# The Finds Research Group

## **DATASHEET 48**

## Post-Casting Modifications to Anglo-Saxon Strap-Ends; Hooked and Lugged Attachments

by

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The Finds Research Group encourages responsible metal detecting. Whilst it values the United Kingdom Detector Finds Database (UKDFD) as an academic research corpus, FRG's ethos is to promote the recording of historical objects utilising the Portable Antiquities Scheme for both archaeological observations and the accumulation of local and national data for analysis.

#### Introduction

Early medieval strap-ends well documented in literary material, dated by contextual excavations and by design, and thus, classified. Classification is based upon design type and period of manufacture, notably in Finds Research Group AD700-1700 Datasheets 32 and 33 (2003,2004), comprehensively documented by Dr Gabor Thomas, whose classification system is used within this paper as a point of reference. Examples of strap-ends have been taken from the Portable Antiquities Scheme (PAS) database and the United Kingdom Detector Finds Database (UKDFD).

This datasheet seeks to draw attention to and clarify the purpose and use of a modification made post-casting to strap-ends of the early medieval period.

## **Description and dating**

It has become apparent, after studying early medieval strap-ends, that many dating to the 8th–11th centuries have been recorded with patches of iron corrosion products on their

back. On closer comparison with each other, it was noticed that although the find location and classification of strap-end varied, the corrosion pattern remained fairly consistent. In most cases, this is a sub-rectangular deposit near the terminal end. In a few cases, the remaining iron deposits projected in the form of a lug or hook. The iron appears to be attached by solder in most cases and riveted in others.



Fig. 1: An example of modification (PAS LVPL-11F855)

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On the PAS database, at the time of conducting the research (May 2013), there were 1856 early-medieval strap-ends recorded. Of those with images of the back available to view, 32 displayed this distinctive patch of corrosion product or a rivet hole at or near the terminal end. Of the 250 early medieval strapends recorded on the UKDFD, 12 exhibited the same corroded patch or rivet hole (Fig. 5).

It would seem too much of a coincidence for all strap-ends in question to acquire this distinctive patch of corrosion product within the soil after being deposited or lost in antiquity. A separate functional attachment, made of iron, must once have been present in this position. The questions to consider at this point were:

- 1. Were the iron fittings on the back of the strap-ends attached at the time of manufacture, or were they added at a later date to modify their use?
- 2. What was the purpose of these iron attachments?

Of the modified examples on both databases, some stood out suggesting answers to their possible use. Differing methods of iron attachment were identified with reference to Thomas' classification;

<u>Class A, Type 1</u>: has the remains of a soldered iron attachment



Fig. 2: PAS WILT-F6B056

<u>Unclassified</u>: has the remains of a riveted and hooked iron attachment



Fig. 3: PAS NMS-65D2E2

<u>Class A, Type 2</u>: has riveted iron attachment remains



Fig. 4: PAS WMID-FF7685

<u>Class A, Type 2</u>: has a rivet hole and iron attachment remains



Fig. 5: UKDFD 6650

<u>Class A, Type 5:</u> has a soldered iron attachment with surviving projection



Fig. 6: UKDFD 3854

There are, in addition to the above, rare strapends with an integral copper-alloy lug or hook that projects from the back near the terminal end. Only one recorded example of the type with an integral lug has been found, namely PAS GLO-8C25F2 (Fig. 7), which is unclassified and dated to between the 9th and 10th century.

Two examples of the type with an integral hooked projection on their back are illustrated in Murawski 2003 (Fig. 8). In all the above cases, the integral projections are in the same position as the iron attachments on the strapends under consideration. IOW-4825B3 (Fig. 7) is most unusual, being an unclassified type having an integral hook extending rearward from the terminal itself.

In view of this, the remains on the back of the modified strap-ends were most likely either lugged or hooked attachments, the same as their integrally cast and rarer counterparts. These modifications were presumably of iron for strength in functional use, but being made of iron, have corroded away leaving only traces of their once permanent place on the strap-end.



Fig. 7: Examples of integral types (recorded on PAS)

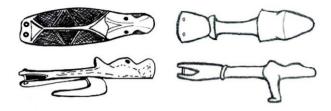


Fig. 8: Examples of integral types (Murawski 2003) A12-0120 & A12-0105

Determining whether the lugs or hooks were attached purposefully at the time of manufacture, or attached at a later date as modifications, inevitably presented a problem. This was eventually resolved by examining examples that were drilled and riveted for the intended adaptation. By this means, it could be established whether the drilled hole destroyed the decorative features on the face of the strapend. If so, it would imply that there was little concern for aesthetic considerations, as purpose and functionality were the dominant objectives.

With the limited number of examples of this type recorded on both the PAS and UKDFD databases, it would appear that perforations were either made with no real regard to the decorative element, or drilled in a way that, at best, caused least damage to the overall design. This observation establishes that the modifications were completed postcast, but it could not be confirmed positively whether they were made at the time of manufacture or at a later date. It would appear most likely, however, that the modifications were made at a later date, as the decorative elements for all classes were not altered over the lengthy period of time concerned to take the modification into account.

Assuming a combined average of 1 modification in 48, derived from published examples, it becomes apparent that the modification was a minority requirement that would not warrant a design change throughout the 300-350 years of strap-end production.

## Use

As stated by Dr Gabor Thomas, strap-ends are generally accepted as being a decorative accessory, to prevent the strap terminal fraying and also to keep it weighted down. With the addition of a lug or hooked fitting on their back, their purpose becomes more useful, as straps can now become tensioned, linked, or held together (Fig. 9). The evidence would suggest this to be the case of modification and use. It would appear then, that the modification was known during the period concerned, and adaptations were made as and when required.

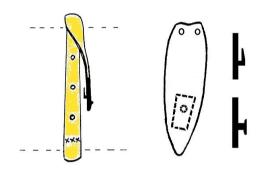


Fig. 9: Modifications and proposed use

The list of current examples (Table 1) is taken from the databases where images are currently available. With educated future actions taken into account, the examples recorded are expected to increase, and these figures can be evaluated over a period of time more positively.

Thomas Class	Α	В	Unclassified ('U')
P.A.S.	22	8	2
UKDFD	10	1	1

Table 1: Modifications by Thomas classification



Fig. 10: Distribution Map (adapted from www.sporcle.com)

County	No. of Examples	Class
Norfolk	6	AAAAUU
Cambridgeshire	4	AAAA
West Midlands	4	AAAA
Worcestershire	4	AABU
Hampshire	4	AABB
Northamptonshire	3	ABB
Lincolnshire	3	AAA
Somerset	2	AA
Sussex	2	BB
Wiltshire	2	AB
Leicestershire	1	A
Hertfordshire	1	A
S.W Yorkshire	1	A
Essex	1	A
Kent	1	В
Dorset	1	A
Staffordshire	1	A
Buckinghamshire	1	A

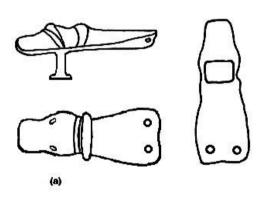
Table 2: Modifications by distribution

#### Classification

Copper-alloy projections or separate iron attachments occur on strap-ends cutting across the already recognised and published Thomas classes. There are two basic forms of modification (integral and separate), which are classified below as Hooked Types 1 and 2. The evolution of these strap-end hybrids can be compared with *hooked tags* of the period and their purpose modified for a wider range of generic employment, from harness or garment accessories to use on household items.

#### Hooked Type 1 (integral)

Type 1 strap-ends appear in two forms, those with an integral copper-alloy hook projecting rearward from the terminal itself (Fig 11.b) and those with an integral copper-alloy hook projecting from the back (Fig 11.c). In one case (Fig. 11.a), the projection is a lug, rather than a hook, the function of which could possibly be utilised as a book clasp, which would explain its rarity as a recorded example (note also, the attachment end is not split).



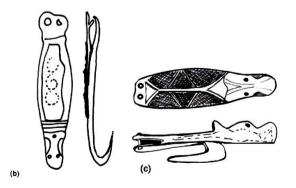


Fig. 11: Hooked Type 1 (integral) (a-PAS GLO-8C25F2, b-PAS IOW-4825B3, c-Murawski 2003 A12-0105)

## Hooked Type 2 (separate)

Type 2 strap-ends represent the majority of those recorded and are all classifiable examples that have been modified post-cast to include a separate attachment.

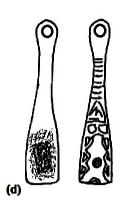
The hooked attachment is of iron rather than copper-alloy, and in the main leave only partial remains of their placement on the back of the strap-end due to corrosion or separation. It would appear that some difficulty was experienced in attaching the iron fitting onto the back of the copper-alloy strap-end, probably due to the soldering techniques of the period which lacked modern fluxes designed to clean a surface for better cohesion.

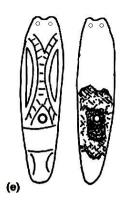
Of those that remain, the iron projects in the form of a hook or lug (Fig. 12.f). The fitting can be recognised by a corroded sub-rectangular patch on the back of the strap-end, often slightly angled, near the terminal end (Fig. 12.d).

In some cases this patch appears burnt, suggesting that the iron element was heated and pressed into the strap-end surface during the soldering process in an attempt to improve bonding.

In other cases, and these cases are few in number, the strap-end was compositely fabricated with a riveted attachment passing through the decorative feature of the strap-end (Fig. 12.e).

This technique was utilised with or without the soldering process, but probably wasn't a preferred method of fixing for aesthetic reasons.





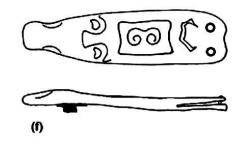


Fig. 12: Hooked Type 2 (separate) (d-author, e-UKDFD 6650, f- UKDFD 23854)

## Acknowledgements

With grateful thanks to the staff of the PAS, Rod Blunt of UKDFD and Paul Murawski (Benet's Artefacts) for kind permissions for the reproduction of copyrighted material. Special thanks to Dr Gabor Thomas, Reading University.

## **Bibliography**

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Thomas, G, 2003 Late Anglo-Saxon and Viking-Age strap-ends 750–1100: Part 1, Datasheet 32, The Finds Research Group

Thomas, G, 2004 Late Anglo-Saxon and Viking-Age strap-ends 750–1100: Part 2, Datasheet 33, The Finds Research Group

## Appendix 1

Researched examples (May 2013) recorded on PAS and UKDFD;

IOW-4825B3 GLO-8C25F2 WILT-F6B056 WILT-4AE713 SUSS-484176 SUSS-4EBA92 SF-18A255

CAM-D83AA1 CAM-1A76D1 WMID-A58487 WMID-FF7685 WMID-DFCCD4 WMID-347B32 NARC-6AB657

NARC-439172 NARC-5E71E0 NMS-65D2E2 NMS-6F2E46 HAMP-BEF683 HAMP-677686 HAMP3232

HAMP-857261 BUC-53E353 WAW-BDA037 WAW-FDFF76 WAW-75F330 SOM-819006 LEIC-E93585

BH-390E47 NLM-03C536 NLM-AB50F3 SWYOR-CC0064 LIN-717E82 LVPL-11F855

UKDFD 29734 UKDFD 15969 UKDFD 16804 UKDFD 4242 UKDFD 6650 UKDFD 2906 UKDFD 40940 UKDFD 23854 UKDFD 35868 UKDFD 27331 UKDFD 32443 UKDFD 28319