked by a deep, diagonal groove; only one of these grooves is complete and is 20 mm long and 9 mm wide. These are characteristics which occur in Cynthia Poole's Danebury Type 1 and 6 (Poole 1984, 403-405), but which do not occur together at Danebury.

The loomweight from context 172 (P2, Pit 170) is a smaller and lighter version of Danebury Type 1 and is a common early to middle Iron Age type (Poole 1984, 403-4). The Danebury examples range from 1017-1875 g whilst this example weighs 946 g; the length of the complete side and width of the piercings are also smaller than the Danebury examples.

The small, decorated fired clay object from pit 19 was made from an untempered, well-fired clay. The surviving fragment amounts to just over a quarter segment of a sphere, the two 'flat' surfaces being the breaks. At its widest its diameter measures 27 mm. The complete form of the original object is, however, quite unknown, and whilst what survives can easily be seen as having originally been spherical, it could have formed part of an object with a much more complex shape. It weighs 9 g, and if spherical, the whole object would have weighed between three or four times as much.

Near the 'top' of the object, one of the breaks runs into a rounded concavity which could be seen as the beginnings of a perforation. There are, however, no other indications of a perforation running through the rest of the object, and the concavity could simply be part of the break rather than being an original, intentionally made feature.

The surface of the object has suffered numerous scratches, and a large flake appears to have spalled off from its lower edge. Nonetheless, two incised motifs can be clearly seen on its smoothed surface as well as traces of at least one more. The first is a rather asymmetrical lozenge-like or amygdaloid motif filled with irregular transverse hatching which descends from the possible perforation nearly halfway across that object. Two short lines forming a 'V' project from the side of the motif near its lower end.

The second motif is a band formed of irregular transverse incisions which runs from the possible perforation and appears to end just above the broken edge.

Near the broken bottom edge part, at least, of a third motif can be made out. All that survives of it are three incised lines forming a thin, more or less A-shaped motif. It might have been the beginning of another lozenge-like motif. There may be further deliberate marks on the object but they cannot easily be distinguished from incidental nicks and scratches.

2.4 Discussion

Loomweights are used on vertical, warp weighted looms, usually attached (via loops) to the warp threads. It is very rare for prehistoric British textiles to survive but those that have been recovered have contributed to an understanding of the types of cloth which such looms could produce (Wild 2003, 7-12; Barber 1991). A simple Tabby, half basket or Basket weave is *de rigueur* (Wild 2003, 41) for linens and for most Bronze Age woollen cloth. By the Iron Age, however, it seems that warp weighted looms were used to produce more complicated weaves.

Weight P1 actually might have worked in the same manner as a late Bronze Age to early Iron Age pyramidal weight. This would hang from the pierced corner, possibly with a ring fed through the piercing rather than the wool (Wild 2003, 32). The warp threads would be tied through the ring, wrapped around the weight and then tied through the weight again. This technique may have evened the tension in the warp threads, lessening the chances of the warp snapping under the strain of the weights. It is not certain whether the P2 loomweight type was hung horizontally or vertically.

The interpretation of the object from pit 19 is problematical, but four possibilities are perhaps worth considering. The first is that the object was simply part of a vessel, perhaps part of a rotund lug or boss, or some other kind of plastic decoration. Lugs, plastic decoration applied to the tops of rims, and applied 'knots' at the intersections of cordons are features characteristic of the Woodlands substyle in particular (Wainwright and Longworth 1971, 238-9), although similar plastic decoration occurs also in the Rinyo substyle (Wainwright and Longworth 1971, 242-3), and occasionally in association with features of the other substyles. The Eythorne object is rather larger and more rotund in shape than might be expected for such a feature. The strongest argument against this interpretation, however, is that it is made from untempered clay in contrast to the grog, sand and flint tempered fabrics of the Grooved Ware vessels on the site.

The second possible interpretation is that it is a fragment of clay weight such as a spindle whorl. Objects interpreted as spindle whorls have only very rarely been recognised in contexts of similar date in the British Isles and none of them are indisputable (eg Wainwright and Longworth 1971, 188, 264, Fig. 82; Manby 1974, 33-5; Piggott 1954, 166, 293, Fig. 28.13). Although the paucity of evidence for late Neolithic spindle whorls in Britain makes the interpretation of the Eythorne Street object as such appear unlikely, it is worth noting that spindle whorls have been found – although, perhaps because it is known mostly from tombs,

not in great numbers – in the contemporary Seine-Oise-Marne Culture in north-east France (Burnez-Lanotte, 1987, 236, pl. 79.14). It is, therefore, not implausible that spindle whorls were first adopted at this date in Kent.

The strongest argument against the interpretation of this object as a spindle whorl is not, therefore, so much its date (although this provides little support) as the uncertainty concerning whether or not it was perforated.

The same uncertainty undermines the second obvious interpretation of small perforated clay objects: that they were beads.

The third possibility, which relates the object to its insular context, is that it was a clay version of the more usually stone balls which occur widely, if not in very great numbers, throughout the British Isles in the late Neolithic. Of these the often much more elaborate Scottish carved stone balls are no doubt best known (Marshall 1977, 1983). They, however, are often larger than the Eyhorne Street object (diameters around 70 mm; Marshall 1977, 40). There are some smaller examples from tombs in Ireland (eg Conwell 1867; Macalister *et al.* 1912; Hencken 1939), but closer parallels may perhaps be found in chalk balls from a small number of sites in southern England (eg Keiller 1934; Curwen 1937; Montague 1995, 402; Hazzledine Warren *et al.* 1936, 200; Wainwright 1979, 167). Two polished balls made from natural marcasite nodules have been found at White Horse Stone (Hayden 2006), one of which was in a pit containing Grooved Ware. Examples in clay are rare, but a few widely dispersed examples are known, none of which is decorated (Wainwright 1979, 180; Hencken 1939; Childe and Grant 1946-8, 42). None of these examples comes from a simple pit context similar to that at Eyhorne Street.

The possible uses of Neolithic balls have been well discussed by both Marshall (1977, 63) and Edmonds (1991). Some of the possible uses of the stone examples (eg as maceheads) are unlikely in the case of the Eyhorne Street clay object, but many of the other suggestions – as bolas weights, gaming pieces, weights, as being used for divination, for storing string – are possible, if not all very plausible.

2.5 Catalogue of Illustrated Fired clay objects (Fig. 2)

P1. Context 11. Fabric FAO1. One triangular loomweight (362 g) with two corners, one complete. Both have diagonal grooves, the complete of which is 9 mm wide and 20 mm deep. One corner is also pierced; this is 20 mm wide at one end, where it has been widened, and 8 mm wide at the other end. The width is approximately 54 mm and the height unknown. Firing: ext surfaces; YBR, core; G.

P2 Context 172. AF1. Almost complete triangular loomweight (968 g) with three corner piercings, one corner being incomplete. Width 49 mm, length of flat edge on complete side 80 mm. Each perforation has been widened slightly during the process of perforating the clay. One is 8 mm wide at one and 16 mm at the other; the second is 8-7 mm wide throughout. The piercing Firing ext surfaces: RBR-BL; core; RBR.

P3 Context 18. NAT. Incomplete, spherical object, possibly with piercing. Possibly a spindlewhorl. Decoration includes a lozenge-like design and a line of impressions leading away from the 'piercing'. Diameter: 27 mm. Weight: 9 g (estimated complete weight *c* 27 g). Firing: external surfaces: black, core; red-brown.

3 BIBLIOGRAPHY

Anderson, E, 1996 The common thread: textile production during the late Iron Age and Viking Age, unpubl. PhD thesis, Univ. Lund

Barber, E J W, 1991 *Prehistoric textiles*, Princeton

Burgess, C, 1980, *The age of Stonehenge*, London

Burnez-Lanotte, L, 1987 *Le Chalcolithique moyen entre la Seine et le Rhin inférieur: étude synthétique du rituel funéraire*, BAR Int Ser **354**, Oxford

Champion, T, forthcoming *Settlement in Kent from 1500 AD to 300 BC*

Childe, V G, and Grant, W G, 1946-8 A Stone Age settlement at the Braes of Rinyo, Rousay, Orkney (second report), *Proc Soc Antiq Scot* **81**, 16-42

Conwell, E A, 1867 Examination of the ancient sepulchral cairns on the Loughcrew hills, county of Meath, *Proceedings of the Royal Irish Academy* **9**, 355-79

Curwen, E C, 1931 Excavations in The Trundle, second season, 1930, *Sussex Archaeological Collections* **70**, 33-85

Curwen, E C, 1937 *The archaeology of Sussex*, London

Drewett, P, Rudling, D, and Gardiner, M, 1988 *The South-east to AD 1000: a regional history of England*, New York

Edmonds, M, 1992 Their use is wholly unknown, in *Vessels for the ancestors: essays on the Neolithic of Britain and Ireland in honour of Audrey Henshall* (eds N Sharples and A Sheridan), 179-93, Edinburgh

Edwards, E, forthcoming The fired clay, in Brady, K, and Lamdin-Whymark, H, *Horcot Pit, Gloucestershire*, Oxford

Harding, P, 1988 The chalk plaque pit, Amesbury, *Proc Prehist Soc* **54**, 320-327

Hayden, C, 2006 The prehistoric landscape at White Horse Stone, Boxley, Kent, *CTRL Integrated Site Report Series*, in ADS 2006

Hazzledine-Warren, S, Piggott, S, Clark, J G D, Burkitt, M C, Godwin H, and Godwin M E, 1936 Archaeology of the submerged land-surface of the Essex Coast, *Proc Prehist Soc* **2**, 178-210

Hecht, A, 2001 *The art of the loom: weaving, spinning, and dyeing across the world*, Washington

Hencken, H O'N, 1939 A long cairn at Creevykeel, Co. Sligo, *Journ Roy Soc Antiq Ireland* **69**, 53-98

Keiller, A, 1934 Excavation at Windmill Hill, *Compte-rendu 1st Internat Congress Prehist. Sciences*, London, 135-8

Macalister, R A S, Armstrong, E C R and Praeger, R L, 1912 Bronze Age cairns on Carrowkeel Mountain, Co. Sligo, *Proceedings of the Royal Irish Academy* **29**, 311-47

Manby, T G, 1974 *Grooved Ware sites in Yorkshire and the north of England*, BAR Brit Ser **9**, Oxford

Marshall, D N, 1977 Carved stone balls, *Proc Soc Antiq Scot* **108**, 40-72

Marshall, D N, 1983 Further notes on carved stone balls, *Proc Soc Antiq Scot* **113**, 628-46

Mercer, R J, 1981 *Grimes Graves, Norfolk: excavations 1971-72*, vol 1, DoE Arch Rep **11**, London

Montague, R, 1995 Chalk objects, in Cleal, R M J, Walker, K E, Montague, R, *Stonehenge in its landscape: twentieth century excavations*, English Heritage Archaeological Report **10**, 399-407

Piggott, S, 1954 *The Neolithic cultures of the British Isles: a study of the stone-using agricultural communities of Britain in the second millennium BC*, Cambridge

Poole, C, 1984 Objects of baked clay, in Cunliffe, B W, *Danebury: an Iron Age hillfort in Hampshire* vol. 2 *The excavations 1969-1978: the finds*, CBA Res Rep **52**, 398-407

Russell, M G, 1989 Excavations of a multi-period site in Weston Wood, Albury: the pottery, *Surrey Archaeological Collections* **79**, 3-51

Smith, I F, 1965 Windmill Hill and Avebury: excavations by Alexander Keiller, 1925-1939, Oxford

Wainwright, G J, 1971 The excavation of a late Neolithic enclosure at Marden, Wiltshire, *Antiq J* **LI**, 177-239

Wainwright, G J, 1979 *Mount Pleasant, Dorset: excavations 1970-1971*, Reports of the Research Committee of the Society of Antiquaries of London **XXXVII**, London

Wainwright, G J, and Longworth, I, 1971 *Durrington Walls: excavations 1966-1968*, London

Wild, J P, 2003 *Textiles in Archaeology*, Princes Risborough