

Notes and News

A LEAD MODEL FOR A LATE 5TH- OR EARLY 6TH-CENTURY SWORD-POMMEL

The subject of this note is an unfinished, but elaborately decorated, model in lead for a sword-pommel of the late 5th or early 6th century, with ornament in Salin's animal Style I (Figs. 1–2). It was acquired by the British Museum in 1988 and the recent redesign of the Early Medieval room has provided an opportunity of putting it on permanent public display.¹ It was purchased from a London antiquities dealer, who had it among a miscellaneous group of material, partly from the River Thames and partly from an old collection including pieces apparently of Scandinavian origin. But, most regrettably, the findspot of the model was not recorded and it could conceivably, therefore, have come from either region. Consequently its value for establishing stylistic links between Scandinavia and Anglo-Saxon England in the Migration Period is much reduced. It is, nevertheless, of both art-historical and technical interest as a fine addition to the increasing corpus of lead models that appear to have been used at a stage in the production of certain Early-medieval, precious-metal and copper-alloy artefacts.

DESCRIPTION

Surface metal analysis by X-ray fluorescence in the museum's Research Laboratory showed that the model consists of almost pure lead, with only 0.05% tin and no other metals detected. It is of a narrow boat shape in plan, bifacial, hollow all along and with rounded ends; length, 93 mm; height, 18 mm; width of base, 10 mm (max., although possibly reduced by later compression). It has a low, curved back. The roughness of the main design on both sides (a and b), which shows deep gouges and toolmarks, suggests that, although the basic pattern is essentially complete, the object is either unfinished, or was rejected as defective. It seems most likely that it is a model for use in making a two-piece mould to cast a sword-pommel in a metal such as silver or copper alloy.

Interpretation of the ornament of the model is made somewhat difficult by slight lateral distortion, the rough, unfinished state of the decoration, some surface wear, and by damage towards the upper left-hand end and at two other points on side b, near the

¹ British Museum registration no. P&E 1988, 3–2, 1 (on display in Room 41, case 43). The museum also possesses three other lead models, of which one is for the chape terminal of a sword-scabbard, possibly from East Anglia (reg. no. P&E OA.10808), which my colleague Leslie Webster kindly informs me has a close parallel in a finished casting from Der Runde Berg bei Urach, Germany: W. Menghin, *Das Schwert im Frühen Mittelalter: Chronologisch-typologische Untersuchungen zu Langschwerten aus germanischen Gräbern des 5. bis 7. Jahrhunderts n. Chr.* (Stuttgart, 1983), 352, no. 30. A Viking-period model is discussed by K. East, 'A lead model and a rediscovered sword, both with Gripping Beast decoration', *Medieval Archaeol.*, 30 (1986), 1–7. An unpublished model for a late Antique/Lombardic bird brooch is in the reserves (P&E 1991, 10–5, 1).

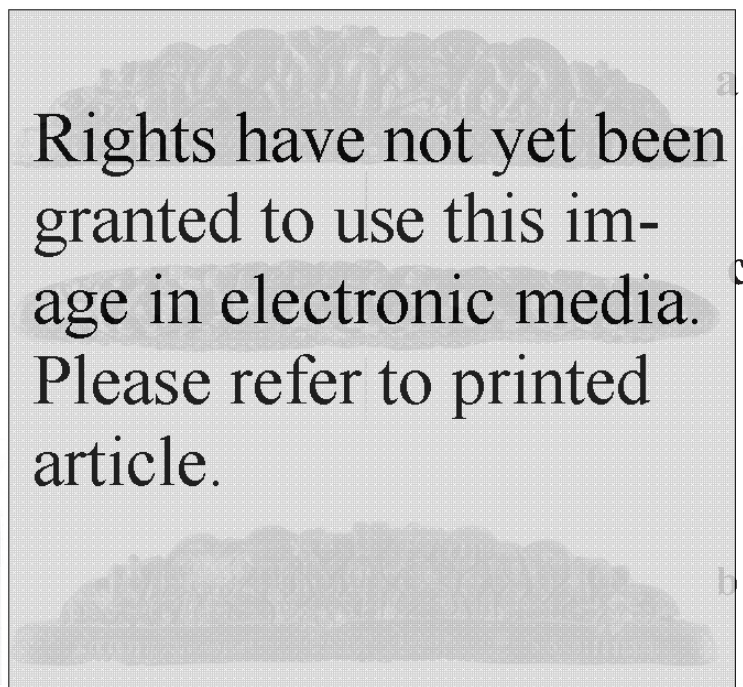


FIG. 1

LEAD MODEL FOR A SWORD-POMMEL; NO RECORDED PROVENANCE.

a: Side a; b: Side b; c: Top. Scale 1:1. *Copyright, British Museum.*

centre and at the upper right-hand end (Figs. 1b and 2b1). Along the base on both sides of the model is a finished, narrow border in shallow relief, with running scrolls between groups of four or five vertical billets towards each end. The principal decoration is in carved high relief and is asymmetric, consisting of a pair of separate, crouching quadrupeds in profile, in Salin's Style I, one directly behind the other, in the upper section on each side of the model (Fig. 2a1–a2 and b2–b3, outlined). Both ends of the model in this section are formed by almost identical, three-dimensional animal heads (Figs. 1c, 2a2 and 2b2). They have V-shaped brow ridges, prominent, round eyes, broad snouts and (where undamaged) a horizontal S-scroll on either side of a beak-like nose. On each side of the model, the head of the animal on the right of the pair is formed by the profile of the terminal head just described. On top, behind each of the terminal heads, there is a plain, flat-sided, double-humped crest, with a lower hump in between, which serves to separate the ornament on either flank of the piece, except in the central section. There the ornament of each side meets up along the ridge, though does not connect across it. The elongated, curved brow ridges of the left-hand animal of each pair enclose prominent, round eyes, while a vertical element, shaped like a walking-stick, appears to form its jaws in the centre of each paired composition, in the absence of any certain indication of jaws on the ridged crest. This interpretation of the element is preferred to the possibility of it being the tail of the animal in front, since vertical, U-shaped jaws or bars do occur occasionally in animal ornament of the period of early Style I, e.g. on the 5th-century gold collars from Älleberg and Färjestaden, Sweden, and on the tongue of the buckle from Snartemo, Vest-Agder, Norway, grave 5, in exactly the same position

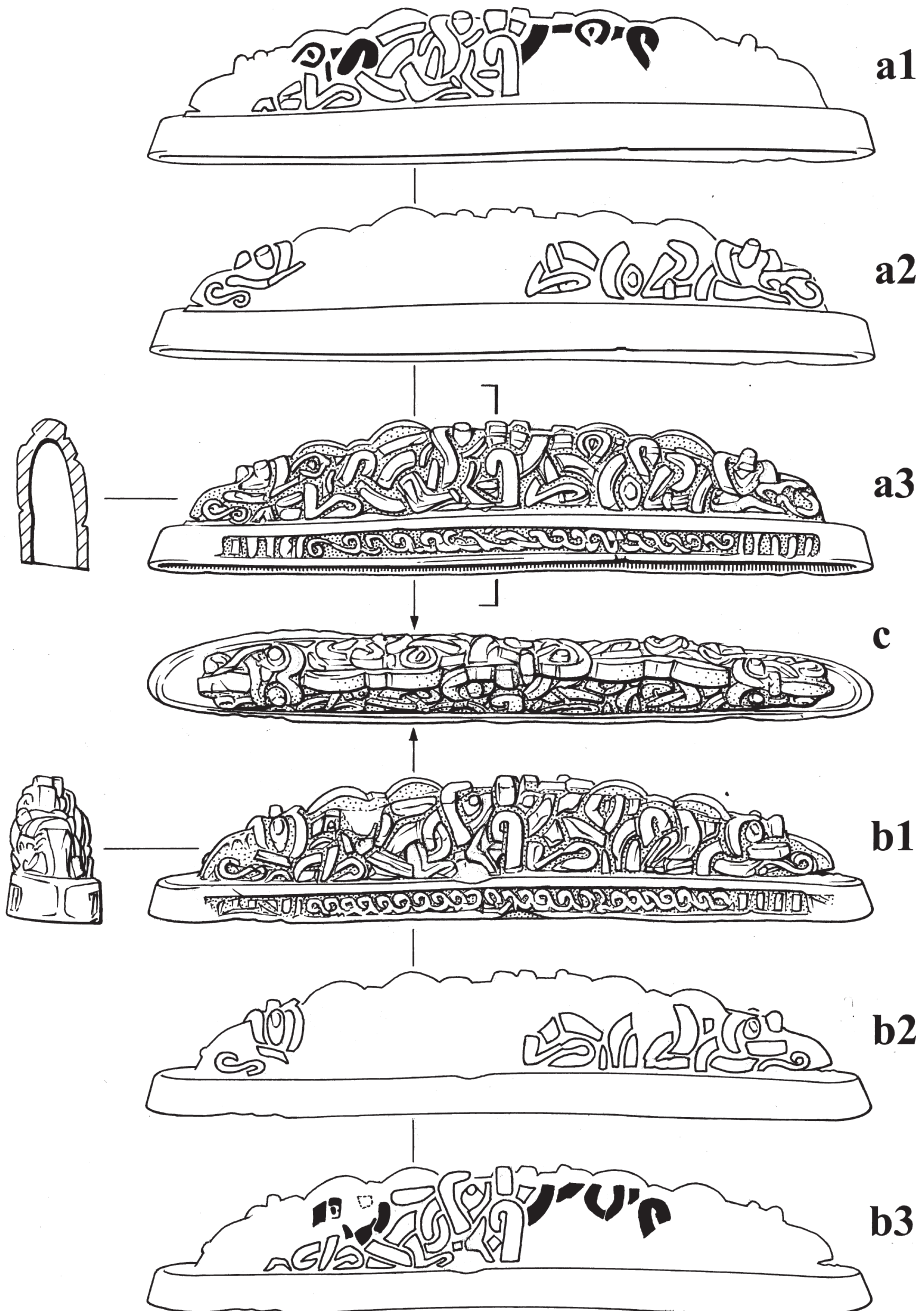


FIG. 2

LEAD MODEL FOR A SWORD-POMMEL; NO RECORDED PROVENANCE.

a1-a2, b2-b3: Schematised views showing individual animals (outlined) and heads (black) in the designs of sides a and b; a3 and b1: general views of sides a and b; c: top view. Scale 1:1. Drawn by J. Farrant.

there as on the model: beneath the second projection in front of the cheek element.² Later examples can be seen in the confronted pair of animals on the gold sword-pommel from Skurup and in the animals on the filigree scabbard-mount from Bakka, Sweden.³ The feature seems unlikely to be the unfinished moustache of a human head, as the 'U' opens at the wrong end.

The animals' necks are formed by either one, or two, short, plain, C-shaped or lentoid elements, and their bodies by two to three curved billets. The rear legs of both animals on each side of the model bend forward at an upward slant and then curl back under themselves. The forelegs of the left-hand animals are similarly bent forward, but terminate in splayed, double-clawed paws, while those of the right-hand animals lie flat under their chins.

Notable features on both sides of the model, too intricate and interlinked with the main animals simply to be space-fillers, are what seem to be four animal heads biting the bodies of the main animals from above and behind (shown in black in Fig. 2a1 and b3). It seems most unlikely that they are inverted rear limbs, which sometimes occur in this position in Style I metalwork, since the main animals already have rear limbs (though typically only one is shown) and the features above have no outwards-pointing toes. The single pellets almost enclosed by a rib that form part of these features (except on side b right, which is so faint, or damaged, that it appears 'blind') must clearly be eyes, therefore, like those of the main animals, rather than pellets in hip-scrolls like those on square-headed brooches from Appledown, W. Sussex, and Donzdorf, Germany, while the inverted U-shaped elements at the right of each feature echo the 'walking-stick' bars already interpreted above as the jaws of the main animals.⁴ The putative heads and necks above the right-hand animals on either side of the model appear to develop from the tips of the tails of the animals themselves, although the connection is less clear on the left-hand animals, which do not certainly have tails. As many Style I motifs derive from late provincial-Roman metalwork, and if the features here in question are correctly read as heads, the latter may be compared with, and possibly derived from, the animal-headed tails of the kinds of beasts and sealions seen decorating the margins and plates of some late Roman belt-fittings, e.g. from Aquileia, Italy, and Szamos-Ujvar, Hungary.⁵ In these examples, the heads at the ends of the tails face backwards and do not bite the animals' bodies, but, on the plate of a buckle from Colombiers-sur-Seulles (Calvados), France, the head does face forwards, as on the model.⁶ The interpretation proposed here is further supported by the recurrence of creatures with zoomorphic tails in the 5th-century Saxon Equal-Arm Brooch Style, as in the outer border of the head-plate of an equal-arm brooch from Zweeloo, Netherlands. A comparable motif occurs again later in Style II ornament, e.g. incised on the blade of the later 7th-century seax from Lausanne Bel-Air, Switzerland, grave 48, and a lion-like quadruped with a serpent-headed tail poised above its back is incised on the

² G. Haseloff, *Die Germanische Tierornamentik der Völkerwanderungszeit* (Berlin, 1981), Taf. 27, 2–3. The author is grateful to Dr J.-P. Lamm for comments on the Swedish parallels.

³ Ibid., Taf. 35, 2, Abb. 153b–c.

⁴ D. Leigh, 'Aspects of early brooch design and production', 107–24 in E. Southworth (ed.), *Anglo-Saxon Cemeteries: A Reappraisal* (Liverpool, 1990), fig. 8c and c.

⁵ G. Haseloff, 'Zum Ursprung der germanischen Tierornamentik — die spätrömische Wurzel', *Frühmittelalterliche Stud.*, 7 (1973), 406–42, figs. 1–2 and Taf. 1.

⁶ H. Böhme, *Germanische Grabfunde zwischen unterer Elbe und Loire* (Munich, 1974), Taf. 116, 6. See also an enamelled Roman zoomorphic brooch, with hind-quarters developing into a forward-facing serpent, from Boulogne-sur-Mer, France, in C. Roach Smith, 'Anglo-Saxon remains found in Kent, Suffolk, and Leicestershire', in idem, *Collectanea Antiqua*, 2 (1852), 155–70, pl. 44, 15 (wrongly referred to as ?fig. 12 in text).

shield-shaped plate of a 7th-century Merovingian buckle from the Marne region, France.⁷ The motif clearly had a long life and would not have been out of place in terms of artistic development in the menagerie of Style I either.

DISCUSSION

The form of the model may be broadly compared with a group of mainly southern Scandinavian silver sword-pommels of Menghin's elongated Snartemo-Blučina type, most of which are also decorated with fine Style I animal ornament, especially the two from Broåsen, Halland, Sweden, datable to the late 5th century, and the example from Snartemo, grave 5.⁸ The closest counterpart is with the first illustrated pommel from Broåsen, although there the decoration consists of only a single animal in each half and terminates in double heads at each end, while the ornament interconnects across the top, forming a visual puzzle which can only be resolved by viewing it from above, so that the heads of the animals can be clearly seen facing alternately outwards in the centre. Good parallels for many of the model's decorative features too can be found on the mounts from the hilt and scabbard of the sword from Snartemo grave 5.⁹ There, the overall shape of the pommel, the running scrolls on the guard underneath in long, narrow bands, and the deep relief interlace decoration of the scabbard mouth-piece, all relate closely to the model. The bipartite, undecorated mid-rib on either side of the top of the model can be compared with similar features on the silver-gilt buckle from Snartemo grave 5, between the animal heads at the base of the tongue above the hinge, and running along the neck and spine of the animal forming the pin.¹⁰

But, in spite of the Scandinavian parallels, the unfinished state of the decoration of the model makes it difficult to be certain whether it is of Scandinavian or, possibly, Anglo-Saxon origin. Also, it can be only broadly dated to the late 5th or the earlier half of the 6th century on the basis of form and style. Although no typical contour lines are shown on the animals' composite bodies, their style can probably be best compared with examples of Haseloff's phase C of Salin's Style I.¹¹ Their bodies are too narrow for the cross-ribbing typical of style phase B, but not yet elongated into ribbons as in phase D, while their carving in high relief appears to hark back to the initial phase A (with compact, complete animals). Phase C is a developed, but still relatively early, phase, typologically speaking. Haseloff emphasises, however, that after phase A these phases may represent regional traditions rather than successive chronological divisions.¹² Following recent research, there are now grounds for suggesting that the transition from the Nydam Style to Style I began in the third quarter, or possibly around the

⁷ G. Haseloff, 'Römische Elemente in sächsischem Schmuck (am Beispiel der gleicharmigen Fibeln)', 153–61 in C. Ahrens (ed.), *Sachsen und Angelsachsen* (Hamburg, 1978), Abb. 8; R. Moosbrugger-Leu, 'Le scramasax décoré de Lausanne, Bel-Air (tombe 48)', *Rev. Suisse d'Art et d'Archéologie*, 23 (1963–4), 10–21, fig. 6 top left and last but one; British Museum, registration no. P&E ML.3425.

⁸ E. Behmer, *Das Zweischneidige Schwert der Germanischen Völkerwanderungszeit* (Stockholm, 1939), Tafn. 28, 9–10, and 29a–b; Menghin, op. cit. in note 1, 306, nos. 1–8; J. Bemmman, J. Hahne and G. Hahne, 'Waffenführende Grabinventare der jüngeren römischen Kaiserzeit und Völkerwanderungszeit in Skandinavien: Studie zur zeitlichen Ordnung anhand der norwegischen Fund', *Bericht Römisch-Germanischen Komm.*, 75 (1994), 283–640, at pp. 380–1, Abb. 42, 9. A further addition to the group is the 5th-century, niello-inlaid silver example excavated at Nydam in 1990–1: K. Stemmann Petersen, 'Danish niello inlays from the Iron Age: a technological investigation', *J. Danish Archaeol.*, 12 (1994–5), 133–49, fig. 11, top left; and I am grateful to Leslie Webster for drawing my attention to what appears to be an Anglo-Saxon counterpart, poorly illustrated in J. Weston, 'A brief return to the Saxon market', *Treasure Hunting*, August 1997, fig. on p. 5, top right.

⁹ Behmer, op. cit. in note 8, Taf. 29.

¹⁰ Haseloff, op. cit. in note 2, Abb. 136f and 138c and e, and Taf. 27, 2; B. Hougen, *Snartemofunnene: Studier i Folkevandringstidens Ornametikk og Tekstilhistorie* (Oslo, 1935), pl. 4, 1–2.

¹¹ Haseloff, op. cit. in note 2, 196–204.

¹² *Ibid.*, 174.

middle, of the 5th century (slightly earlier than Haseloff's suggested date of around 475).¹³ It lasted until around the mid-6th century in southern Scandinavia and into the second half of the century in peripheral regions. The stylistic dating of the model is slightly advanced on Menghin's dating of the Snartemo and Blučina pommels (to which the model is formally related) to around the period of Childeric, about 450–500, but this seems quite acceptable, as the complete animal decoration of Snartemo 5, particularly, is closer to that of Haseloff's initial phase A.¹⁴

The pommel model is an important find, as it was clearly used, or intended to be used, in the production of what would have been a high-status sword-fitting, and provides further significant evidence for the purpose of such models. An increasing number of discoveries shows that the use of lead models was widespread in Roman and Early-medieval Europe, most probably as an intermediate stage in the process of casting items of jewellery and various fittings in both silver and copper alloy, although the precise method is still under debate. Continental research shows that the use of lead models in an earlier hypothesised process of 'lost-wax' casting leaves traces of lead oxides in the mould which spoil the final casting of the object, and an alternative purpose has therefore been proposed by E. Foltz.¹⁵ He suggests that a primary model was first carved in wax or wood (possibly box or yew) around which a two-piece mould was made and, after careful removal of the model, fired. Experiment showed wood to be more suitable than wax for sharply chip-carved designs. In order to try out the design, molten lead would then have been cast into the mould to form a model on which minor adjustments could be made, before using it to make a secondary mould in clay or sand. The secondary mould would then be used for the final casting of the desired artefact. Lead models seem unlikely to have been used for multiple castings, however. Similar conclusions have been drawn by Mortimer with regard to the Anglo-Saxon evidence, and the use of Anglo-Saxon and Viking-period models in various materials is further discussed in detail by Coatsworth and Pinder.¹⁶

¹³ Bemann and Hahne, op. cit. in note 8, at 325–6; M. Axboe, 'The chronology of the Scandinavian gold bracteates', 126–47 in J. Hines, K. Høilund Nielsen and F. Siegmund (eds.), *The Pace of Change: Studies in Early-Medieval Chronology* (Oxford, 1999), 138; Haseloff, op. cit. in note 2, 17.

¹⁴ Menghin, op. cit. in note 1, 58 and 173.

¹⁵ E. Foltz, 'Guß in verlorener Form mit Bleimodellen?', *Archäologisches Korrespondenzblatt*, 10 (1980), 345–9. Apart from the three Early-medieval lead models in the British Museum noted above, in note 1, I am grateful to my colleague Ralph Jackson for referring me to lead models for a Roman cosmetic grinder from Skipton Street, London, and for three brooches from Poole's Cavern, Buxton, Derbyshire: R. Jackson, 'The function and manufacture of Romano-British cosmetic grinders: two important new finds from London', *Antiq. J.*, 73 (1993), 165–9. A further lead model for a Roman brooch has since been reported from Gauting, Germany: S. Mühlemeier, 'Römisches Handwerk', *Archäologie in Deutschland*, 2/2003, 39–40. Three lead models for jewellery-making in the Viking Period have been found at Ribe, Denmark: C. Feveile and S. Jensen, 'Metalstøberien i Vikingetidens Ribe', *Mark og Montre*, 1991, 65–70, at p. 69, fig. 11. Lead models for belt-fittings have been found, too, in excavations at the Crypta Balbi, Rome: C. Bertelli and G. P. Brogiolo (eds.), *Il futuro dei Longobardi: L'Italia e la costruzione dell'Europa di Carlo Magno* (Milan, 2000), 90. Three lead objects, possibly models, were found in the Anglo-Saxon smith's grave at Tattershall Thorpe, Lincolnshire: D. A. Hinton, *A Smith in Lindsey: The Anglo-Saxon Grave at Tattershall Thorpe, Lincolnshire* (Soc. for Medieval Archaeol. Monogr. 16, 2000), figs. 49–50, nos. 118–20. Other finds are periodically reported in the literature.

¹⁶ C. Mortimer, 'Lead-alloy models for three early Anglo-Saxon brooches', *Anglo-Saxon Stud. Archaeol. Hist.*, 7 (1994), 27–33; E. Coatsworth and M. Pinder, *The Art of the Anglo-Saxon Goldsmith. Fine Metalwork in Anglo-Saxon England: Its Practice and Practitioners* (Woodbridge, 2002), 73–85. My suggestion at an Early Medieval Seminar (University College London), that the Anglo-Saxons may, very rarely, have worn (or been buried with) lead models as substitute brooches, or even lead brooches, was sceptically received at the time, but there is sound Continental evidence in support: e.g. a Visigothic lead bow brooch, or re-used model for one, of the late 5th or early 6th century fitted with an iron pin from Spain: M. Schulze-Dörlamm, 'Neuerwerbungen für die Sammlungen', *Jahrb. Römisch-Germanischen Zentralmus. Mainz*, 37(2) (1990), 716–23, Abb. 45. Furthermore, lead annular brooches with iron pins have been found as if worn even in a couple of Anglo-Saxon graves. But, in the absence of such contexts for further recent finds of fragments of lead cruciform brooches, it still remains unclear at present whether the latter represent models or usable brooches: K. Leahy, 'West Rasen', *Medieval Archaeol.*, 49 (2005), 337–41, fig. 6a–e.

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I should like to thank Michael Cowell of the British Museum's Department of Scientific Research for semi-quantitative analysis by X-ray fluorescence, James Farrant, Departmental Illustrator, for the drawings, and the museum's Photographic Services for the prints reproduced here.

BARRY AGER

AN EARLY ANGLO-SAXON BRIDLE-FITTING FROM SOUTH LECKAWAY, FORFAR, ANGUS, SCOTLAND

In February 2003 the Kinnettles Heritage Group made a quite unexpected find during field-walking at South Leckaway farm near Forfar, Angus (NGR NO 4379 4810): the most northerly example in Britain — by about 150 miles — of an Anglo-Saxon object decorated in Salin's Style I. It lay isolated and face down on the surface. A follow-up field-walk at the end of the month confirmed, partly with the aid of a metal detector, that there were no readily apparent additional pieces of metalwork, associated structures or burial evidence.¹⁷ The find was reported under the Scottish Treasure Trove legislation, duly claimed and allocated in June 2003 to the Meffan Institute, Forfar (part of Angus Cultural Services).¹⁸

DESCRIPTION (Figs. 3–4)

The copper-alloy fitting is cruciform-shaped, measuring 33.4×27.9 mm overall, with a thickness of 2.3–2.8 mm; it weighs 4.03 gms. It has a gilded, slightly concave-sided, lozengiform body, measuring 20×20 mm, and plain ovoid terminals to the arms, two surviving to their full length and the other two as stumps. The surface of the copper alloy has an even, green patina and is highly worn and abraded, which with the broken terminals is consistent with prolonged exposure to ploughed soil. To date there has been no X-radiography to see if any trace of rivets survives on the reverse.

The body carries a relief-cast zoomorphic design in Salin's Style I within a lozengiform frameline (Fig. 5a). It consists of two, not necessarily independent, motifs. The first (illustrated in black font) might be read as a single abbreviated quadruped, with a profile head, triple-strand body and leg with plain foot. The second (illustrated in grey font) is a pair of confronted legs with recurved and clawed feet. Some of the raised elements, such as the banded body, are less defined than they once were because of the effects of time spent in the plough-soil.

FUNCTION, ART-STYLE AND DATE

The South Leckaway find can be positively identified as an early Anglo-Saxon bridle-fitting, largely thanks to the excavation in 1997 at RAF Lakenheath, Eriswell

¹⁷ The finder was Mr Archie Dick of Kirriemuir. The owner of the farm is Mr Peter Janoch, an enthusiastic supporter of the field-walking, which was led by John Sheriff and forms part of a wider parish project, including study of the South Leckaway farm buildings: J. Sherriff, 'South Leckaway: an early 18th century farmhouse in Kinnettles, Angus', *Tayside Fife Archaeol. J.*, 9 (2003), 112–23. To date no excavation has taken place at South Leckaway, but a programme of geophysical evaluation and trial-trenching is under consideration.

¹⁸ Digital images were circulated widely by Sally Foster and Mark Hall. They were seen by Susan Youngs, Leslie Webster and others at the British Museum, Kevin Leahy at North Lincolnshire Museum, and thence Chris Fern and Tania Dickinson, who unanimously and independently agreed the identification.