

HOARD

Unique ID: LANCUM-65C1B4

Object type certainty: Certain

Workflow status: Published

Note on discovery: all the small finds, except one coin, were found within a lead container (no. 198 below), at a depth of about 18 inches, while five of the larger, complete arm-rings were found underneath it. The objects are described in their uncleaned condition, in accordance with the terms of the Treasure Act 1996, and some of the details are currently obscured by adhering soil. After conservation, some of the weights may be slightly lighter, although there is unlikely to be any significant difference.

Surface metal analysis of a sample of six objects from the hoard conducted at the British Museum indicated approximate metal contents, as follows:- Arm-ring (no. 1) - silver 97% with 2% copper Arm-ring (no. 2) - silver 93% with 3% copper Arm-ring (no. 4) - silver 97% with 2% copper; the central collet - 95% silver with 3% copper; and tongue-shaped collet - 95% silver with 2% copper Arm-ring fragment (no. 30) - 91% silver with 7% copper Penannular brooch fragment (no. 38) - 95% silver with 3% copper Ingot fragment (no. 58) - 93% silver with 5% copper The silver content of the core metal is likely to be a slight overestimate, since corrosion alters the composition of the surface by preferentially leaching out copper. Traces of gold and lead were found in all of the objects analysed.

Contents of the hoard

A. SILVER ARTEFACTS (excluding coins)

1. Broad-band arm-ring of thick, rectangular section strip tapering to ends hammered into rods, which have been knotted together. It has been compressed to an oval shape; diameter, 101.5mm x 64.6mm; width of band, 26.9mm (max); thickness, 3.8mm - 4.3mm; weight, 155.36g. The ring is punch decorated with triple-pelleted, triangular stamps arranged in roughly three rows, grading to two, then one towards the ends. The edges are closely punched transversely with short, lop-sided, arrow-shaped stamps in mainly a single row along one edge and a double row grading to a single one along the opposite edge. An example of the type was found in the Cuerdale Hoard found near Preston and deposited c. 905-10 (E. Hawkins, 1847, "An account of coins and treasure found in Cuerdale", *Archaeological Journal*, 4, pp. 110-130, fig. 21). Broad-band arm-rings were developed in Ireland from Danish prototypes in the later 9th century and continued in general circulation until around AD 930/40 (J. Sheehan, 2004, 'Social and economic integration in Viking-Age Ireland: the evidence of the hoards', pp. 177-188 in J. Hines, A. Lane and M. Redknap (eds.), *Land, Sea and Home. Proceedings of a conference on Viking-period settlement at Cardiff, July 2001, Leeds*). They appear to have been produced to a postulated weight unit of 26.15 grammes and the new find squares closely with this figure at almost exactly six times the base unit (x 5.94). Such arm-rings could thus have been used for the storage and circulation of silver in a bullion economy, although they could also have been worn as symbols of status.

2. Penannular arm-ring of thick, rectangular section strip tapering from an expanded lozenge-shape at the front to overlapping ends with curled-back terminals. It has been bent across the front and compressed to a rounded, sub-triangular shape; diameter, 64.9mm x 50.1mm; width of band, 19.9mm (max); thickness, 2.5mm; weight, 52.28g. The ring is punch decorated with transverse bar

stamps of double saltires separated by a thin rib and with a single pellet between each pair of arms. The stamps are separated by plain, flat-topped ribs, but in the centre of the front three stamps have been set diagonally, leaving four plain, sub-triangular zones, each of which contains a lozenge-on-triangle stamp. The sides have been hammered in places. A plain example of the type was found in the Cuerdale Hoard (Hawkins, op. cit., fig. 11). The ring weighs exactly twice the postulated weight unit of 26.15 grammes to which similar rings appear to have been produced (see no. 1 above).

3. Arm-ring of thin strip of concavo-convex section tapering towards the ends, which have been hammered into thin rods looped round each other, then coiled back on themselves by $13\frac{1}{2}$ and $10\frac{1}{2}$ turns; diameter, 97.5mm (max); width of band, thickness, 1.0mm; weight, 51.6g. A rounded, sub-rectangular silver repair patch is secured by two flat-ended rivets next to one edge on the inner surface, towards the end with more coils, to fix a crack in the edge. The ring is elaborately punch decorated. Crossing over a median rib, small, apex-to-apex triangle stamps have been used to create 'beading' of raised lozenges along it, and, on either side of that, a row of interlocked, diagonally opposed, lozenge-on-triangle stamps is carefully placed, while the expanded areas between the waists of the stamps are punched with single apex-to-apex stamps set horizontally. The median rib continues almost to the plain terminals, while the lozenge-on-triangle stamps are replaced by five or six annulets on either side. The main pattern is broadly comparable with that of the lost gold arm-ring from the Hare Island Hoard of around the early 10th century, Ireland, and on a fragment of an arm-ring from the Cuerdale Hoard (J. Graham-Campbell, 1980, *Viking Artefacts. A select catalogue*, British Museum Press, London, pl. 231; Hawkins op. cit., fig. 47). The form is broadly comparable with the only surviving arm-ring from the Bossall/Flaxton Hoard, North Yorkshire, representing an Insular copy of a Scandinavian original (J. Graham-Campbell, 2001, 'The northern hoards from Cuerdale to Bossall/Flaxton', pp. 212-229 in N.J. Higham and D.H. Hill (eds.), *Edward the Elder 899-924*, London/New York, fig. 16.2). Note: nos. 4-6 below consist of a group of three arm-rings slightly compressed one inside the other and not separated at the time of examination; total weight, 245.55g:-

4. Arm-ring (outer) of thin, plano-convex section strip, with punched decoration and coiled ends similar to no. 3 above, but with animal-head terminals and three applied collets, apparently for lost settings and re-used from another object(s) of probable Continental origin (see below); diameter, 102.7mm x 85.5mm; width of band, 20.4mm (max); thickness, 2.0mm. At the front is applied a large, raised, circular collet (23.7mm x 22.3mm), which is decorated with eight hollow segments alternating with tear-shaped lobes closely recalling the classical 'egg-and-dart' borders copied in 9th-century Carolingian sculpture and ivory panels of gospel book-covers, e.g. architrave fragments from Rome and Bodleian Library, Ms. Douce 176 (C. Stiegemann and M. Wemhoff (eds.), 1999, *Kunst und Kultur der Karolingerzeit. Karl der Große und Papst Leo III. in Paderborn*, vol. 2, Mainz, 629-30, 696-8, cat.nos. IX.15-16 and X.7). The collet encloses a plain, slightly convex field and gives the impression of having originally been mounted with a thin setting, possibly of metal or glass, but nothing of it survives; the field has a small, central perforation. The edges of the ring are punched with small, punched triangles creating a beaded effect. The terminals are moulded in the form of a pair of opposed animal heads with projecting, semi-circular ears and punched, circular eyes on either side of a rib which forks at each end to mark the brows and snout. The rib is decorated with punched, apex-to-apex triangle giving a beaded effect, and there is a single arc of the same pattern under each eye. Grooves on either side of the snout mark the jaws. At the back of each head is a plain, tongue-shaped field enclosed by a collet decorated to match the one on the front and possibly also once containing a thin setting of uncertain material (length, 25mm). Beyond the heads the ends have been hammered into thin rods, which are coiled together into a knot and then coiled back on themselves by $7\frac{1}{2}$ turns. Like the decoration, the animal heads may also be compared with those on the Hare Island arm-ring (see no. 3 above; and J. Graham-Campbell, 1995, *The Viking-Age Gold and Silver of Scotland (AD 850-1100)*, National Museums of Scotland, Edinburgh, 37), or rather more

broadly with the terminal heads with prominent ears and open jaws on the harness fittings from Mammen and Sølsted, Denmark, decorated in the Viking Jellinge Style, which emerged around the mid-9th century and continued into the late 10th, although they may also show Anglo-Saxon influence (D.M. Wilson and O. Klindt-Jensen (1980; 2nd edn.), *Viking Art*, London, pls. 35a-b). The three collets are broadly comparable in outline with the tongue-shaped and oval panels on the arms of the cross displayed on the Carolingian, 'earlier' book-cover from Lindau, Germany, of around 800/early 9th century (P. Lasko, 1994 [2nd edn.], *Ars Sacra 800-1200*, Yale University Press, ill. 2), so they were perhaps originally mounted on a cross of some form, or on an object decorated with one, e.g. a book-cover or reliquary.

5. Arm-ring (middle), mostly obscured by the inner and outer rings (nos. 4 and 6) and by adhering soil, but apparently of similar form to no. 3 above, although the knotted ends are of simpler, double returned coils; diameter, 93mm x 70mm (very approximate).

6. Arm-ring (inner) of flat, broad-banded type, expanding to a slightly lozenge-shaped front and with tapering ends hammered into rods, which are knotted together and then coiled back on themselves by 2-2½ turns; diameter, 78.5mm x 56mm (approx); thickness, 2mm. The punched decoration is mostly hidden by the middle ring (no. 5), although part of a border of closely punched triangles is visible inside a plain edge.

7. Arm-ring of rod of sub-circular section, coiled almost double with the ends hammered out and coiled round the hoop by 2½ turns each, leaving a short gap of single rod between them. The ring is considerably compressed out of shape, but is complete; length, 103.3mm; width of rod, 3.3mm (max); weight 41.4g. The outer surface is closely punch decorated all round with apex-to-apex triangles, with a single pellet in each triangle, creating a beaded effect of raised lozenges. The decoration is comparable with a ring of lozenge section from the Cuerdale Hoard (Hawkins op. cit., fig. 50). Coiled arm-rings of this general type were produced in Ireland in a Hiberno-Viking milieu around AD 880-930 and are ultimately of Scandinavian origin; the ring from Silverdale belongs to Sheehan's subgroup A (J. Sheehan, 1991-2, 'Coiled armrings - an Hiberno-Viking silver armring type', *Journal of Irish Archaeology*, 6, 41-53).

Note: item no. 8 below consists of two complete arm-rings (c-d) looped through an incomplete, folded arm-ring (b), which is in turn looped through a thick, plain, penannular ring with the ends closed up (a); and of a finger-ring (e) strung on arm-ring (d); total weight, 167.0g.

8a. Penannular ring ('bullion-ring' or 'currency ring') of thick, plain strip very slightly tapering to closed-up, rounded ends; diameter, 34.1mm (max); width of band, 16.2mm (max); thickness, 5.7mm (max). There is a group of about six small testing nicks on one of the outer edges and one large nick on the inner edge almost opposite. A similar ring is known from the Cuerdale Hoard (Hawkins op. cit., fig. 67).

8b. Part of an arm-ring made of two plain rods twisted together, but with the ends cut off and the whole triple folded and passing through ring (a); hacksilver; length, 77.8mm; thickness, 3.0mm - 4.2mm. The ring may originally have had knotted ends, like a complete arm-ring of similar construction from the Cuerdale Hoard (Hawkins op. cit., fig. 57).

8c. Arm-ring of rod of oval section, coiled about one-and-a-quarter turns, with the tapered ends overlapping by about 60mm and double coiled round the hoop; diameter, 81.3mm x 77.2mm; thickness, 3.4mm (max). The outer surface is punch decorated with apex-to-apex triangles, creating a beaded effect of lozenges in false relief. The coiled ring is a variant of Sheehan's subgroup B (see no. 7 above).

8d. Arm-ring made by twisting together two pairs of rods that have themselves been twisted together and with the ends coiled round each other by 2 - 3 turns; slightly compressed into an oval

shape; diameter, 78.5mm x 58.3mm.

8e. Finger-ring of strip expanding to a slightly lozenge-shaped front and tapering to narrow ends hooked round each other; diameter, 21.7mm; width, 7.8mm (max); thickness, 1.0mm. The ring is strung on arm-ring 8d above. The punched decoration is obscured by adhering soil. Viking-period finger-rings are frequently found fastened on arm-rings, as at Cuerdale (Hawkins op. cit., fig. 54).

9. Arm-ring of lozenge-sectioned rod tapering to long, hammered-out rods, which originally coiled round each other, but have been partly forced apart by tight folding and compression of the ring; length, 70.5mm (as survives); thickness, 6.0mm - 6.3mm; weight, 42.5g. The two outer faces are closely punched with apex-to-apex triangles with triple pellets in each triangle, except where the stamps have gone over the edge and lost the two pellets in the base angles, so appearing to have only one. The stamps leave small, plain, hexagonal patterns between them. Plain arm-rings of the same type occur in the Cuerdale Hoard (Hawkins op. cit., figs. 48-9).

10. Length of plain silver rod of lozenge section probably from a piece of 'ring-money' of arm-ring form, bent to a J-shape and broken at the ends; hacksilver; length, 53mm (surviving); thickness, 4.3mm; weight, 10.2g. There are several testing nicks along the edges. The lozenge section is typical of ring-money from the Irish Sea region and Scotland of the first half of the 10th century and later (Graham-Campbell 1995, op. cit, 38-40, 57-59).

11. Length of two rods twisted together, cut at both ends from an arm-ring; hack-silver; length, 50.9mm; thickness, 2.6mm; weight, 7.5g.

12. Fragment of a broad-band arm-ring of flat strip, slightly tapering and cut across both ends; hacksilver; length, 36.6mm; width, 14.1mm (max); thickness, 2.0mm; weight, 8.4g. The fragment is punch decorated with irregularly placed, transverse, bar stamps of small triangles with their bases on either side of a plain rib. Testing nicks on both edges.

13. Rectangular fragment of a broad-band arm-ring of flat strip, with one corner bent up and cut and broken across both ends; hacksilver; length, 21.4mm; width, 15.7mm; thickness, 1.6mm; weight, 4.9g. The fragment is punch decorated with transverse bar stamps of small, interlocked triangles and occasional trapezoids on either side of plain ribs. Testing nicks on the edges.

14. Sub-rectangular fragment of broad-band arm-ring of thick, flat strip, cut across both ends; hacksilver; length, 19.5mm; width, 12.7mm (max); thickness, 3.3mm - 3.6mm; weight, 7.1g. The fragment is punch decorated with a saltire arrangement of bar stamps of small triangles with their bases on either side of a rib with a median groove and fainter on one side of the rib. There are four close, transverse cuts across the broader end on the back and possibly one across the other end on the front. On the back and on one side there are also irregular, faint, thin ridges and there are testing nicks on one edge.

15. Rectangular fragment of a broad-band arm-ring of thin, flat strip, plain, cut across both ends and bent across the middle; hacksilver; length, 16.6mm; width, 12.9mm; thickness, 1.0mm; weight, 1.9g.

16. Sub-square fragment of a broad-band arm-ring of flat strip, plain, cut across both ends; hacksilver; length, 13.2mm; width, 12.7mm (max); thickness, 2.7mm; weight, 3.8g. Four cut marks across one end and a testing nick on each side.

17. Fragment of a broad-band arm-ring of flat strip, tapering, folded over and cut across both ends; hacksilver; length, 30.3mm; width, 11.3mm (max); thickness, 2.2mm; weight, 9.0g. Indistinct cut marks or fissures across the broader end, three testing nicks on two edges and one or two on the

reverse edge.

18. Fragment of a broad-band arm-ring of flat strip, tapering, folded over and cut across both ends, plain; hacksilver; length, 21.0mm; width, 14.1mm (max); thickness, 1.5mm; weight, 6.3g. There is one testing nick (possibly two) on one edge at the broader end.

19. Fragment of a broad-band arm-ring of flat strip, cut across both ends, plain; hacksilver; length, 16.5mm (max); width, 17.7mm (max); thickness, 2.9mm; weight, 6.8g.

20. Fragment of a broad-band arm-ring of flat strip, slightly tapering, cut straight across one end and at two angles at the other forming a triangular projection, plain; hacksilver; length, 14.3mm; width, 10.5mm (max); thickness, 2.0mm; weight, 2.5g. Two testing nicks on one edge and perhaps one on the opposite edge.

21. Fragment of a broad-band arm-ring of flat strip tapering to a rounded, bent-back terminal and cut across the broad end; hacksilver; length, 35.2mm; width, 21.0mm (max); thickness, 1.6mm (but thinner at edges); weight, 11.5g. The broader part has a median rib punched with a line of annulets, on either side of which are opposed, quadruple-pelleted, T-shaped stamps with their bases pointing alternately inwards and outwards. There are also punched annulets along the edges, while the terminal end is punched with three, narrowing to two rows of triple-pelleted, triangular stamps. There are at least seven testing marks along one edge and five on the opposite edge.

22. Sub-rectangular fragment, possibly from an arm-ring, of thick strip cut triangular at one end and straight across at the other, plain; hacksilver; length, 19.6mm; width, 15.2mm; thickness, 5.3mm (max); weight, 11.5g. Indistinct fissures on one side at the triangular end; testing nicks on one side, on one side edge and on one edge at the straight end.

23. Sub-rectangular fragment of a broad-band arm-ring of flat strip cut across both ends, plain; hacksilver; length, 15.2mm; width, 21.4mm (max); thickness, 3.1mm; weight, 8.5g. Two cut marks across the broader end.

24. Rectangular fragment of a broad-band arm-ring of flat strip, cut across both ends, plain; hacksilver; length, 11.6mm; width, 17.2mm; thickness, 2.0mm; weight, 3.7g.

25. Rectangular fragment of a broad-band arm-ring of flat strip, cut on all four sides, plain; hacksilver; length, 13.6mm; width, 9.7mm (max); thickness, 3.2mm; weight, 3.5g. Testing nicks on the side and edge at one end.

26. Irregular, pentagonal fragment of a broad-band arm-ring of flat strip, plain; hacksilver; length, 15.5mm; width, 11.7mm; thickness, 2.1mm; weight, 2.9g. Testing nicks on two edges.

27. Curved, slightly tapering fragment of a broad-band arm-ring of flat strip, cut across both ends, plain; hacksilver; length, 19.5mm (chord); width, 14.4mm (max); thickness, 3.3mm; weight, 9.9g. Cut marks across broad end on the inside.

28. Narrow, rectangular fragment of a broad-band arm-ring of flat strip cut across both ends; hacksilver; length, 9.3mm; width, 19.1mm; thickness, 2.9mm; weight, 4.0g. Transverse, punched decoration of a bar stamp of a row of interlocked, flat-topped arcs, and remains of similar across both ends. Testing nick on one edge.

29. Fragment of an arm-ring of rod of heptagonal section cut across both ends; hacksilver; length,

30.0mm; thickness, 6.4mm; weight, 7.9g. The three outer facets are punch-decorated all along with apex-to-apex triangle stamps. There are at least five testing nicks on the inner angles.

30. Fragment of 'ring-money' or arm-ring of lozenge-section rod, with two opposed angles faceted and cut across both ends (see no. 10 above); hacksilver; length, 24.9mm; thickness, 7.6mm; weight, 11.32g. Two adjoining faces are punch decorated with rows of squares with serrated sides, each enclosing a ring of seven pellets around a central pellet. Testing nicks on three edges.

31. Fragment of an arm-ring of lozenge-section rod, bent nearly double and tapering to a round-section end bent inwards, plain (see no. 10 above); hacksilver; length, 53.1mm; thickness, 6.8mm (max); weight, 29.4g. There are cracks from bending around the outer angle and testing nicks on the inner and outer angles.

32. Fragment of rod of circular section from a ring of 'Permian' type, cut at one end and broken at the other; hacksilver; length, 20.5mm; thickness, 5.1mm; weight, 3.5g. The rod has a finely twisted appearance and there are several testing nicks all round it. A fragment of the same type of ring was found in the Cuerdale Hoard (Hawkins op. cit., fig. 52). Complete examples of Permian rings have polyhedral terminals and date from the 9th/early 10th century. They appear to be of central or northern Russian origin, although they occur in both the British Isles (as fragments) and Scandinavia. They were originally made as neck-rings to a weight standard of about 100g and 200g, probably from using a set number of Islamic coins in their manufacture. But they were coiled into arm-rings by the Vikings, who presumably obtained them by trade, or as tribute (J. Graham-Campbell, 1980, *Viking Artefacts, A select catalogue*, London, no. 331; S. Fuglesang and D.M. Wilson (eds.), 2006, *The Hoen Hoard: a Viking gold treasure of the ninth century*, Det norske institutt i Roma, 22, 74-6).

33. Fragment of twisted rod of faceted, circular section probably from 'ring-money' of arm-ring form (see no. 10 above), cut at both ends; hacksilver; length, 46.5mm; thickness, 2.5mm; weight, 3.5g. Four testing nicks.

34. Length of two rods twisted together cut from an arm-ring, folded double and the ends knotted; hacksilver; length, 55.5mm; width, 14.5mm (max); thickness of rod, 2.5mm; weight, 18.7g (with adhering soil).

35. Length of narrow chain or braid of very fine, knitted wires, with one of the ends bent double; length, 73mm (approx total); width, 4mm; weight, 2.7g. The chain is comparable in technique with a broader fragment fitted with a ring from the Cuerdale Hoard and the examples from 9th/10th-century British hoards are noted by Graham-Campbell (Hawkins op. cit., fig. 83; Graham-Campbell, 1995, op. cit., 155-6).

36a-b. Two fragments cut from the terminal plates of a pseudo-penannular brooch; hacksilver. 36a is roughly pentagonal, with three of five riveted, dome-headed bosses surviving and the central hole for another; length, 34.3mm; width, 31.8mm; thickness, 2.2mm (at edge); weight, 22.7g (with much adhering soil). The bosses are dentelated round the bases and enclosed by plain, incised circles, while the trapezoidal and triangular fields in between are decorated with pointillé dots. Two edges of the plate are raised and rounded with the stub of a joining strut on one side and, on the reverse, there are borders of double rows of punched dots between incised lines. There is a testing nick on one edge. Pseudo-penannular brooches are an Irish form and are occasionally decorated with one or more bosses, as on the mid-to-late 9th-century brooch from Killamery (A. Mahr (ed., 1932), *Christian Art in Ancient Ireland*, vol. 1, Dublin, pl. 40, 3). But the five-boss arrangement appears to reflect the influence of bossed penannular brooches, on which five bosses commonly occur (see no. 37 below).

36b. Triangular fragment with two raised, rounded edges; length, 27.3mm; height, 14.0mm; weight, 3.6g. On the front an empty rivet hole is enclosed by a plain, incised circle on a pointillé ground, while the back has the same border as 36a above. There are three testing nicks on each of the short sides.

37. Narrow, sub-rectangular fragment cut from the terminal plate of a bossed penannular brooch, with one dome-headed boss surviving and an empty rivet hole; hacksilver; length, 37.7mm; width, 14.0mm; thickness, 2.3mm; weight, 10.1g. The base of the boss is dentelated and the main field round it is plain, with a beaded border of short, close incisions between incised lines and, outside that on one side, part of an openwork, zoomorphic border with a curvilinear outer edge. There are random, minute, triangular punch marks on the back, two testing nicks on the shorter cut edge and three on the opposite edge. The piece represents part of a bossed penannular brooch of Johansen's subgroup C, amalgamated with subgroup D as subgroup C/D in Graham-Campbell's review of the typology. This was a mainly Irish type of brooch with a floruit in the later 9th century, although production continued into the 10th (O.S. Johansen, 1973, 'Bossed penannular brooches. A systematization and study of their cultural affinities', *Acta Archaeologica*, 44, 63-124, fig. 35; for production and dating, see J. Graham-Campbell, 1975, 'Bossed penannular brooches: a review of recent research', *Medieval Archaeology*, 19, 33-47).

38. Fragment cut from the plano-convex section hoop of a penannular or pseudo-penannular brooch, with part of the terminal surviving at the broader, flattened end; hacksilver; length, 57.2mm (chord); width of hoop, 10.5mm; width of terminal, 27.6mm (surviving); thickness of hoop, 4.3mm; weight, 20.95g. On the inside of the hoop at the junction with the terminal is a small animal head with a dot-punched eye and nostril. A beaded border extends from the back of its head round the inner edge of the terminal, which is demarcated by a plain, flat rib and has a sunken, circular field broken in half across a rivet hole for a missing boss. Linking this field to the border is a curved, hollow-sided triangle with an inner contour line.

39. Distorted fragment cut and broken from the plano-convex section hoop of a penannular brooch, with part of the terminal surviving at the broader, flattened end; hacksilver; length, 39.3mm; width of hoop, 9.4mm; width of terminal, 13.7mm (surviving); thickness of hoop, 4.2 mm; weight, 10.7g. On the front of the flat end are traces of a putative, double-incised circle or scroll, while on the back is part of an incised double circle with a narrow, hatched triangle on one side. A double-incised contour line extends along both edges on the back of the hoop. There are three testing nicks along each edge of the hoop and cracks on the back edge near the broken end.

40. Tubular head and part of the shaft cut from the pin of a penannular or pseudo-penannular brooch; hacksilver; length, 33.1mm (overall); width of head, 9.7mm; inner diameter of head, 7.0mm; width of shaft, 4.4mm; weight, 7.6g. The shaft is of slightly faceted, rounded section, flattened and curved round at the top. There are three testing nicks on one side of the shaft and two on the other.

41. Finger- or toe-ring of round-sectioned rod, slightly thicker at the front and with the ends overlapped and hooked round each other at the back. It has been slightly compressed to an ovoid shape and one of the ends is split; diameter, 19.6mm x 17.0mm; thickness, 2.1mm; weight, 1.8g.

42. Ingot: bar-shaped and of rounded trapezoidal section with rounded ends; length, 99.6mm; width, 11.1mm (max); thickness, 13.6mm(max); weight, 100.5g. There are at least four testing nicks on the edges. The ingots in the Silverdale Hoard (see below) are typical of Viking-period hoards found in both Scandinavia and Western Europe. They were probably used as bullion in trade and commercial transactions before the introduction of coinage and possibly also sometimes as stock pieces of precious metal for casting into jewellery.

43. Ingot: bar-shaped and of rounded trapezoidal section with rounded, pitted ends; length, 98.1mm; width, 10.6mm (max); thickness, 12.8mm (max); weight, 49.1g. There are at least six testing nicks on the edges.

44. Ingot: bar-shaped and of rounded triangular section with one end rounded, the other slightly turned up and cut; length, 97.2mm; width, 11.0mm (max); thickness, 8.9mm; weight, 52.7g. There is a testing nick on one edge.

45. Ingot: bar-shaped and of rounded sub-triangular section with rounded ends; waisted and pitted towards one end; length, 73.9mm; width, 13.2mm (max); thickness, 9.4mm (max); weight, 51.9g.

46. Ingot: bar-shaped and of rounded sub-triangular section with rounded ends and surfaces pitted in places; a deep, transverse, V-shaped cut and a light cut towards one end; length, 68.3mm; width, 9.7mm (max); thickness, 8.8mm (max); weight, 37.4g. There are at least five testing nicks.

47. Ingot: bar-shaped and of ovoid section with rounded ends; length, 59.0mm; width, 9.3mm (max); weight, 26.5g. There is a testing nick on either side.

48. Ingot: bar-shaped and of rounded section with rounded ends and a deep cut across the centre; length, 56.3mm; width, 7.2mm; weight, 18.2g. There is a testing nick on either side.

49. Ingot: bar-shaped and of sub-triangular section with rounded ends and a pitted furrow along one side; length, 51.4mm; width, 16.0mm (max); thickness, 10.6mm; weight, 49.1g. There is a testing nick on either side.

50. Ingot: irregular bar-shaped and of flattened ovoid section with rounded ends and grooved, waisted section towards one end; length, 50.0mm; width, 12.4mm (max); thickness, 7.2mm; weight, 26.3g.

51. Ingot: narrow bar-shaped and of rounded triangular section with rounded ends; length, 46.3mm; width, 7.8mm (max); thickness, 7.9mm; weight, 17.9g. There are at least three testing nicks on the edges.

52. Ingot: narrow bar-shaped, tapering and of round to rounded triangular section with rounded ends; length, 40.4mm; width, 8.0mm (max); weight, 14.2g. There is a group of five testing nicks on one edge and two or more on the other edges.

53. Ingot: narrow bar-shaped and of round to rounded triangular section; length, 32.1mm; width, 7.9mm (max); weight, 11.0g.

54. Ingot: bar-shaped and of flattened ovoid section with a group of small lumps in the centre of the smooth face; length, 33.8mm; width, 11.2mm (max); weight, 14.2g. Two testing nicks on one edge.

55. Long fragment of bar-shaped ingot of rectangular section, rounded at one end and cut across the other; hacksilver; length, 71.1mm (max); width, 11.6mm; thickness, 7.9mm; weight, 53.8g. Two testing nicks on one edge and one on another.

56. Fragment of bar-shaped ingot of rounded trapezoidal section, rounded at one end and cut across the other, with a lump on one side; hacksilver; length, 41.7mm; width, 11.8mm (max); thickness, 9.1mm; weight, 30.2g. Testing nick on one edge.

57. Long fragment of bar-shaped ingot of rounded trapezoidal section, rounded at one end and cut across the other; hacksilver; length, 49.3mm; width, 10.0mm; thickness, 6.9mm; weight, 26.7g. Two testing nicks on one edge and one on another.

58. Long fragment of bar-shaped ingot of rounded triangular section, rounded at one end and cut across the other; hacksilver; length, 49.4mm; width, 9.2mm; thickness, 8.0mm; weight, 23.87g. One or two testing nicks on one edge and one on another.

59. Fragment of bar-shaped ingot of ovoid section, rounded at one end cut across the other; hacksilver; length, 30.3mm; width, 8.5mm; weight, 14.0g. Four testing nicks on one edge and one on another.

60. Terminal of tapering, bar-shaped ingot of rounded trapezoidal section, rounded at one end and cut across the other; hacksilver; length, 31.8mm; width, 12.8mm; thickness, 11.0mm (max); weight, 24.1g.

61. Terminal of bar-shaped ingot of rounded trapezoidal section, rounded at one end and roughly cut at the other and with a furrow along one side; hacksilver; length, 29.7mm; width, 14.5mm; thickness, 11.3mm; weight, 27.2g. Testing nick on one edge.

62. Terminal of bar-shaped ingot of ovoid section, rounded at one end and cut across the other and with a pit on the underside; hacksilver; length, 30.9mm; width, 9.5mm; weight, 14.1g. At least two testing nicks on one edge and one on another.

63. Terminal of bar-shaped ingot of rounded rectangular section, rounded at one end and cut across the other; hacksilver; length, 32.6mm; width, 9.1mm; weight, 13.5g. Testing nicks on three edges.

64. Terminal of bar-shaped ingot of rounded trapezoidal section, narrow and rounded at one end and cut obliquely across the other; hacksilver; length, 42.6mm (max); width, 10.8mm; thickness, 10.3mm; weight, 27.5g. Testing nicks on base and two angles.

65. Terminal of bar-shaped ingot of rounded rectangular section, rounded at one end and cut obliquely across the other; hacksilver; length, 42.6mm (max); width, 9.9mm; thickness, 8.0mm (max); weight, 22.3g.

66. Terminal of bar-shaped ingot of rounded trapezoidal section, rounded at one end and cut and broken across the other; hacksilver; length, 31.9mm; width, 13.6mm; thickness, 9.9mm; weight, 25.3g. A crack on one side and a group of three testing nicks on one angle.

67. Terminal of bar-shaped ingot of rounded sub-rectangular section, rounded at one end and cut across the other; hacksilver; length, 29.6mm (max); width, 10.8mm; thickness, 6.4mm; weight, 15.0g. Testing nicks on two angles.

68. Terminal of bar-shaped ingot of rounded sub-triangular section, rounded at one end and roughly cut across the other; hacksilver; length, 25.2mm; width, 14.8mm (max); thickness, 8.2mm; weight, 16.5g. Two testing nicks on one angle.

69. Terminal of narrow, bar-shaped ingot of rounded sub-triangular section, rounded at one end and cut across the other; hacksilver; length, 33.1mm; width, 7.3mm (max); weight, 10.4g. Prominent testing nicks on all angles: two on apex, three on side and at least five on the other side.

70. Terminal of narrow bar-shaped ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 23.6mm; width, 9.2mm (max); thickness, 6.5mm; weight, 8.7g. Testing nick on either side.
71. Terminal of bar-shaped ingot of rounded trapezoidal section, rounded at one end and cut diagonally across the other; hacksilver; length, 21.6mm; width, 13.6mm (max); thickness, 9.6mm; weight, 18.0g. Two testing nicks on one angle and one on the one opposite.
72. Terminal of bar-shaped ingot of rounded trapezoidal section, indented at one end and cut across the other; hacksilver; length, 26.0mm; width, 11.0mm; thickness, 12.8mm; weight, 24.5g. Two testing nicks on one edge and one on another.
73. Bent terminal of bar-shaped ingot of flattened rectangular section, rounded at one end and cut across the other; hacksilver; length, 23.1mm; width, 12.6mm; thickness, 5.9mm; weight, 13.0g. Testing nick on one side, one on each adjacent angle and two on the opposite side.
74. Terminal of bar-shaped ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 22.1mm; width, 9.6mm; thickness, 7.1mm; weight, 9.6g. Two or three testing nicks on one edge and a group of five on the opposite edge.
75. Terminal of bar-shaped ingot of rounded rectangular section, rounded at one end and cut at two intersecting angles at the other; hacksilver; length, 18.8mm; width, 13.6mm; thickness, 7.0mm; weight, 11.6g. Two testing nicks on one side and three on the opposite side.
76. Terminal of bar-shaped ingot of rounded sub-trapezoidal section, rounded at one end and cut across the other; hacksilver; length, 18.0mm; width, 16.2mm; thickness, 10.6mm (max); weight, 13.9g.
77. Terminal of bar-shaped ingot of rounded trapezoidal section, rounded at one end and cut across the other; hacksilver; length, 17.8mm; width, 11.3mm; thickness, 9.9mm; weight, 12.3g. Two testing nicks on one angle, one opposite and two on another.
78. Terminal of bar-shaped ingot of rounded sub-triangular section, rounded at one end and cut across the other; hacksilver; length, 18.5mm; width, 10.1mm; weight, 10.4g. Testing nick on one angle.
79. Terminal of bar-shaped ingot of rounded sub-trapezoidal section section, rounded at one end and cut across the other; hacksilver; length, 17.8mm; width, 7.9mm; weight, 7.0g. Two testing nicks on one angle and one on another.
80. Terminal of narrow bar-shaped ingot of rounded rectangular section, rounded at one end and cut across the other; hacksilver; length, 19.3mm; width, 8.8mm; weight, 7.5g. Three testing nicks on one angle and one on the one opposite.
81. Terminal of bar-shaped ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 19.7mm (max); width, 9.0mm; weight, 7.1g. Testing nick on one angle.
82. Terminal of narrow bar-shaped ingot of ovoid section, rounded at one end and cut across the other, with a deep dent on one side; hacksilver; length, 21.4mm (max); width, 6.6mm; weight, 5.0g. Testing nick on either angle.
83. Terminal of bar-shaped ingot of ovoid section, rounded at one end and cut across the other;

hacksilver; length, 16.5mm; width, 9.5mm; weight, 5.4g.

84. Terminal of bar-shaped ingot of rounded section, rounded at one end and cut across the other; hacksilver; length, 13.9mm; width, 7.9mm; weight, 4.5g.

85. Terminal of bar-shaped ingot of trapezoidal section, rounded at one end and cut across the other; hacksilver; length, 19.2mm (max); width, 9.4mm; thickness, 10.9mm; weight, 12.1g. Two testing nicks on one edge, with a small lump and a nick on the one opposite and another nick on the base.

86. Terminal of bar-shaped ingot of sub-trapezoidal section, rounded at one end and cut obliquely at the other; hacksilver; length, 21.5mm (max); width, 13.3mm; weight, 11.1g.

Notes:

87. Terminal of bar-shaped ingot of flattened ovoid section, rounded at one end and cut across the other; hacksilver; length, 20.3mm; width, 12.1mm; thickness, 6.4mm (max); weight, 9.7g. Testing nick on one edge.

88. Terminal of bar-shaped ingot of ovoid section, rounded at one end and cut obliquely at the other; hacksilver; length, length, 20.9mm; width, 11.9mm; thickness, 6.9mm; weight, 10.6g. Testing nick on one angle.

89. Terminal of narrow bar-shaped ingot of sub-square section, rounded at one end and cut obliquely at the other; hacksilver; length, 23.3mm (max); width, 8.8mm; weight, 9.3g. Testing nicks on two angles.

90. Terminal of bar-shaped ingot of round section, rounded at one end and cut across the other; hacksilver; length, 20.8mm; width, 7.2mm; weight, 6.9g. Testing nick on one side.

91. Terminal of bar-shaped ingot of rectangular section, rounded at one end and cut obliquely at the other; hacksilver; length, 17.1mm; width, 12.4mm; thickness, 9.4mm; weight, 12.6g.

92. Terminal of bar-shaped ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 16.8mm; width, 10.5mm; weight, 6.9g. Two testing nicks on opposite angles.

93. Terminal of bar-shaped ingot of rounded trapezoidal section, rounded at one end and cut across the other; hacksilver; length, 19.2mm; width, 10.1mm; weight, 8.8g. Two testing nicks on one angle and one on the cut end.

94. Terminal of bar-shaped ingot of rounded triangular section, pointed at one end and cut across the other; hacksilver; length, 20.3mm (max); width, 9.8mm; weight, 6.3g. Four testing nicks on one angle and three or four on the one opposite.

95. Terminal of bar-shaped ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 17.1mm; width, 10.1mm; weight, 5.4g.

96. Terminal of bar-shaped ingot of rounded rectangular section, rounded at one end and cut across the other; hacksilver; length, 13.5mm; width, 12.7mm; thickness, 8.5mm; weight, 9.1g.

97. Terminal of narrow bar-shaped ingot of rounded sub-trapezoidal section, rounded at one end and cut obliquely at the other; hacksilver; length, 17.9mm (max); width, 8.9mm; weight, 6.2g. Two testing nicks on one angle.

98. Terminal of narrow bar-shaped ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 18.2mm (max); width, 8.4mm; weight, 5.3g. Two testing nicks on one angle and a small lump on the one opposite.
99. Terminal of narrow bar-shaped ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 14.6mm; width, 7.8mm; weight, 4.3g. Two testing nicks on one side and one or two on the other.
100. Terminal of ingot of trapezoidal section, rounded at one end and cut across the other; hacksilver; length, 13.0mm; width, 9.5mm; weight, 5.7g.
101. Terminal of ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 11.8mm; width, 10.4mm; weight, 5.3g.
102. Terminal of ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 12.9mm; width, 10.5mm; weight, 5.1g.
103. Terminal of ingot of rounded trapezoidal section, rounded at one end and cut across the other; hacksilver; length, 11.8mm; width, 9.7mm; weight, 4.3g.
104. Terminal of ingot of sub-rectangular section, flattened at one end and roughly cut across the other, with a crease in one side; hacksilver; length, 12.5mm (max); width, 11.4mm (max); weight, 5.6g.
105. Terminal of ingot of rounded sub-trapezoidal section, cut in half lengthwise, but originally rounded at one end and cut across the other; hacksilver; length, 17.9mm; width, 8.6mm; weight, 7.0g. Testing nick on one angle and another on the inside edge.
106. Terminal of bar-shaped ingot of rounded sub-trapezoidal section, flat at one end and cut obliquely at the other; hacksilver; length, 22.9mm (max); width, 9.0mm (max); weight, 14.2g.
107. Terminal of ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 13.7mm (max); width, 11.3mm; weight, 5.5g. Testing nick on one side and possibly another on the one opposite.
108. Terminal of ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 13.9mm; width, 8.8mm; weight, 4.1g. Putative testing nick on one side.
109. Terminal of ingot of ovoid section, rounded at one end and cut across the other; hacksilver; length, 10.0mm; width, 10.5mm; weight, 3.0g.
110. Fragment of bar-shaped ingot of ovoid section, cut across both ends; hacksilver; length, 13.5mm (max); width, 11.9mm; thickness, 8.3mm; weight, 8.3g. Putative testing nick on one end and one or two on one angle.
111. Fragment of bar-shaped ingot of ovoid section, cut across both ends; hacksilver; length, 11.8mm (max); width, 12.1mm; weight, 5.9g. One or two testing nicks on one edge.
112. Fragment of bar-shaped ingot of ovoid section, cut across both ends; hacksilver; length, 9.9mm; width, 9.2mm; weight, 4.2g.
113. Terminal of ingot of sub-rectangular section, rounded at one end and cut across the other; hacksilver; length, 10.0mm (approx); width, 8.2mm; weight, 2.6g.

114. Fragment of bar-shaped ingot of rounded sub-trapezoidal section, cut across both ends; hacksilver; length, 28.2mm; width, 14.3mm; thickness, 9.9mm; weight, 28.4g. Three or four testing nicks on one angle and one or two on the one opposite.
115. Fragment of bar-shaped ingot of sub-square section, cut across both ends; hacksilver; length, 32.3mm (max); width, 9.3mm; thickness, 10.6mm; weight, 22.8g. Three or four deep cuts across one end; four testing nicks on one angle, two on the one opposite, three on the third angle and three or four on the fourth.
116. Fragment of bar-shaped ingot of sub-trapezoidal section, cut across both ends; hacksilver; length, 27.8mm (max); width, 9.5mm; thickness, 9.4mm; weight, 15.9g. Putative testing nick on one angle.
117. Fragment of bar-shaped ingot of rounded sub-trapezoidal section, roughly cut across both ends; hacksilver; length, 25.2mm; width, 11.0mm (max); thickness, 7.0mm; weight 12.8g. Two testing nicks on one angle and one deep one on the opposite side.
118. Fragment of bar-shaped ingot of flattened ovoid section, cut across both ends; hacksilver; length, 28.8mm; width, 13.0mm; thickness, 5.6mm; weight, 14.8g. Crack and group of five testing nicks on one side; three nicks on the opposite side.
119. Fragment of bar-shaped ingot of flattened ovoid section, cut across both ends; hacksilver; length, 29.4mm; width, 12.8mm; thickness, 5.7mm (approx); weight, 15.0g. Three or more testing nicks on one side and one or two on the other.
120. Fragment of bar-shaped ingot of rounded rectangular section, cut across both ends; hacksilver; length, 22.1mm (max); width, 13.4mm; thickness, 7.4mm; weight, 16.1g. Group of four testing nicks on one angle, one on the one opposite, possibly more on the other two angles and one on one end.
121. Fragment of bar-shaped ingot of rounded triangular section, cut across both ends; hacksilver; length, 20.0mm; width, 12.2mm (max); thickness, 7.1mm (max); weight, 10.9g. Two testing nicks on apex.
122. Fragment of bar-shaped ingot of rounded rectangular section, cut across both ends; hacksilver; length, 20.0mm (max); width, 11.4mm; thickness, 6.3mm; weight, 10.1g. Testing nick on one angle, two on the one opposite, two on one side and one on the adjacent angle; also two light cuts across one end.
123. Fragment of bar-shaped ingot of rounded rectangular section, cut roughly across both ends; hacksilver; length, 22.5mm (max); width, 10.7mm; thickness, 6.2mm; weight, 10.3g. Crack and testing nick on one angle, two on the one opposite, one on the side and one on the adjacent angle.
124. Fragment of bar-shaped ingot of rounded rectangular section, cut across both ends; hacksilver; length, 20.0mm; width, 11.4mm (max); thickness, 6.0mm; weight, 11.0g. Two or three shallow transverse cuts near one end; one or two testing nicks on one angle and two on the one diagonally opposite.
125. Fragment of bar-shaped ingot of rounded rectangular section, cut across both ends; hacksilver; length, 15.4mm (max); width, 12.3mm; thickness, 7.8mm; weight, 10.9g. Two testing nicks on one angle and possibly one on the one opposite.
126. Fragment of bar-shaped ingot of rounded sub-trapezoidal section, cut across both ends; hacksilver; length, 20.6mm (max); width, 11.8mm; thickness, 8.9mm (max); weight, 14.7g. Testing

nick and hammered on one end and a group of four or five nicks on one angle, with five or six on the one opposite.

127. Fragment of bar-shaped ingot of high arched section, cut across both ends; hacksilver; length, 18.1mm; width, 14.0mm; thickness, 12.4mm; weight, 22.5g. A cut across the top at one end, four testing nicks on one angle, at least two on the one opposite and two on one end.

128. Fragment of bar-shaped ingot of rounded trapezoidal section, cut obliquely at one end and cut and broken at the other; hacksilver; length, 23.1mm (max); width, 15.9mm (max); thickness, 10.8mm; weight, 25.0g. Seven or eight testing nicks on one angle and four or five on the one opposite.

129. Fragment of bar-shaped ingot of almost square section, roughly cut across both ends; hacksilver; length, 14.8mm (max); width, 11.4mm; thickness, 11.8mm; weight, 13.8g. Crease along top and a crack across it; two testing nicks on one angle and one on the one diagonally opposite.

130. Fragment of bar-shaped ingot of rounded trapezoidal section, cut and broken across both ends (?); hacksilver; length, 13.0 (max); width, 16.1mm; thickness, 9.7mm (approx); weight, 12.8g. Deep cut across one end; testing nick on one angle, one on one end and possibly also on the other.

131. Fragment of bar-shaped ingot of sub-trapezoidal section, cut obliquely across both ends; hacksilver; length, 22.3mm (max); width, 11.6mm; thickness, 10.2mm; weight, 14.3g. Two slight furrows along one face and testing nick on one angle.

132. Fragment of bar-shaped ingot of roughly triangular section, roughly cut across both ends; hacksilver; length, 18.1mm (max); width, 14.0mm; thickness, 9.3mm (max); weight, 13.2g. Testing nick on one angle.

133. Fragment of bar-shaped ingot of rounded sub-rectangular section, cut across both ends; hacksilver; length, 16.8mm (max); width, 13.3mm; thickness, 8.0mm (max); weight, 11.1g. A deep cut and two fine ones across top; testing nick on one angle.

134. Fragment of bar-shaped ingot of rounded sub-rectangular section, cut obliquely at one end and roughly at two intersecting angles at the other; hacksilver; length, 16.6mm (max); width, 17.6mm; thickness, 8.2mm; weight, 12.4g. Two testing nicks on one angle and cracked on the one opposite.

135. Fragment of bar-shaped ingot of plano-convex section, cut across one end and diagonally across the other leaving a projection; hacksilver; length, 16.1mm (max); width, 15.6mm; thickness, 8.6mm (max); weight, 12.3g. Three testing nicks on one angle and possibly one on the one opposite.

136. Fragment of bar-shaped ingot of ovoid section, cut obliquely across one end and at two angles at the other; hacksilver; length, 13.8mm (max); width, 13.6mm; thickness, 7.3mm; weight, 8.2g. Testing nick on one angle and cracks on the one opposite.

137. Fragment of bar-shaped ingot of ovoid section, cut across both ends and leaving a projection on one; hacksilver; length, 17.5mm (max); width, 12.1mm; thickness, 7.5mm; weight, 9.8g. One or two testing nicks on one angle and on the one opposite.

138. Fragment of bar-shaped ingot of ovoid section, cut obliquely across both ends; hacksilver; length, 16.1mm (max); width, 13.2mm; thickness, 9.9mm (max); weight, 11.4g. Testing nick on one angle.

139. Fragment of bar-shaped ingot of plano-convex section, cut across both ends; hacksilver; length,

- 13.8mm; width, 13.0mm; thickness, 9.0mm; weight, 10.0g. Testing nicks on opposing angles, one (possibly two) on one end and possibly one on the underside.
140. Fragment of bar-shaped ingot of plano-convex section, cut across both ends; hacksilver; length, 14.2mm (max); width, 12.4mm; thickness, 9.6mm; weight, 10.0g. Crack next to projection on one end; testing nick on one angle and possibly on the one opposite.
141. Fragment of bar-shaped ingot of rounded rectangular section, cut across both ends; hacksilver; length, 15.7mm (max); width, 10.2mm; thickness, 8.9mm; weight, 10.1g. Testing nick on one angle and at least one on the one diagonally opposite.
142. Fragment of bar-shaped ingot of rounded trapezoidal section, roughly cut across both ends; hacksilver; length, 15.6mm (max); width, 9.2mm; thickness, 9.8mm (max); weight, 8.6g. Testing nick on one angle and crack on the one opposite.
143. Fragment of bar-shaped ingot of ovoid section, roughly cut obliquely at both ends; hacksilver; length, 16.6mm (max); width, 13.7mm; thickness, 7.3mm; weight, 8.3g. Deep testing nick on one angle leaving a hooked projection and one or two nicks on the opposite angle.
144. Fragment of bar-shaped ingot of rounded sub-rectangular section, roughly cut across both ends; hacksilver; length, 15.9mm (max); width, 11.0mm; thickness, 7.9mm; weight, 9.2g. Light cuts towards one end on top; also cracks running over one angle with a putative testing nick, and a nick on the opposite angle.
145. Fragment of bar-shaped ingot of rounded trapezoidal section, cut across both ends; hacksilver; length, 15.0mm (max); width, 10.5mm; thickness, 7.2mm; weight, 6.8g. Two testing nicks on one angle, one on each of the others and possibly one on one end.
146. Fragment of bar-shaped ingot of flattish ovoid section, roughly cut across both ends; hacksilver; length, 12.9mm (max); width, 13.6mm; thickness, 6.3mm; weight, 7.2g. Crack in the side at one end next to two testing nicks on one angle; also one nick on one side and one on the opposite angle.
147. Fragment of bar-shaped ingot of ovoid section, cut across both ends; hacksilver; length, 14.5mm (max); width, 10.7mm (max); weight, 6.3g. Cut close to one end, three testing nicks on one angle, at least two on the one opposite and possibly one diagonally opposite.
148. Fragment of bar-shaped ingot of rounded sub-trapezoidal section, cut across both ends; hacksilver; length, 10.7mm (max); width, 12.7mm; thickness, 7.2mm; weight, 5.8g. Light cut across on end; testing nick on one edge.
149. Fragment of bar-shaped ingot of ovoid section, cut across both ends; hacksilver; length, 11.2mm; width, 10.7mm; thickness, 6.2mm; weight, 5.2g.
150. Fragment of bar-shaped ingot of rounded rectangular section, cut across both ends; hacksilver; length, 11.8mm (max); width, 13.0mm; thickness, 6.7mm; weight, 6.1g. Deep testing nick or crack across one angle and a nick on one end.
151. Fragment of bar-shaped ingot of rounded rectangular section, cut across both ends (much soil adhering); hacksilver; length, 11.0mm (max); width, 16.2mm; weight, 9.2g.
152. Fragment of narrow bar-shaped ingot of rounded sub-trapezoidal section, cut across both ends (much soil adhering); hacksilver; length, 16.9mm (max); width, 8.3mm; weight, 6.9g. Putative testing nick on one angle and one on the adjacent side.

153. Fragment of bar-shaped ingot of rounded triangular section, cut across both ends; hacksilver; length, 15.7mm (max); width, 8.6mm; weight, 6.4g. Two testing nicks on one angle and one or two on the base.
154. Fragment of bar-shaped ingot of probably ovoid section section, cut straight across at one end and diagonally at the other then cut in half lengthwise; hacksilver; length, 12.0mm (max); width, 7.8mm (surviving); thickness, 9.9mm; weight, 5.0g. Two or three testing nicks on one angle and one on one end.
155. Fragment of bar-shaped ingot of faceted ovoid section, cut across both ends (much soil adhering); hacksilver; length, 15.2mm; width, 9.4mm; thickness, 6.0mm; weight, 5.9g. Crack and putative testing nick on one angle and probably a nick on the opposite angle.
156. Fragment of bar-shaped ingot of rounded sub-trapezoidal section, cut across both ends; hacksilver; length, 9.1mm; width, 11.3mm; thickness, 6.8mm; weight 4.7g. Furrow across one end, three testing nicks on the other and possibly two or three more on one end of base.
157. Fragment of bar-shaped ingot of rounded sub-triangular section with a prominent lump on the side at one end, cut across both ends and through the lump; hacksilver; length, 9.0mm (approx); width, 10.9mm; thickness, 7.7mm; weight, 4.8g. Testing nick on one angle and possibly one on another.
158. Fragment of bar-shaped ingot of rounded rectangular section, cut across both ends and diagonally lengthwise; hacksilver; length, 10.1mm; width, 10.8mm (max surviving); thickness, 7.1mm; weight, 4.2g. Testing nick on one angle.
159. Fragment of bar-shaped ingot of plano-convex section, cut across both ends; hacksilver; length, 7.3mm; width, 12.4mm; thickness, 9.0mm; weight, 3.8g.
160. Fragment of narrow bar-shaped ingot of roughly rounded section, cut straight across one end and diagonally at the other; hacksilver; length, 12.6mm; width, 7.7mm; thickness, 7.5mm; weight, 4.1g. Two deep hollows on one side.
161. Fragment of narrow bar-shaped ingot of roughly rounded section, cut across both ends; hacksilver; length, 12.0mm (max); width, 8.4mm; thickness, 7.6mm (approx); weight, 4.0g (approx). Testing nick on angle at one end.
162. Fragment of flat strip possibly from either an ingot, or perhaps an arm-ring, of rounded rectangular section, cut straight across one end and at two intersecting angles at the other; hacksilver; length, 14.8mm; width, 15.4mm; thickness, 5.4mm; weight, 6.9g. Three small lumps give a beaded appearance to one angle.
163. Ingot: bar-shaped, of flattened ovoid section; length, 33.3mm; width, 12.8mm (max); thickness, 5.8mm; weight, 16.3g. Two testing nicks on one side.
164. Casting spill, or small ingot, of ovoid section and with a long, narrow projection giving it a bottle shape; length, 29.8mm; width, 8.0mm; thickness, 5.6mm (max); weight, 6.0g. Two testing nicks on one side and one on the other.
165. Fragment of rod of round section, narrowing to bent, ovoid end and cut across the other; perhaps the terminal of an arm-ring; hacksilver; length 31.9mm; diameter, 5.7mm; weight, 4.7g. Two testing nicks on one side and one on the other.

166. Fragment of rod of rounded heptagonal section, cut across both ends and possibly from an arm-ring; hacksilver; length, 25.0mm; diameter, 7.5mm; weight, 9.7g. Deep, V-shaped cut on one side, two testing nicks on one adjacent angle and three on the next.

167. Fragment of rod of round section, curved and cut across both ends; possibly from an arm-ring; hacksilver; length, 18.8mm (chord); diameter, 5.7mm; weight, 4.0g. Two testing nicks on one side, two on the adjacent side and one or two on the inner curve.

168. Fragment of thick rod of round section, slightly curved, tapering to one end and cut across both ends, probably from an arm-ring; hacksilver; length, 32.1mm; diameter, 7.8mm - 10.0mm; weight, 16.0g. Testing nick on one side.

169. Fragment of curved bar of thick rectangular section, cut across both ends; possibly from a "currency ring"; hacksilver; length, 23.9mm (max); width, 10.4mm (max); thickness, 7.2mm (max); weight, 12.4g. Deep testing nick or crack on one angle, two nicks on the opposite angle and one on each inner angle.

170. Fragment of curved rod of rectangular section, cut across both ends and possibly from an arm-ring; hacksilver; length, 24.9mm; width, 7.4mm (max); thickness, 5.9mm (max); weight, 5.9g. Slight flange to the angle at one end; one testing nick on the opposite angle.

B. COINS

171 (Coin 15). Silver penny of Alfred (871-99), Cross-and-Lozenge type (N629), moneyer Liafwald, mint London. Obv. ÆLFRED/REX SA Rev. LIA/FVA/LDM/ONE Weight: 1.33g

172 (Coin 1). Silver penny of Alfred of Wessex (871-99), Two-Line type (N. 635-7), moneyer Boga Obv. +EL FR [ED] RE Rev. BOGA/MON: Weight: 1.45g

173 (Coin 4). Silver penny of Alfred of Wessex (871-99), Two-Line type (N. 635-7), moneyer Cuthberht, buckled, pecked. Obv. +EL FR ED RE Rev. CVDB/ERHT Weight: 1.53g

174 (Coin 7). Silver penny of Alfred of Wessex (871-99), Two-Line type (N. 635-7), moneyer Ethelred, pecked. Obv. +EL FR ED RE Rev. EDERE/DMON Weight: 1.54g

175 (Coin 8). Silver penny of Alfred of Wessex (871-99), Two-Line type (N.639), moneyer Wulfred Obv. AL FRE DRE Rev. VVLF/RED Weight: 1.56

176 (Coin 3). Silver penny, Viking imitation of Alfred (c. 880-899), Two-Line type (N475/1), moneyer Cyneferth, cracked. Obv. +EL FR ED RE Rev. CVH/EVER Weight: 1.36g

177 (Coin 5). Silver penny, Viking imitation of Alfred (c. 880-899), Two-Line type (N475/1), moneyer uncertain. Obv. +EL FR ED RE Rev. OLFFI/HOME Weight: 0.96g

178 (Coin 6). Silver penny, Viking imitation of Alfred (c. 880-899), Two-Line type (N475/1), moneyer uncertain, pecked. Obv. +EL FR ED RE Rev. YYDIA/NYIYT Weight: 1.25g

179 (Coin 9). Silver penny, Viking imitation of Alfred (c. 880-899), Two-Line type (N475/1), in name of moneyer Tilewine, bent, pecked. Obv. +EL FR ED RE Rev. TILEVVNE (NE ligated, N reversed) Weight: 1.10g

180 (Coin 10). Silver penny, Viking imitation of Alfred (c. 880-899), Two-Line type (N475/1), in name of moneyer Wine, bent, pecked. Obv. +EL FR ED RE Rev. VIHIC/MONE (NE ligated, N reversed)

Weight: 1.37g

181 (Coin 11). Silver penny, Viking imitation of Alfred (c. 880-899), Two-Line type (N475/1), in name of moneyer moneyer Ludig, pecked. Obv. EL +FR ED RE Rev. LVDI/GMO Weight: 1.21g

182 (Coin 12). Silver penny, Viking imitation of Alfred (c. 880-899), Two-Line type (N475/1), moneyer uncertain. Obv. +EL FR ED RE Rev. VVLO/MFL (both Ls and F retrograde) Weight: 1.26g

183 (Coin 2). Silver penny of Athelstan II/Guthrum of East Anglia (c. 880-c.890), Two-Line type (N. 479), moneyer Berter Obv. +ED EL IA RE Rev. BER/TER Weight: 1.3g

184 (Coin13). Silver penny of Æthelwold (c. 900-902), Two-Line type (N505). Obv. +ALVVALDVS Rev. D⁻NS D⁻S/ REX Weight: 1.12g

185 (Coin14). Silver penny, possibly in the name of Harthacnut, unrecorded type in Viking Northumbrian series (c. 895-905). Obv. •AIRDECONVT, as circumscription around small cross pattée Rev. DNS/R/EX. Two words crossing at right angles, to form shape of cross, trefoil of pellets in each angle. Weight: 1.36g

186 (Coin 16). Silver denier of Odo, king of the West Franks (888-97), mint of Angers, bent, pecked. Obv. XODO +ESTREX, around Karolus monogram Rev. ANDECAVIS CIVITAS, around cross fourchée Weight: 1.74g

187 (Coin17). Silver penny of Viking Northumbria, (c. 895-905), Mirabilia fecit/DDR type (N509). Obv. MIRABILIA FECIT Rev. D⁻NS D⁻S/ REX Weight: 1.40g

188 (Coin 20). Silver denier of Charles the Fat, as emperor (881-89) Obv. +CARLVSIMPAVG Rev. D⁻ RICECIVIT Weight: 1.57g

189 (Coin 18). Silver denier in the name of Charles, mint of Melle, late ninth century Obv. CARLVS REX FR, around cross fourchée Rev. +METxVLLO, around Karolus monogram Weight: 1.55g

190 (Coin19). Silver denier in the name of Charles, mint of Melle, late ninth century Obv. CARLVS REX FR, around cross fourchée Rev. +METxVLLO, around Karolus monogram Weight: 1.74g

191 (Coin21). Silver denier in the name of Charles, mint of Melle, late ninth century Obv. CARL⁻ REX F, around cross fourchée Rev. +METxVLLO, around Karolus monogram Weight: 1.56g

192 (Coin 22). Silver denier in the name of Charles, mint of Melle, late ninth century Obv. CARLVS REX FR, around cross fourchée Rev. ⁻VLLO, around Karolus monogram Weight: 1.52g.

193 (Coin 23). Silver-plated base-metal imitation denier of Odo, king of the West Franks (888-97), GRATI D⁻I REX type, mint of Limoges Obv. +GRAT⁻AD⁻RE, O++O in field Rev. +LIMOV⁻ CIVIS, around cross fourchée

194 (Coin 24). Abbasid dirhem, AH 220s/AD 830s (Should be more legible after conservation)

195 (Coin 25). Abbasid dirhem, AH 205/723-4, uncertain ruler, mint illegible

196 (Coin 26). Abbasid silver dirhem of Caliph al-Mansur, AH 149/ 766-7, mint Madinat al-Salam.

197 (Coin 27). Dirham, probably Abbasid, illegible

C. LEAD

198. Container of corroded lead sheet, the edges folded up and round to form a rough pouch shape, now open at the top, where the sides have been slightly bent back and then back again by the finder to ascertain the contents; much soil adhering both in and outside; length, 195.0mm (approx); width, 130.0mm; height, 105.0mm (approx); thickness, 2.0mm; weight, 1,472g (approx). A separate, squarish fragment retrieved from the topsoil appears to belong; 13.0 x 14.0 x 1.8mm; weight, 1.3g.

Three, or possibly four, other early 10th-century Viking hoards from northern England, such as Cuerdale and Bossall/Flaxton, were associated with lead containers (Graham-Campbell 2001, op. cit., 217).

Although not of precious metal, the container qualifies as potential Treasure by close association with the silver items. [Soil sample in a plastic bag inside the lead container]

D. IRON

An unidentified, corroded iron lump was retrieved from the pit fill or topsoil. X-radiography carried out at the British Museum shows that it is purely ferrous corrosion product and no metallic iron remains; 30 x 25 x 25mm (approx); weight, 13.3g. It is undiagnostic and has no demonstrable association with the hoard.

Discussion

The artefacts and coins together bear witness to diverse cultural contacts and a wide Viking mercantile network, extending from Ireland in the West to central or northern Russia and the Islamic world in the East. The hacksilver and weight-adjusted arm-rings served as a form of currency in a bullion economy. This perspective further reinforces the picture gained most recently by study of the finds from the Vale of York Hoard (SWYOR-AECB53), discovered only in 2007. Probably the most significant connection to emerge from a preliminary examination of the Silverdale finds is the similarity shown by a number of the objects to pieces from the rather larger Viking-age hoard discovered at Cuerdale, near Preston in Lancashire in 1840. The Cuerdale hoard can be dated to c. 905-10 on the basis of the combination of the coins. The Silverdale hoard contains many of the same types, and was apparently buried at much the same time, or possibly slightly earlier. While further work may produce a more secure date, an approximate date of c. 900-910 seems safe at present.

Barry M. Ager, Curator, Department of Prehistory & Europe, British Museum, 15/12/2011

G. Williams, Curator, Department of Coins & Medals, British Museum, 15/12

Discussion of the non-numismatic objects has benefited from the comments of Leslie Webster, Susan Youngs, Fleur Shearman, Prof. James Graham-Campbell and Jamie Hood. The Viking hoard from Silverdale would therefore qualify as Treasure under two of the stipulated criteria of the Treasure Act: it is more than 300 years old and the precious metal content of the silver items exceeds 10%. The object is not disclaimed at either a local or a national level, since Lancashire Museums have expressed an interest in acquiring it and the British Museum would attempt to do so should local efforts fail.

Find of note status

This is a find of note and has been designated: County / local importance

Subsequent actions

Subsequent action after recording: Submitted for consideration as Treasure

Treasure details

Treasure case tracking number: 2011T569

Chronology

Broad period: EARLY MEDIEVAL

Subperiod from: Late

Period from: EARLY MEDIEVAL

Subperiod to: Late

Period to: EARLY MEDIEVAL

Ascribed Culture: Viking style

Date from: Circa AD 900

Date to: Circa AD 910

Dimensions and weight

Quantity: 200

Discovery dates

Date(s) of discovery: Wednesday 14th September 2011

Personal details

This information is restricted for your access level.

Other reference numbers

Treasure case number: 2011T569

Materials and construction

Primary material: Silver

Secondary material: Lead

Manufacture method: Cast

Completeness: Complete

Spatial metadata

Region: [North West](#) (European Region)

County or Unitary authority: [Lancashire](#) (County)

District: [Lancaster](#) (District)

To be known as: Silverdale

Spatial coordinates

Grid reference source: From a paper map

Unmasked grid reference accurate to a 0.01 metre square.

Discovery metadata

Method of discovery: Metal detector

General landuse: Cultivated land

Specific landuse: Character undetermined

finds.org.uk