

A DECORATED SEAX FROM THE THAMES AT KEEN EDGE FERRY

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IN AUGUST 1961 a seax was dredged from the bed of the Thames at Keen Edge Ferry, in the parish of Brightwell-cum-Sotwell (SU 590928). The discovery was briefly noted in this Journal (Vol. 59 (1961) p. 59). Although it was covered with rust and various adhesions, some decoration was visible. The cleaning was carried out by Mr. V. Rickard of the Ministry of Public Building and Works, so that the whole of the inlaid metal patterns may now be seen (Pl. 1), and the weapon has been deposited on loan in Reading Museum by the Thames Conservancy Board.¹

The seax is of considerable size, being 45.3 cm. long and 3.9 cm. wide. The cutting edge is straight, and the line of the back runs parallel to it, turns at an angle and curves in slightly to meet the cutting edge in a narrow point. The spine is 7 mm. thick, so imparting to the weapon a formidable amount of weight and strength. The blade is broken off, and on analogy with other similar seaxes, it is probable that it extended for at least another 6 cm. and the tang would have added another 16 cm. (see the reconstruction, Fig. 2a). Further damage was sustained in antiquity by means of a blow across the blade just by the angle. The blade is bent at this point and some of the ornament missing. The grip would probably have consisted simply of a wooden covering to the tang, for no seax of this type has yet been found with pommel or grip decoration.

There are two narrow grooves running along each face near the spine, and a wider groove along the middle of the blade. Although there is no surface indication, a radiograph shows that this middle groove consists of pattern-welding in two zones. The blade, then, consists of three separate strips of iron welded together, the solid back with double groove, the middle strip of pattern-welding and the cutting edge.

On both faces the decoration runs in three zones, on the flat surfaces above, between and below the grooves, and it is carried out in three different colours of metal, red, white and yellow.² The surface of the iron was first prepared by the scoring of longitudinal grooves, and then the coloured wires or strips³ and plates were hammered into position to form the pattern. For the top row, a red and a white wire were twisted together and then hammered in. Short lengths were used, with sometimes a right-hand twist, sometimes a left-hand twist. The middle row is a line of sheet-inlaid triangles fitted side by side, alternately on base and apex, and separated by a zig-zag line of twisted wires. For the first 3 cm. near the grip all the triangles are yellow, but thereafter they proceed in the regular order, white, red, yellow, and the twisted wires are consistently red and white. A double row of twisted wires, placed so as to give a herringbone effect, form the lowest zones; a stretch of about 3 cm. of red and yellow alternates with a shorter stretch of red and white.

¹Museum accession number 232.61 (TCB Coll. no. 223).

²Dr. G. F. Claringbull reports that the yellow metal consists of brass and zinc, the white is silver with traces of copper, and the red is copper with traces of silver.

³The terms wire or strip are used indiscriminately for this type of narrow inlay; since the metal is hammered into position and so flattened, the original shape of the metal is not evident at sight.

The herringbone points sometimes one way, sometimes the other. Below this, at regular intervals about 2 cm. apart, are pendant yellow triangles.

On the back, the top row is repeated, and the lowest row is also the same except that the herringbone is red and white only, pointing mostly one way, but near the tang a run of the two twists have both been placed the same way. The middle zone is different, for each triangle is divided into two halves, one red, one white, until near the tang where they are all yellow. The separating twists are red and white.

This is therefore a very fine weapon: its three-fold construction ensures firmness combined with elasticity, and the additional advantage of a long, narrow point helps to form a highly efficient weapon for thrust as well as for hewing. The gay and dramatic mixture of inlaid coloured metals which ornament most of the available surface endow it with a scintillating and exciting appearance.

Regarding the question of date of this type of seax, none occur in pagan graves, and as the types of seax which do occur then are quite different, this type obviously cannot begin before the eighth century. Associations are very rare, and, in fact, most long seaxes come from river beds. The insecurity of the dating may be noted from a recent attempt to place them in the sixth century by comparison with decorated knives from Gotland.¹ This is not convincing, for, apart from the fact that the Gotland knives have zig-zag decoration along the back, there is no similarity; differences of size, shape and decorative technique are far too great.

Knife and seax are of course, basically the same thing, only size deciding whether the object is mainly for use as a domestic utensil or as an offensive weapon. Unfortunately the study of knives is hampered by the fact that little notice was taken of them in earlier excavations. Their very ubiquity, and the baseness of the metal of which they were made, meant that they provoked little or no interest at the time of excavation, and many have since disintegrated. In reports they were hardly ever accorded the courtesy of a description or drawing. There is a variety of shapes, most of which occur in the large as well as the small types. A sharp point is constant, and the cutting edge either straight or convex, in the latter case the curvature may be for the length of the blade or near the tip only. The back assumes a wider variety of lines: it can be convex, rarely concave, or straight. The straight line of the back may be interrupted near the point and run down to the blade in a convex or concave curve, or in a straight line.

Although there are some seaxes which belong to the pagan period in England, it is possible that most, if not all, of these were brought in from the Continent, and it is there that the development can best be traced for a number of centuries. In a recent review of the seax² it has been pointed out that a large, single-edged knife was in use by Germanic tribes early in the first millenium, and was retained in use by Germanic tribes in the east and north during the Roman period. It was probably influence from both of these directions which was responsible for its adoption by the Franks. The tomb of Childeric, for instance (481 A.D.) contained one in a garnet-set scabbard. Through various changes of shape and size, it persisted to the end of the eighth century, but began to go out of use in the ninth century. During the whole of this

¹*Ant. J.* XXXIX (1959), 289-90.

²K. Böhner, *Die Frankischen Altertümer des Trierer Landes* (1958), 130-145.

time, both cutting edge and back were curved as they narrowed to the point. Seaxes of these Frankish kinds do occur in this country, and some in late pagan graves can be roughly dated by their associated objects.¹ Many of the later types are river finds or without associations, however, and there is little to show whether they are manufactured in this country as well. Fig. 1a shows a seax with double-handed grip from the Thames off Newbridge.² It is unusual in having an iron pommel and grip fittings, but otherwise is very similar to the seax of the Franks.

While the Frankish seax curved on both sides to the tip, the type mainly current in Scandinavia, and which developed into a full-length one-edged sword with pommel, was the type with a straight back and a parallel cutting edge curving to the point. These were both illustrated by Sir R. E. M. Wheeler as his Types I and II.³ His Types III and IV both have a straight cutting edge and a 'broken back', i.e. the line turns at an angle to meet the point. These types are practically non-existent in Scandinavia and on the continental mainland, and when they do occur are considered to be imports from England, e.g. at Myklebostad, Fjaler, Sogn og Fjordane, Norway.⁴ Sometimes the line of the back between angle and point is straight, and sometimes concave. These must surely represent developments of two of the shapes of small knife which were common in the pagan period of Anglo-Saxon England and on the Continent.⁵

Wheeler's Type III is the category to which the Keen Edge Ferry seax belongs, i.e. a straight back which runs parallel to the blade, bends at an angle and curves down to the point. These are in the region of 70 cm. long and must have been used as single-edged swords. The next Type, IV, is substantially the same shape, but although there are intermediate sizes, and smaller ones too, most of them are about 30 cm. long—large knives in fact. The line of the back generally runs slightly away from, rather than parallel to, the cutting edge before it turns the angle. The cutting edge may be straight or convex. These two types, III and IV, are not only similar in basic form, but the same three methods of decoration are used on both—a groove or grooves along the back and a band of pattern-welding, with or without an adjacent zone of inlaid metal design along the back or middle of the blade.

Long seaxes with 'broken back' and straight edge are rare. There is one of unknown provenance in the British Museum (Fig. 2c)⁶ which has lost most of the grip. It has two grooves along the back, but shows no trace of inlay. The back rises slightly out of parallel to the blade, turns in a definite angle and curves to the tip. The seax from Little Bealings, Suffolk⁷ (Fig. 2b) has a longer point and the back curves in slightly

¹*Medieval Archaeology*, V (1961), 226–30.

²On loan to Reading Museum by the Thames Conservancy Board, acc. no. 284.47.

³R. E. M. Wheeler, *London and the Saxons*, (1935), fig. 42.

⁴G. Gjessing, *Studier i norsk merovingertid* (1934) 100, pl. XXVI, b.

⁵Straight line between angle and point: B. Faussett, *Inventorium Sepulchrale*, (1856), pl. XV, 3, 5 and 10; E. T. Leeds and D. B. Harden, *The Anglo-Saxon Cemetery at Abingdon, Berkshire* (1936), grave 60, pl. XII; *Arch. Cant. LXX* (1956), grave 6, 1, fig. 14; grave 7, fig. 16, 4; grave 8, fig. 17, 3. J. Werner, *Das*

Alamannische Graberfeld von Bülach, (1953), Gr. 138, 140, 289, Taf. X, 13, 14 and 19. J. Werner, *Das Alamannische Graberfeld von Mindelheim*, (1955), Gr. 3, Taf. 23; Gr. 23, Taf. 28; Gr. 29b, Taf. 29; Gr. 59, Taf. 29; Gr. 90, Taf. 36; Gr. 120a, Taf. 41. *Germania* 20, 200, Taf. 42, Abb. 1. Incurved line between angle and point: B. Faussett, *op. cit.* Kingston Down, 88, grave 264. K. Böhner, *op. cit.* Type D, 215, Taf. 60, 12. J. Werner, *op. cit.* (1955), Gr. 35, Taf. 29; Gr. 63, Taf. 32; Gr. 94b, Taf. 37.

⁶Reg. No. 56 7-1 1408.

⁷*Proc. Soc. Antiq.* 2nd ser. X, 17; *Victoria County History Suffolk I*, 350.

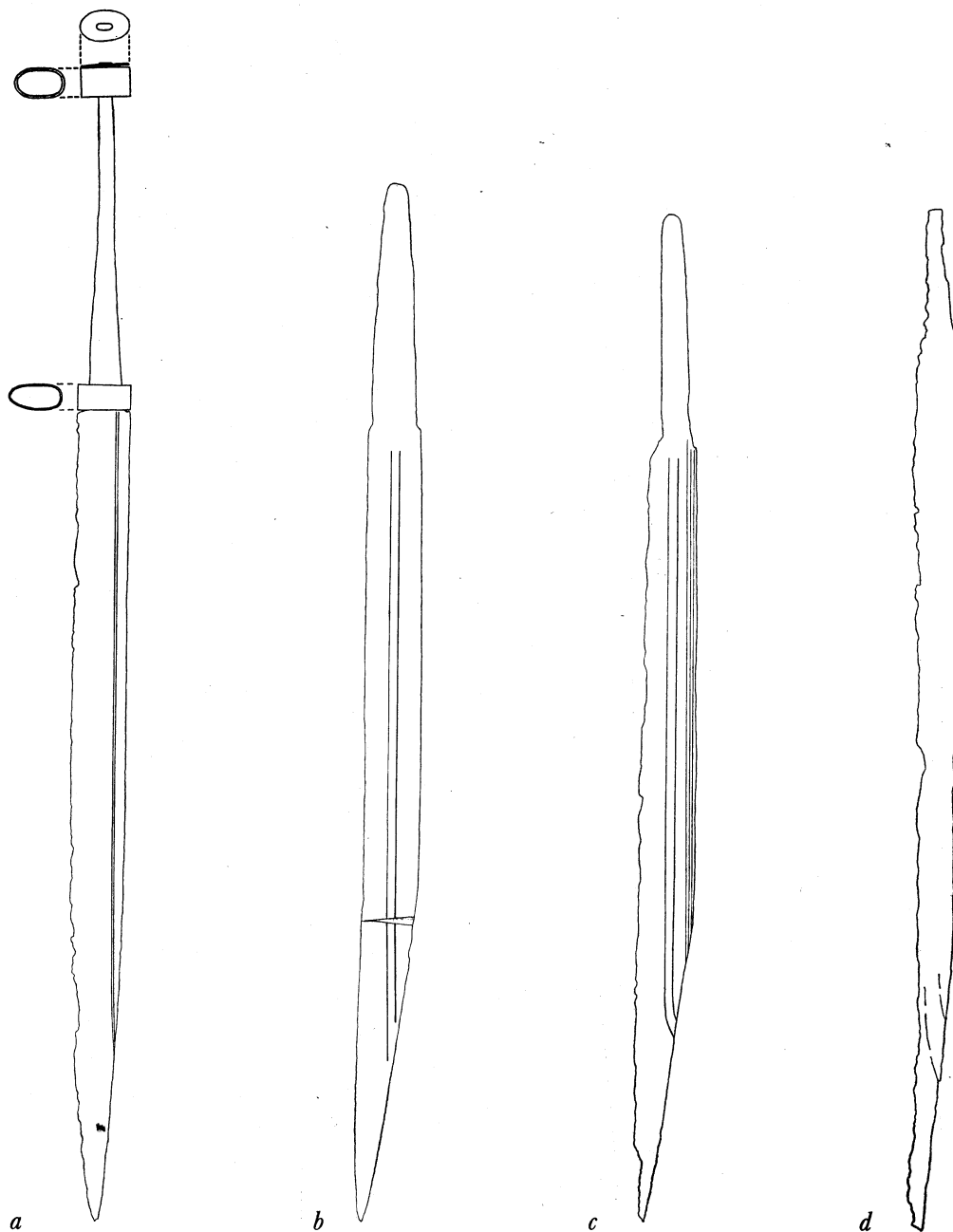


Fig. I. a. Thames off Newbridge. (T.C.B. Reading Museum)
 b. Thames at Battersea. (British Museum)
 c. Thames at Battersea. (London Museum)
 d. Hurbuck, Durham. (British Museum) ($\frac{1}{8}$)

(Cutting edges to the left)

DECORATED SEAX FROM THE THAMES

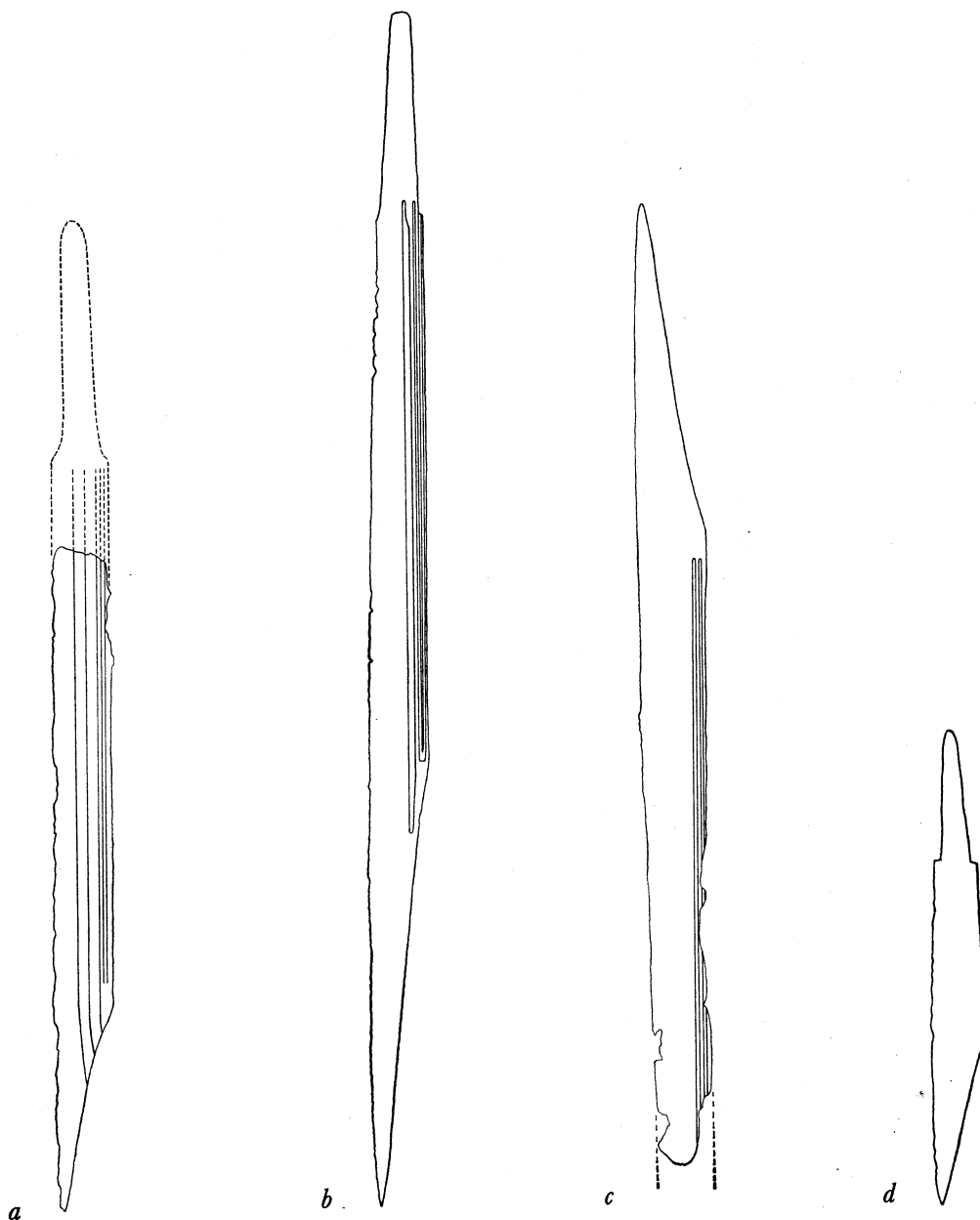


Fig. 2. *a.* Thames at Keen Ferry Edge. (T.C.B. Reading Museum)
b. Little Bealings, Suffolk. (British Museum)
c. Unknown provenance. (British Museum)
d. Sittingbourne, Kent. (British Museum) ($\frac{1}{2}$)

(Cutting edges to the left)

between the angle and the point. Two small grooves and one wider one run along the blade and a zone of pattern-welding runs unsteadily along the middle. Another similar long seax with parallel edges and grooves along the back is illustrated by Wheeler,¹ and is 'alleged to have been found on the site of pile-dwellings at Walthamstow'. On three others now to be mentioned, the angle in the back is so slight that it nearly forms a curve. One comes from the Thames at Battersea, (Fig. 1c).² This has two narrow grooves along the back, a wider one along the middle of the blade, and probably a zone of pattern-welding in between.

The Hurbuck seax (Fig. 1d) is the only one of its type found associated with other objects. It was recovered from the bank of a stream at Hurbuck, near Lanchester, Durham, in company with a collection of other iron weapons and tools.³ This cannot of course, be closely dated, but the most distinctive member of the group is the sword with curved guards and knobbed pommel of Petersen's Type L, which by reason of some associations in Norwegian grave finds may be dated to the turn of the ninth and tenth centuries, but without much indication of how long a time it was actually in use.⁴ The elaborate decoration often lavished on the hilts of this type confirm the dating and further establish the place of manufacture as England.⁵ The seax in the Hurbuck hoard has lost a great deal of the thinner part of the blade near the cutting edge, so that only about half the original width remains. The angle of the back is slight but clear. Decoration is by means of inlaid twisted yellow and red wires, and a zone of pattern-welding appears to run along the blade between the inlaid lines. Its associations suggest a date of about 900 A.D. and an English origin.

Very similar indeed to this, and even more closely related to the seax from Keen Edge Ferry, is the runic seax from the Thames at Battersea⁶ (Fig. 1b, Pl. II a,b). The angle in the back is not so sharp and the spine is slightly narrower. A shallow groove runs along the middle axis on both, and although the Battersea seax has not been X-rayed, it is probable that its hollowed zone indicates pattern-welding here as well. The Battersea seax is decorated on both faces, and the layout of the ornament is similar, although on the lowest row the yellow pendant triangles are placed in groups of two and three instead of singly, and a single wide zone of inlaid runes and lozenges takes the place of two rows with intervening grooves at the top. Between herringbone lines, the runes are inset in twisted wires. Three colours are again in evidence, again red wire is twisted with white or yellow, but never white and yellow together. Single wire inlay and single squares are additional motifs on the Battersea seax, together with the use of decoration on the spine. Both weapons were found in the Thames and both were damaged by a blow across the blade at the same point. Coincidence, no doubt, but in any event, the shape, the method of construction, the close resemblance of technique, the craftsman's layout and his choice of colours all strongly suggest a common workshop.

¹R. E. M. Wheeler, *op. cit.* pl. XIV, 13. Reg. No. C. 732. This was a loan and is no longer in the London Museum.

²*Ibid.* pl. XIII, 6, Reg. No. A 13921. Pls. XIII, 4 and 5 classified by Wheeler as Types II-III and III must be regarded as Type II, Frankish, as both back and cutting edge curve towards the point.

³*Arch. Journ.* XVIII, 67; *Victoria County History, Durham I*, 213-5 with plate.

⁴J. Petersen, *De Norske Vikingesverd* (1919), 112-6, figs. 94-97.

⁵*Dark Age Britain*, ed. D. B. Harden, (1956) pls. XXI and XXIII.

⁶D. Wilson, *Anglo-Saxon Ornamental Metalwork, 700-1100*, (1964), 38-9, No. 36.

This identity of origin does not hold good for the knife from Sittingbourne, Kent¹ (Fig. 2d) with which the Battersea seax has been compared. There is certainly evidence that the seax and knife, Wheeler's Types III and IV, were both current in the tenth century, cf. the dating of the Hurbuck find above, and the presumed coin dating of the Honey-Lane knife to c. 1003 A.D.² If anything, the dating of the knives is slightly later than that of the long seax, but the numbers and dating material are so slight that as yet we have no idea how long a life is to be attributed to either. The acanthus decoration of the Sittingbourne knife supports a tenth-century date. It uses the twisted wire technique and small plate and triangle inlay present on the Keen Ferry Edge seax and the Battersea seax, but it also displays many differences. The form is that of a knife, without grooves or pattern-welding. The pendant inlaid triangles have spiky edges, whereas those on the others are smooth. The area covered by plate inlay is much larger, with complicated foliage and animal designs embellished with niello. (Pl. II, *c, d*)

In view of the haphazard nature of the finds in this period, therefore, no detailed study is possible. One may however, see that the long seax and shorter knife with angled back, Wheeler's Types III and IV, were produced in England exclusively, certainly in the tenth century and probably before and after as well. Both decorated and undecorated examples occur, the decorated seax being so far limited to the Thames and one example from Hurbuck in the north, but the decorated knife is more widespread, occurring in London, Cambridgeshire, Kent and Suffolk.³ An important characteristic is the habit of inlaying twisted wires of two different colours. This was used in the north during the fourth century,⁴ on the loops of fifth-century buckles found in England,⁵ and on a sixth-century sword pommel.⁶ There is then a hiatus before it reappears in this country in the ninth century.

At about the same time it also occurs on weapons abroad. Spearheads with inlaid sockets in Norway have been examined,⁷ and divided into two main groups, A with geometric ornaments, and B with plant and animal ornament. As spearheads of Group A occur at Birka, but none of Group B, it has been suggested that Group B probably did not begin until the end of the tenth century, after the decline of Birka.⁸ The spearheads with geometric inlay are further sub-divided into Aa where the pattern is mainly of twisted wire herring-bone pattern with plait or triangle sheet inlay, and Ab which has little or no herring-bone. It may be seen from Fig. 3, a spearhead socket from Boen, Dal, Telemark, Norway, that the similarity of the Aa type of decoration to the two Thames seaxes is close, but this may indicate no more than a general chronological correspondence. A Norwegian production centre has

¹*Ibid.* No. 80.

²*Ibid.* 150-1.

³Honey Lane, *ibid.* No. 43; London area, London Museum, Reg. No. A 27035, (unpublished, recent cleaning has revealed inlaid twisted wires of silver and copper. Mr. F. Celoria kindly drew my attention to this.) London, ? Thames, *ibid.* No. 50; River Cam, Cambs., *V.C.H. Cambs.* I, pl. IV (b); River Ouse, Cambs., *Proc. Cambs. Ant. Soc.* XXXII, 63, pl. V, 1; Sittingbourne, Kent, D. Wilson, *op. cit.*, No. 80; Dover, Kent, Dover Museum; Barnham, Suffolk, Moyses Hall Museum, Bury St. Edmunds.

⁴W. Holmqvist, *Tauschierte Metallarbeiten des Nordens*, (1951), Abb. 33, 3; 40, 3; 41; 42; 43; 88 ff.

⁵V. I. Evison, 'Early Anglo-Saxon Inlaid Metalwork', *Ant. J.* XXXV, pl. III, a, b, pl. V, a. These have not yet been cleaned so that it has not been ascertained whether the wires are of two different colours.

⁶*British Museum Guide to Anglo-Saxon Antiquities* (1923), fig. 209.

⁷C. Blindheim, 'Smedgraven fra Bygland i Morgedal', *Viking* (1962) 25-80. For another photograph, see A. Hagen and A. Liestol, *Ancient Norwegian Design* (1961), 54.

⁸H. Arbman, *Schweden und das Karolingische Reich* (1937), 234, note 2.

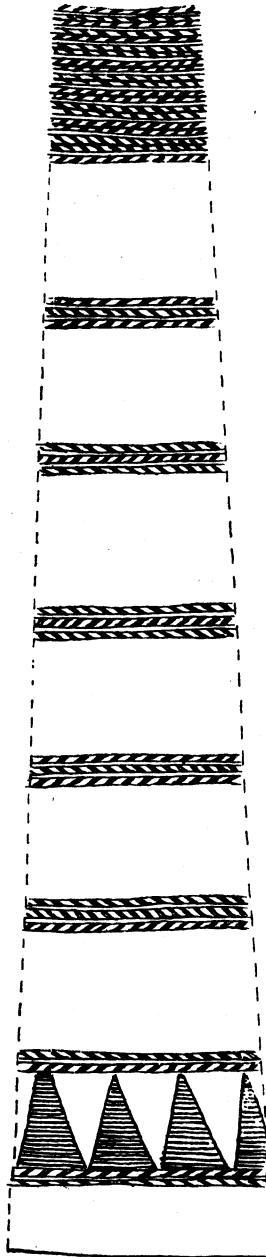


Fig. 3. Decoration on spearhead socket from
Bøen, Dal, Telemark, Norway

been suggested for the Scandinavian spearheads,¹ but a Swedish or Frankish source is not impossible.² Study of this type of inlay has not progressed far enough to produce conclusions, but its use on objects of undoubted Anglo-Saxon origin provides further data for consideration.³

In view of their splendid decoration, it is difficult to imagine the runic seax and the Keen Edge Ferry seax as anything but display weapons, for the first blow would surely damage the inlaid metals, the presence of which would preclude the possibility of repair of the blade by re-forging. Even so, both of them undoubtedly bear the scars of use in combat. Fortunately, enough is left of the Keen Edge Ferry seax to present us with one of the best examples of this type of craft, and to provide a most important addition to the corpus of late Anglo-Saxon metalwork.

¹C. Blindheim, *op. cit.*, 49.

²H. Arbman, *op. cit.*, 234.

³cf. also the stirrups, etc. with twisted wires inlaid in spiral shapes—D. Wilson, *op. cit.*, 39. A spearhead inlaid with silver and copper after the fashion of Group Aa was found in the Thames, *Victoria County History, London I*, 152, fig. 5.