

Roman Brooches from North Britain

A classification and a catalogue of brooches
from sites on the Stanegate

Margaret E. Snape

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Publication was unavoidably delayed until 1993, making more revision necessary. Although the amount of new material included was small, much more effort was involved in the type-setting, and for this I am very grateful to Dr Colin Snape. Material from South Shields has been up-dated in view of the forthcoming report on excavations by Paul Bidwell and Stephen Speak. I should also like to thank Dr Grace Simpson for her interest in the project and for kindly giving me much material which will be useful for further study. Elizabeth Elliott helped with the production of the tables. I am grateful for the encouragement of members of the Roman Finds Group, colleagues at South Shields Roman fort, and many others, including Drs Michael Bishop and Jon Coulston. To all of these and to the publisher I should like to express my thanks for their support and patience during the sometimes difficult process of preparing this volume for publication.

PREFACE

The collections on which this study is based are housed in museums in the following locations :-

University of Newcastle upon Tyne (Museum of Antiquities), Carlisle (Tullie House Museum), and the site museums at South Shields, Corbridge, Chesters, Housesteads and Vindolanda. A further collection belonging to the Carlisle Archaeological Unit was also seen, and there is a single brooch in the Fulling Mill Museum, Durham.

Only brooches from sites on the Stanegate frontier, Hadrian's Wall, and South Shields were studied. Since this description is a long one, it has been abbreviated in the text to 'the Tyne-Solway frontier region' or simply 'the region'. Brooches from the native sites, outpost forts, and hinterland forts were excluded, as were examples not belonging to the Roman period.

All examples in the above collections were seen, measured and, where possible, weighed. The weight could not be obtained for some brooches permanently fixed in a museum display, and some too fragile to handle easily. No analysis of alloys was possible; generally the descriptions 'copper alloy', 'base silver' or 'white metal plating' are based simply on appearance, although occasionally the weight of a brooch indicates that it was made with leaded bronze. In the case of examples previously published or catalogued, but which are now missing, dimensions and other details were often quoted in the publication, or could be estimated from illustrations.

The origin and development of brooches (Chapter 1.2) and discussion of early types (Chapter 2.5, groups 1 and 2) have been covered very briefly, as they are fully dealt with elsewhere (references to the most useful works are given in Chapter 1.2).

More brooches have been published since the completion of the thesis on which this work is based, the largest number being those described by Miss Allason-Jones in Bishop M C and Dore J N 1988, *Corbridge. Excavations of the Roman fort and town, 1947-80*, London. Brooches from Carlisle have also been published. In addition, further material was made available for study at Corbridge and Carlisle, and all this information has been added to the catalogue. However the original catalogue numbers used in the thesis have been retained, and new entries are listed thus: the two new entries between numbers 251 and 252 are numbered 251.1 and 251.2.

It was not possible to ascertain a museum accession number or small finds number for every brooch, and these examples are recorded as 'number unknown' or 'not numbered'. Work was in progress by the Hadrian's Wall Museums staff to assign a registration number to all objects in the collection, but the project was not completed at the time of writing this volume.

The bibliography lists all works consulted as well as those referred to in the text.

CHAPTER 1. ROMANO-BRITISH BROOCHES

1.1 Definition of terms

The three forms of Romano-British brooch - bow, plate and penannular - are shown on Fig. 1, with labels indicating the terms used in this study to describe the component parts.

1.2 Origins

It is unnecessary to repeat here what has already been written about the origin and development of brooches. The following publications have been found to be the most useful. General descriptions and discussion have been given by Collingwood (Collingwood and Richmond 1969), Mackreth (1973a), and Hattatt (1982: 1985), and in the Richborough reports (Bushe-Fox 1926: 1928: 1932: Henderson *et al* 1949: Hull 1968). Enamelled brooches have been discussed by Butcher (1977), and penannulars by Fowler (1960: 1964). Reports dealing particularly with early brooches are by Hawkes and Hull (1947), Wheeler and Wheeler (1932), Brailsford (1962) and Stead and Rigby (1989). The largest published catalogue of brooches from the North is by Allason-Jones and Milet (1984). Recent catalogues of Continental brooches, with comprehensive references and discussion are by Böhme (1972), Jobst (1975), and Riha (1979). Other publications are listed in the bibliography. Therefore only the following brief summary is included here.

Simple one-piece bow brooches were in use in Britain during the pre-Roman Iron Age; those with separate pins were introduced with the conquest (Hawkes and Hull 1947, 308-28; Mackreth 1973a, 8-12; Hattatt 1982, 35-42). The later first century saw great developments, both in the number of new types and the elaboration of style.

Penannular brooches also pre-date the conquest. Elizabeth Fowler suggests that they may have originated in Britain, though it cannot be proved conclusively (Fowler 1960, 171); but she demonstrates that some form of the penannular was in use in the Highland Zone of Britain from the third century BC until well into the Dark Ages, being a native form which became popular with the Roman army.

Plate brooches are thought to have had a purely Continental origin (Collingwood and Richmond 1969, 299). The earliest may be pre-Augustan (Hawkes and Hull 1947, 325). Small numbers appeared on southern British sites throughout the second half of the first century, their popularity increasing greatly in the second century when they were often enamelled.

The fashion for brooches virtually came to an end in Lowland Britain in the mid-second century, but many new types were in use in the military north in the third and fourth centuries. It is mainly with these brooches that this study deals (see Chapter 2.5).

Note : In a publication by R Hattatt (1985) several brooches are included the provenance of which is given as Hadrian's Wall or Northumberland (p 83 no 377, p 101-2 no 420, p 121 nos 476-7, p 151 no 547, p 164 no 592, p 169 no 601). As these examples are already fully described and illustrated they are not included in this catalogue.

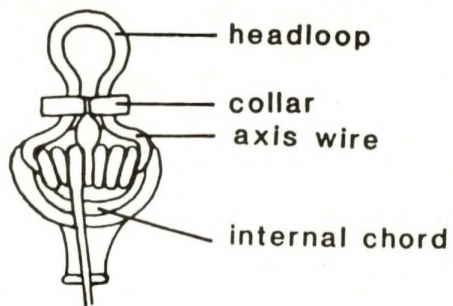
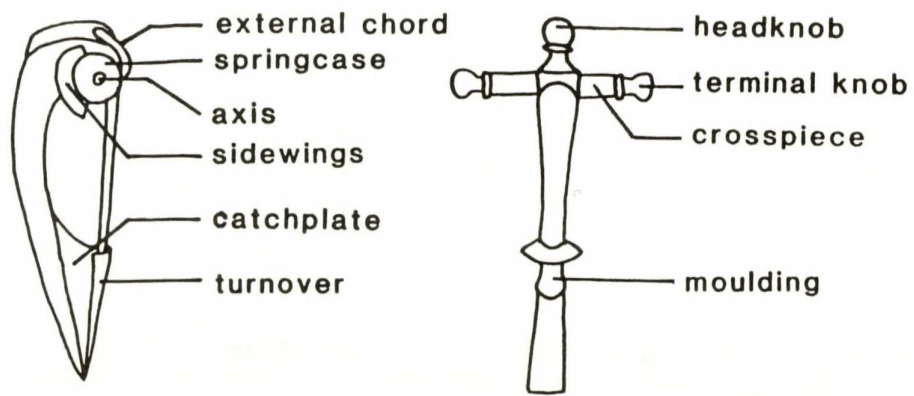
1.3 Manufacture

There is at present no published site identifiable as a workshop specifically for the production of brooches. However it is unlikely that brooch-making was a specialisation, but rather one part of the work of the metalsmith, who might produce a variety of objects, possibly in a variety of metals (Mackreth 1973a, 14).

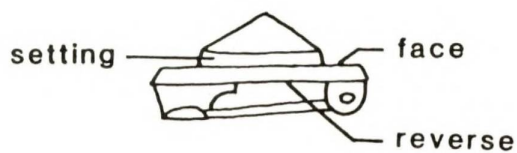
Unfinished brooches and flawed castings have been found amongst metal-working debris on many sites, both civilian and military, including :- Chichester (Wacher 1981, 252), Wroxeter (*ibid*, 369), Baldock (Stead and Rigby 1986, 122-3 nos 160-2; fig 50), Brough under Stainmore (Collingwood 1931b, 82; fig 8), Vindonissa (Tomašević 1963, 22-3), Rheingönheim (Ulbert 1969, 19,38; Abb 4.1), and possibly Risstissen (Ulbert 1970, 43; Taf 24). But brooch fragments could be merely part of collections of scrap intended for re-melting (*cf* a partially melted brooch from Wroxeter (Mackreth 1973a, 16)), and need not indicate that brooches were made on the site.

But most important in this connection is a recently excavated Romano-British industrial settlement at Prestatyn, in North Wales (Blockley 1989). Romano-British timber buildings were constructed in the 70s AD on a site formerly occupied by an Iron Age farmstead. By AD 90/100 two bronzesmiths' workshops had been built, with another constructed *c*AD 120 (*ibid*, 223). Found within these buildings and in dump layers associated with them were hearths, fragments of moulds and crucibles, scrap bronze, and tools (*ibid*, 34). The objects made there included trumpet brooches, cruciform mounts, button-and-loop fasteners, cheekpiece rings, and chapes. A two-piece baked clay mould for a trumpet brooch was found in association with a building dated AD 90/100 - 120. The mould was unused and complete; the two halves were carefully keyed together by matching ridges and depressions. It provides useful information both about the making of moulds and the casting of brooches (*ibid*, 184-7).

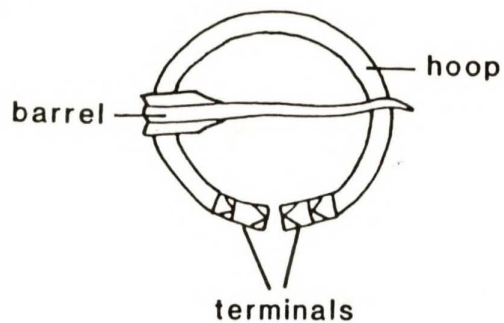
Finds of such fragile ceramic material are extremely rare. A similar assemblage of bronzeworking debris survived by chance at Gussage All Saints, an Iron Age site where chariot fittings had been made (Spratling 1979, 125-49). It was concluded that 'it would take only a few minutes to destroy all the crucibles from Gussage All Saints by treading them on a hard surface' (*ibid* 141). Presumably



Bow



Plate



Penannular

Figure 1. Parts of the brooch.

that is exactly the way in which most traces of Romano-British brooch making have been destroyed, and conclusive evidence of a manufacturing site is always likely to be rare.

Some brooches themselves provide further evidence of manufacturing methods. The simplest one-piece bow brooches were made by forging, and marks from this process are often left behind (see cat no 174). Later examples were cast with two projections behind the head which were then cold-worked, one to produce the spring, chord, and pin, the other to produce the hook which held the chord. The half-finished examples mentioned above, especially those from Baldock, illustrate the process. For further details of the method of coiling the spring see Bechert 1973, 15 and Hattatt 1982, 36; fig 9. Catchplates always needed to be hammered into their final shape. The development of two-piece brooches and more elaborate decoration increased the amount of hand-finishing required for the original casting.

Manufacturing processes have been described in more detail by Mackreth (1973a, 12-14: see also Blockley 1989, 183-7)), but a few further comments can be added.

It is thought likely that a blank of the brooch itself was used to form the mould from Prestatyn (Blockley 1989, 184-7). Lead dies in the shape of bow brooches found at Brough under Stainmore (Plate I) and Lydney (Wheeler and Wheeler 1932, 15; pl VIA) may have been blanks designed for this purpose. Lead is malleable enough to be easily shaped and is also very durable. Presumably one blank could be used to form many moulds, each of which, if handled carefully, could also be re-used many times. Two trumpet brooches from Stanwix, found joined by a chain, are identical and must have come from the same mould (cat nos A390, A391).

Gilbert Ward, formerly head of sculpture at the Department of Fine Art, Newcastle upon Tyne Polytechnic, examined some bronze brooches from the region and noticed a casting fault which occurs most frequently in trumpet brooches (see cat nos 22, 23, 29, 32). The base of the foot is slightly sunken, and at the centre there is a small projection which appears to have been cut off flush with the outer edge. He believes this to be the remains of the 'runner' into which the molten metal was poured. In well-made castings all extraneous features like runners, or projections caused by leakage of metal into the gap between the two parts of the mould could be later removed; but a trace of the runner would remain where the foot had shrunk on cooling. Confirmation that trumpet brooches at least were cast with the head down and foot uppermost is provided by the mould from Prestatyn, and also a flawed casting from Brough under Stainmore (Collingwood 1930, 52; fig 10) with a complete trumpet head but a failure at the waist.

However this may not have been the case with other brooch types; nor should the simple sheared-off runner be confused with the decoration sometimes deliberately formed on a brooch foot in the form of a stud, boss or decorative projection, as seen on many Continental knee brooches. A mould from Pannonia for two knee brooches (Kovrig 1937,

Taf XXVI.4) has a V-shaped notch at the top, which is part of a funnel for pouring metal into the heads of the two brooches rather than the feet. Unusually, the impressions of the brooches are 'back to back' with the pin attachments joined, and an unfinished casting of a pair of knee brooches is still joined at the head (ibid, 121; Taf IX.90). Such variations must have been idiosyncrasies of individual metalworkers.

Richard Cole, formerly of the Department of Fine Art, University of Newcastle upon Tyne, examined a stone mould from Gateshead (Green 1978, 19; pl 49), now in the Museum of Antiquities, Newcastle upon Tyne. The mould, possibly for a disc brooch, also has a V-shaped notch through which the metal could be poured. There is no scorching of the stone, or metal adhering to it, so the mould appears not to have been used. But the position of the notch means that the mould must have stood vertically rather than horizontally, and would have needed a backing. (This is paralleled by a stone mould from Prestatyn for the casting of ingots, which was also used in vertical position (Blockley 1989, 192; fig 102)). The backing for the Gateshead mould could have been a plain block of baked clay, carrying only a notch to form the other half of the funnel, and two indentations to produce the catchplate and pin attachment plate. If the die used to form these indentations were pressed too deeply into the clay, the result would be an impression of the outline of the die in the mould, and subsequently a ridge between the two plates in the final casting. A few plate brooches from the North do have such a ridge. This is most common on discs with repoussé silver sheet (cat nos 219, 220, A139, A289, A317, A355, and a blank disc A356). It is also found on some gilded discs (cat nos A294, A361, A362, A379) and two other unusual brooches (cat nos 280, A134).

The use of two-piece moulds (with a seam down the long axis of the brooch) which could be pulled apart and re-used would be the most economical way of producing the first and second century brooches described by Mackreth. However, crossbow brooches with three knobs could not be produced in this way, as the undercutting of the arms to form terminal knobs would mean that the mould would break on removal. The only possible method would be a two stage process. First a two-piece mould would be used to produce a wax blank with plain arms; terminal knobs and any other decoration could be carved into the wax. Then a one-piece clay investment mould would be formed round the blank, and a casting made by the lost-wax process, this mould being broken to release the casting.

The method would lend itself to mass production; an apprentice could produce many simple wax blanks, leaving the carving and casting to the craftsman. The end result would be a series of brooches which were very similar but not identical. This cannot be demonstrated for crossbows with three knobs from the region, but it can for P-shaped brooches (cat nos 70, A55) and crossbows with headknob only (cat nos 79, 205). Also, knee brooches show great uniformity. This indicates that perhaps the two-stage method was introduced in the second half of the second century or in the third, as an aid to mass-production,



*Plate 1. Lead die from Brough-under-Stainmore. Scale approx 3:1.
(Courtesy: Tullie House Museum, Carlisle.)*

and then gave rise to variations which could not have been made using only a single stage of casting in a two-piece mould.

In this connection it is interesting that at Prestatyn both two-piece moulds and lost-wax moulds were found. The former were associated with a building dated *c*AD 90/100 - 120. Curiously the lost-wax moulds, more usually thought to be in a native Iron Age tradition, were associated with a later building, in a context dated *c*AD 120 - 135/40. The tradition may have been retained through conservatism, or possibly it was retained, or revived, for the sort of reasons described above.

Completed castings of brooches could be decorated in a variety of ways, sometimes with notches or punched dots, sometimes with applied decoration. The latter could include champlevé enamelling, gemstones, silver repoussé sheet, white metal plating, gilding, granulation, and filigree wire. Examples of all of the above have been found in the region, and are described in the catalogue. For further discussion of enamelling, see Butcher 1977, Henry 1933, Exner 1939, and Selley 1939: a more recent specialist report is to be found in the report on the workshops at Prestatyn (Henderson 1989, 181-3), and references to other works are quoted there.

It is impossible to say who the brooch makers were, whether military or civilian, or how the industry was organised, if at all. However Mackreth feels that the regional distribution of some brooches, particularly in the southwest, indicates either regional centres of supply from which traders operated, or travelling workers who kept to the same circuit, or more likely, a combination of both (Mackreth 1973a, 15).

There are few clear patterns of brooch types to indicate the movement of travelling smiths or merchants along the Stanegate or Hadrian's Wall. However a hint of this kind of mechanism is provided by 'Severn' brooches. The general type apparently originated around the Severn estuary, and their presence at the industrial settlement of Prestatyn (Mackreth 1989, 91-2 nos 5-9) suggests a movement north through the Welsh Marches. Also found at the latter site was an unusual iron brooch, the form of which resembles the more robust northern sub-group of 'Severn' brooches (Snape 1987, 309-12), of which it could be a prototype. Examples of the northern sub-group are sufficiently similar to be products of the same craftsman, and their distribution stretches from Wilderspool and Ravenglass in the west, to the central sector of Hadrian's Wall and the Stanegate, and into southern Scotland. This could indicate either an itinerant smith following the army and working at Corbridge, where a flawed casting of a 'Severn' brooch has been found (cat no 10.3), or a trader introducing a new type which was copied by local craftsmen.

Also found at Corbridge was a fine example of another brooch type usually only found in the Severn Valley (cat no 10.1). The latter area appears to be the home of many brooch makers or traders.

Apart from the flawed casting already mentioned, there is no clear evidence of local manufacturing centres. All that can be said is that headstud brooches were probably made in the North, and dragonesques more certainly were; there is a high concentration of the latter at Corbridge.

There does not seem to have been any large scale export and import trade with the Continent. A few very unusual foreign brooches have been found in the area (such as the trumpet derivative from Corbridge (cat no 43), and the brooches from Nether Denton, cat nos 236, 237, 238), just as a few examples of British types like headstuds and trumpets are found on Continental sites. But these small numbers could easily be explained as the property of individual soldiers posted from another province, and are not necessarily an indication of organised trade.

1.4 Who wore Romano-British brooches ?

Roman brooches were worn by men as well as women, and were not merely decorative, but were used to pin garments together.

The military cloak was fastened by a brooch, both on the Continent (Wild 1968, fig 10), and in Britain (Wright and Richmond 1955, 23-4 no 37; pl 13). Officials of the late Empire affected a semi-military costume, and men of high status are shown wearing cloaks fastened by heavy crossbow brooches. The best known example is seen on an ivory diptych said to be of Stilicho (Bandinelli 1971, 35; pl 31).

J P Wild has studied the clothing worn in the northwestern provinces in the first three centuries AD (Wild 1968). He concluded that in the early part of the period the costume of the unromanised civilians of both sexes included a cloak fastened by a brooch. Sculptural evidence from the Rhineland and Danubian provinces shows that women from the countryside wore in addition to the cloak a series of tunics and shawls, all of which needed to be pinned together (ibid, 199-203). The best example is shown on a Claudian tombstone from Mainz (ibid, fig 4). There is no sculptural evidence for this kind of native dress in Britain, but a similar costume has been assumed.

Burials as well as sculpture show a costume change in the second century in Gallia Belgica and the two Germanies - women's costume changing a little later than the men's. Provincials in the towns and large country estates began to wear tunics, with hooded capes (or draped shawls for women), garments which did not need to be pinned together. There is evidence for the same change in Britain, which is no doubt the reason for the scarcity of brooches in Lowland Britain after the mid-second century (Mackreth 1973a, 16).

Sculpture shows women from northern Britain wearing the 'Gallic coat' without brooches (Wild 1968, 194-6; figs 6, 18), but they are all women from towns (Carlisle, Chester, York) or originally from the south, like Regina the Catuvellaunian who died at South Shields.

Romano-British brooches have rarely been found in native homesteads in the region of Hadrian's Wall or to the north. Two rare exceptions came from Milking Gap (Kilbride-Jones 1938, 342-3) and Doubstead (Jobey 1982, 15-17, 20; fig 7.2). Poverty as well as resistance to Roman customs may have been a factor, since the large number of brooches found at Traprain Law (Burley 1956, 154-67) seems to indicate that those with the means and the wish to acquire them did so.

In conclusion, some of the brooches in this catalogue will have been worn by soldiers, others by those civilians who were neither the most romanised nor the least, perhaps living in the *vici* rather than the large towns or the native homesteads. Such people might retain their traditional costume, but their contact with the army would give them the prosperity to 'improve' on it with new trade goods.

1.5 How brooches were worn

Brooches were most commonly worn with the foot uppermost, although they could occasionally be worn with the head uppermost, or positioned horizontally; it was obviously a matter of personal taste (Wild 1965).

On the Continent, burials and sculpture show that wearing a matched pair of brooches was a purely female fashion. Occasionally a pair of brooches was worn in a purely decorative way, linked by a length of chain too short (usually about 13-15 cm) to have had any practical use. There is a fine example from Stanwix of two identical trumpet brooches linked by an unusual chain (cat nos A390, A391).

Continental examples include a pair of enamelled disc brooches from Nijmegen (Wild 1968, 207), and a pair of bow brooches from Thrace (Patek 1942, pl IX no 9). The Thracian brooches were joined by a chain attached to their springs, as Continental examples did not have headloops.

More frequently, a single brooch survives with a short length of chain, or its terminal ring, attached. There are several examples from the Tyne-Solway frontier, from Carlisle (cat nos 255.1, 258, 265), and Newcastle upon Tyne (cat nos A214, A215). The latter two were found in association, A214 with a length of chain attached, and A215 with only a terminal ring attached. They were restored as a pair with the chain joined.

All the British examples mentioned here are trumpets, headstuds, or headstud derivatives, and have headloops to which the chain is attached. It is most likely that these were worn with the head downwards (Wild 1965, 612).

In the five examples from Carlisle and Newcastle upon Tyne, the chain has caused wear on the headloop. There are other examples in this catalogue (cat nos 254, 255, A382, 263) which have the same wear, although no chain is now present. In some cases wear is at the side, indicating the brooch was originally one of a pair. Occasionally (cat nos 254, 255) wear at the centre of the loop suggests a single

brooch, worn head downwards from which perhaps hung a pendant or *châtelaine*. Two possible examples of this are known from Carlisle (P Cracknell and T G Padley, forthcoming). A copper alloy sawfish brooch (cat no 254.1) has a very short length of silver chain attached to its cast headloop; at the other end of the chain is the remains of a silver disc. There is also an unusual find described as a 'pin brooch' (cat no 280.1). At first sight this appears to be a leaf-shaped pendant, but a pin is fastened to the back by a rivet to which a length of chain is also attached. Single brooches with pendants are known from Illyricum (Patek 1942, pl IX nos 7,10), though as in other Continental examples, the pendants were attached to the spring.

If we are correct in assuming that the wearing of brooches with chains attached to the headloop was a purely female fashion, then such objects if found in a military context would apparently indicate the presence of civilians on that site.

Some brooches may not have been worn at all, but used as votive objects. Large numbers have been found at temple sites at Woodeaton (Kirk 1949, 1-45), and Lydney (Wheeler and Wheeler 1932, 68-82). Miss S Butcher thinks that horse and rider brooches may be associated with religious cults (Butcher 1977, 56); other representational brooches may also have been, particularly those in the form of a wheel or an axe (*cf* the miniature votive objects described by Mrs Green (1981, 253-69)), or a shield (Wheeler and Wheeler 1932, 81 no 42; fig 16). Some brooches may have been specially made to be deposited at religious sites, and not worn at all. They need not have been very well made, nor substantial enough to hold material (see the very small or fragile penannular brooches from Corbridge (cat nos 150, 172).

1.6 The dating of Romano-British brooches

Plate brooches are difficult to date precisely. Of those found in the North, the majority are enamelled types which have no more precise date than the second century; those with gilding and a gemstone probably developed in the mid-third.

There are also problems with the dating of penannulars. Many types have a wide date range throughout the Roman period; brooches of Fowler types E and D7 are known to be late, but are not yet dated very precisely.

There is more dating evidence for the many types of bow brooch. However it should be emphasised that for all brooches it is only the introduction of a type which can ever be securely dated; the total date range will always be uncertain. Many brooches will have had a much longer than expected lifespan, for the reasons given below.

Items of jewellery may survive for a long time in use. Many brooches show extensive wear, and there are examples of ancient repairs. However the very small number of first century brooches from the Tyne-Solway frontier (see Chapter 4) shows that not many early brooches

survived in the North beyond their expected date range. And that is despite the fact that first and second century brooches are apparently more likely to be repaired than later types (Chapter 2.2, Table 1, and Hattatt 1985, 200-2). Fewer third and fourth century examples show repairs, so presumably they were more easily replaced and more likely to be discarded when broken. Nevertheless any brooch of great intrinsic or sentimental value might have been preserved for a long period of time, which makes individual examples unreliable as dating evidence.

Broken or discarded bronze brooches could have been kept with other residual material in metalworkers' hoards of scrap.

If some brooches had a votive or religious significance, a traditional style may have been faithfully copied for long periods of time. Alternatively individual examples might have been retained or have acquired some ritual use long after the particular form of brooch had ceased to be worn. A vivid illustration of this is the habit of Anglo-Saxon women of making a collection of 'good luck charms', including Roman objects, which were kept in a small purse

hung from the belt. Many of these purse collections have been found in graves, and a study of their contents has shown that the owners had distinct aims in making their collections (Brown 1977). They selected objects of many different materials; at least some had to be a century old or more, and there was a preference for ring shaped or openwork objects. Penannular brooches of the Roman period were therefore sometimes included. It is only their position in the grave, i.e. mixed with other finds in the purse collection, which shows that they were no longer worn as brooches, nor even regarded as such.

It is only when sufficient brooches have been found in occupation layers in modern excavations that their dating can be improved. Even then, individual brooches will never be as useful for dating as say, pottery or coins. However, they are very numerous, and large samples give the opportunity to study the distribution of different types with potentially more useful results than obtainable from a single object. For example the distribution of first century brooches described in Chapter 4 has some interesting implications.

CHAPTER 2. CLASSIFICATION

2.1 Introduction

The list of brooch groups given in 2.5 is a classification rather than a typology, as it does not show a uniform development from Group 1 to Group 16. Instead the brooches have been divided into their three main forms of bow, plate, and penannular, and further divided into groups based mainly on shape, but listed as far as possible in chronological order. These 16 large groups were then divided into sub-groups, many of which correspond to categories already commonly used, i.e. Polden Hill or headstud, but a few new categories have been suggested. The typology of some small sub-groups has already been studied, most notably Group 3.1, headstuds (Painter and Sax 1970), and Group 8.8, heavy crossbows (Keller 1971).

The classification proposed here is based on a study of brooches from the Stanegate and Hadrian's Wall. The former are catalogued in Chapter 3 (nos 1-290), the latter are listed in Appendix I (nos A1-A434). Line drawings of type specimens are shown on Fig. 2.

2.2 Comparison with examples from southern Britain

This collection from the northern military zone is significantly different from that which would be found in a comparable area of southern Britain.

In a larger sample of approximately 7,000 brooches, presumably of mainly southern origin, R Hattatt (1985, 202-5) found the proportion of the three main brooch forms was:

bow brooches	76.8%
plate brooches	16.5%
penannulars	6.75%.

For the 845 brooches in this catalogue the proportions are :

bow brooches	62.2%
plate brooches	24.7%
penannulars	13.0%.

A higher percentage of penannulars might be expected in a military zone, as they are said to have been popular with the army (Fowler 1960, 171), but the same is apparently also true of plate brooches.

In terms of the particular brooch types present, the differences between the northern collection and the southern one are strong, but equally predictable. There are very few first century types, but large numbers of trumpet brooches, which are known to have been popular in the North, and a fairly large number of headstuds, which are likely to have had a northern origin. But the most noticeable characteristic of the northern sample is the large number of knee brooches, P-shaped brooches, and crossbows. This study lists a total of twenty nine of the fully developed late crossbows (Appendix III), of which eight are unpublished. There is also a significant number of late disc brooches with gilding and glass paste 'gemstones'.

A total of 14 brooches from the region had been repaired in antiquity (Table 1), or 1.7%, which is lower than an estimate of 1 in 35, or 2.8%, given by Hattatt (1985, 200-2). But as repairs are found more often on early brooches than on P-shaped or crossbows, a slightly lower percentage of repaired examples is to be expected in the North.

2.3 Suggested revisions within existing groups

A revised typology has been suggested for headstuds (see below and Table 2), and a new classification for knee brooches and their derivatives (see below and Table 3). An interesting variant of the D7 penannular has recently been identified and a sub-Roman date suggested for it.

2.4 Further evidence of the origins of some groups

Traditionally a north British origin has been assumed for trumpet brooches and headstuds, but this is now disputed (Mackreth 1973a, 19, 22-3; 1992, unpublished paper to a Roman Finds Group conference, and pers comm). There is no doubt that much lively North/South debate could be generated. However, insufficient evidence was found during this study to make definitive statements, other than the following observation. The large number of different varieties of headstud found in the region suggest that this was the area in which the type originated, with many prototype versions and 'one-offs' being tried before the more successful variants survived to be exported elsewhere. In contrast the very standardised forms of trumpets found in the north tend to confirm that the type originated elsewhere (the Midlands has been suggested), with only the most developed forms reaching the North.

It is recognised that later types like knee brooches, and P-shaped brooches and crossbows are common on the German frontier; they are therefore sometimes referred to as 'German brooch types', as if they were all made there, and all examples found in Britain were imports. However, within the large northern sample it is possible to see small variations not closely paralleled on the Continent (see discussion at end of group 5.4, also groups 8.1B, 8.5A, 8.5B, and 8.6A). This suggests that at least a few examples were produced in Britain, even some angular knee brooches, one of the variants most often described as Germanic. Nevertheless there is no doubt that many crossbow brooches were imports from Germany, or are indicative of Germanic influence. M R Hull noted long ago that late crossbows have a mainly eastern distribution, especially at Saxon shore forts (1986, 76-7). This will be an important topic for future research; it has not been followed up here, as up-to-date information on numbers and distribution of crossbows was not available. It is hoped that this catalogue will provide enough data for the subject to be investigated further.

2.5 Classification

2.5.1 List of groups

See Figs. 2 and 3. Groups not illustrated on Fig. 2 are marked *. Numbers of each type are shown in brackets.

a) Bow Brooches

GROUP 1. FIRST CENTURY

1.1	Nauheim derivative	(7)
1.2	Colchester	(3)
1.3	Eye brooch derivative	(1)
1.4	Almgren form 19	(2)
1.5	Aucissa	(1)
1.6	Aesica	(1)
1.7	Almgren form 16	(2)
1.8	Hod Hill derivative	(4)
1.9	Polden Hill	(4)
1.10	Kräftig profiliert and derivative	(2)
1.11*	Other early bow brooches	(4)
1.12*	Sawfish	(1)

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

2.1	'Harlow'	(1)
2.2	Dolphin	(9)
2.3	Southwestern enamelled	(2)
2.4	'Severn'	(4)
2.5*	Other bow brooches	(4)

GROUP 3. HEADSTUD AND DERIVATIVES

3.1	Headstud	(26)
3.2	'Thealby Mine'	(7)
3.3	Headstud derivative	(4)

GROUP 4. TRUMPET AND DERIVATIVES

4.1	Trumpet	(105)
4.2	Trumpet and Plate	(8)
4.3	Trumpet, plate and fantail	(2)
4.4	Trumpet and fantail	(3)
4.5	Almgren form 101	(1)

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1	Knee	(60)
5.2	Knee and fantail	(18)
5.3	S-profile	(10)
5.4	Incurved S-profile	(2)

GROUP 6. FANTAILED (7)

GROUP 7*. MISCELLANEOUS (6)

GROUP 8. P-SHAPED

8.1	P-shaped, plain	(27)
8.2	Divided bow, double	(25)
8.3	Divided bow, triple	(10)
8.4	P-shaped, bow knobs	(9)
8.5	Crossbow, light (headknob only)	(11)
8.6	Crossbow, light (three knobs)	(29)
8.7	Crossbow, intermediate	(12)
8.8	Crossbow, heavy	(29)

GROUP 9*. FRAGMENTARY (63)

b) Plate Brooches

GROUP 10. SIMPLE ENAMELLED PLATES

10.1	Concentric ovals	(8)
10.2	Concentric circles	(9)
10.3	Concentric circles, with lugs	(1)
10.4	Concentric circles and dots	(10)
10.5	Plain enamel, bronze dots	(4)
10.6	Semi-circles	(3)
10.7	Star and dots	(2)
10.8	Rings and dots	(2)
10.9	Six-armed motif	(5)
10.10	Millefiori	(2)
10.11*	Miscellaneous discs	(7)
10.12	Disc, raised enamelled centre	(3)
10.13	Umbonate	(5)
10.14	Enamelled oval, raised centre	(1)
10.15	Equal ended	(1)
10.16	Other shapes	(12)

GROUP 11. APPLIED REPOUSSÉ SHEET

11.1	With repoussé sheet	(18)
11.2*	Blank disc	(14)

GROUP 12. DISC WITH CENTRAL PROJECTION

12.1	Buckler	(9)
12.2	Disc with separate rivet (wheel)	(3)
12.3	Disc with separate rivet (other)	(4)

GROUP 13*. UNCLASSIFIED DISCS (9)

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.1	S-shaped	(2)
14.2	Dragonesque	(11)
14.3	Zoomorphic	(14)
14.4	Shield	(2)
14.5	Axe	(2)
14.6	Sandal	(2)
14.7	Wheel	(6)
14.8	Openwork	(4)
14.9	Trompetenmuster	(3)
14.10	Swastika	(3)
14.11	Pelta	(4)
14.12*	Other shapes	(1)

GROUP 15. GILDED DISC AND GEM

15.1	Oval	(11)
15.2	Circular	(12)

c) Penannular Brooches

GROUP 16. PENANNULARS

16.1	Fowler A	(70)
16.2	Fowler B	(1)
16.3	Fowler C	(1)
16.4	Fowler D	(16)
16.5	Fowler E	(11)
16.6*	Unclassified	(4)
16.7*	Fragmentary	(7)

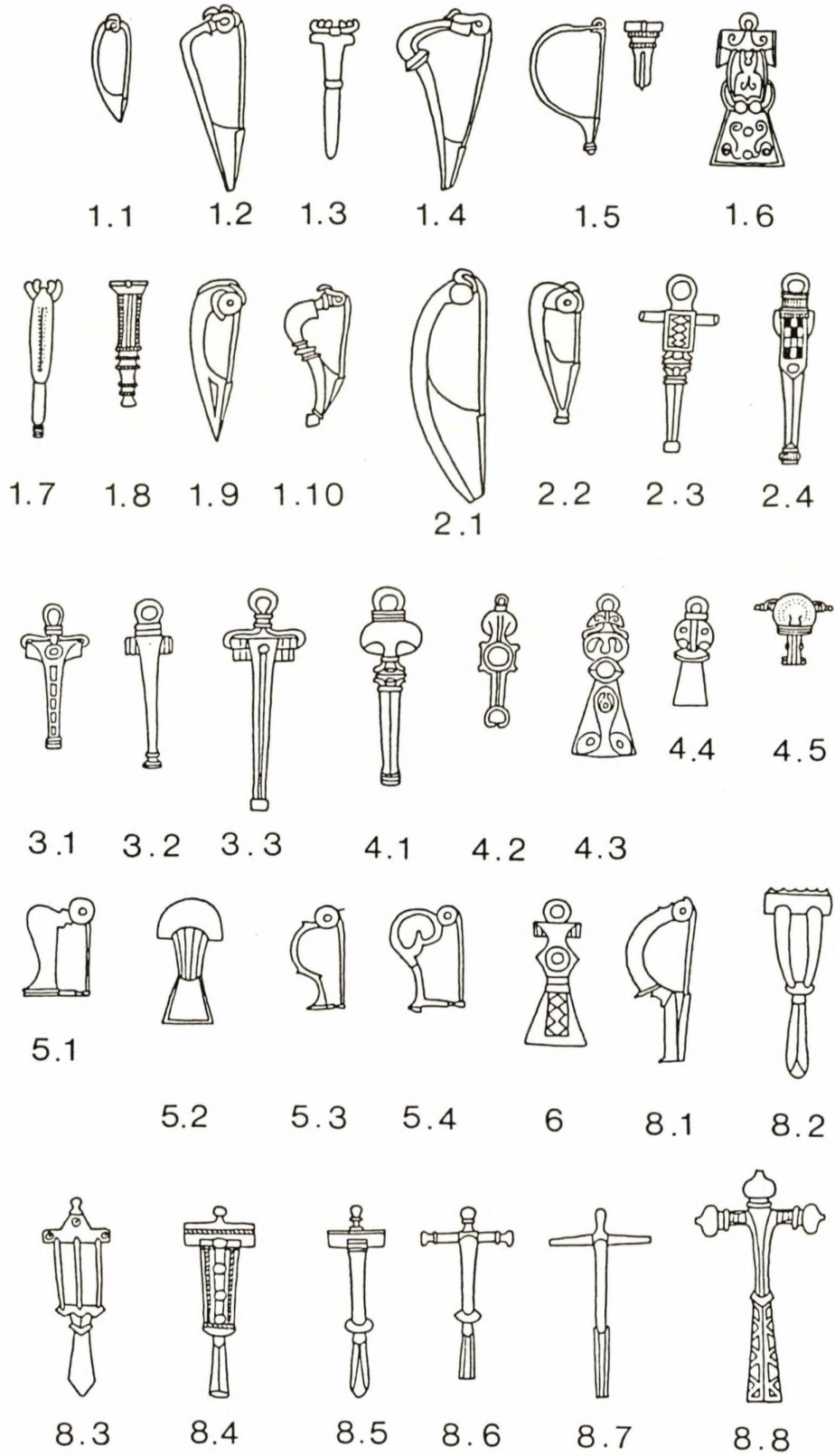


Figure 2. Classification.

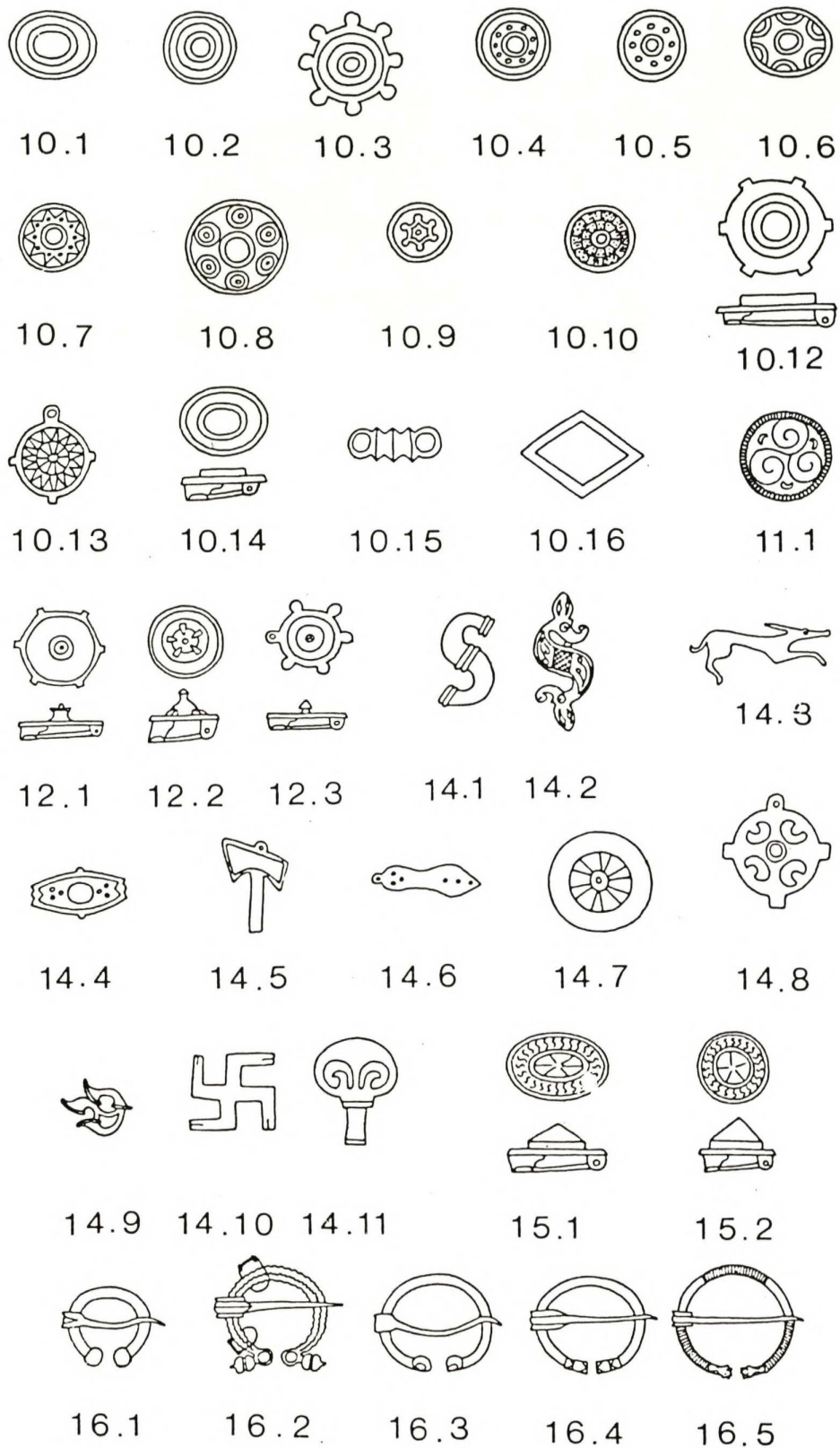


Figure 2. Classification.

CAT NO	GROUP		SITE	TYPE OF REPAIR
156	1.9	Polden Hill	Corbridge	spring repaired
8	1.11	Other early bows	Corbridge	? headloop replacement
3	3.1	Headstud	Corbridge Red House	spring repaired
4	3.1	Headstud	Corbridge Red House	pin replaced
258	3.3	Headstud derivative	Carlisle	pin replacement
A413	4.1	Trumpet	mc 48	catchplate repaired
181	4.1	Trumpet	Vindolanda	pin replaced
265	4.1	Trumpet	Carlisle	pin replaced
59	5.2	Knee and fantail	Corbridge	pin replaced
192	5.2	Knee and fantail	Vindolanda	? spring repair
A332	7	Miscellaneous	Housesteads	pin replaced
A 93	8.8	Crossbow, heavy	South Shields	hinged pin replaced
A358	13	Unclassified disc	Housesteads	glass boss added
224	15.1	Gilded disc and gem (oval)	Vindolanda	gemstone replaced

Table 1. Repaired brooches.

2.5.2 Discussion of individual groups

Brooches of Groups 1 and 2 are rare in north Britain, and have been dealt with very briefly here, since they are fully discussed elsewhere. References to useful publications are given in Chapter 1.2. This study is concerned mainly with discussion of those brooches more commonly found in the North, i.e. Groups 3 - 16.

Bow Brooches

GROUP 1. FIRST CENTURY

1.1 Nauheim derivative (Collingwood Group A)

Nauheim derivatives are simple one-piece brooches the construction of which resembles that of the modern safety-pin, and their origins lie in Iron Age prototypes. For discussion see Bushe-Fox 1928, 40-1, and Hawkes and Hull 1947, 308-9, 312-3. The type is more commonly found in southern Britain, Gaul and the Rhineland than in northern Britain, and is generally thought to have gone out of use by the 70s AD (Simpson, Hawkes, and Hull 1979, 338). A variant with foot-knob (Collingwood Group B) is known to have continued into Agricola's times, as an example was found at Newstead (Curle 1917, 231-2; fig 1.1), and the date range of the whole group should possibly be extended (see Chapter 4). A Nauheim derivative from Carlisle (cat no 251.1) was found in an apparently late context (AD 84/5 - cAD 100/5); however this context could well have contained residual material (I Caruana, pers comm). A pin probably from a Nauheim derivative (cat no 251.2) was found in a construction layer dated cAD 71/2 - 78/9).

1.2 Colchester (Collingwood Group F)

These one-piece brooches were found in large numbers at Colchester (Hawkes and Hull 1947, 308-10), and are commonly found in the Belgic areas of Britain, with some outliers. The early form with pierced catchplate has not been found on the Tyne-Solway frontier. The accepted date range is AD 1-75 (but see Chapter 4).

1.3 Eye brooch derivative (Collingwood Group T)

The standard form is that of a one-piece brooch with two stamped circles on the head, resembling eyes. A derivative lacking the 'eyes' is uncommon in Britain (D Mackreth, pers comm), but a single example is known from the region (cat no A4). The date range of eye brooches is early to mid-first century (but see Chapter 4).

1.4 Almgren form 19

There are two examples from the region (cat nos 236, 237) of this one-piece brooch type, which is more usually found in the Rhineland and also in Pannonia. The date range is from the early first to the mid-first century. For discussion see Riha 1979, 71 (and see Chapter 4).

1.5 Aucissa (Collingwood Group C)

One fragment of an Aucissa brooch has been found in the region (cat no A5). The type originated on the Continent and was introduced to Britain with the conquest (Hawkes and Hull 1947, 321-2), surviving to about AD 65 (Mackreth 1973a, 24-5, but see Chapter 4).

1.6 Aesica (Collingwood Group X)

The thistle or rosette (Collingwood Group W) was a Continental brooch type which gave rise to a British derivative named after the most famous example of its type, the 'Aesica brooch' (cat no A367). The latter, a very large silver-gilt brooch with elaborate relief decoration, is obviously far more precious than a normal everyday item of jewellery, but more ordinary Aesica type brooches were still of complex construction, sometimes requiring the joining of separate castings. Mackreth (1973a, 23-4) feels that this is the reason why the type was short-lived (from some time before AD 60 to possibly AD 80; but see Chapter 4). Apart from the 'Aesica brooch' itself all examples have been found in the Midlands or Central Southern England (Mackreth 1973d, 115).

1.7 Almgren form 16

A variation on the Nauheim derivative, this one-piece brooch type has a cylindrical foot-knob formed from a separate strip of bronze wound around the base of the leg. The bow has a central groove with punched dots on either side. The type is common in Belgian cemeteries (Simpson, Hawkes and Hull 1979, 334), but the two northern examples, one from Vindolanda and one found south of Birdoswald (cat nos 174, A381) have no good parallels in Britain. A link between Vindolanda and Belgium is provided by the *cohors I Tungrorum*, who with *cohors VIII Batavorum*, are attested at Vindolanda cAD 95-105, the Tungrians probably present during the latter part of that period (Bowman and Thomas 1983, 47-50). It has also been suggested that *cohors I Tungrorum* could have been the unit at Birdoswald early in the Hadrianic period because of a tile stamp found to the west of that site, at Hare Hill; of course, a small portable object such as a single tile (or a brooch) is not in itself very strong evidence for the siting of a unit, as Dr M Roxan has pointed out (Bidwell 1985, 97). It has been thought that the type went out of use in the late first century (Simpson, Hawkes and Hull, *op cit*), but individual examples may have been retained for longer by Tungrians outside their homeland, and the type as a whole may have survived longer than previously thought (see Chapter 4).

1.8 Hod Hill derivative (Collingwood Group P)

The Hod Hill brooch is a Continental type related to the Aucissa. It was introduced at the time of the conquest and went out of use by the 70s AD. For discussion see Hawkes and Hull 1947, 323-5, and Brailsford 1962, 9-10. There is wide variety within the general type, with individual examples being hard to parallel. The derivatives found on the Tyne-Solway frontier are late in the series and probably belong to the late first century (D Mackreth, pers comm) (but see Chapter 4). A brooch from Carlisle (cat no 253) came from a construction layer dated cAD 71/2 - 78/9 (I Caruana, forthcoming).

1.9 Polden Hill (Collingwood Group E)

The Polden Hill type is a Colchester brooch derivative in which a distinctive method of pin attachment can be seen. There is a semi-cylindrical springcase, open at the back, with the ends pierced to hold the axis bar for the spring. The chord is held by a central hook or pierced plate. For fuller description see Hawkes and Hull 1947, 310-11; see also Hattatt 1985, 82-3. The accepted date range is from the mid- to late first century (but see Chapter 4). Examples from the Tyne-Solway frontier (cat nos 156, 253.1, A410, A181) have pierced catchplates, normally considered an early feature. A brooch from Carlisle (cat no 253.1) was found in a context dated cAD 71/2 - 78/9 (I Caruana, forthcoming).

1.10 Kräftig Profilert and derivative

This is a type of one-piece brooch the name of which means 'strongly profiled'. For discussion see Hull 1968, 83 nos 37-9 and Riha 1979, 72-5. The type was introduced with the conquest and lasted until the end of the first century (Crummy, 1983, 10-12) (but see Chapter 4). It is most commonly found along the Danube, with some examples in Britain and Germany.

1.11 Other early bow brooches

Bow brooches of non-standard form but of possibly early date have been included in this sub-group.

1.12 Sawfish

The single example of a sawfish brooch found in the region (cat no 254.1) is from Carlisle, and is the most northerly example known so far. It came from a context dated cAD 78/9 - 84/5.

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

2.1 'Harlow'

There is one brooch from the region (cat no A8) in which the pin is attached by an unusual method. There is a projecting plate at the back of the head which is pierced twice. The axis bar for the spring passes through the lower hole, and the chord through the upper. D Mackreth (pers comm) has identified this example as one of a type for which he suggests the name 'Harlow' because of an example found there (Wheeler 1928, 309 no 4; fig 4.4). He suggests a date range up to cAD 125.

2.2 Dolphin (Collingwood Group H)

The type is so named because the humped bow resembles a dolphin's back. All examples have Polden Hill pin attachments and foot-knobs. Collingwood (1969, 295) gave a date range from Neronian times until the middle of the second century; see also Hattatt 1985, 72-3. They were

probably manufactured in the Welsh Marches but there is a wide distribution throughout Britain, and great variety in the decorative detail, making individual examples hard to parallel (D Mackreth, pers comm). An unusually large and well-made brooch from Corbridge (cat no 10.1) is of a type normally found around Cirencester and in the Severn valley. The enamelled panel on cat no A235 is very unusual; an unpublished example in Caerwent Museum (Ne/T11) has a similar panel, though bearing a different enamelled motif.

2.3 Southwestern enamelled

This type is commonly found in southwestern Britain, and is characterised by an enamelled panel on the upper bow. Examples are given by Mackreth (1968, 94-5 no 5; fig 27) who believes the type began about AD 70 or before, but that brooches with a hinged pin and headloop probably belong to the late first century or early second. The two northern examples (cat nos A236, A237) are of the latter type.

2.4 'Severn'

The name 'Severn' may be appropriate for a group of brooches found throughout Britain, but most commonly around the Severn estuary. The group as a whole appears so varied and complex that an exact typology is difficult (D Mackreth, pers comm; and see examples from Prestatyn (Mackreth 1989, 91-2 nos 5-80)). Most of the examples from the Hadrian's Wall area, northwest England, and Scotland belong to a northern sub-group whose characteristics are sufficiently similar to suggest that they are all products of a single workshop (Snape 1987, 309-12). Furthermore that workshop may have been local, as one of these northern examples (cat no 10.2, from Corbridge) was an unfinished or flawed casting. 'Severn' brooches in general may have a Flavian origin, but enamelled examples probably belong to the second century.

2.5 Other bow brooches

Bow brooches of non-standard form but probably of the late first to mid-second century have been included in this sub-group.

GROUP 3. HEADSTUD AND DERIVATIVES

3.1 Headstud (Collingwood Group Q)

Headstud brooches are so named because of the stud which was initially an integral part of the pin attachment, but in later examples became merely a decorative boss. Their construction and development has been comprehensively described (Painter and Sax 1970).

In many ways their development paralleled that of trumpet brooches. They had similar headloops, separate in early examples, cast-in-one later. Decoration was more common on headstuds than on trumpets; usually enamel was used, but sometimes relief decoration or silver wire inlay. The decoration might be of geometric shapes like lozenges or

rectangles, or tendrils and sinuous curves. Use was also made of bands of moulding, particularly above the footknob. However headstuds show greater variation than trumpets, particularly in early examples. Other, presumably later ones, are smaller and simplified. 'Thealby Mine' brooches are of the same general form but without the stud.

According to R G Collingwood (Collingwood and Richmond 1969, 296) headstuds were derived from a Flavian prototype from Honley, Yorkshire, which lacked the stud, and they were chiefly made in north Britain. He believed southern examples to be late imitations, although this has been questioned (Mackreth 1973a, 19, and 1992, unpublished paper to Roman Finds Group conference). The great variety of styles seen in the headstuds of this survey - some of them seem definitely to be 'one-offs' - would support the idea of a northern origin. Presumably the greatest number of variations are found in the place of origin, whereas only the most successful forms survive to be exported to other areas. The trumpet brooches from the region, although sharing many similarities with headstuds, seem more standardised, which would be consistent with their having originated elsewhere (in the Midlands and Welsh Marches), with only the most highly developed forms reaching the North.

One headstud brooch with no headloop was found at Nether Denton (cat no 239), but it is unusual, and it is not clear whether it resembles the late type mentioned by Collingwood (*ibid*). A few typically north British examples have been found on the Continent, and were probably exports. Examples have been found at the following sites :- Augst (Riha 1979, Taf 47.1391), Nijmegen (van Buchem 1941, pl XIV.7, 8), Neuss (Lehner 1904, Taf XXIV.73), in the Rhineland (Exner 1939, Taf 6.1-4), and at Thamusida in Morocco (Gerharz 1987, 94 no 78; Abb 14).

The typology and dating put forward by Painter and Sax (1970, 173) are as follows :-

- a) Prototype:
in existence by Flavian times (Honley)
- b) Spring-pin and loose headloop:
in use before AD 155 (London)
- c) Hinged pin and loose headloop:
in use before AD 90 (Richborough)
- d) Hinged pin and fixed headloop:
in use not long after AD 134 (Stanwix)

'The spring-pin type must be in existence before the hinged pin type because of the vestiges of the first seen on the second; but as M R Hull has pointed out in relation to the brooches from Nor'nour, there is no reason why the two types should not be contemporary, or why the hinged examples should not be merely a cheaper form to suit the purchaser's pocket.'

Two comments should be made on the above quotation from Painter and Sax.

i) The brooch from Stanwix (Collingwood 1931b, 72 no 2; fig 1.2 and fig 3) does not have a fixed headloop; it probably had a separate wire which is now missing. However there is another example from Chelmsford (Butcher 1976, 64) with hinged pin and fixed headloop which can be used to provide dating evidence for this sub-group (see below and Table 2).

ii) There is one example from a northern site of a hinged pin brooch apparently being in use at the same time as spring-pin brooches (see Group 3.1C below and Table 2), but the latter may have been repaired and may therefore be much older. In other cases considerable effort was expended, on casting a skeuomorphic spring (cat no 14) or adding a non-functional spring to the hinge attachment (cat no A240); therefore these brooches are not simplified or cheap versions, but apparently provide evidence that the spring was the earlier, and was retained after the hinge was introduced, perhaps because of conservatism.

A typology for the headstud brooches from the Stanegate and Hadrian's Wall is shown on Table 2 (see also Appendix IIa). There are no examples from the region of the Honley prototype. For a discussion of early and developed headstuds see Mackreth 1985, 199.

In the absence of any dating evidence for the introduction of group 3.1B it seems reasonable to assume a development from spring to hinge. The chord of the spring sometimes passes through a pierced cast crest which functions in the same way as the retaining strip (cat no 255), or sometimes through a pierced plate at the back of the head while the crest becomes decorative only (cat no 11). Two examples from Chesters (cat nos A239, A240) have confusing combinations of hinge and spring, and the details are difficult to determine. Where a hinged pin only is used there is obviously no chord and the crest becomes merely decorative.

The dating of group 3.1C is interesting. A spring held by a forward hook would seem to be an earlier feature than a hinged pin, and it is surprising to see both in use in similar examples from similar contexts, both pre-dating the demolition of cAD 98, at Corbridge Red House (group 3.1Ci with spring-pin, cat nos 3,4; group 3.1Ciii with hinged pin, cat no 5). Both the spring-pins were broken and repaired in antiquity, so group 3.1Ci could be thought to be early, beginning well before the end of the first century, the 3.1Ciii example being a later development or copy of the two survivals. However the evidence points to spring-pins and hinged pins being parallel developments. A brooch of sub-group 3.1Ci from Colchester was dated AD 80/5 - c100 (Crummy 1983, 13 no 35; fig 9; Mackreth 1989, 94). There are two other dated examples of 3.1Ciii; one from Wall, Staffs, was earlier than AD 85-90 (Gould 1964, fig 18 no 3; Mackreth 1989, 94), another from Richborough was from a pit dated to AD 75-90 (Henderson *et al* 1949, 114 no 35; pl XXVIII).

If a brooch from Chelmsford (Butcher 1977, 64) does in fact resemble the four northern examples then it would provide a surprisingly early date for the sub-group 3.1D which has apparently late features. A possibly similar brooch from Carlisle (cat no 257) is dated AD 92/3 - c100/5 (P Cracknell and T G Padley, forthcoming, no F72). A simplified version without enamel decoration on the bow was found at Richborough (Henderson *et al* 1949, 114 no 36; pl XXVIII) in a context dated AD 80-90.

For further discussion of the dating of headstuds see Mackreth 1985, 199 and 1989, 93-4.

In conclusion, the present dating evidence, admittedly incomplete, suggests the three sub-groups found in the North may be parallel developments beginning before the end of the first century and continuing into Antonine times. More have been found at Stanegate sites than at Wall forts.

GROUP	STUD	HEADLOOP	PIN	OTHER DETAILS	TOTAL NO	DATE OF INTRODUCTION
3.1A				Honley prototype	None	Flavian
3.1B i	separate	separate	spring	pierced or decorative crest	2	
ii	separate	separate	hinge or spring	pierced or decorative crest	2	
iii	separate	separate	hinge	decorative crest	6	not long after AD 134 (Stanwix)
3.1C i	cast	separate	spring	forward hook	4	AD 80/5-c98 (Colchester; Corbridge Red House)
ii	cast	separate	hinge or	decorative crest	1	
iii	cast	separate	hinge	decorative crest	1	AD 75-c98 (Richborough; Wall, Staffs; Corbridge Red House)
3.1D i	cast	fixed	hinge	enamelled bow	6	before AD 80 (Chelmsford)
ii	cast	fixed	hinge	unenamelled bow	1	AD 80-90 (Richborough)
3.1E	Unclassified or fragmentary				3	

(3.1B iii and 3.1D ii found in Antonine contexts in Scotland and Nor'nour)

Table 2. Headstud brooches from sites on the Tyne-Solway frontier (see also Appendix IIa).

3.2 'Thealby Mine' (Collingwood Group Q)

'Thealby Mine' brooches are usually dated to the second century (Dudley 1949, 20; fig 52.6); nothing further can be added, as there is no northern example from a dated context. All have hinged pins and fixed headloops, but lack the headstud. The type could be derived from sub-group 3.1D, or from the Honley prototype. So far none has been found at a Wall fort: all are from the Stanegate.

3.3 Headstud derivative Collingwood Group Q)

A brooch with a length of chain attached to its headloop, which was found in the river Tyne near Newcastle (cat no A214) (Brewis 1924, 178-9; pl VIII), is an almost exact parallel of a brooch found near York (Painter and Sax 1970, 163; fig 3.11), although smaller. A much damaged brooch from Corbridge (cat no 19) may be a simpler version of the above.

Two enamelled brooches with acanthus decoration at the waist, from Carlisle (cat no 258) and Corbridge (cat no 19.1) are included here, but perhaps could be described as 'trumpet/T-shape' hybrids (Padley, 1991, 106 no 11; fig 64). The Carlisle example is from a context dated cAD 105 (T G Padley, pers comm).

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet (Collingwood Group R)

The name is derived from the flared head of the brooch which resembles the mouth of a trumpet.

The distinctive waist decoration of a central button bordered by mouldings, either plain or with acanthus leaves, is the basis of Collingwood's classification, which is as follows :-

Ri, - plain mouldings, decoration continuous round the back of the bow.

Rii, - mouldings with acanthus, decoration continuous round the back of the bow (further sub-divided into Riia and b, whose bows have 'stumpy' and 'graceful' profiles respectively).

Riii, - plain mouldings, not continuous.

Riv, - mouldings with acanthus, not continuous.

In general the large group of trumpet brooches from the Stanegate and Wall forts conform to Collingwood's classification, but there are a few minor comments to be made. The differences in waist decoration are not always clear cut; in particular the distinction between types Rii and Riv is often blurred. Many of the Rii brooches have a decoration which, although continuous, is considerably flattened at the back, while some Riv examples have a

featureless bump at the back rather than a completely smooth line. Frequently the differences seem to reflect a variation in the quality of the castings rather than a distinction between two sub-groups. Also some Riii examples (cat no A185) are just as well made and elaborate as those of type Ri, so it would be a mistake to think of Riii and Riv purely as simplifications of Ri and Rii, and typologically later, as Collingwood implied (1969, 296-7).

The 'stumpy' profile can be found in sub-groups other than Rii, i.e. the Ri example from Benwell (cat no A217). Of the 'stumpy' types in this sample most appear to have been cast deliberately in that shape, i.e. with the head bent sharply backwards, and the lead blank from Brough (Plate 1) is similar. However, a few examples look more like bad castings, or as if they have subsequently been distorted. The profile of the leg may be convex, straight, or occasionally concave. The former profile is thought to be early (*cf* the example from the Lunt (Mackreth 1969, 110-1; fig 19.9)).

Trumpet brooches show remarkable uniformity, for example the fine incised line running down each side of the leg, about 1mm from the edge, is a very consistent feature only absent in a few poorly-made brooches. (This is referred to as a 'side groove' in the catalogue). Other features are discussed below.

The head almost always has a flanged edge. Trumpet brooches, like headstuds, have headloops, usually formed from the axis wire of the spring which is curved upwards and secured by a collar. The loop is prevented from slipping forward by a small triangular spike which projects up from the top of the head and through the headloop collar. In simplified examples the loop is cast in one with the brooch, rising from a rectangular plate which is a skeuomorph of the collar. Trumpet brooches were sometimes worn in pairs, head downwards, joined by a short length of chain attached to the headloops (see Chapter 1.5). The pin is usually sprung, but occasionally hinged. Hinged brooches are not necessarily simplified versions, but may be quite elaborate and well-made (cat nos 30, 31, A26).

The mouldings around the waist may be single, double or triple, and are often milled. Milled mouldings are also found on the headloop collar and foot.

The foot is usually a flattened cylinder, but occasionally takes the form of a hemisphere with acanthus leaves above. The base of the foot is often sunken rather than flat, due to shrinkage of the casting on cooling. Occasionally the remains of a 'runner' is visible, showing that the foot was uppermost in the mould during casting (see Chapter 1.3).

Some trumpet brooches are decorated with champlevé enamel, the colours found in this sample being red, blue, orange and yellow/cream, and the same decorative motifs are consistently used. One very fine example from Vindolanda is gilded (cat no 184).

Collingwood (1969, 297) thought that trumpet brooches were a northern development and had a date range from the

late first century to the mid-second. An origin in the Midlands is now thought likely (Mackreth 1973a, 22-3), and at a slightly earlier date. A fully developed Rii trumpet with enamelled decoration was found in a sealed pit at the Lunt, Coventry, a fort which went out of use cAD 75 (Mackreth 1969, 110-1 no 9). The brooch must have been in use well before that date, as it had been broken, repaired, and broken again before being discarded.

For another important discussion of origin and dating see also Boon and Savory 1975, 41-61. An Rii brooch from Carmarthen was dated by them to AD 25-50; they considered the Ri type to be a development of Rii.

There is little dating evidence from the Tyne-Solway frontier. An enamelled Rii trumpet brooch from Carlisle (cat no 262.1) is from a context dated cAD 78/9 - 84/5 (I Caruana, forthcoming), and a plain Riv trumpet (cat no 264) from the same site was found in a context dating from the mid-80s to AD 92.

4.2 Trumpet and Plate (Collingwood Group Sii)

This derivative has a trumpet head but the waist decoration is a flat plate which lies on top of the bow rather than bisecting it at right angles. The plate is usually enamelled and usually circular, although other shapes are known (Collingwood 1969, 298). One example from the region (cat no 41) has a crescentic plate.

The type has a wide distribution; for discussion see Richardson 1960, 200-13. The mid-second century date given by Collingwood was confirmed by Miss Richardson who concluded that 'by and large it appears that the type was in use from a little before AD 150 to the end of the century, and its *floruit* is the Antonine period'.

4.3 Trumpet, plate and fantail (Collingwood Group Siii)

There are two examples from the region (cat nos 42, A39), although the waist decoration is not strictly a plate, but a circular setting for a stud or enamelled decoration which is now missing. The two brooches are very similar, differing only in decorative detail, and are unparalleled elsewhere. They are very well made, with elaborate relief decoration. There is no good dating evidence for either.

4.4 Trumpet and fantail (Collingwood Group Si)

This brooch type is small, with a headloop and fantail foot. It is British, probably northern, and was dated by Collingwood to the mid-second century. The three examples from the region are cat nos 159.1, A249, and A325.1.

4.5 Almgren form 101

Almgren form 101 is a Continental type with a straight-sided leg; it has no headloop. The general form is found

along the Rhine and Elbe, with a few examples on the Danubian frontier. The single example found in the region is an unusual variant (cat no 43; see also Böhme 1972, 64-5; Taf 35).

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee (Collingwood Group V)

These brooches are so named because of the sharp bend at the top of the bow, resembling a knee. They are small, but can be heavy, especially the angular brooches, because of the addition of lead to the copper alloy of some examples.

There are two different profiles; angular (with a very sharp bend to the 'knee'), or rounded (with a bulbous 'knee'). There are also two types of head; a cylindrical springcase, or a flat plate which is usually semi-circular, but may be pelta-shaped. This gives rise to four sub-groups, 5.1A-D (see Fig. 3); several non-standard forms have been classed as 5.1E. The foot is splayed and may be of quadrangular or semi-circular section.

Catchplates also vary. They are :-

- (i) the conventional type, with turnover; usually very narrow but deep,
- (ii) a narrow, deep bar, hooked at the end, and
- (iii) a deep flat plate, extending in the same plane as the base of the foot, with a notch cut at the end (see Fig. 3).

The type (iii) catchplate occurs with the quadrangular foot, types (i) and (ii) with the other examples.

Almost all the brooches in this sample have spring-pins, hinged pins only occurring on two of the 5.1D brooches from Corbridge (cat nos 53, 54).

Bows may be faceted or plain (a few examples are ribbed), and semi-circular headplates may be decoratively notched. Occasionally there is a step between bow and headplate. There may also be milling around the foot (semi-circular type), or a groove round the edges (of the quadrangular foot). There are only three examples (cat nos 44, 243, A432) of decoration on the base of the foot, a feature common in Continental knee brooches, seen in examples from the Saalburg and Zugmantel (Böhme 1972, Taf 8,9) and Lauriacum (Jobst 1975, Taf 17). One northern brooch (cat no A255) has a catchplate decorated with deep notches. Some brooches have white metal plating.

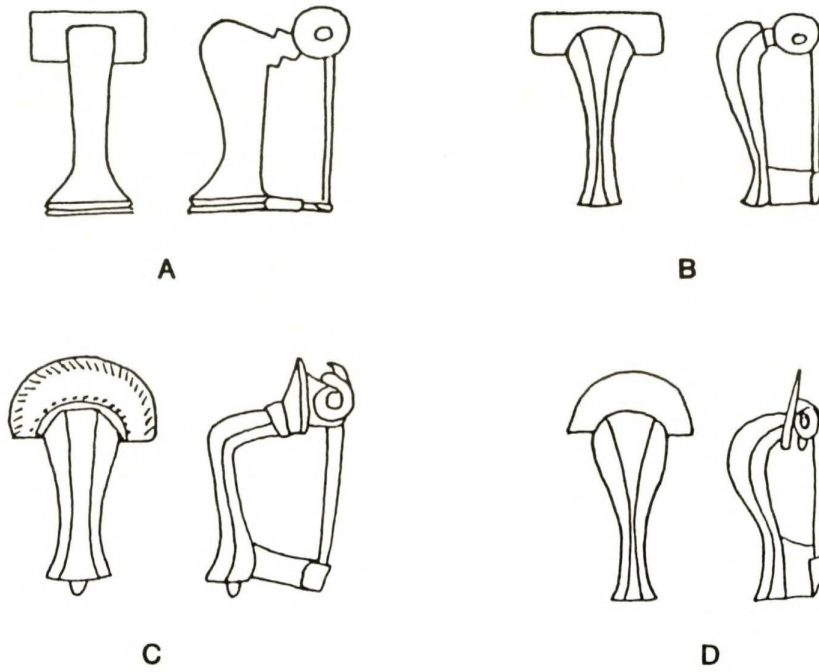
There is considerable uniformity of size and form, especially within sub-groups 5.1A and 5.1C.

A classification of northern knee brooches and derivatives is shown in Table 3 overleaf. There are several which are too fragmentary to classify.

There is little evidence from the North to modify Collingwood's dating of mid-second to third century for the

knee brooch. An example of sub-group 5.1A from Carlisle (cat no 266.5) was found in a mid- to late Antonine context (I Caruana, forthcoming).

For discussion of the origin and distribution of knee brooches and their derivatives see below, at the end of the description of sub-group 5.4.



catchplates

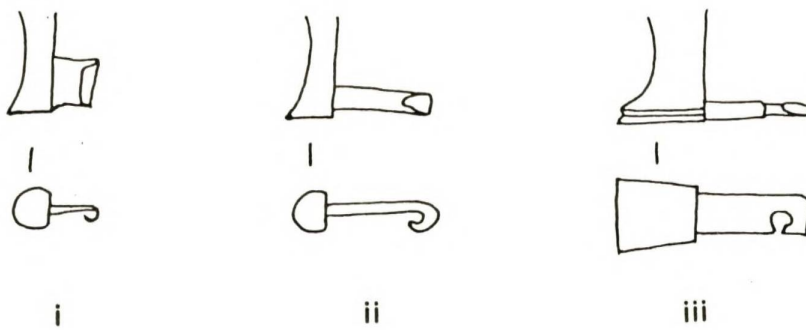


Figure 3. Knee brooches

5.2 Knee and fantail (Collingwood Group X)

Collingwood included these brooches with other fantailed examples like the Aesica brooch in Group X, but they have been classed in this catalogue as knee brooch derivatives because they have some features in common with sub-group 5.1D, i.e. a semi-circular headplate, gently rounded bow, spring-pin, and type (i) catchplate. The fantail foot may be plain or may have an incised line round the sides and base.

As with sub-groups 5.1A and 5.1C there is considerable uniformity of size and form.

The examples from Housesteads (cat no A328) and Vindolanda (cat no 192) provide evidence for a re-assessment of the dating of this sub-group. It was previously thought to belong to the late third or early fourth centuries, on the basis of an example from Richborough, and others from sub-Roman contexts elsewhere (see Henderson *et al* 1949, 118 no 51); but the Housesteads brooch is from an early third century context (Allason-Jones 1988c, 89 no 103; fig 9). The Vindolanda brooch is dated slightly later, from a mid-third century context, but is well worn and may have been repaired. The earliest date known so far is provided by a brooch from Carlisle (cat no 266.9) found in a late second century context (I Caruana, forthcoming).

For classification see Table 3 and also Appendix IIB. For a discussion of origin, see below, at end of 5.4.

5.3 S-profile

The bow is a copper alloy strip in a sinuous curve, with slight notches or steps, front and back, at the point of recurve.

There is also a step at the top, at the junction of the bow and head. There is a spring-pin in a cylindrical cross-piece.

The base of the foot is quadrangular and, as with the knee brooch proper, the type (iii) catchplate goes with the quadrangular foot. One example (cat no A263) has white metal plating.

As with sub-groups 5.1A and 5.1C, there is considerable uniformity in size and form. For classification see Table 3, and also Appendix IIB.

S-profiled brooches have been discussed by D Mackreth (1979b, 145 no 5), but the type is not closely dated. An example from Carlisle (cat no 267.1) is from a third or early fourth century context (I Caruana, forthcoming).

For discussion of origin see below, at end of 5.4.

5.4 Incurved S-profile

There are two examples, from Corbridge (cat no 64) and South Shields (cat no A46), of brooches which seem to be variants of the above. Both have cylindrical crosspieces and hinged pins. The Corbridge example has a semi-circular foot, and as with knee brooches a type (ii) catchplate occurs with this. In the South Shields example, the foot curves upwards to form a complete S-shape, and there is a type (iii) catchplate.

For classification see Table 3, and also Appendix IIB. For discussion of origin see below.

There are also some knee brooches and derivatives from the region which are now missing and for which there are no details, and also some examples too fragmentary to classify.

GROUP	PROFILE	HEAD	FOOT	CATCHPLATE	PIN	TOTAL NO
5.1A	angular	cylindrical	quadrangular	iii	spring	16
5.1B	rounded	cylindrical	semi-circular	i or ii	spring	15
5.1C	angular	semi-circular plate	semi-circular	ii	spring	4
5.1D	rounded	semi-circular plate	semi-circular	i	spring or hinge	13
5.1E	miscellaneous					3
5.2	fantail	semi-circular plate	fantail	i	spring	18
5.3	S-profile	cylindrical	quadrangular	iii	spring	10
5.4	incurved S	cylindrical	semi-circular or incurved	ii or iii	hinge	2
Unclassified and fragmentary						8

Table 3. Knee brooches and derivatives from sites on the Tyne-Solway frontier (see also Appendix IIB).

Origin and distribution of Group 5 brooches.

Most knee brooches, and particularly those with an angular profile, are said to be of German origin, but it has been suggested that 5.3 with its curved outline is more likely to be of British manufacture (Charlton 1934, 195 nos 1, 2). This simple distinction can be modified and amplified on the basis of the north British groupings listed above.

It is true that the angular form 5.1A (see Fig. 3) is common on the Continent, particularly on the German frontier (Böhme 1972, 58-9, Taf 8,9), but only two examples from the Tyne-Solway frontier (cat nos 44, A432) closely resemble those found in Germany. The others lack the incised decoration on the base of the foot, and also differ in that the back of the bow is straight rather than curved.

The Group 5.1B brooches with unfacetted bows (see Fig. 3) are best paralleled in Britain, although the facetted example from Corbridge (cat no 47) is paralleled at Lauriacum (Jobst 1975, Taf 15.101).

The best parallels for 5.1C (see Fig. 3) are also at Lauriacum (*ibid*, Taf 20.145-6, Taf 22-3) and in Pannonia (Kovrig 1937, Taf IX.82).

Knee brooch 5.1D (see Fig. 3) is not closely paralleled on the Continent, nor is derivative 5.2. The latter was formerly considered to be derived from late brooches from Germany and South Russia (Henderson *et al* 1949, 118 no 51), but in view of the earlier dating now proposed (see above), it should perhaps be seen as a third century north British variety.

One unusual 5.1E knee brooch (cat no 56) is paralleled only at the Saalburg (Böhme 1972, Taf 8.415).

Derivative 5.3 is paralleled at several British sites (Mackreth 1979b, 145 no 5), and also at Zugmantel (Böhme 1972, Taf 9.468), and there is a similar example from Lauriacum (Jobst 1975, Taf 19.135).

Derivative 5.4 is unusual, but similar types have been found in Pannonia (Kovrig 1937, Taf XI.112,116) and at Augst (Riha 1979, Taf 22.597), Lauriacum (Jobst 1975, Taf 17.118-9), and Dura-Europos (Toll 1949, 50 no 24; pl XI).

In conclusion, the greater number of knee brooches and derivatives from the German frontier does indicate an origin there, but some sub-groups may be British. Where only a few examples of any variant exist in Britain and on the Continent, it is impossible to say in which direction export was taking place. It is noticeable that many of the brooches from the Stanegate and Hadrian's Wall area are paralleled at Lauriacum.

GROUP 6. FANTAILED

This group is a miscellaneous collection of brooches all with T-shaped head and fantailed foot. Some have headloops, others do not. Three examples with polychrome

enamel (cat nos 162, 163, and 267.2) appear to be related to Collingwood Group Siii, but lack the trumpet head; they belong to a type which is common in the Midlands (D Mackreth, pers comm). No dating evidence can be given, except that enamelled examples probably belong to the second century. (See also Mackreth 1973c, 131 no 1; fig 23a.)

GROUP 7. MISCELLANEOUS

Brooches not easily classified have been included here. This group includes two probably second century hinged bow brooches of a type found in the southwest (cat nos A331, A332), three very unusual brooches not easily paralleled elsewhere (cat nos A50, A221, 67), and one brooch about which few details are known (cat no A330).

GROUP 8. P-SHAPED

Brooches of Group 8 are referred to as P-shaped because of their profile with strongly arched bow and straight leg. Collingwood (1969, 298-9) included not only these but also eye brooches and some other early types in his Group T, but the term 'P-shaped' is generally taken to mean those types (i.e. sub-groups 8.1-8.8 in this catalogue) current in the third and fourth centuries, particularly on the German frontier and in north Britain.

Apart from sub-group 8.3, all P-shaped brooches have cylindrical crosspieces open at the back and with sides pierced for the axis bar, housing a spring or hinged pin. All have a catchplate in the form of a narrow sheath (with the exception of cat no A392). In sub-groups 8.2-8.8 the plain P-shape is supplemented by features such as decorative knobs or division of the bow.

The name 'crossbow' is given to brooches the outline of which is said to resemble that weapon. They were first manufactured in the first half of the third century and lasted through the fourth, during which time there was an increase in size, and the decorative knobs on the crosspiece more elaborate. Authors vary in defining exactly which form is termed a 'crossbow', sometimes reserving the name for the developed type (sub-group 8.8 here) and referring to the lighter types (sub-groups 8.5 and 8.6) as 'proto-crossbows'. In this classification the term is used for sub-groups 8.5-8.8; that is, light early forms (either with one or three knobs), the fully developed late form, and any intermediate examples not easily classified as light or heavy.

8.1 P-shaped, plain (Collingwood Group T)

This group is well represented on the Tyne-Solway frontier. All examples have spring pins.

In sub-group 8.1A the crosspiece has a flat top, ending in a transverse step which is often milled. There is a double step at the top of the bow, one step of which may be milled. The bow is of rectangular or D-shaped section, usually with a

deep groove or countersunk milled rib down the centre. The bow ends at a projecting semi-circular plate; below that, at the junction with the leg, is a curved moulding. The leg widens slightly to a flat base, is usually faceted, and is straight when seen in profile. Occasionally the leg has some milled decoration (cat nos A51, A53). Some examples have white metal plating on the leg, crosspiece and back of the bow, often combined with gilding on the front of the bow (cat nos 268, A194, A333). The type is most commonly found in Germany and also in Pannonia (Böhme 1972, 60; Taf 13.593-9; Kovrig 1937, Taf XVI.170).

Sub-group 8.1B has the same crosspiece, but the bow is 'knife-edged' and lacks the steps at the top. The projecting plate at the base of the bow is roughly triangular. The faceted leg widens for most of its length, then narrows into a smooth leaf-shaped end. There are only two examples, from South Shields (cat no A55) and from Corbridge (cat no 70) and they are similar enough to be products of the same craftsman, or even to have come from the same master mould (see page 6). The type is not paralleled on the Continent.

Other variants have been included in sub-group 8.1C. There are also many fragments which obviously belong to Collingwood Group T, but which are so small that any definitive features such as decorative knobs or divided bows are missing. They have been included here with the plain P-shaped brooches but some could equally well have belonged to sub-groups 8.2-8.6.

There is no new evidence from the Tyne-Solway frontier to amend the date given by Collingwood for plain P-shaped brooches.

8.2 Divided bow, double (Collingwood Group T)

In this type of brooch the bow is divided into two arms. All examples have spring pins. However, as the brooches from the region are very varied it is difficult to classify them into precise sub-groups.

The crosspiece may have a transverse step as in the previous type, or a headcrest with a wavy edge. In one example (cat no 72) the headcrest is decorated with two stamped circles. One brooch (cat no A267) has a small headknob instead of the step or crest. The arms of the bow may be of D- or V-shaped section, or be flat strips with ribbed decoration (cat nos A63, A265, A266). There is only a vestigial moulding at the base of the bow, rather than the large projecting plate seen in sub-group 8.1. With one exception (cat no A61) the leg is like that of sub-group 8.1B, but with a concave profile. An unusual example (cat no A338) has a small footknob, and decoration at the junction of the bow and leg consisting of four bands of moulding in a skeuomorphic representation of wire wrapped round the bow.

These brooches may be gilded, white metal plated, or decorated with a combination of the two, as in sub-group 8.1.

The type is found in Britain and in Germany (Böhme 1972, 60-1, Taf 14.634-6. Taf 15.639-54).

There is an example from Carpow (Birley 1965, 206 no 3; fig 11), a fort with an exclusively Severan occupation beginning in the first decade of the third century, and probably ending ten to fifteen years later, although there is a possibility of later occupation. This provides the earliest dated context in Britain for a brooch with double divided bow.

8.3 Divided bow, triple (Collingwood Group T)

In brooches of this sub-group the bow is divided into three arms. All examples have spring pins. The head consists of a flat triangular plate rising to a decorative knob. The three arms of the bow are flat strips joined at the base by a projecting plate; there is usually a slight moulding below the junction with the leg similar to that seen in sub-group 8.2. There are two varieties.

In variant 8.3A the flat arms of the bow are aligned in the same plane as the headplate and leg; the central arm is narrower than the outer two which are decorated with a countersunk milled central rib; the arms are braced at the centre by a horizontal bar. Only one example is complete (cat no 74), and in that case the leg is undecorated. Brooches may be white metal plated.

Brooches of sub-group 8.3A are found in Germany (Böhme 1972, 62; Taf 16.696-7) and in Dacia (Gudea and Lucăcel 1979, pl XXIV no 32).

Variant 8.3B is a simplified version in which the arms are thin plain strips at right angles to the headplate. There is no bracing bar, and therefore the strips of bow are more easily distorted and broken (see cat nos 204, 75, A64). The headplate and leg are decorated with punched dot and circle motifs. There may also be white metal plating.

Brooches of sub-group 8.3B, with or without the leg decoration, are found in Germany and Dacia (Böhme 1972, 61; Taf 15.667-81, Taf 16.682-95), Pannonia (Kovrig 1937, Taf XVII.179) and at Lauriacum (Jobst 1975, Taf 25.189). (See also examples from Richborough (Hull 1968, 90 no 72; pl XXXII).)

The earliest date for an 8.3B brooch is given by an example found at Carpow (Birley 1965, 206 no 4; fig 11. See also discussion following cat nos 75 and 78).

An unusual example (cat no A392; sub-group 8.3C) has a wavy headcrest, catchplate of conventional rather than sheath type, and white metal plating.

8.4 P-shaped, bow knobs (Collingwood Group T)

Brooches in this sub-group share many of the characteristics of the plain P-shaped. The springcase has a flat top with a transverse step, usually milled; there is a double step at the

top of the bow, which may also have milled decoration, and there is also a projecting semi-circular plate and curved moulding at the base of the bow; the faceted leg has a straight profile (though the foot is more splayed than that of sub-group 8.1). All have spring pins.

However the bow differs from that of the plain P-shaped in being a broad flat strip with a raised milled rib down each side, in the centre of which is a bar carrying four, or sometimes three, decorative knobs. With one exception the bar was separately made and rivetted on to the bow. The knobs are often flattened to become merely small studs. There is usually also a headknob rising from the top of the crosspiece. Only one example (cat no A68) has punched decoration on the leg, and one example is white metal plated (cat no 76).

There is one simplified version of 8.4 (cat no A339) in which the decorative knobs were cast in one with the bow rather than rivetted; it also lacks the headknob.

The earliest date for these brooches is given by an example from Caerleon, dated at cAD 220 (Wheeler and Wheeler 1928, 164 no 17; fig 14.18; see also parallels cited there, in Britain and Germany.).

8.5 Crossbow, light (headknob only) (Collingwood Group T)

This type resembles the plain P-shaped but with the addition of a headknob. The knob may be collared or uncollared, but is always flat at the back. It rises from a square plinth set at the top of the crosspiece. There are two main forms and some unusual variants. The main forms all have spring-pins, but the variants are hinged.

There is one example (cat no A70) which might be classified as belonging to sub-group 8.5A. It bears a close resemblance to brooches of 8.1A in having a straight leg ending in a flat base. However in this example, unlike sub-group 8.1A, the raised central rib of the bow is left plain and there is beaded decoration on either side. The front of the bow is gilded, and the rest of the brooch white metal plated.

Brooches of sub-group 8.5B are the same as those of 8.1B but with the addition of the headknob. A very fine example from Chesters (cat no A270) has decoration of punched dots down the centre of the bow and fine notches down the centre of the leg. The head, bow and leg each have a complex combination of gilding and white metal plating. Other examples have only the white metal.

There are numerous examples of light crossbow brooches from the Continent, especially Germany, and large numbers are also found at Dura-Europos, but 8.5A and B appear to be distinctly British varieties, not closely paralleled on the Continent.

Sub-group 8.5C consists of three brooches from South Shields (cat nos A69, A72, A71) which appear to be Continental examples. Catalogue number A72 is a Dacian

type (Crişan 1979, pl IX nos 1-9). The first two examples have hinged pins.

There is no new evidence from the North to add to Collingwood's dating.

8.6 Crossbow, light (three knobs) (Collingwood Group T)

Brooches of sub-group 8.6 resemble those of 8.5 but have a knob at each end of the crosspiece in addition to the headknob. The knobs may be collared or uncollared in any combination - all three may be the same, or the headknob only may be collared, or the terminal knobs only collared. All have hinged pins. A few are white metal plated, one (cat no A79) combines gilding with white metal.

Brooches of sub-group 8.6A resemble those of 8.5A in having a straight leg ending with a flat base.

Classified as belonging to sub-group 8.6B is one example (cat no 274) in which the leg has a leaf-shaped end, and a further example (cat no A78) of 8.6B which is probably of the same type.

These are apparently British varieties, with few parallels abroad. There is one example from Augst (Riha 1975, Taf 50.1440), and one from Dura-Europos (Toll 1949, 54 no 69; pl XII).

Sub-group 8.6C consists of three unusual examples from South Shields (cat nos A75, A76, A86). The first two are poorly made, with incised decoration on the bow, and with small footknobs. The last example has a triangular projection rather than a headknob, a lower bow decorated in skeuomorphic representation of wrapped wire, a leaf-shaped foot, spring-pin, and the whole brooch is white metal plated. It is paralleled in Dacia (Crişan 1979, pl VIII).

There is no new evidence to add to Collingwood's dating but sub-group 8.6 seems typologically later than 8.1 and 8.5 (see Chapter 1.3 Manufacture).

8.7 Crossbow, intermediate (Collingwood Group T)

This is a collection of rather varied brooches, intermediate between sub-groups 8.5-8.6 and 8.8. Some intermediate crossbows are heavier than examples from sub-groups 8.5-8.6, others are light but elongated. Some have headknob only, and some three knobs, which may be collared or uncollared. Bows may be knife-edged or faceted, and occasionally have incised, stamped or relief decoration (cat nos A88, A89, A414). The leg may be straight or leaf-shaped. Where the pin attachment can be seen, it is always attached to a hinge. Some examples (A346, A87, A414) are as heavy as the brooches of sub-group 8.8, but do not conform to Keller's typology for heavy crossbows, so have been included here. One example is made of silver (cat no 275).

8.8 Crossbow, heavy (Collingwood Group T)

Brooches of sub-group 8.8 (developed late crossbows) are heavy. The average weight of examples from the region is 34.5gm, whereas that of light crossbow brooches is 8.8gm. The heaviest developed crossbow brooch so far examined weighed 68.5gm. All examples have three knobs, the headknob being set forward over the bow rather than over the crosspiece; the knobs are usually collared, except for those of cat no A97. The leg has a straight profile and always has incised, stamped or cut-out decoration. There is a tendency towards increased elaboration, the later examples having onion-shaped knobs, more complex leg decoration, and decoration along the front of the crosspiece, stepped out from the bow. However, in most examples the projecting plate at the base of the bow is vestigial. The bow may be knife-shaped or quadrangular, broad or narrow, but in only a few northern examples (cat nos A273, A198, A312, 210) is there any simple decoration on the bow. The pin is always hinged.

In several northern examples the headknob is separately made and rivetted on (cat nos 173, A273, 84, A376). There are no examples of a type noted at Richborough (Bushe-Fox 1928, 44 no 20; pl XVIII) in which a separately made terminal knob on a threaded pin is inserted through the crosspiece and helps to secure the brooch pin; however there is a fragment from Corbridge (cat no 166.2) consisting of a spherical knob on a rod which is not threaded. There are two brooches (cat nos A273, 84) whose catchplates contain traces of what appears to be the remains of a safety bolt to secure the pin, *cf* an example from Augst (Riha 1979, 174, Abb 30c; see also Hattatt 1985, 191-7).

Occasionally crossbow brooches were made in two halves, joined at the centre of the bow by a mortice and tenon (see cat nos A98, A99, A376, and compare examples from Richborough (Bushe-Fox 1928, 44 no 17; pl XVIII)).

Heavy crossbow brooches made of precious metal are known from other regions, but from the Hadrian's Wall area there is only one example made of base silver (cat no A415) and one copper alloy brooch which is white metal plated (cat no A347). There is however one hollow casting (cat no 87), presumably a brooch deliberately made to be lightweight for use with light materials. Many of the northern brooches (and especially cat no 84) show a characteristic which was noted at Lankhills (Clarke 1979, 260 no 74), namely that the original casting was carefully made, but the final cold working was poorly executed.

Late crossbow brooches are common on the Continent, especially in Pannonia, Noricum, and Germany (southern Bavaria and Rhineland). These have been listed by Keller (1971, 201-19) who has also proposed a typology and chronology (summarised and discussed in Clarke 1979, 257-63; fig 32). Keller's typology is a linear development from group 1 to group 6, each group being further subdivided according to decorative details. However Clarke suggests that groups 5 and 6 may be contemporary, the former being more common in the western provinces than

on the Danube. Many examples have also been found in North Africa; a large number is known from Tamuda, Morocco (Gerharz 1987, 98-100 nos 125-63; Abb 15-9).

At the time of publication of a group of late crossbows from Lankhills cemetery, Winchester (Clarke, *ibid*), few other British groups had been published. However, there is a total of twenty nine late crossbows from the region of Hadrian's Wall and the Stanegate, showing that the type was popular in north Britain as well as in other frontier provinces. The largest number is from South Shields and is now published (Allason-Jones and Milet 1984, 100-6 nos 3.44, 3.45, 3.49, 3.50, 3.57, 3.75, 3.78, 3.85, 3.86; see also M E Snape, forthcoming, for two further examples). Corbridge has produced seven brooches - six unpublished examples are described in this catalogue (cat nos 83-87.1), and an example from Shorden Brae, previously published without illustration (Gillam and Daniels 1961, 56-7) has been illustrated (cat no 173). Details of other examples are given in Appendix III.

The heavy crossbows found on the Tyne-Solway frontier belong to Keller types 1, 3, and 4, with type 4C being the most common.

Clarke (*ibid*, 262) considered that some of the Lankhills brooches are atypical and are therefore more likely to have been made in Britain than on the Continent. Of the northern group, some have parallels on the Continent, particularly at Lauriacum and Augsburg, while others have parallels in Britain, at Lankhills and Richborough. Two northern examples, from Housesteads (cat no A347) and South Shields (cat no A95) respectively, have the same unusual linear decoration on the leg which is unparalleled elsewhere, and may be a north British variation.

Keller's chronology is as follows :-

Type 1	cAD 290-320
Type 2	cAD 310-50
Type 3	cAD 340-60
Type 4	cAD 350-80
Type 5	cAD 370-400
Type 6	cAD 400 or later (but see above)

The small amount of dating evidence which exists for northern examples does not conflict with this. The Keller type 3A brooch from Shorden Brae was found in a late burial; a coin of the 330s was found in the area, although not in close association with the brooch. Two examples from South Shields were obviously residual; one (cat no A95) in which features of types 3 and 4 were combined with features of type 1A was found in the fill of a robber trench which was probably post-Roman; the other (cat no A97) came from the fill of a post-Roman ditch (Bidwell and Speak, forthcoming).

GROUP 9. FRAGMENTARY

All bow brooches too fragmentary for precise identification are included here.

b) Plate Brooches

GROUP 10. SIMPLE ENAMELLED PLATES

Simple enamelled plate brooches are found in Britain and on the Continent (Butcher 1977, 41-69; see also Exner 1939; Henry 1933; Sellye 1939). Sub-groups 10.1-10.12 consist of oval or circular discs with a variety of motifs in champlevé enamel; sub-groups 10.14-10.16 include brooches of other shapes. Umbonate discs, 10.13A and 10.13B, are dated to the late first and early second centuries (Butcher 1977, 52-4). All that can be said of the other plate brooches, sub-groups 10.1-10.12 and 10.14-10.16, is that in the main they belong to the second century; some were made in Britain, some on the Continent, where the industry continued into the third century (*ibid*, 44-5).

In many northern examples the pin attachment has been lost or is corroded. Where details are known most of the simple discs have spring pins, which may be attached to a single pierced plate, to two plates, or within a housing. Details of the pin attachment are listed for the sub-groups described below as D Mackreth (1985, 204) has indicated that some methods are specifically British. It is interesting that some sub-groups show a variety of methods, possibly suggesting a distinction between Continental imports and locally-made examples. Most discs have a central setting which is now empty. One or two examples contain what appears to be the remains of black glass paste; presumably the adhesive used eventually failed to hold the 'gemstone' in position. This is borne out by traces of a brown material, presumably glue, found in the setting of many discs. Alternatively the central decoration itself may have been of a more perishable material.

10.1 Concentric ovals

The oval central setting is surrounded by a single band of enamel, which may be plain or chequered. The spring-pin is attached to a single plate.

10.2 Concentric circles

All examples have two concentric bands of enamel, which may be chequered or plain. All have spring-pins, mostly set between two plates, one (cat no 88) with a shallow housing. One (cat no A351) has a single pierced plate.

10.3 Concentric circle, with lugs

The single example (cat no 92) has eight lugs projecting from the circumference, and has two bands of plain enamel.

10.4 Concentric circles and dots

All examples have two concentric bands of enamelling, the inner band also containing a variable number of bronze dots. Brooches of sub-group 10.4A have a plain outer rim: in 10.4B the inner edge of the rim is scalloped.

In most examples the central setting contains traces of its original filling; one example (cat no 167) also has a hole pierced through the centre, presumably so that a stud or boss could be rivetted as well as glued. The spring-pin is attached between two plates or in a housing.

10.5 Plain enamel, bronze dots

The number of dots may vary. The central setting is small. The pins may be hinged (cat no 94), or sprung between two plates (cat no A352), or on a single plate (cat no 94.1). A fourth example (cat no 94.2) has a slightly domed face and the remains of four projecting lugs.

10.6 Semi-circles

The single example of sub-group 10.6A (cat no 95) is a circular disc decorated with six semi-circles, each one of which has a central bronze dot. There is a trace of glass paste in the central setting; the spring-pin is set between two plates. There are two examples of sub-group 10.6B (cat nos A315, A431). They may have been oval, but are too damaged to say with certainty; they lack the bronze dots, and the spring-pins are attached to single plates.

10.7 Star and dots

The number of points of the star may vary. In the single northern example (cat no 217) the pin attachment is damaged.

10.8 Rings and dots

These large circular discs resemble brooches of sub-group 10.6A, but are decorated with six small circles rather than semi-circles, each having a central dot. The spring is set between two plates, and may also have a housing.

10.9 Six-armed motif

The six 'arms' of the motif have rounded ends, and there is a central bronze boss rather than a setting for a separate gemstone or stud. The interior of the motif is enamelled, and there is enamel of a contrasting colour on the rest of the disc. The pin may be hinged, or sprung from a single plate or within a spring housing.

10.10 Millefiori

Two circular discs (cat nos 98, 99), now missing, were apparently each decorated with a circle composed of inserts of millefiori glass. Other details are unknown.

10.11 Miscellaneous discs

Included in this sub-group are circular discs with a variety of motifs, and one disc with punched dot decoration which gives the appearance of millefiori (cat no A134). Where known, the pin attachment is a spring on either one or two plates.

10.12 Disc, raised enamel centre

All examples are circular, with a raised central circle. Two similar brooches (cat nos A284, A285) have small lugs projecting from the circumference; in each case the centre is decorated with a ring of plain enamel and there is no hollow for a gemstone setting. A fragmentary example (cat no A407) has a circle of chequered enamel around a small central setting. All have hinged pins.

10.13 Umbonate

Brooches of sub-group 10.13A are large saucer-shaped discs. The centre is domed, and has inner and outer areas of enamelled scale patterning. There are small lugs projecting from the circumference, one of which is pierced possibly for a decorative chain (see Chapter 1.5 for method of wearing). The pin is hinged. The type is thought to have originated in the Midlands or South, and is dated to the late first or early second centuries (Butcher 1977, 52-4).

Brooches of sub-group 10.13B are small umbonate discs with projecting lugs. The two bands of decoration consist of triangular cells of enamel, often in alternating colours, usually red and black, or red and blue. The spring-pin is held between two plates. The type is of similar date to sub-group 10.13A and is probably a simplified version of it, with a wider distribution in northern and southern Britain, as well as in the Rhineland (Butcher 1977, 53-4).

10.14 Enamelled oval, raised centre

There is a single example (cat no 103) from the region of an oval brooch with a raised oval centre decorated with plain enamel. This is surrounded by a band of scalloped decoration of green enamel on red. The spring is contained within a housing. There are no known parallels.

10.15 Equal ended

The single example from the North (cat no A286) is a small plate with zig-zag edges, and three transverse bands of milled decoration. There is a circular setting at either end, which may have held enamel or gemstones. The pin is hinged.

Equal ended brooches are a Continental type. The north British example is paralleled at Zugmantel (Böhme 1972, Taf 24.930) and Vindonissa (Ettliger 1973, Taf 14.3).

10.16 Other shapes

The other geometric shapes found in plate brooches from the region are lozenge (cat nos A135, A288, A418), rectangle (cat nos A287, A354), lunula (cat nos 278.1 and A203) and oblong (cat no 104). An example from South Shields (cat no A135) is a particularly fine brooch decorated with millefiori enamel. Others have plain enamel, but some (cat nos A288, A418, A287, A354) may have been decorated with repoussé sheet as well as, or instead of, enamel. Pins may be hinged or sprung, on a single plate, on two plates, or in a housing.

GROUP 11. APPLIED REPOUSSÉ SHEET

11.1 With repoussé sheet

These brooches consist of a circular copper alloy disc to which a repoussé silver sheet is attached by means of lead solder. Frequently the silver is lost or damaged, but an impression of the repoussé sheet is left in the solder. The most common design is a curvilinear triskele, often with a small crescent or other motif between each of the three scrolls. The border is usually beaded. There is a good example from South Shields (cat no A136).

Discs with applied repoussé sheet have a wide distribution in Britain (Allason-Jones and McKay 1985, 25, no 47). They are dated to the second century as in some cases the repoussé pattern is based on Hadrianic coin types (Goodchild 1941, 1-8). There is a probable example of the latter from Corbridge (cat no 107). All but one (cat no A317) in this sample have hinged pins.

11.2 Blank discs

There are many examples of blank discs with hinged pins. These are probably brooches of sub-group 11.1 from which both the silver repoussé sheet and the lead solder have been lost, or which were unfinished.

GROUP 12. DISC, WITH CENTRAL PROJECTION

12.1 Buckler

This type of brooch is said to resemble a buckler, or round shield with a central boss. The standard form, 12.1A, is an unenamelled disc with a raised outer rim from which there are six small projections. The centre rises to a cup-shaped boss which has a central countersunk projection. In most of the examples from the Hadrian's Wall area the pin attachment is missing or damaged, but a hinged pin seems the most likely.

Plain bucklers are found throughout Britain (Hull 1967, 56 no 207) and in Pannonia (Patek 1942, Taf XVI.15).

The enamelled version, sub-group 12.1B, like other enamelled discs, should be dated to the second century, and is found in Britain and on the Continent, especially the Rhineland. For parallels see Allason-Jones and McKay 1985, 25 no 45.

12.2 Disc with separate rivet (wheel type)

There are three examples from the region of an unusual disc brooch found at few other sites in Britain (cat nos 223, A290, A357). The central decoration, which is separately made and rivetted on, resembles the hub of a wheel; humped arms or 'spokes' radiate out from a conical boss which rises to a small flattened knob. There is a raised bronze ring around the central decoration and around the outer rim. Between the two rings is a band of decoration

which varies from one example to another; it may be punched dots or crosses, incised scallops, or raised dots. The face of the disc is gilded and the reverse white metal plated. The spring-pin is attached to a single plate.

The examples from Vindolanda (cat no 223) and Housesteads (cat no A357; Allason-Jones 1988c, 89-90 no 10) have only five 'spokes'. The brooch from Chesters (cat no A290), though poorly made, resembles three other known examples from Caerwent (Barnett 1954), Lakenheath (British Museum no 834-46) and Woodcuts (Pitt-Rivers 1887, 41 no 5; pl X) in having six 'spokes'. (See also Hattatt 1985, 150-2).

The Housesteads example was found in a deposit dated to the mid-fourth century (Allason-Jones 1988c, 89).

12.3 Disc with separate rivet (other)

In this sub-group are included two examples (cat nos 280, 112) with a rivetted-on central stud surrounded by enamel decoration. A brooch from Corbridge (cat no 113) has a central hole which may once have held a rivet; a damaged example from the same site (cat no 113.1) has projecting lugs, and appears to have a central rivet, although it is corroded.

A hinged pin seems the most common type, but cat no 280 has probably been restored (Haverfield 1919, 11-12 no 12).

GROUP 13. UNCLASSIFIED DISCS

In this group are included all discs not easily classifiable, or too fragmentary for identification.

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.1 S-shaped

There is an S-shaped brooch from the region (cat no 118) which has an exact parallel from Yorkshire, and a simpler version from Carlisle (cat no 281). For fuller discussion see 14.2 below.

14.2 Dragonisque

Dragonisque brooches have been classified and discussed by R Feachem (1951, 32-44; see also Bulmer 1938, 146-153, and Feachem 1968, 100-2).

The type is curvilinear and in the form of a stylised animal. The centre of the S widens to represent the body and each end terminates in a head with ear, eye, and snout. One of the heads is obviously intended as the principal one, sometimes being better modelled and often attached to the body with a stay. The pin is strongly humped and similar to that used in penannular brooches, the top being wound around the 'neck' of the dragon and the tip resting on the lower end of the brooch. Most of the unenamelled

examples have decoration in relief (see cat nos 119 and 282.1).

The enamelled brooches have been divided by Feachem into four sub-groups as follows :-

- i) with circular device
- ii) with lozenge motif
- iii) with a panel of squares
- iv) with a single row of squares.

All the above sub-groups are represented on the Tyne-Solway frontier and there are in addition two unusual examples (cat nos 282, A208).

Simple S-shapes (14.1) were recognised by Bulmer (1938, 147) as being outside the general development, and he thought they were early. However they could also have been a parallel development. A well-known example from South Shields (cat no A142) has been classified in this catalogue as a dragonisque rather than a plain S-shaped brooch. It is in the form of a reverse S, as are six other examples (Feachem 1951, 32).

Dragonisque brooches are found throughout Britain, and are traditionally said to have originated in the North. The highest concentrations are found at Settle, Yorkshire, at Corbridge and at Traprain Law (ibid, 34). Isolated examples have been found on the Continent and are presumably exports. The date range is from the mid-first to late second centuries.

14.3 Zoomorphic

Enamelled brooches were made to represent mammals, birds, fish or insects, and may be flat or three dimensional. All the main motifs are found in the region, including horse and rider, stag, hind, dog, and hare (cat nos 126, A230, 127, A319, A425, A395, 124, 125); there is a fragment of a possible fish or sea monster (cat no A146), a hippocamp (cat no 168.1), and two three-dimensional brooches of a cockerel (cat no A145) and a fly (cat no A144). A boar from South Shields (Allason-Jones and Miket 1984, 114 no 3.130) may be a zoomorphic mount rather than a brooch, and has not been included in this catalogue. Examples may have hinged pins or springs.

Zoomorphic brooches are found throughout Britain, on the Rhineland, and in Pannonia. For parallels see Allason-Jones and McKay 1985, 23 no 40; Butcher 1977, 54-6; fig 7, and 1986, 316-9. Miss Butcher notes that Exner dated zoomorphic plate brooches to the second century, but horse and rider brooches from Hockwold, Norfolk, and Lamyatt Beacon, Somerset were found in fourth century deposits. Horse and rider brooches may have been associated with a religious cult, as several are from temple sites. They appear to be a British type, not closely paralleled on the Continent.

14.4 Shield

There is a single example from Corbridge (cat no 128) of a type paralleled exactly at Lydney (Wheeler and Wheeler 1932, 81 no 42; fig 16), and identified by Wheeler as a

representation of a Gallic or Celtic shield. He refers to small model shields used as votive offerings. The brooch is oval and decorated in relief. The Corbridge example is broken and lacks the pin. A brooch from Carlisle (cat no 283.1) resembles a plain rectangular shield.

14.5 Axe

There is an example from South Shields (cat no A147) of an enamelled brooch in the shape of an axe. It has a spring pin set between two plates. The type is paralleled on the Rhineland, and miniature axes are known elsewhere as votive offerings (Allason-Jones and Miket 1984, 114 no 3.129; Green 1981, 253-269). A very poorly made brooch, also from South Shields (cat no 148), appears to be an amateur attempt to model an axe.

14.6 Sandal

There are two examples from the region (cat nos A396, A149) of brooches in the shape of the sole of a sandal or boot. They are decorated with spots of enamel to represent hobnails. One example has a hinged pin, but this may be a modern repair. Each has a loop, or the remains of one, at the heel, presumably for the attachment of a chain. (The axe brooch described above, and some of the zoomorphic brooches share this feature).

Sandal brooches may represent the left or the right foot, and may have a rounded or pointed toe. The type is found in Britain and on the Continent (Allason-Jones and Miket 1984, 112-4 no 3.128; Hull 1967, 58; fig 23.216-23; Riha 1979, 203; Taf 68.1749-56).

14.7 Wheel

These brooches are in the form of a stylised wheel, with an outer rim, a central hub, and either four, six or eight spokes. They may be enamelled (cat nos A423, 129) or plain (cat nos 130, 131, A359, A378). There may be projections on the outer rim (cat nos 129, A378). All have hinged pins.

Wheel brooches are found in Britain and on the Continent (Exner 1936, Taf 16.4). The symbol of the wheel may have had a religious significance (Green 1978, 18; *ibid* 1981, 254-5; see also the wheel brooch parallels cited there).

14.8 Openwork

There are three identical examples from the region (cat nos A209, A419, A150) of an enamelled disc with four pelta-shaped cut-outs (see Allason-Jones 1983, 120 no 190; fig 77). One disc brooch (cat no 132) has three circular cut-outs. All have hinged pins.

A very unusual brooch from Carlisle (cat no 283) has been included in this sub-group. It consists of three finely modelled dolphins, heads joined at the centre, and tails lapping around each other to form a circle or openwork triskele pattern. It has a single plate for a spring pin.

14.9 Trompetenmuster

The trompetenmuster motif is common in second and third century bronzework in Britain and Germany. For a discussion of trompetenmuster mounts see Allason-Jones and Miket 1984, 224 no 3.768.

There is a very fine silver trompetenmuster brooch with a hinged pin from Housesteads (cat no A360), and two copper alloy examples from Corbridge. One is circular (cat no 133) and paralleled at the Saalburg (Böhme 1972, Taf 29.1139), the other (cat no 134) has a lozenge shape not closely paralleled elsewhere.

14.10 Swastika

Swastika brooches are most commonly found on the German frontier (Böhme 1972, Taf 30.1179-83; Taf 31.1184-1208), with some examples from Noricum, Pannonia, Italy, Dura Europos and Britain (*ibid*, 69-70). There are three examples from the Tyne-Solway frontier. One from Carlisle (cat no 284) faces left and has incised decoration, a saltire at the centre, a diagonal line at the angle of each arm, and milling at the ends of the arms. The front is white metal plated, and the pin, now missing, was originally attached to two plates. A second example from Benwell (cat no A223) is smaller and has a single incised line at the end of each arm. The spring-pin is attached to a single plate. A third example from Corbridge (cat no 135) is now missing, and no details are known.

14.11 Pelta (Collingwood Group Z)

This type consists of a pelta-shaped plate with a leg to hold the catchplate. There are two similar examples from South Shields one of which is broken (cat nos A151, A152); one has a hinged pin and one a spring on a single plate. For discussion and parallels see Allason-Jones and Miket 1984, 120 no 3.154. There is also an unusual small brooch and a fragmentary example from Corbridge (cat nos 169, 136).

The type is found in Germany and Britain and is dated to the mid- to late second century.

14.12 Other shapes

An unusual brooch from Carlisle (cat no 281) consists of four spirals of copper alloy wire, resembling a double S, or a sinuous version of a swastika. There are no known parallels.

GROUP 15. GILDED DISC AND GEM

15.1 Oval

Most examples consist of an oval disc with raised rim and raised central setting for an oval conical glass paste gemstone. One example (cat no A153) has a narrow ridge between the setting and the rim. The face is gilded and in many cases shows traces of incised decoration. (In these

respects the brooch resembles those of sub-group 12.2, but all of the oval brooches are too corroded at the back to determine if the reverse was white metal plated). A brooch from Vindolanda (cat no 224) has evidently been repaired in antiquity when the missing gemstone was replaced by small fragments of yellow and black glass paste. In several other cases the gemstone has survived. Where present the pin is a spring attached to a single plate; that of cat no A292 has a spring housing. There are two very large and more elaborately decorated examples (cat nos A320, A379).

Gilded disc and gem brooches are found throughout Britain and are likely be of British origin, although a few examples are found on the Continent. They are found in third and fourth century contexts (Allason-Jones and Milet 1984, 115-6 no 3.136). Their origin and development is discussed by D Mackreth (1986, 65-7, 73) who considers that they 'should be regarded as being essentially third century in date.'

15.2 Circular

These brooches resemble those of 15.1, but are circular, and in two examples (cat nos A361, A294) white metal plating is visible on the back in addition to the gilding on the face. Just over half of the examples are small (the best preserved example being cat no A155); the rest are larger, the largest being approximately 50mm in diameter. The smaller examples are about the same size as brooches of sub-group 12.2 to which they may be related. All examples have a spring-pin attached to a single plate.

The distribution and dating is the same as for sub-group 15.1 (see also Allason-Jones and Milet 1984, 116 no 3.138).

c) Penannular Brooches

These have been classified by Mrs E Fowler, who has discussed their pre-Roman origin and their development (Fowler 1960, 149-77), and also their survival into post Roman times (Fowler 1964, 98-160). More examples are now known from the Tyne-Solway frontier, but there are no major changes to be made to the original classification and chronology. It is suggested that a bowed penannular pin is a north British characteristic, while examples from the south have straight pins (D Mackreth, 1992, unpublished paper to a Roman Finds Group conference, and pers comm). Of the 110 penannulars in this survey, 32 have surviving pins and all but five of these are strongly bowed. Straight pins are found on an example from South Shields (cat no A173) and from turret 50B (cat no A426). Three examples have pins which are only slightly bowed; they include the fine silver penannular from Corbridge (cat no 152), one more example from South Shields (cat no A176) and one from Chesters (cat no A305). It is perhaps doubtful whether any significance can be attached to such a small sample. If however, these examples do indeed represent imports from the south, it may be significant that two come

from a fort on the east coast. Both of these belong to type E and are dated to the third or fourth centuries.

The suggested sub-Roman date for a variant of type D7 raises important implications and work is in progress on this subject.

The brooches discussed in a reappraisal of Fowler type G penannulars (Dickinson 1982) are beyond the scope of this study.

GROUP 16. PENANNULARS

16.1 Fowler A

Variations of type A brooches are said to be common on sites associated with auxiliary soldiers (Fowler 1960, 171).

The following Fowler A sub-groups are present in the region of Hadrian's Wall :-

A1 with uncollared, unmilled terminal knobs, has a wide distribution throughout Britain and a date range of the first century BC to the third century AD (ibid, 174).

A2 with uncollared, milled terminal knobs, also has a wide distribution, but the greatest numbers are from the Hadrian's Wall area and from Traprain Law. The date range is from the first to the fourth centuries AD (ibid, 174).

A3 with collared, unmilled terminal knobs, has been further subdivided. There are examples from the region of types A3i, A3ii and A3iv. The basic date range is from the first to the third centuries AD, but some examples have been found in Anglo-Saxon graves (ibid, 174-5). The distribution is also wide.

A4 with collared, milled terminal knobs, also has a wide distribution and a date range from the first to the third centuries AD (ibid, 175).

There are also a few brooches in this sample which are too worn or corroded for precise classification.

16.2 Fowler B

There is a very fine example of a type B2 penannular from Corbridge (cat no 152). It is silver and has bulbous terminals bent back to form an omega shape. It is well-made, elaborately decorated and exactly paralleled at Newstead (Curle 1911, 326-7; pl XXXVIII.13). For other brooches of the general type, see Charlesworth 1961, 23-4. The type is not closely dated, but may belong to the first century AD (Fowler 1960, 166).

16.3 Fowler C

There is a possible example from Vindolanda (cat no 230) of a penannular with spiral terminals at right angles to the plane of the brooch. The only other examples from Roman military sites are from Richborough. (The example from Great Chesters mentioned by Mrs Fowler (*ibid*, 175) was not found in this survey). Type C is said to be British, found almost entirely on pre-conquest sites (Simpson, Hawkes, and Hull 1979, 329-30); the distribution is mainly eastern, with some brooches in mid, southern, and southwestern England, and one other in Scotland. The earliest examples belong to the first century BC, and some brooches have been found in Anglo-Saxon graves (Fowler 1960, 175).

16.4 Fowler D

Like type A, type D is commonly found on sites associated with auxiliaries.

There are a few examples from the region of the basic type D (with plain folded back terminals), including one unusual example (cat no A309) where the hoop has a segmented appearance formed by pinching the metal. Four of the sub-groups are present, namely D1, D3, D6, and D7.

D1 with terminals grooved or notched to resemble an animal's head, has a southwestern and southeastern distribution, apart from one outlier in Scotland. The date range is from the first to the third centuries AD (*ibid*, 176).

D3 with terminals decorated with a saltire, is a mainly northern type, with a few examples from the southwest and London. The date range is said to be possibly the second to fourth centuries AD (*ibid*, 176).

D6 a miscellaneous group with 'quasi-zoomorphic' terminals, has a mainly southwestern and southern distribution with a few northern examples (*ibid*, 176).

D7 is an uncommon type for which a wide date range from late Roman times into the Dark Ages has been suggested (Fowler 1964, 98-160). However, as Mrs Fowler points out (*ibid*, 113), not all brooches in this sub-group are identical. One particular variant seems associated with sub-Roman occupation of Roman sites (Snape 1992, 158-60). Most examples come from the northern frontier, the largest number from any site being that from South Shields (cat nos A170, A171, A172), others being found on the east coast and the southwest. I am grateful to Dr Grace Simpson for drawing my attention to other examples catalogued by the late M R Hull. Further investigation of these brooches is in progress because of their potential importance

as indicators of sub-Roman occupation on sites where structural evidence of that date is lacking.

16.5 Fowler E

Mrs Fowler's type E is defined as a small brooch with zoomorphic terminals in which all the features of the animal's head are visible; in type E1 the features are not clearly defined (Fowler 1960, 153). However, of the type E brooches found in the region of Hadrian's Wall only cat no A177 from South Shields is really small; the others vary in size and are in fact larger than most other penannulars, two examples (cat nos 231, A175) having a diameter of 39mm. Also the type can be further divided into two sub-groups, E1 and Eii, depending on the style of decoration around the hoop.

Type E1 has an incised rib pattern which is continuous around the bow; type Eii has discontinuous zones of ribbing. An E1 brooch from Birdoswald (cat no A388) was found in a sealed deposit dated to AD 369-83 (Richmond 1931, 132 no 2; fig 4.3D). There are good examples of type Eii from South Shields (cat nos A175, A176), but their contexts are unknown. Other parallels are quoted by Savory (1956, 51-4; pl V), who dated the type to the third and fourth centuries, suggesting that type Eii was later in the series.

16.6 Unclassified

This sub-group consists of three examples from Vindolanda. Cat no 232 is of a type thought to originate in eastern Gaul, and dated to the first century AD, with examples possibly surviving into later times (Galliou 1981, 288-9). Cat no 233 is a small brooch with white metal plating. Cat no 234 is known only from illustration, and the details are not clearly identifiable.

16.7 Fragmentary

Included here are examples too corroded or fragmentary for identification, also several penannular brooch pins.

2.6 Distribution of brooch groups along the Tyne-Solway frontier

The distribution of the sixteen groups is shown on Table 4.

Corbridge is the only site at which all groups are present, covering the full date range from late first to late fourth century. A notable feature is the great number of representational brooches (group 14), including six dragonesque brooches. This is the second largest group of dragonesques after that found in the Settle Caves, Yorkshire, and is equalled only by the group from Traprain Law (Feachem 1951, 34).

SITE	GROUP																TOTAL NO
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Corbridge Red House	2	.	3	2	.	.	.	.	.	.	.	.	.	.	.	.	7
Corbridge	4	6	10	29	27	3	1	23	20	24	10	8	6	21	5	21	218
Vindolanda	1	1	3	11	7	.	.	14	3	5	3	2	.	.	3	8	61
Nether Denton	4	.	1	3	3	.	.	3	1	.	.	.	.	.	.	1	16
Carlisle	8	.	6	13	7	1	.	10	1	5	1	1	1	7	.	12	73
South Shields	7	5	7	24	11	3	1	60	22	16	8	.	.	12	6	27	209
Wallsend	1	.	.	6	6	.	.	5	3	2	3	1	.	2	1	3	33
Newcastle	.	.	1	2	.	.	.	.	.	.	.	.	.	.	.	.	3
Benwell	.	.	.	2	2	.	1	.	1	.	.	.	.	1	1	1	9
Halton Chesters	.	.	.	.	2	.	.	.	1	.	1	.	.	1	.	2	7
Chesters	2	4	2	9	14	.	.	11	6	8	1	1	1	.	3	16	78
Carrowburgh	.	.	.	.	1	.	.	2	.	4	1	1	.	1	1	1	12
Housesteads	.	.	1	4	5	.	3	17	2	5	2	1	1	2	2	7	52
Great Chesters	1	1	.	4	2	.	.	2	.	.	1	.	.	1	1	1	14
Birdoswald	1	.	.	2	.	.	.	2	.	2	.	.	.	.	.	1	8
Stanwix	.	.	1	2	.	.	.	1	1	.	.	.	.	3	.	3	11
milecastles	1	2	2	3	2	.	.	2	2	2	1	1	.	.	.	1	19
turrets	.	1	.	2	1	.	.	.	.	1	.	.	.	3	.	4	12
'Hadrian's Wall'	.	.	.	1	.	.	.	.	.	1	.	.	.	.	.	1	3
Total No	32	20	37	119	90	7	6	152	63	75	32	16	9	54	23	110	845
					526							209				110	
					Bow							Plate				Penannular	

Table 4. Numbers of each brooch group from sites on the Tyne-Solway frontier

Also found at Corbridge are large numbers of knee brooches (group 5), P-shaped brooches (group 8), trumpets (group 4), and headstuds (group 3), enamelled discs (group 10), and penannulars (group 16).

The P-shaped brooches from Corbridge include seven late crossbows (sub-group 8.8), and this is the second largest collection of late crossbows from the region, exceeded only by that from South Shields with eleven examples. Most come from old excavations and are of unknown context, but late crossbows are often found in burials, as was the example from Shorden Brae, Corbridge (cat no 173). It is possible therefore that some others among the above examples come from early digging in cemetery areas outside South Shields and Corbridge.

Also the fact that South Shields lies on the coast suggests that the large number of P-shaped brooches in general is the result of seaborne links with the Continent from the third century - whether the brooches came in by direct trade, or whether they were locally produced as a result of Germanic influence. It is perhaps relevant that the percentage of P-shaped brooches and crossbows is also high at Housesteads, where German units are known to have been stationed in the third century. However, knee brooches, also known to be popular in Germany, do not show the same distribution. The percentage of knee brooches at South Shields is only half that found at other sites.

The only major brooch type not found at South Shields is the buckler or disc with central projection (group 13). Trumpet brooches and penannulars were also found in large numbers.

First century brooches (group 1) from South Shields and other sites are discussed in Chapter 4.

Chesters and Vindolanda have also produced almost the complete range of brooches, the significant omission from both sites being the representational brooch (group 14). There is an unusually high percentage of penannulars from Chesters: this is shown more clearly on Table 5.

Carlisle has produced a high percentage of first century brooches, and also headstuds and trumpets. Many examples have decorative chains attached to them or wear on the headloop suggesting a chain; this may be indicative of civilian use.

Brooches from milecastles and turrets are mainly of second century date. There is a report of a knee brooch, type unspecified, from turret 48A (cat no A424), but this example need not be later than mid-second century. Poltross Burn (milecastle 48) is the only exception, with two crossbows of the third century or later (cat nos A414, A415) and one first century Polden Hill (cat no A410). However the latter is of doubtful context (see Chapter 4).

The sample size from other sites is so small that no firm conclusions should be drawn. However there are possible explanations for the anomalous figures from Carrawburgh and Nether Denton, best seen on Table 5. All but two of the

brooches from Carrawburgh were found in Coventina's Well (see Allason-Jones and McKay 1985), and it would appear that plate brooches were more commonly selected than other types for this votive deposit (cat nos A313-20). It is suggested elsewhere (Snape in Bidwell and Speak, forthcoming) that a circular shape was a significant factor in the selection of these objects for ritual deposition. At Nether Denton it is the proportion of bow brooches which is distorted. This is because of the presence of examples which are uncommon in Britain. The three early brooches (cat nos 236-8) are of types more usually found along the Rhine and Danube, and the unusual headstud (cat no 239) may be Continental rather than British, since it lacks a headloop. Apart from the bow brooches there is a fragment of penannular (cat no 250) which has no close parallels. The crossbows at Nether Denton are indicative of some form of activity on the site in the third century.

Table 5 shows the relative proportions of the three main forms of bow, plate, and penannular, although it is only useful to consider those sites with a large number of brooches, i.e. South Shields, Corbridge, Chesters, Vindolanda, Housesteads, Carlisle, and Wallsend.

The brooches from Vindolanda and Housesteads conform quite well with the average percentages for the North. At Chesters the percentage of plate brooches is low, and that of penannulars is amongst the highest for any site. The figures from Carlisle are similar. South Shields and Corbridge, with the largest groups, show the greatest deviation from the average. The percentage of plate brooches from Corbridge is far higher than average, at the expense of both of the other forms. This is a reflection of the large number of dragonesque brooches, as mentioned above. South Shields has produced proportionately far more bow brooches than plates, reflecting the large numbers of P-shaped brooches and crossbows.

SITE	FORM (% of Total)			Total
	Bow	Plate	Penannular	
Corbridge Red House	100.0			7
Corbridge	56.4	33.9	9.6	218
Vindolanda	65.6	21.3	13.1	61
Nether Denton	93.8		6.2	16
Carlisle	63.0	20.5	16.4	73
South Shields	67.0	20.0	12.9	209
Wallsend	63.6	27.3	9.1	33
Newcastle	100.0			3
Benwell	66.7	22.2	11.1	9
Halton Chesters	42.8	28.6	28.6	7
Chesters	61.5	17.9	20.5	78
Carrawburgh	25.0	66.7	8.3	12
Housesteads	61.5	25.0	13.7	52
Great Chesters	71.4	21.4	7.2	14
Birdoswald	62.5	25.0	12.5	8
Stanwix	45.4	27.3	27.3	11
milecastles	73.7	21.0	5.3	19
turrets	33.3	33.3	33.3	12
'Hadrian's Wall'	33.3	33.3	33.3	3
average for northern frontier	62.2	24.7	13	
average for southern Britain (Hattatt)	76.8	16.5	6.75	

(percentages do not total 100 because of rounding up)

Table 5. Percentages of bow, plate and penannular forms at sites on the Tyne-Solway frontier.

CHAPTER 3. CATALOGUE OF BROOCHES FROM STANEGATE SITES

Abbreviations

CAU	Carlisle Archaeological Unit
CM	Corbridge Museum
MA	Museum of Antiquities, Newcastle upon Tyne
THM	Tullie House Museum, Carlisle
L(d)	length of damaged or distorted brooch
L(s)	surviving length of broken brooch
Wt	weight

Most brooches in the collection at Corbridge Museum originally had accession numbers with the prefix 75; at the time of this study (1990) the programme of assigning a registration number to every object in the collection had not been completed.

3.1 CORBRIDGE RED HOUSE

a) Bow Brooches

GROUP 1. FIRST CENTURY

1.11 Other early bow brooches

The following two examples have many of the characteristics of headstud brooches, but the mixture of other features has made them difficult to parallel and date (Allason-Jones 1979, 61-2). However, one parallel is now known from Carlisle (cat no 254) and all three have affinities with Colchester derivatives (Cracknell and Padley, forthcoming). It is therefore suggested that these brooches may represent a transition between the 'true' Colchester derivative and the headstud, and should be dated to the late first century (P Cracknell, pers comm).

1. Not numbered CM; L(d) 64mm; Wt 21gm

Allason-Jones 1979, 61-2; fig 21.1

2. Not numbered CM; L 58mm; Wt 18.5gm

ibid, 61-2; fig 21.2

several links of chain were found in association with this pair of brooches.

GROUP 3. HEADSTUD AND DERIVATIVES

3.1 Headstud (Collingwood Group Q)

Sub-group 3.1 Ci

3. Acc no MA, 1961.19.10 MA; L 62mm; Wt 19gm

Illustrated - Fig. 4

Daniels 1959, 156 no 10

the spring broken in antiquity and repaired.

4. Acc no MA, 1961.19.10 MA; L 60mm; Wt 21gm

Illustrated - Fig. 4

ibid, 156 no 11

spring broken in antiquity and repaired; catchplate pierced.

Sub-group 3.1 Ciii

5. Acc no MA, 1961.19.10 MA; L 65mm; Wt 20gm

Illustrated - Fig. 4

ibid, 156 no 9

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet (Collingwood Group R)

Sub-group Rii

6. Acc no MA, 1961.19.10 MA; L 42mm; Wt 12.5gm

Illustrated - Fig. 4

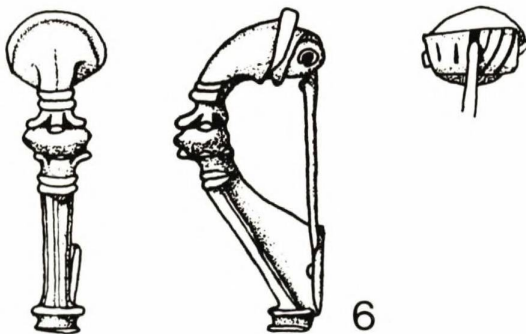
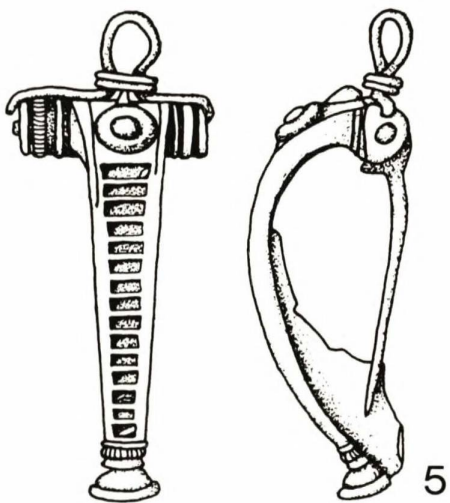
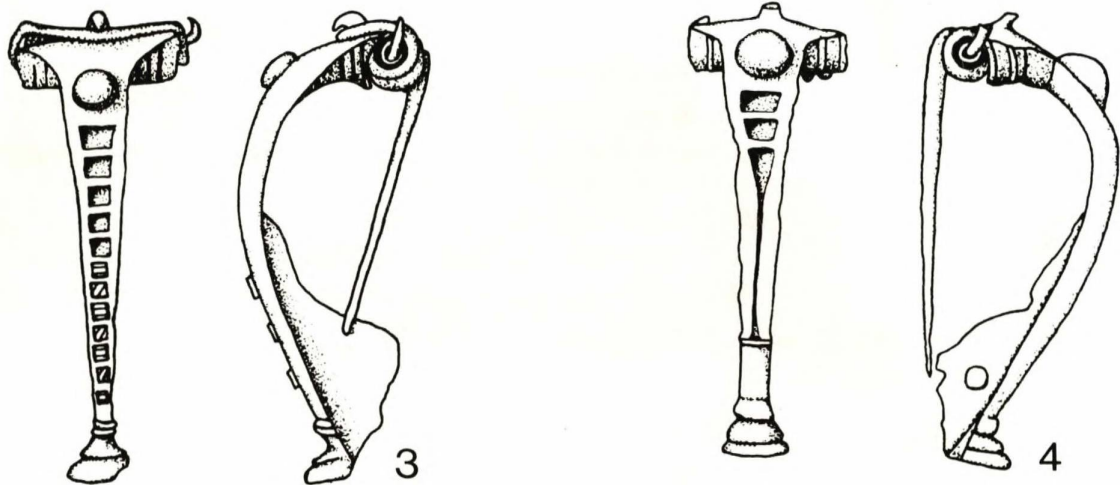
ibid, 157 no 13

catchplate pierced.

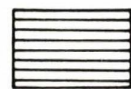
Sub-group Riii

7. Not numbered missing; L(s) c38mm; Wt -

ibid, 156 no 12



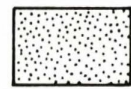
Enamel



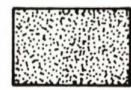
light blue



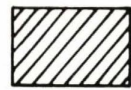
dark blue



yellow



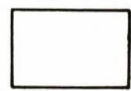
orange



red



green



white/cream



black



Figure 4. Brooches from Corbridge Red House.

3.2 CORBRIDGE

The reports of the excavations of 1906-13 give only approximate totals of the brooches found; some are mentioned briefly, in some cases the description is hard to follow, and some are omitted altogether. However, where examples are fully described and illustrated, comparison with surviving brooches shows the original illustrations to be accurate. Many brooches now in Corbridge Museum can be positively identified as finds from the early excavations, and others tentatively so. Some examples described by Professor Haverfield in the reports by Forster and Knowles did not survive to be included in an unpublished catalogue made in 1975. A few brooches listed in the 1975 catalogue were lost a theft in in 1978. All of these missing brooches have been included in the catalogue below.

A small group in the Museum of Antiquities, Newcastle upon Tyne, in a box labelled 'Corbridge 215P, XIE, Box 7' are assumed to come from the 1906-13 excavations, as several resemble brooches mentioned by Haverfield.

Three examples in the 1975 catalogue are wrongly identified as brooches :-

- Acc no 75.366 - trompetenmuster mount
Acc nos 75.483, 75.484 - studs shown by Haverfield
(1909b, 406; figs 23, 24)

Also one example (acc no 75.296) cited by Haverfield (1911, 181; pl IV no 6) is not a brooch but a decorative mount or stud.

Unpublished brooches and those published only in the early reports have been fully described in the catalogue below. Those which have been discussed in more recent reports are mentioned briefly and references given. Brooches from the 1960s excavations (Allason-Jones 1988a) are listed separately.

Most of the examples included here are of unknown context, but where locations are known they are given in full. All are of copper alloy except cat nos 43 and 152, which are silver, and cat no 153.1, which is iron.

a) Bow brooches

GROUP 1. FIRST CENTURY

1.11 Other early bow brooches

8. Acc no 75.302 CM; L(d) 46mm; Wt 14gm

Illustrated - Fig. 5

head rolled over to form cylindrical casing for hinged pin; square section iron axis, trace of headloop wire (? or repair), pin missing; front of head has three longitudinal grooves each side with cabled silver wire inset; bow

humped, central groove (? for inset); scale pattern in relief either side; foot missing; catchplate turnover missing.

The arm decoration is paralleled on a brooch from Camerton (Wedlake 1958, 218 no 5; fig 50), but that brooch had a spring rather than a hinged pin. A southeastern type dated to the second half of the first century (D Mackreth, pers comm).

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

2.2 Dolphin (Collingwood Group H)

9. Acc no 75.299 CM; L 56mm; Wt 12gm

Illustrated - Fig. 5

semi-cylindrical springcase, ends pierced; rearward hook complete; axis, pin and spring missing; bow humped, with sidewings; central countersunk milled rib, ending with pair of raised lentoids halfway down bow; footknob with flat base, single moulding above, catchplate complete, squared edge to turnover.

Parallels:-

Shakenoak (Mackreth 1971, 118-9 no 70; fig 47)

Cirencester (Mackreth 1986, 104 no 1; fig 77).

10. Acc no 75.300 CM; L 33mm; Wt 5.5gm

Illustrated - Fig. 5

head as above, spring corroded, pin missing, rearward hook broken; bow corroded, central spine with diagonal notched or lentoid decoration either side; footknob with flat base, semi-circular section; trace of catchplate.

Parallels:-

Example of uncertain provenance (Collingwood and Richmond 1969, fig 102 no 16)

Jewry Wall, Leicester (Kenyon 1948, 249 no 8; fig 80)

Old Winteringham (Stead 1976, 198 no 6; fig 100).

The last two examples have hinged pins.

Dated cAD 75-125 onwards (D Mackreth, pers comm).

10.1. Acc no 75.1881 CM; L 87mm; Wt 38gm

Illustrated - Fig. 5

a large, well-made brooch; semi-cylindrical springcase, open at back, ends closed by plates wider than casing and pierced for axis (slight damage to one end); rearward facing hook; axis, spring, pin missing; bow strongly arched with very narrow sidewings; decoration extending full length of bow, consisting of central narrow double rib with a row of cast raised dots either side; narrow raised rim at edges of bow; solid, bell-shaped foot with two incised lines around lower edge, and single collar above; small countersunk boss in base; catchplate extending full length of bow, turnover damaged.

There is an almost identical brooch from Cirencester (Mackreth 1986, 104 no 2; fig 77). The two are so similar that they are likely to have been cast in the same mould. In the Corbridge example the arms of the springcase are slightly shorter, the raised dots are less well defined, and there is no sign that the catchplate was separately made as in the Cirencester brooch; however these differences can be accounted for by damage and by differences in finishing-off after casting. It is suggested that the Cirencester brooch was a hollow casting, or had a clay core. It is interesting that the distribution is otherwise very restricted, 'from Cirencester and up the Severn Valley' (ibid).

10.2. Acc no 75.3936 CM; L(s) 40mm; Wt 22.5gm

very corroded fragment of a large brooch; head and upper half of bow only; semi-cylindrical springcase, open at back, ends pierced for axis; rearward facing hook; axis, spring, pin missing; remains of bow corroded.

2.4. 'Severn'

10.3. Acc no 75.2406 CM; L 68mm; Wt 24gm

Illustrated - Fig. 5

unfinished brooch, probably a flawed casting; headloop missing; U-shaped headplate has decorative rectangular panel at top, poorly cast, surface irregular; back of head corroded, details obscure, but there appears to be an open-ended cylindrical housing for a hinged pin; pin missing, but possible

fragment of iron axis in position; upper bow has decorative panel down it, probably intended for three strips of enamel, but no trace present; below panel is a circular boss, cast-in-one, with an incised V below; surface of casting very rough at one edge of panel and reverse side of bow; leg V-sectioned, concave profile, damaged by small pits, presumably casting flaws; cylindrical foot with four mouldings, central two milled; catchplate unfinished, not hammered out to produce turnover.

This brooch is part of a small northern group the examples of which resemble each other so closely that they may be products of the same workshop; they have been found at Vindolanda (cat no 175) and Chesters (cat no A238), as well as Brough-under Stainmore, Ravenglass, Wilderspool, Traprain Law, and in the Peebles area (Snape 1987, 309-12).

It is interesting that the Corbridge brooch is a flawed casting, hinting at manufacture there. Another brooch, much simpler than the Corbridge example though still of the same general type, is also an unfinished casting: it is unprovenanced, but thought to come from the region of Hadrian's Wall (ibid, Fig 1a).

GROUP 3. HEADSTUD AND DERIVATIVES

3.1 Headstud (Collingwood Group Q)

Sub-group 3.1 Bi

11. Acc no 75.325 CM; L 65mm; Wt 42.5gm

Illustrated - Fig. 5

semi-cylindrical springcase, spring of twelve turns; external chord through pierced plate; pin missing; remains of cast headloop on rectangular plate; no retaining strip, cast crest only; large oval setting for separately rivetted stud (missing); arms with relief decoration of leaf and tendril, circular depression either side (empty); head-plate decorated with inlaid silver wire; bow with flat central strip, relief decoration of leaf and tendril either side, very corroded; foot with cup shaped setting for separately rivetted stud (missing); catchplate extends full length of bow, very thick, turnover damaged.

The closest parallel is from Chesters (cat no A239).

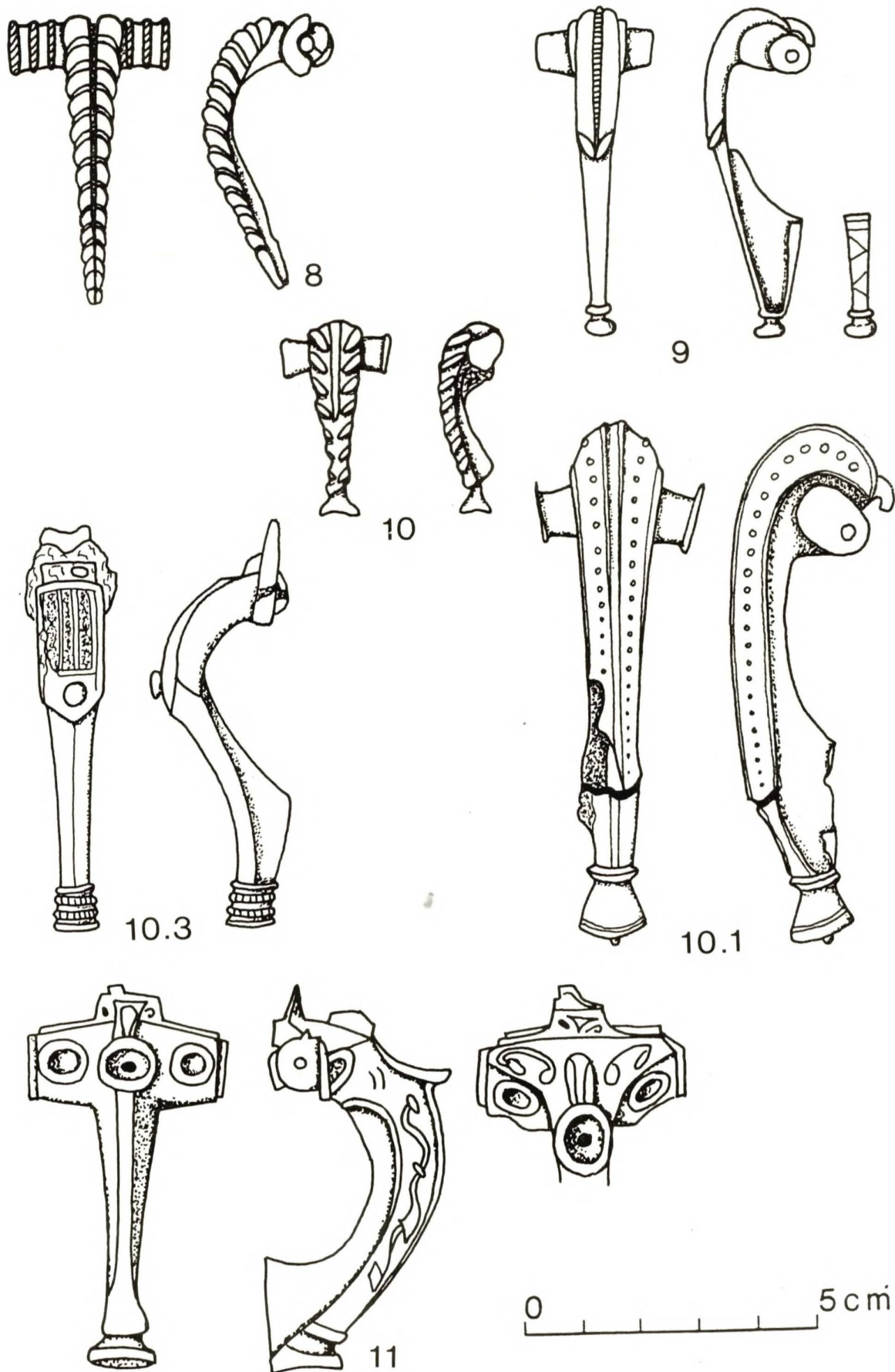


Figure 5. Brooches from Corbridge.

Sub-group 3.1 Biii

12. Acc no 75.330 CM; L 45mm; Wt 11gm

Illustrated - Fig. 6

casing for hinged pin, only head of pin remaining; bronze axis; no headloop (not clear if originally present); crest and setting as above; arms enamelled (trace of blue), ? two opposed crescents; bow damaged; ? central spine; foot as above, with double moulding; trace of catchplate.

Paralleled at Traprain Law (A O Curle 1915, 169; fig 24.3).

Sub-group 3.1 Ci

13. Acc no 75.329 CM; L(d) 53mm; Wt 15.5gm

Haverfield 1911, 182; fig 13

broken since original illustration, spring and chord missing, one arm broken; stud with ring of enamel (damaged); 5 cells of enamel, red present in upper and lower, red enamel spot below; foot has countersunk boss.

Parallels:-

Corbridge Red House (cat no 4) in a context later than the demolition of cAD 98. Another example from the same site (cat no 3) is similar but has enamel cells the whole length of the bow, and predates the demolition.

Sub-group 3.1 Cii

14. Acc no 75.334 CM; L 68mm; Wt 30.5gm

MacGregor 1976, fig 5.4

hinged pin complete; casing cast as skeuomorphic spring of 14 turns; separate headloop, cast crest; headloop collar has ridged edges, cream enamel in centre; sides of head enamelled, opposed pairs of semi-circles with dot inside, enamel cream, traces of red; headstud cast-in-one, oval, outer ring of red enamel, inner cream; bow plain, slightly raised spine, hollow at back, tapering; foot has hemi-spherical knob, double moulding above (? milled); catchplate complete.

Parallels:-

Chesters (cat no A240)

Monyash, Derbyshire (Painter and Sax 1970, 160 no 7; fig 2).

Sub-group 3.1 Di

15. Acc no 75.331 CM; L(s) 40mm; Wt 7gm

Haverfield 1911, 182; fig 12

damaged since original illustration; hinged pin (moves loosely), tip broken; fixed headloop (missing); arms damaged; stud cast-in-one, enamelled, colour uncertain; bow of flat section, lozenges enamelled yellow; foot damaged; catchplate complete.

16. Not numbered missing; L -; Wt -

Haverfield 1911, 182

as above but with blue enamel.

Parallels:-

Nor'nour (Hull 1967, 40-1 nos 103-6; fig 17)

Camelon (Anderson 1901, 406-7 no 5; pl A)

Wroxeter (Bushe-Fox 1916, 24 no 10; pl XVI)

Faversham, unprovenanced, and Brough (Painter and Sax 1970, 167-8 nos 18-20; fig 4)

Harlow (France and Gobel 1985, 79 no 72; fig 41)

Shrine of Apollo, Nettleton, Wilts (Wedlake 1982, 128 no 60; fig 53)

Rhineland (Exner 1939, Taf 6.2)

An example has been found at Thamusida, Morocco (Gerharz 1987, 94 no 78; Abb 14).

For dating of headstuds see Chapter 2.5.2 (Group 3).

Sub-group 3.1E

17. Acc no 75.328 missing; L 65mm; Wt -

spring and chord visible; pin, foot and catchplate missing; bow plain; other details not visible.

18. Acc no 75.341 missing; L 59mm; Wt -

?headstud, pin missing.

3.3 Headstud derivative

19. Not numbered MA; L 62mm; Wt 13gm

Context 'Corbridge 215P, XIE, Box 7'

Illustrated - Fig. 6

casing (ends damaged) for hinged pin (missing); bronze axis; transverse step across head; bow corroded, flat section, tapering; ridge running from top of head meets circular hole (? for separate stud); foot damaged, small projection in flat base; catchplate corroded, turnover missing.

The following brooch was in conservation, but details were recorded by the author.

19.1. Acc no 75.3400 L 42mm; Wt -

Illustrated - Fig. 6

enamelled brooch; T-shaped head; cylindrical housing for hinged pin, head of which is in position; axis wire curves upwards, secured by rectangular plate on top of head, but broken before the point where it would have formed headloop; small longitudinal crest at the top of bow; waist decoration of a button with stylised acanthus above and below, not continuous round the back of the bow; cylindrical foot with triple moulding; catchplate with trace of turnover; enamel decoration as follows:- each arm has 3 triangles, central yellow, outer ones possibly originally red; rectangular collar also with 3 triangles, central turquoise, outer ?red; upper bow has 5 blue lozenges, outer triangular cells ?originally red; lower bow has 4 lozenges, 1st and 3rd yellow, 2nd blue, 4th ?blue, outer triangles ?originally red.

Parallels and dating :-

This unusual brooch combines the decorative crest and enamelled lozenges of many headstud brooches with the waist decoration of an Riv trumpet brooch. It has been included here with headstud derivatives, but a very similar example from Carlisle, cat no 258, has been classed

elsewhere as a trumpet/T-shape hybrid (Padley, 1991, 106 no 11: fig 64). The Carlisle example came from a context dated AD 105.

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet (Collingwood Group R)

Sub-group Ri

20. (a) brooch

Acc no 75.356 missing; L c80mm; Wt -

Haverfield 1911, 181; fig 11

unusual brooch; original illustration shows back of head corroded, spring and pin missing; headloop the collar of which has decorative rosette; waist decoration continuous around bow, central button decorated in relief with lentoid pattern, narrow moulding above and below; above and below that is a double moulding, inner band milled; leg with straight profile, grooves at sides; foot is flattened knob, double moulding above; catchplate not extending full length of leg, turnover damaged.

(b) rosette headloop

Acc no 75.332 CM; diam 14mm; Wt -

rosette has countersunk central cone, surrounded by 12 petals; horizontal plate at back, cast-in-one with rosette, headloop passing through 2 holes; third hole for rivet holding plate to head.

Boon and Savory (1975, 49-61) discuss a brooch from Carmarthen with a rosette headloop attached in the same way. The Carmarthen brooch, a type Rii, was dated by them to AD 25-50. They considered the Ri to be a development of the Rii. Rosette headloops are unusual; Boon and Savory suggest that the acanthus moulding at the waist of trumpet brooches developed from the rosette.

21. Acc no 75.370 missing; L 59mm; Wt -

'stumpy' profile; headloop and pin attachment missing; Ri decoration, central button grooved around edge, single moulding above, double below; leg and catchplate as above; foot has

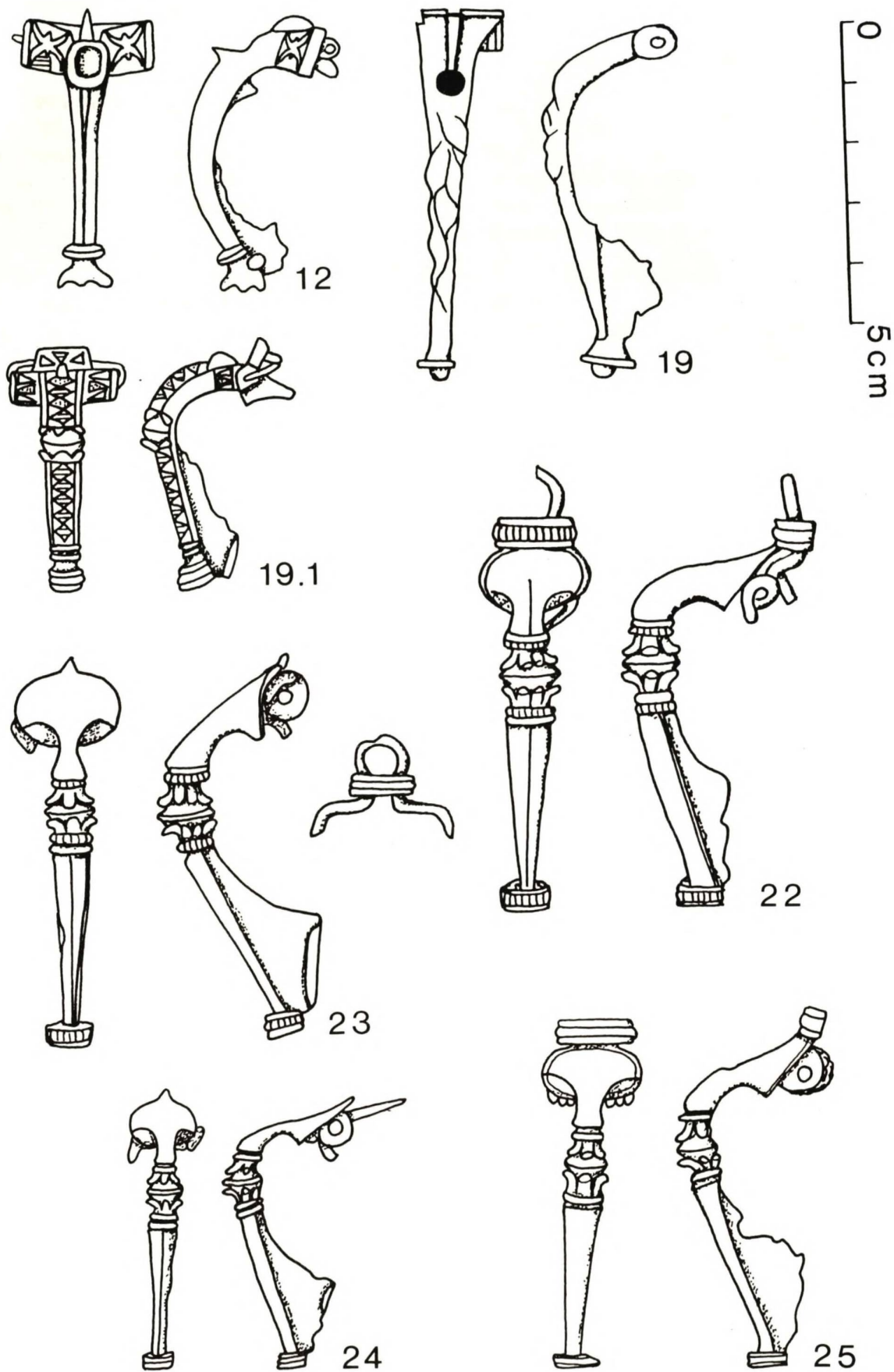


Figure 6. Brooches from Corbridge.

double moulding and small projection from base.

27. Acc no 75,344 missing; L 60mm; Wt -

headloop and pin missing; spring present; waist decoration with double mouldings.

Sub-group Rii

22. Acc no 75,338 CM; L 72mm; Wt 20gm

Illustrated - Fig. 6

headloop broken; collar has triple moulding, central band milled; spring of 6 turns; pin missing; Rii decoration, single moulding above (milled), double below (inner milled); leg V-sectioned, side grooves; leg profile slightly convex; foot cylindrical, moulding as collar, trace of 'runner' in base; catchplate turnover missing.

27.1. Acc no 75,400,41 missing; L(s) 55mm; Wt -

head missing; Rii decoration, double mouldings above and below, inner bands milled; leg with side-grooves, one edge damaged; cylindrical foot, triple moulding, central band milled, small boss or 'runner' in base; catchplate turnover damaged.

The following three brooches are similar and poorly made:-

All the following have rather 'stumpy' profiles and Rii decoration which is much flatter at the back than the front. The flange around the head is particularly strongly marked.

23. Acc no 75,343 CM; L(d) 63mm; Wt 15.5gm

Illustrated - Fig. 6

headloop, collar and chord missing; Rii, milled mouldings as above; leg V-sectioned, no side grooves, damaged; runner on foot; catchplate complete.

28. Not numbered MA; L 59mm; Wt 28gm

Context 'Corbridge 215P, XIE, Box 7'

Illustrated - Fig. 7

heavy style; headloop, collar, and pin missing; spring of 6 turns; upper bow of roughly quadrangular section; waist decoration with double mouldings; leg of sharp V-section; foot with triple moulding, small hole in base.

(The separate collar and headloop now catalogued with 75.332 would fit this brooch, and are shown on Fig. 6.)

The Rii trumpet brooch has wide distribution, the 'graceful' profile said to be common in north Britain, the 'stumpy' profile in Wales (Collingwood and Richmond 1969, 297).

24. Acc no 75,355 CM; L(d) 45mm; Wt 7gm

Illustrated - Fig. 6

as above; Rii decoration continuous but flatter at back; foot mouldings unmilled.

For good parallels see:-

Newstead (Curle 1911, 323; pl LXXXVI.15)

Traprain Law (Burley 1956, 155 nos 2,3,4,5,6)

Watercrock (Olivier 1979, 209 nos 8-10; fig 84)

Saalburg; Mainz (Collingwood 1930, 50-1; fig 7).

25. Acc no 75,354 CM; L(d) 57mm; Wt 12gm

Illustrated - Fig. 6

as above; headloop missing, collar in position, spring corroded; leg of shallow D-section; foot very flat, no mouldings.

The following three brooches have hinged pins:-

29. Acc no 75,346 CM; L(d) 62mm; Wt 30gm

Illustrated - Fig. 7

as above, apart from hinged pin; headloop missing; back of head flat, cast-in-one cylindrical housing, axis and head of pin in position; leg of convex profile; foot has double

26. Acc no 75,357 missing; L 57mm; Wt -

as no 22 but pin present; good condition except for missing foot and damaged catchplate turnover; waist decoration has single mouldings.

moulding, trace of 'runner'; catchplate turnover damaged.

turns, pin complete; worn Riv with single mouldings; leg narrow, distorted, not clear if leg ever enamelled; trace of 'runner' in base of foot, catchplate turnover damaged; decoration exactly paralleled in an example from Newcastle (MA 1978.23) and one from Hockwold (see below) including colours of enamel; however, very badly modelled, apparently a poor copy.

30. Acc no 75.353 CM; L 69mm; Wt 22.5gm

Illustrated - Fig. 7

complete, undamaged, well-made with sharply defined detail, lighter in style than previous example; head wide and shallow, collar with triple moulding, centre milled; casing for hinged pin; waist decoration with double mouldings, lower bands milled; leg V-sectioned, straight, with side grooves; foot decorated as collar; the pin moves loosely as the hole is large, however it is unlikely to be caused by wear as the rest of the brooch is unworn.

Exactly paralleled at Hockwold (Butcher 1977, 60 no 25; fig 9).

33. Acc no MA 1982.30 MA; L 63mm; Wt 22gm

Stray find

Illustrated - Fig. 7

complete, similar to the above, but enamelled motif different and leg has a slight recurve; foot may have had acanthus, but is damaged; depression in base of foot; decoration - collar has three triangles, no enamel visible; head has central spine with 3 pairs opposed semi-circles of yellow/orange enamel; leg has chevrons, no enamel visible.

31. Not numbered MA; L(d) 44mm; Wt 16gm

Context 'Corbridge 215P, XIE, Box 7'

Illustrated - Fig. 7

similar to the above, top of head damaged, headloop missing, axis and pin in position, tip broken; upper bow of quadrangular section; fragment of leg and catchplate.

34. Acc no 75.345 CM; L(d) 40mm; Wt 6.5gm

Illustrated - Fig. 8

unenamelled; pin, headloop and collar missing; spring of 6 turns; waist decoration has double mouldings; leg distorted, V-sectioned, side grooves; foot cylindrical, triple mouldings; catchplate turnover missing.

Parallels:-

South Shields (Allason-Jones 1983, 117 no 137; fig 75)

Wallsend (L Allason-Jones, forthcoming b)

Traprain Law (Cree 1924, 260; fig 16.1)

Rudston (Stead 1980, 95 no 8; fig 60) - a repaired example found in 2nd century layers.

Parallels:-

Watercrook (Olivier 1979, 208-9 nos 6,7; fig 84)

Traprain Law (Cree and Curle 1922, 233; fig 28.1)

Mainz (Collingwood 1930, 50-1; fig 7)

Birdoswald (cat no A382)

Housesteads (cat no A325).

Sub-group Riv

In the first three examples the back of the brooch is not completely flat; the slight contours corresponding to the central button suggest a poor attempt at moulding an Rii type. However, since the mouldings and acanthus are distinct only at the front, these brooches have been classed as Riv.

32. Acc no 75.358 CM; L 69mm; Wt 24.5gm

Illustrated - Fig. 7

enamelled trumpet, complete but a poor casting; headloop, spring of 6

35. Acc no 75.352 CM; L 60mm; Wt 12gm

Illustrated - Fig. 8

unenamelled; well made and in good condition; fixed headloop on

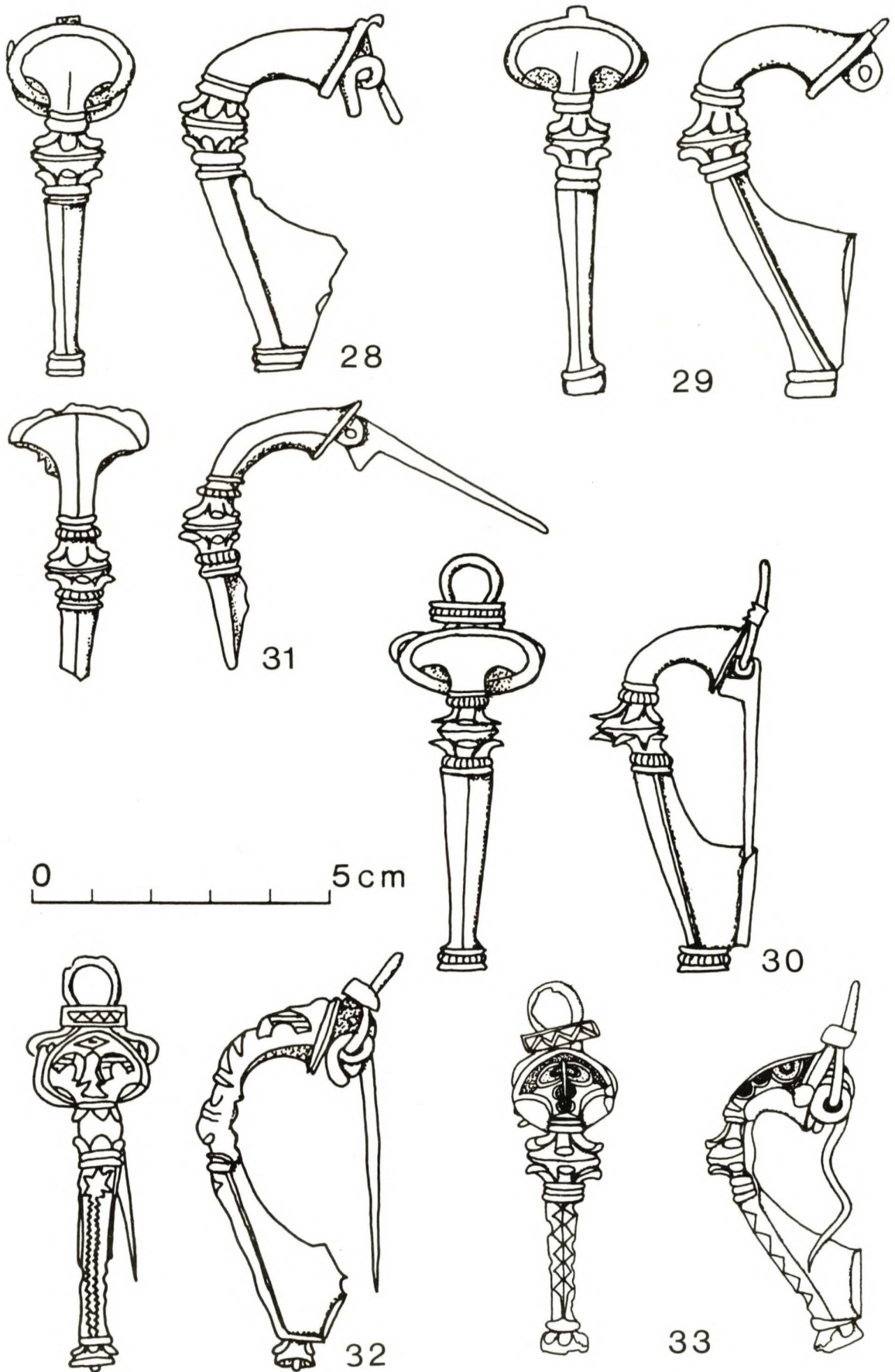


Figure 7. Brooches from Corbridge.

rectangular plate (skeuomorphic collar); housing for spring of 4 turns, pin missing; unusual waist decoration, single moulding and pair of acanthus leaves above and below central acanthus; leg of shallow D-section and slightly concave profile; foot semi-circular with triple moulding; catchplate complete, very squared turnover, finely tooled decoration along edges.

Unclassified trumpets

36. Not numbered missing; L -; Wt -

Haverfield 1911, 181

report mentions 2 enamelled trumpets; one could be cat no 32, the other is unaccounted for, so is included here.

36.1. Acc no 75.3936 CM; L(s) 14mm; Wt 4.5gm

head only, probably of copper alloy, although very dark in colour; flange around head; forward projection for securing collar, but pin, headloop, and collar missing; spring of six turns corroded into position.

Dating:-

Trumpet brooches are traditionally given a date range from the late 1st century to the mid-2nd (Collingwood and Richmond 1969, 297). However a fully developed Rii trumpet with enamelled decoration was found in a sealed pit at the Lunt, Coventry, a fort which went out of use cAD 75 (Mackreth 1969, 106-11). The brooch must have been in use well before that date, as it had been broken, repaired, and broken again before being discarded.

4.2 Trumpet and plate (Collingwood Group S)

Sub-group Sii

Four have been described in detail by Miss K Richardson.

37. Acc no 75.334 CM; L(s) 44mm; Wt 10.5gm

Illustrated - Fig. 8

Richardson 1960, 207 no 5

damaged since original report, foot now missing.

38. Acc no 75.335 CM; L(s) 32mm; Wt 6.5gm

Context 'site XI'

Illustrated - Fig. 8

ibid, no 6: Forster and Knowles 1909, 403 no 6

'eyes' missing since original report.

39. Acc no 75.333 CM; L(d) 45mm; Wt 9gm

Illustrated - Fig. 8

ibid, no 7

40. Acc no 75.336 CM; L 56mm; Wt 8gm

Illustrated - Fig. 8

ibid, no 8

the 'inner ring of green enamel' mentioned in the 1960 report is merely corroded bronze.

For parallels see Richardson 1960. Other examples have been found at :-

Nor'nour (Hull 1967, 44 no 111; fig 17)

Shrine of Apollo at Nettleton, Wilts (Wedlake 1982, 128 nos 62 and 63(C); fig 54).

41. Acc no 75.285 CM; L(d) 43mm; Wt -

Context 'H301'

Illustrated - Fig. 8

head missing, but top of bow flared and slightly hollow at back indicating remains of trumpet shape; bow carries crescentic plate, enamelled in blue with bronze dots (2 visible); leg corroded, cross-section indeterminate; foot ring broken and conserved; catchplate pierced or broken, turnover missing.

Parallels:-

Camelon (Anderson 1901, 401; fig 39), red enamel, lower leg missing

Segontium (Wheeler 1923, 25; fig 10), without bronze dots.

An example shown by Wright (1872, 282) was said to come from Colchester, and an example shown in the Newstead report (Curle 1911, 324; fig 47.1) was said to come from Ilchester.

Dating:-

The mid-2nd century date given by Collingwood (Collingwood and Richmond 1969, 298) was confirmed by Miss Richardson who concluded that 'by and large it appears that the type was in use from a little before AD 150 to the end of the century, and its *floruit* is the Antonine period'.

4.3 Trumpet, plate and fantail (Collingwood Group S)

Sub-group Siii

42. Acc no 75.337 CM; L 47mm; Wt 19gm

Illustrated - Fig. 8

no headloop; casing for hinged pin (half present); 2 'eyes' of seed pearls (or glass paste imitation of pearl); relief decoration (very corroded) along crest of bow, edge of head and possibly around eyes; bow has central circular setting, with slight projections at sides; stone or stud now missing; fantail foot with relief decoration of scrolls; ?trace of seed pearls; catchplate turnover damaged.

A very unusual brooch; the only close parallel from the North is from South Shields (M E Snape, forthcoming).

4.5 Almgren form 101

43. Acc no 75.281 CM; L 29mm; Wt 10gm

Context 'near the middle of the central yard in site XI, in a deposit of silt above hard gravel'.

Haverfield 1911, 184-6; fig 26; Charlesworth 1961, 36 no 6; pl VIII.6; Wedlake 1958, 224 no 16k; fig 52.

silver brooch decorated with silver pointillé, gold granulation and plaited gold wire; trumpet head, central plate, and straight leg; brooch slightly damaged since original illustration; spring of 12 turns has been broken and conserved.

The general form Almgren 101 is found along the Rhine and Elbe, with a few examples on the Danubian frontier (Böhme 1972, 64-5; Taf 35).

The Corbridge brooch is an example of a variant found at Nexenhof (Free Germany). There are five other examples from the German frontier, one from Carnuntum, and one from Berzée (Namur). The gold granular decoration is paralleled on a gold brooch from Felegyhaza (Hungary), (Kent and Painter (eds) 1977, 27 no 18).

GROUP 5. KNEE BROOCH AND DERIVATIVE

5.1 Knee (Collingwood Group V)

Sub-group 5.1A - with angular profile, cylindrical springcase, and notched bar catchplate (type iii)

44. Acc no 75.385 CM; L(d) 33mm; Wt 8.5gm

Illustrated - Fig. 8

springcase broken, trace of iron axis; spring and pin missing; trace of square projection at front, with cabled edge; bow narrow; foot has trapezoidal base, circular depression with central indentation; catchplate complete.

Although examples of the general form are known in Britain (see below, cat no 46), the circular decoration on the base of the foot is a feature more commonly found on the Continent, for example at:-

Saalburg (Böhme 1972, Taf 8.430-6)

Lauriacum (Jobst 1975, Taf 117. 115-6)

The only other known British example with this circular decoration may be an import since it comes from the *classis Britannica* fort at Dover (Williams and Parfitt 1981, 151 no 74; fig 32). Other decorative motifs found on the base of the foot include an incised line around the edge (cat no 243), and an incised saltire (cat no A432).

45. Acc no 75.376 CM; L 31mm; Wt 17.5gm

Haverfield 1911, 182; fig 17

now very corroded.

46. Acc no 75.383 missing; L 33mm; Wt -

as above; good condition; pin missing.

Brooches of this angular form are common in Germany, and also at Carnuntum. In most examples the back of the bow has a slightly curving profile, as cat no 44, and similar examples from Carlisle (cat nos 266.4 and 266.5); a straight

back like that of cat no 45 is less common, and best paralleled at the Saalburg (Böhme 1972, Taf 9.457; full list of parallels on pages 58-9).

See also:-

Newstead (Curle 1911, 326; pl LXXXVII.33)

Dura-Europos (Toll 1949, 49-50 nos 20-22; pl XI).

outer edge of headplate decorated with incised chevrons, double row of dots round junction with bow; plate pierced to hold axis and notched at top for external chord; all pin attachments missing; step at junction of bow and head; bow faceted, flat at back; foot splayed, flat semi-circular base; catchplate complete.

Sub-group 5.1B - with rounded profile, cylindrical springcase and conventional catchplate (type i)

47. Acc no 75.375 missing; L 42mm; Wt -

Haverfield 1911, 182; fig 15

catchplate now broken.

Paralleled at Lauriacum (Jobst 1975, Taf 15.101).

48. Not numbered missing; L c33mm; Wt -

Haverfield 1911, 182-3; fig 16

lacks the strong facets of the previous example.

Paralleled by another example from Corbridge (cat no 160).

There are 6 unfaceted type B knee brooches from Traprain Law (Curle 1915, 166; fig 23.3; Cree and Curle 1922, 224; fig 20.3; Cree 1923, 200; fig 15; Cree 1924, 252; fig 9.4, 260; figs 16.2 and 16.3).

Sub-group 5.1A or 5.1B

49. Not numbered missing; L - ; Wt -

Three knee brooches with cylindrical springcase are mentioned by Haverfield apart from the ones illustrated, (Haverfield 1912, 204-5, 2 brooches; Haverfield 1913, 274, 1 brooch). One of these might be the unidentified example 75.386 (cat no 65), and one could be the angular type 75.383 (cat no 46), but one is still unaccounted for, and is therefore included here.

Sub-group 5.1C - with angular profile, semi-circular headplate, curved bar catchplate (type ii), and external chord carried on notched plate.

50. Acc no 75.385 CM; L 37mm; Wt 10.5gm

Illustrated - Fig. 8

Parallels:-

Vindolanda (Bidwell 1985, 119 no 8; fig 39)

Wallsend (L Allason-Jones, forthcoming b)

Saalburg and Zugmantel (Böhme 1972, Taf 7.401-4; and see page 58 for a full list of parallels, mostly in Noricum and Pannonia, and also in Germany).

Sub-group 5.1D - with rounded profile, semi-circular headplate, and (with one exception) type i catchplate.

51. Acc no 75.388 CM; L 43mm; Wt 6gm

Haverfield 1909b, 401-2; fig 17

housing for spring (now missing); back hollow.

52. Acc no 75.389 CM; L 36mm; Wt 5gm

Illustrated - Fig. 8

headplate damaged; ? notched edge; 2 pierced plates, spring of ? 4 turns; pin missing; bow faceted, back hollow; foot has flat, pelta-shaped base with notched edges; catchplate complete.

Parallels:-

South Shields (Allason-Jones and Miket 1984, 98 nos 3.23-4)

Blackfriars Street, Carlisle (Mackreth, 1990, 109 no 13; fig 101)

Newstead (Curle 1911, 325; pl XXXVII.30)

Segontium (Wheeler 1923, 17 no 1; fig 7).

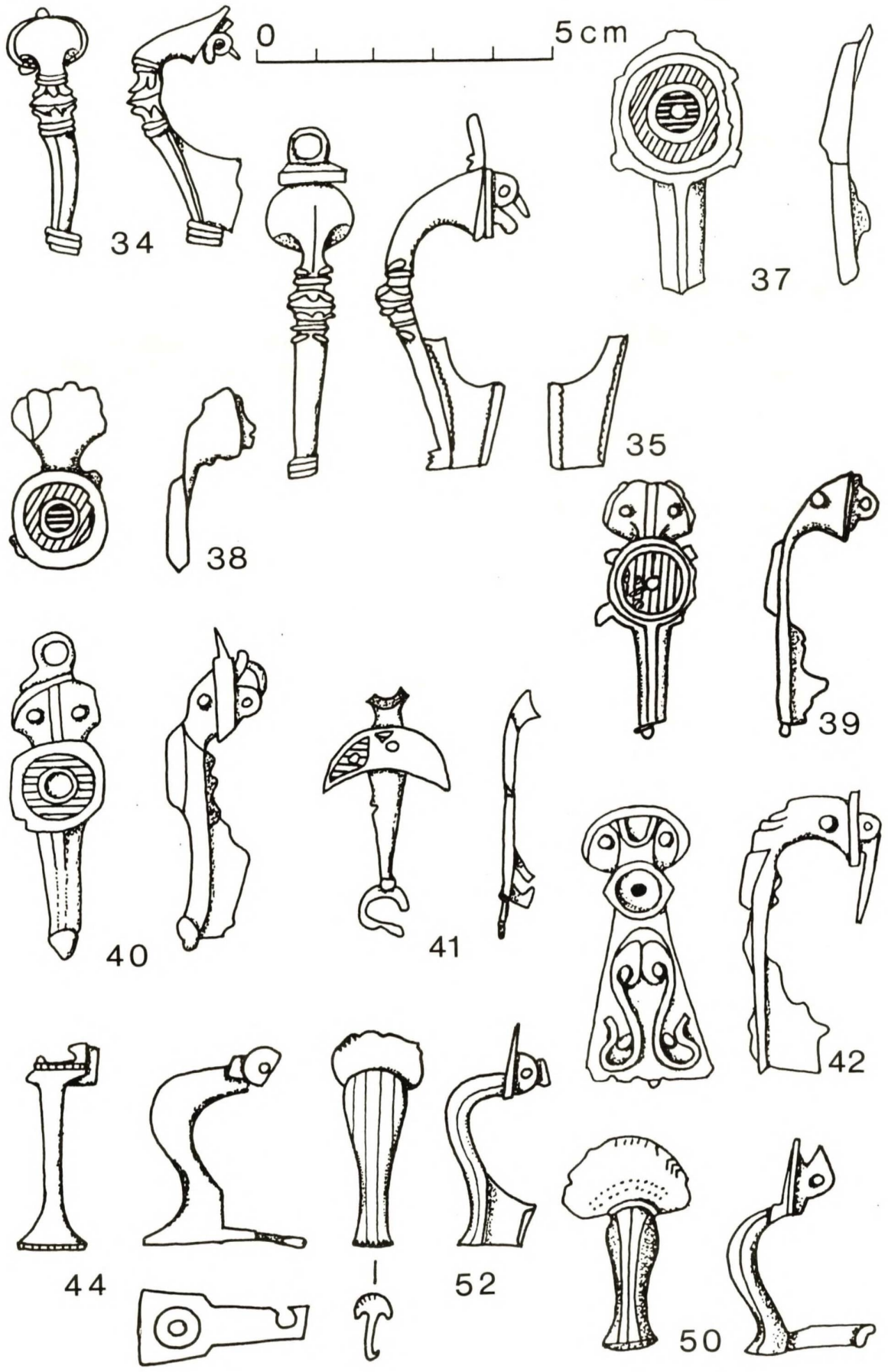


Figure 8. Brooches from Corbridge.

The following 2 examples have hinged pins (unparalleled elsewhere):-

53. Acc no 75.377 CM; L 36mm; Wt 11gm

Haverfield 1911, 182; fig 14

back of bow hollow; milled decoration around edges of headplate and foot.

54. Acc no 75.380 CM; L 47mm; Wt 10.5gm

Illustrated - Fig. 9

similar to the above; headplate damaged; 2 perforated plates for hinged pin (missing); trace of iron axis; bow bulbous, strongly curved, hollow at back, unfaceted; trace of catchplate.

The following has unusual decoration, unparalleled elsewhere:-

55. Not numbered missing; L 39mm; Wt -

Haverfield 1911, 182; fig 19

Sub-group 5.1E

56. Acc no 75.379 CM; L 35mm; Wt 7.5gm

Illustrated - Fig 9

head is a flat rectangular plate; single pierced plate at back for bronze axis; spring broken (3 turns at one side); pin missing; headknob (collared, flat at back); bow is knee-shaped with ridges down centre and at sides, flat at back; foot curves upwards resembling a fish tail; type iii catchplate complete.

There is an exact parallel from Zugmantel (Böhme 1972, Taf 8.415).

Date (all types):- mid-second to third centuries.

5.2 Knee and fantail (Collingwood Group X)

- semi-circular headplate, fantail, type i catchplate.

57. Acc no 75.381 CM; L 41mm; Wt 7.5gm

Illustrated - Fig. 9

headplate damaged, 2 pierced plates for axis, and slight hollow to house

spring; all pin attachments missing; bow faceted, slightly hollow at back; fantail foot with incised line around sides and base; catchplate small, complete.

58. Acc no 75.384 CM; L 40mm; Wt 8gm

Illustrated - Fig. 9

as above, fantail and catchplate turnover damaged.

59. Acc no 75.436 CM; L 38mm; Wt 7gm

Illustrated - Fig. 9

as above, but poorly made and repaired in antiquity, spring broken at junction with pin and pin replaced; single turn of spring at one side, 2 turns at the other; pin complete but moves loosely on axis; fantail unevenly made, incised lines incomplete.

60. Acc no 75.382 CM; L 42mm; Wt 7.5gm

Illustrated - Fig. 9

no incised lines on fantail; spring of 4 turns, stump of pin only; back of bow corroded; trace of catchplate.

60.1. Acc no 75.3936 CM; L(total) c50mm; Wt 10gm

three fragments, probably from the same brooch, although the joins do not match very well, perhaps because of distortion; first fragment consists of pelta-shaped headplate, remains of corroded spring, and upper third of very corroded and distorted bow; second fragment consists of lower half of bow, hollow at back, fantail foot, corroded, no details visible, remains of catchplate, turnover missing; also small fragment of pin.

61. Not numbered missing; L c39mm; Wt -

Context 'North of site XI'

Haverfield 1911, 184; fig 25

The illustration shows a brooch lacking its catchplate, and with dimensions different from any

brooch in the existing collection. As all Corbridge brooches of this type so far examined have catchplates, this must be an additional example which is now missing.

Parallels without incised lines:-

Richborough (Hull 1968, 92 no 84; pl XXXIII; Henderson *et al* 1949, 118 no 51; pl XXIX)

Vindolanda (Bidwell 1985, 119 no 7; fig 39).

Parallels with incised lines:-

Housesteads (L Allason-Jones, forthcoming a)

Carlisle (cat no 266.8)

Old Penrith (Butcher 1991, 183 no 627: fig 89), and parallels cited there: no parallels have been found on the Continent.

Dating:-

Evidence from recent excavations suggests an earlier date than that previously suggested in the Richborough reports. The Housesteads brooch came from an early 3rd century context (Allason-Jones 1988c, 89 no 103). The Vindolanda brooch was found with mid-3rd century material, but may have already been repaired by that time, as indicated by the unusual coiled ends of the axis wire threaded through the spring. The earliest date, of the late second century, is provided by a brooch from Carlisle (cat no 266.8).

5.3 S-profile

- with cylindrical springcase and type ii catchplate

62. Acc no 75.378 CM; L 35mm; Wt 10gm

Illustrated - Fig. 9

iron axis, spring corroded (? of 6 turns), pin missing; S-shaped profile with step on front at junction of head and bow, 2 steps (front and back) at point of recurve; upper bow wide, tapering after recurve; foot splayed, base of trapezoidal section; catchplate complete.

63. Acc no 75.387 CM; L 35mm; Wt 8.5gm

Illustrated - Fig. 9

as above, but profile flatter; traces of spring and axis; remains of catchplate.

Parallels:-

Vindolanda (Bidwell 1985, 119 no 6; fig 39, and see parallels cited there)

Chilgrove villa, Chichester (Mackreth 1979b, 145 no 5; fig 43)

Zugmantel (Böhme 1972, Taf 9.468)

Lauriacum (Jobst 1975, Taf 19.135).

Dating:-

The type is thought to be of 3rd century date, though there are no examples from well-dated contexts (Mackreth, *ibid*). The Vindolanda example was found with residual material.

5.4 Incurved S-profile

64. Acc no 75.390 CM; L 34mm; Wt 11gm

Haverfield 1911, 184; fig 18

with type ii catchplate.

The closest parallel is from Pannonia (Kovrig 1937, Taf XI.112), and there are examples showing some similarities from the following sites:-

Augst (Riha 1979, Taf 22.597)

Lauriacum (Jobst 1975, Taf 17.118-9)

Dura-Europos (Toll 1949, 50 no 24; pl XI).

Unclassified knee brooches

64.1. Acc no 75.3936 CM; L(s) 23mm; Wt -

leg of knee brooch, very corroded; splayed foot with semi-circular base; remains of catchplate, turnover missing.

65. Acc no 75.386 missing; L 38mm; Wt -

details unclear.

GROUP 6. FANTAILED (Collingwood Group X)

66. Not numbered missing; L c36mm; Wt -

Haverfield 1911, fig 29 (not mentioned in text); Collingwood and Richmond 1969, 294; fig 105,96)

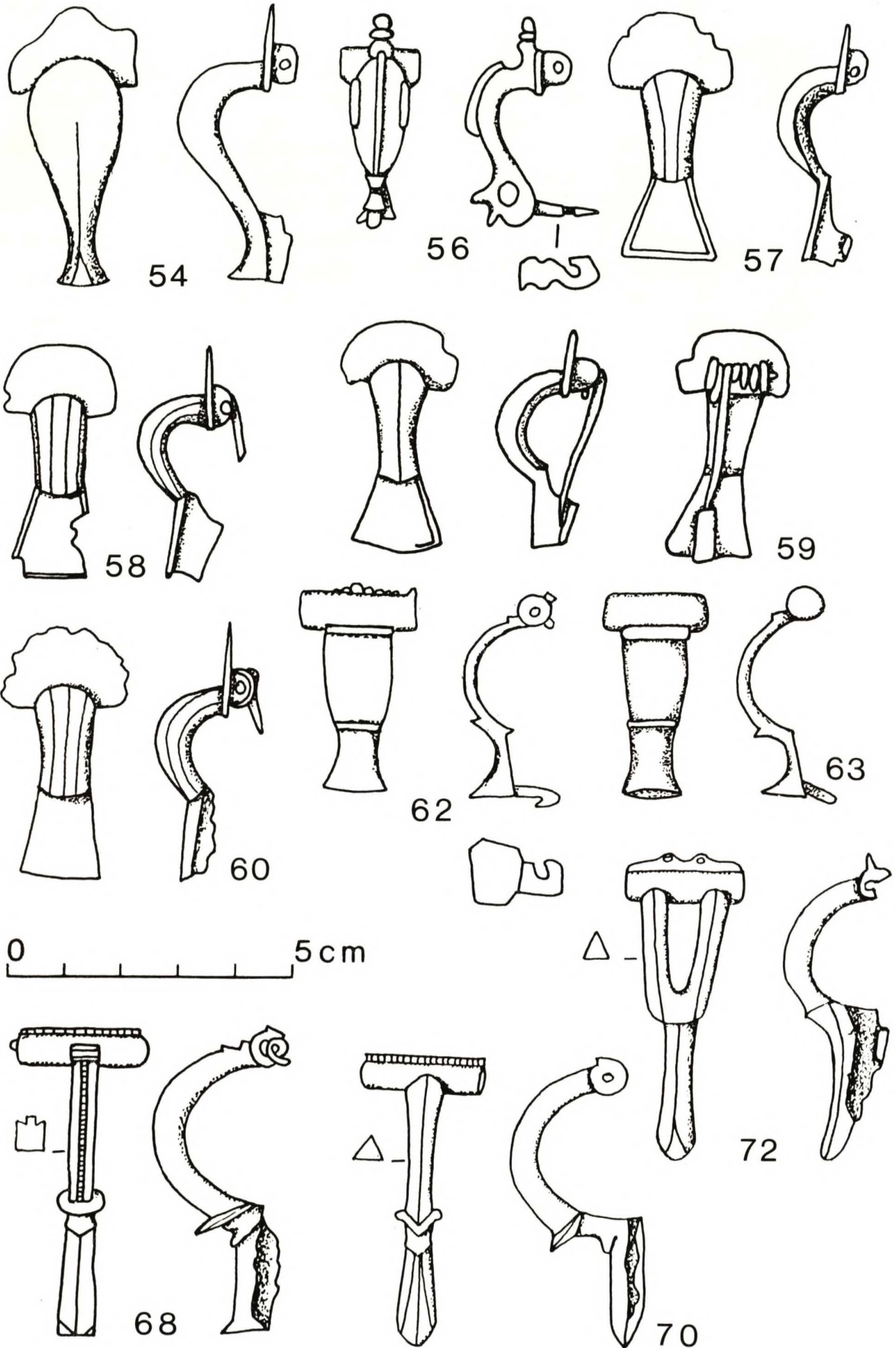


Figure 9. Brooches from Corbridge.

Collingwood's illustration suggests it originally had a headloop; decoration on foot ? in relief rather than enamel.

Parallels:-

Tripontium (Mackreth 1973c, 131 no 1; fig 23a, and see discussion there).

Also two enamelled versions:-

Richborough (Bushe-Fox 1926, 43 no 4; pl XII)

Rudston villa (Stead 1980, 95 no 15; fig 61).

GROUP 7. MISCELLANEOUS

67. Not numbered CM; L 56mm; Wt 14.5gm

Haverfield 1912, 205; fig 21

headplate slightly damaged since original illustration, half pin present only; large footknob not cast-in-one but attached by pin which projects slightly from base; similar knobs may have been inserted into hollows of sides of headplate and plate at base of bow (knobs may have been of perishable material such as bone); catchplate turnover damaged.

An unusual brooch, but there are examples with some similarities from:-

Grosser St Bernard, Switzerland (Ettlinger 1973, 147-8; Abb 3)

Colchester (Hull 1963, 145; fig 81), in a burial with pottery dated AD 190.

GROUP 8. P-SHAPED (Collingwood Group T)

8.1 P-shaped, plain

Sub-group 8.1A

68. Acc no 75.347 CM; L 52mm; Wt 14gm

Illustrated - Fig. 9

cylindrical crosspiece, one end broken; iron axis, spring of 6 turns, pin missing; transverse step (finely milled) across top of head; bow of rectangular section, longitudinal milled rib; double step at top of bow, upper step possibly milled; semi-circular plate and curved moulding at junction of leg and bow; leg faceted, straight profile, widening

slightly; foot broken, splayed, flat base; sheath-type catchplate, turnover missing; white metal plating.

Parallels:-

South Shields (Allason-Jones and Miket 1984, 104 nos 3.59, 3.60, 3.65, 109 no 3.91)

Brooch of unknown provenance but probably local origin in Tullie House Museum, Carlisle (not numbered)

Dover (Williams and Parfitt 1981, 151 no 80; fig 33)

Shrine of Apollo at Nettleton, Wilts (Wedlake 1982, 135 no 109; fig 56).

See also a fine example from Brancaster (Mackreth 1985, 119-200 no 8; fig 86) which has a double row of cable moulding with a central recess.

69. Not numbered missing; L c58mm; Wt -

Haverfield 1911, fig 24

unusual example with ribbed bow.

Sub-group 8.1B

70. Acc no 75.349 CM; L 49mm; Wt 8.5gm

Illustrated - Fig. 9

head as previous example, but all pin attachments missing; knife-edged bow, no step at top; triangular plate and moulding at junction with leg; leg faceted, leaf-shaped end; catchplate turnover damaged; bow white metal plated, traces of plating on head.

An almost exact parallel comes from South Shields (Allason-Jones and Miket 1984, 106 no 3.79).

8.2 Divided bow, double

71. Acc no 75.373 CM; L 56mm; Wt 12.5gm

Haverfield 1909b, 402-3; fig 19

spring corroded, pin missing; front gilded, back white metal plated.

Parallels:-

South Shields (Allason-Jones and Miket 1984, 98 no 3.27)

Saalburg and Zugmantel (Böhme 1972, Taf 15.645-8).

missing), upper containing remains of chord, pin missing.

72. Acc no 75.374 CM; L 56mm; Wt 10gm

Illustrated - Fig. 9

as above, but springcase carries transverse crest with wavy edge and 2 stamped dots; axis, spring and pin missing; catchplate turnover damaged; front gilded, no plating at back.

Parallels:-

South Shields (Allason-Jones 1983, 109 no 1; fig 68: 118 no 158; fig 77)

Saalburg (Böhme 1972, 62; Taf 16.696-7), and examples from Feldberg and Osterburken cited there

Dacia (Gudea and Lucăcel 1979, pl XXIV.312).

73. Acc no 75.372 CM; L 61mm; Wt 6.5gm

Illustrated - Fig. 10

as above but longer and thinner; head damaged, but traces of crest remain; axis, spring and pin missing; conventional catchplate rather than sheath, turnover damaged.

Sub-group 8.3B

75. Not numbered missing; L c56mm; Wt -

Haverfield 1911, 184; fig 22

damaged.

Parallels:-

Vindolanda, cat no 204

Old Penrith (Butcher 1991, 183 no 626: fig 89)

Carpow (Birley 1965, 206 no 4; fig 11)

Saalburg and Zugmantel (Böhme 1972, 61; Taf 15.679-81, Taf 16.682-90; see also parallels cited there, mostly in Germany)

Osterburken (ORL B40, Taf VI.26)

Pannonia (Kovrig 1937, Taf XVII.179)

Examples without the foot decoration (or lacking the foot):-

Richborough (Bushe-Fox 1928, 43 no 13; pl XVII: Hull 1968, 90 no 72; pl XXXII)

Lauriacum (Jobst 1975, Taf 25.189).

73.1. Acc no 75.2443 CM; L(s) 34mm; Wt 3.5gm

leg and base of bow only; base of two arms, joined by vestigial plate, no moulding below; leg of shallow V-section, leaf-shaped, slightly concave profile; catchplate of conventional type rather than sheath type, does not extend full length of leg, turnover damaged.

8.4 P-shaped, bow knobs

76. Acc no 75.316 CM; L 64mm; Wt 17.5gm

Haverfield 1911, 184; fig 21

8.3 Divided bow, triple

Sub-group 8.3A

74. Acc no 75.371 CM; L 64mm; Wt 9gm

Haverfield 1911, 184; fig 23

plate behind head with 2 perforations, lower for axis and spring (now

iron axis, spring of 12 turns; 3 decorative knobs carried on separate bar rivetted onto centre of bow; no trace of the white metal plating mentioned in the original report.

77. Not numbered missing; L c55mm; Wt -

Haverfield 1911, 184; fig 20

not known if knobs are cast or rivetted.

78. Acc no 75.326 missing; L 59mm; Wt -

? Haverfield 1913, 274

It was suggested in the 1975 catalogue that this example was enamelled, but in the photograph it appears to have vestigial studs or knobs. The original report refers to an example of this type, but 'without the studs'.

Parallels:-

The example with only three decorative knobs is unparalleled elsewhere; examples with four knobs have been found at :-

Carlisle (cat 272)

South Shields (Allason-Jones and Miket 1984, 96-8 no 3.18)

Richborough (Radford 1932, 78 no 13; pl IX)

Caerleon (Wheeler and Wheeler 1928, 164 no 17; fig 14, and also a brooch from Heddernheim cited there).

Unprovenanced, but probably local (Tullie House Museum, Carlisle, Gilbanks bequest 27 - 1926.160).

Dating for P-shaped and divided bows:-

P-shaped brooches were in use in Britain from the early 3rd century (Collingwood and Richmond 1969, 298-9). Carpow, with its exclusively Severan occupation beginning in the first decade of the 3rd century, and ending ten to fifteen years later, provides possibly the earliest dated contexts for both the double and triple divided bow (Birley 1965, 206 nos 3 and 4; fig 11). A double divided bow from Vindolanda (cat no 203) was found in a context dated cAD 235, and another from Carlisle (cat no 269.1) is from a context dating from the late second century to the mid-third. The type with decorative knobs along the bow is best dated by a brooch from Caerleon, to AD 220.

8.5 Crossbow, light (headknob only)

Sub-group 8.5B

79. Acc no 75.360 CM; L 62mm; Wt 9gm

Illustrated - Fig. 10

cylindrical crosspiece; collared headknob (flat at back); iron axis, spring of ? 10 turns, pin missing; bow V-sectioned, double step at junction with head; semi-circular plate and curved moulding at junction with leg; leg V-sectioned, leaf-shaped tip; sheath-type catchplate extending full length of leg, turnover missing.

Parallels:-

Vindolanda (cat no 205), an almost identical brooch

Carlisle (cat no 273)

Richborough (Henderson *et al* 1949, 119 no 54; pl XXX)

Caerleon (Nash-Williams 1932, 80 no 10; fig 32)

Coldham (Johns 1981, 95 no 8; fig 8)

Brancaster (Mackreth 1985, 200 no 9; fig 86).

8.6 Crossbow, light (three knobs)

Sub-group 8.6A

80. Acc no 75.361 CM; L 55mm; Wt 7.5gm

Illustrated - Fig. 10

cylindrical crosspiece with central square plinth carrying uncollared headknob (flat at back); collared terminal knobs, flattened ends, also flat at back; axis and head of hinged pin in position; bow D-sectioned, semi-circular plate and double moulding at base; leg D-sectioned, flat circular base; sheath-type catchplate, turnover missing.

Paralleled at South Shields (Allason-Jones and Miket 1984, 106 no 3.82).

81. Acc no 75.362 missing; L 64mm; Wt -

similar to the above, but headknob collared, terminal knobs uncollared; good condition, complete; faceted bow.

Paralleled at South Shields (Allason-Jones and Miket 1984, 104 no 3.56).

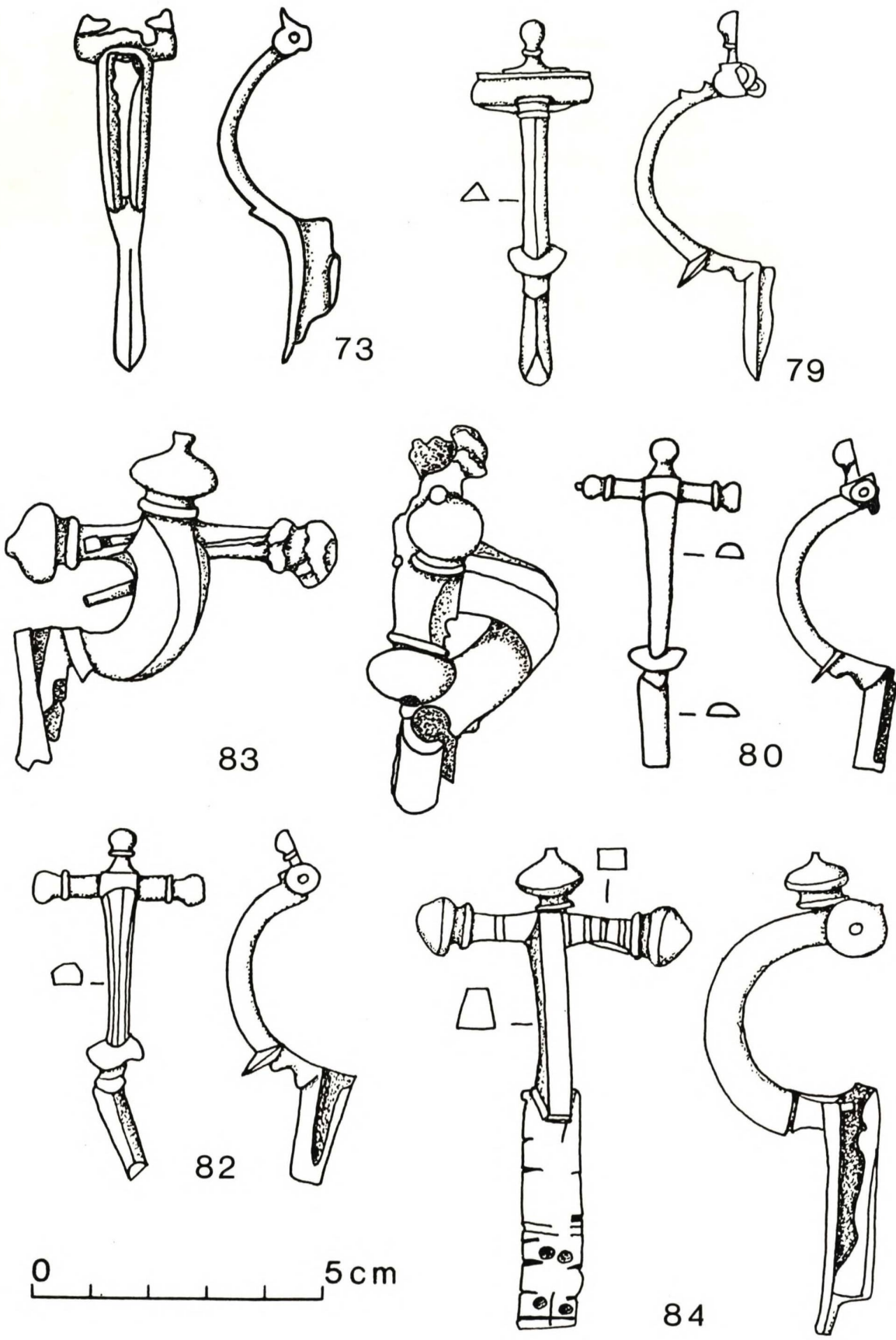


Figure 10. Brooches from Corbridge.

82. Acc no 75.348 CM; L(d) 58mm; Wt 9gm

Illustrated - Fig. 10

similar to cat no 80, but heavier in style; headknob and terminal knobs collared; bow faceted; leg V-sectioned, distorted; catchplate complete; white metal plating.

Parallels:-

South Shields (Allason-Jones and Miket 1984, 100-4 nos 3.43, 3.47, 3.51, 3.54)

Coventina's Well (Allason-Jones and McKay 1985, 24-5 no 49)

Wallsend (L Allason-Jones, forthcoming b)

Brough-under-Stainmore (Haverfield 1919, 9 no 8; pl II)

Richborough (Henderson *et al* 1949, 119 no 55, pl XXX)

Augst (Riha 1979, Taf 50.1440).

The Richborough example was dated to before the last quarter of the 3rd century, but Continental parallels in the same report are slightly earlier.

stepped out from bow; axis and pin missing; knobs onion-shaped, wider than long, collared; headknob separately made, fixed on by means of shank threaded through hollow centre of bow; bow narrower and shorter than leg, trapezoidal section, 2 incised lines running down upper surface, fading and becoming off-centre; vestigial plate at lower end; leg broad and flat, straight sides, slightly recurved profile; decoration of incised horizontal lines and pairs of punched dots, trace of off-centre vertical incised line; catchplate complete, very thick, not extending full length of leg, open at base; the fragment of bronze rod projecting across the top of the catchplate opening may be the remains of a safety device to hold the pin secure in the catchplate, *cf* an example from Augst (Riha 1979, 174, Abb 30c).

The decorative detail of this brooch is poorly executed, but it was presumably intended to be similar to examples from Richborough (Henderson *et al* 1949, 121-2 no 65; pl XXXII) and Winchester (Clarke 1979, 260 no 74; fig 32). See also examples from Augst and Kaiseraugst (Riha 1979, Taf 54.1477-80, Taf 55.1481) and Lauriacum (Jobst 1975, 101-2, Taf 36-39).

8.8 Crossbow, heavy

Keller Type 3A

83. Acc no 75.359 CM; L(d) 60mm; Wt 47.5gm

Illustrated - Fig. 10

crosspiece damaged, ?trapezoidal section, stepped out from bow; unfaceted collared knobs, wider than long, one terminal knob damaged; bronze axis and upper part of pin present; bow very distorted, faceted, hollow at back, vestigial plate at base; remains of leg, ? transverse ridge decoration; end of catchplate damaged.

Type 3A is dated *c*AD 340-60

Keller Type 4A

84. Not numbered CM; L 80mm; Wt 44gm

Illustrated - Fig. 10

narrow crosspiece of rectangular section, corroded and distorted,

Keller Type 4B (?)

85. Acc no 75.350 CM; L(d) 62mm; Wt 22.5gm

Illustrated - Fig. 11

headknob and one arm missing; arm has 7-sided section, moulding at junction with bow (not continuous around back); unfaceted terminal knob, wider than long, double collar (continuous); axis bar, pin missing; knife edged bow, lower part decorated as leg; leg shorter than bow, straight, rough cut-out pattern of pairs of semi-circles and notches; flat, slightly splayed foot; catchplate complete.

The crosspiece and bow of this brooch resemble those of types 1-3, but the leg is characteristic of type 4B. The following three brooches are close parallels, but have square cut-outs on the leg:-

Woodyates (Pitt-Rivers 1892, pl CLXXXII.19)

Besançon (Lerat 1956, pl XIX.317)

Wallsend (L Allason-Jones, forthcoming b)

Two examples from Ausburg (Keller 1971, Taf 6.4, Taf 7.9) have semi-circular cut-out decoration, but different knobs and crosspiece.

incised saltire with stamped dot above and below.

Keller Type 4C

86. Acc no 75.340 CM; L 77mm; Wt 37gm

Illustrated - Fig. 11

crosspiece as cat no 84, but of trapezoidal section; axis and head of hinged pin present; knobs shaped as cat no 84, but headknob cast-in-one; bow narrow, quadrangular section, small plate at lower end; leg wider than bow, slightly longer, and widening towards base; incised line down centre, cut-out trapeze decoration either side; catchplate not extending full length of leg, hole in base, side opening is narrow and short.

This is the only Keller type crossbow from Corbridge which is finished off to a high standard of workmanship. There are no exact parallels for the cut-out decoration on the leg, but the closest are from :-

Seebruck (Keller 1971, Taf 44.7)

Wilzhofen (ibid, Taf 45.12).

87. Acc no 75.339 CM; L 72mm; Wt 23gm

Illustrated - Fig. 11

similar to the above, but simplified and less well made; hollow casting, and crosspiece sharply cut away on underside, therefore lighter; headknob uncollared and set further back; knife-edged bow, leg cast in poor imitation of trapezoidal cut-outs.

Dating :-

The date range of all Keller type 4 crossbows is cAD 350-80 .

8.8Unclassified

87.1. Acc no 75.400.124 missing; L(s) 46mm; Wt -

leg and lower half of bow only; bow 'knife-shaped' ending in vestigial plate; leg widens slightly towards base; decoration consists of three transverse grooves at top of leg, at base of leg is

This decoration is paralleled on a brooch from Tamuda, Morocco (Gerharz 1987, 98 no 139; Abb 16).

GROUP 9. FRAGMENTARY

87.2. Acc no 75.400.12 missing; L(s) 29mm; Wt -

pin with spring of 2-3 turns, probably from a one-piece brooch.

87.3. Acc no 75.400.65 missing; L(s) 56mm; Wt -

pin, ? from a trumpet brooch; spring (broken) of six turns, chord and pin; axis and headloop, collar with triple moulding; headloop worn at one side.

b) Plate Brooches

GROUP 10. SIMPLE ENAMELLED PLATES

Brooches of the following eleven sub-groups are enamelled, those of the first nine groups being circular discs. Enamelled plate brooches in general are dated to the 2nd century AD.

10.2 Concentric circles

88. Acc no 75.480 CM; diam 33mm; Wt 11.5gm

Illustrated - Fig. 11

corroded; 2 circles, outer dark blue, inner red; central setting empty; trace of catchplate; 2 pierced plates and shallow pin housing; axis, spring, and pin missing.

89. Acc no 75.287 missing; diam 21mm; Wt -

as above, colour of enamel unknown.

Parallels:-

Richborough (Hull 1968, 88 no 65; plXXXI)

Brancaster (Mackreth 1985, 204 no 15; fig 86)

South Shields (Allason-Jones and Miket 1984, 116 no 3.140).

90. Acc no 75.473 CM; diam 34mm; Wt 13gm

Illustrated - Fig. 11

as above, but outer circle of black and green chequered enamel, inner circle red; 2 pierced plates; axis bar; spring broken, ? 4 turns; pin missing; catchplate turnover damaged.

91. Acc no 75.297 missing; diam 21mm; Wt -

edge damaged; enamel in good condition, both circles chequered; outer rim notched; central setting may be raised, but empty.

Paralleled at Mandeuire (Lerat 1956, pl VIII.147).

10.3 Concentric circles, with lugs

92. Acc no 75.474 CM; diam (max) 36mm; Wt 7.5gm

Illustrated - Fig. 11

? Haverfield 1911, 181

disc with 8 circular projections (1 now missing); outer circle of yellow/orange enamel, inner black; central setting empty; remains of single pierced plate; spring, pin missing; catchplate complete.

This may be the brooch referred to by Haverfield which 'parallels Jacobi, Saalburg, pl LXVIII,9,10'.

Paralleled at Thistleton, Leics (Butcher 1977, 54; fig 6.10) - with ten lugs.

10.4 Concentric circles and dots

Sub-group 10.4A

93. Acc no 75.475 CM; diam 30mm; Wt 8gm

Illustrated - Fig. 11

rim damaged; outer band of blue, inner red with bronze dots (damaged, 13 dots visible, space for ?17); central setting contains traces of brown staining, ? remains of adhesive for gemstone now missing; 2 pierced plates; axis; spring corroded, of 2 or 3 turns; pin missing; catchplate turnover damaged.

Parallels:-

Corbridge (cat no 166.16)

Coventina's Well (Allason-Jones and McKay 1985, 23-5 no 42)

South Shields, 2 examples (Allason-Jones and Miket 1984, 118 no 3.145: M E Snape, forthcoming)

Colchester (Crummy 1983, 17 no 83; fig 14).

10.5 Plain enamel, bronze dots

94. Not numbered MA; diam 21mm; Wt 3.5gm

Context 'Corbridge 215P, XIE, Box 7'

Illustrated - Fig. 11

rim damaged; enamel colour now faded, patches of red; 5 bronze dots, space for 1 or 2 more; small central setting containing ? adhesive traces; 2 pierced plates, head of corroded hinged pin; trace of catchplate.

94.1. Acc no 75.3937 CM; diam 19mm; Wt 4gm

as above, corroded, six bronze dots in field of red enamel; small central setting now empty; single pierced plate with remains of corroded spring; pin missing; catchplate, turnover missing.

Parallels:-

Colchester (Crummy 1983, 17 no 80; fig 14)

Richborough (Hull 1968, 88 no 63; pl XXXI; and see parallels cited there)

Saalburg (Böhme 1972, Taf 26.998)

Housesteads (cat no A352).

94.2. Acc no 75.3937 CM; diam (max) 20mm; Wt 3.5gm

circular face, slightly domed, with remains of four projecting lugs; face enamelled blue with central bronze dot surrounded by eight others; reverse very corroded; remains of pin corroded into position, cannot tell if hinged or sprung; catchplate distorted.

No close parallels.

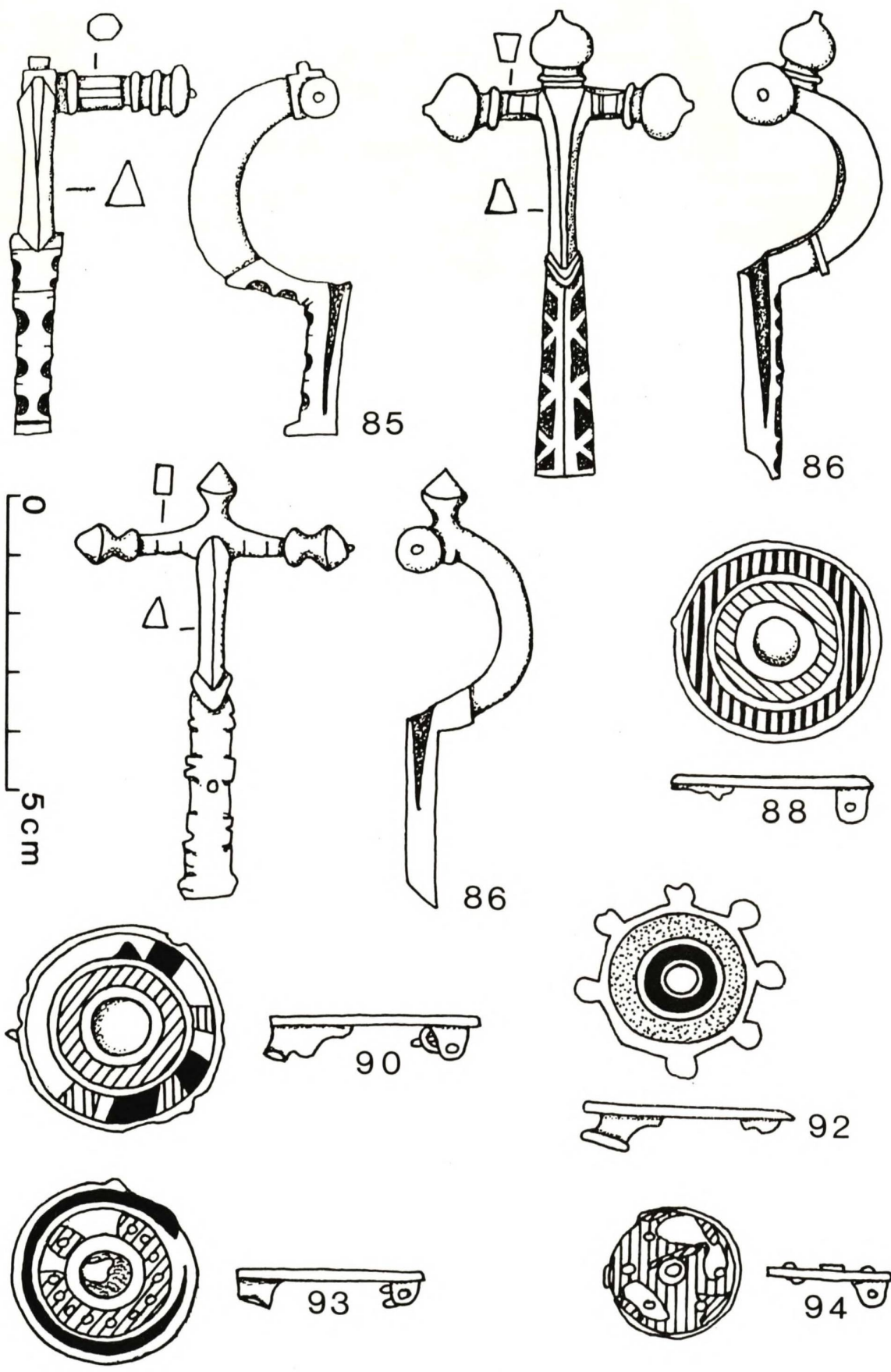


Figure 11. Brooches from Corbridge.

10.6 Semi-circles

Sub-group 10.6A

95. Acc no 75.477 CM; diam 33mm; Wt 8gm

Illustrated - Fig. 12

rim damaged; 6 bronze-walled semi-circles around edge, containing red enamel each with central bronze dot; central setting with trace of black glass paste; no enamel on rest of disc; reverse corroded; 2 pierced plates, corroded spring; pin missing; trace of catchplate.

Parallels (both lacking the bronze dots) :-

Coventina's Well (Allason-Jones and McKay 1985, 25 no 44)

Stray find from Hadrian's Wall area (cat no A431).

10.9 Six-armed motif

96. Acc no 75.476 CM; diam 19mm; Wt 3gm

Context '5080'

Illustrated - Fig. 12

bronze rim; 6-armed motif, enamelled red (with central bronze dot) on a black ground; 2 pierced plates and housing for spring of 2 turns; pin missing; catchplate complete.

97. Acc no 75.478 CM; diam 21mm; Wt 2gm

as above, but rim damaged, colour of outer enamel indeterminate, stained green; trace of catchplate; trace of pin attachment plate.

Parallels:-

South Shields (Allason-Jones and Milet 1984, 120 nos 3.152 and 3.153; and see parallels cited there)

Kirkby Thore (RCHME Westmorland, XXXIX.B4)

Housesteads (L Allason-Jones, forthcoming a).

10.10 Millefiori

98. Acc no 75.295 missing; diam 17mm; Wt -

outer ring of squares of blue and white millefiori enamel; ? central circle of millefiori; half of pin in position.

99. Acc no 75.470 missing; diam 18mm; Wt -

outer ring of millefiori squares in red, white, and pale blue; central setting empty.

Paralleled at Nor'nour (Hull 1967, 52-4 no 194; fig 21).

10.11 Miscellaneous discs

100. Acc no 75.471 missing; diam 31mm; Wt -

'Yellow, dark blue, red and black enamel. Pin missing. ? enamel partially restored.' (1975 catalogue).

10.13 Umbonate

Sub-group 10.13A

101. Not numbered MA; diam 33mm; Wt 11gm

Context 'Corbridge 215P, XIE, Box 7'

Illustrated - Fig. 12

saucer-shaped disc with domed centre; decoration in relief, cannot tell if originally enamelled; central cinquefoil surrounded by 2 concentric bronze rings; outer scalloped decoration; raised rim is 9-sided rather than circular, has 8 small projections, and remains of loop situated over pin attachment; centre back hollow; housing for pin, now missing; remains of catchplate.

Parallels:-

Leicester (Butcher 1977, 51; fig 5.6; and see parallels cited there)

Blackfriars Street, Carlisle (Mackreth 1990, 112 no 21; fig 101).

The type probably originated in the Midlands or South, and like the example below is dated to the late 1st or early 2nd centuries (ibid, 52-4).

- Sub-group 10.13B
102. Not numbered MA; L(d) 35mm; Wt 2.5gm
- Context 'Corbridge 215P, XIE, Box 7'
- Illustrated - Fig. 12
- umbonate disc, broken; small central bronze circle surrounded by ring of triangular cells with convex ends, filled alternately with red and black enamel; outer ring of chevrons in ? black enamel; outer bronze rim; projections to hold catchplate and pin attachment, very corroded; back hollow; pin complete.
- Parallels:-
- Richborough (Bushe-Fox 1926, 43-4 no 7; pl XII; and see parallels cited there).
- Corbridge (cat no 167.2)
- Carlisle (Haverfield 1919, 12 no 14; pl II)
- Blackfriars Street, Carlisle (Mackreth 1990, 112-3 no 22; fig 101)
- Ravenglass (Olivier 1979, 67 no 2; fig 26)
- Brough-under-Stainmore (RCHME Westmorland, XXXIX.A11)
- Winterton (Stead 1976, 201 no 32; fig 101)
- Templeborough (May 1922, 71-2 no 2; pl XIV).
- An example of the type is the only disc brooch from Traprain Law (Curle 1932, 329; fig 31.8).
- Also found in the Rhineland (Exner 1939, Taf 17).
- For dating see cat no 101.
- Either of the above examples could be the brooch described by Haverfield (1911, 181) as 'resembling a piece from Newstead (pl LXXXIX.20)'.
- 10.14 Enamelled oval, raised centre
103. Acc no 75.294 CM; width 28mm; Wt 5.5gm
- Illustrated - Fig. 12
- Haverfield 1909b, 406 no 9
- central raised oval setting with ? green enamel, now damaged; outer ring of
- green enamel scallops on red background; outer rim corroded; housing for spring (corroded); pin missing; trace of catchplate.
- No close parallels.
- 10.16 Other shapes
104. Not numbered missing; width - ; Wt -
- Haverfield 1912, 205
- 'An oblong disc fibula ... blue'
- 104.1. Acc no 75.3936 CM; L(s) 44mm; Wt 4.5gm
- very corroded plate brooch, rim damaged, original shape may have been lozenge or oval; lozenge shaped raised central setting, containing three cells of enamel, colour now indistinguishable; hollow at back; pin attachment corroded; catchplate complete with turnover.
- No close parallels.
- GROUP 11. APPLIED REPOUSSÉ SHEET
- 11.1 With repoussé sheet
105. Not numbered MA; diam 25mm; Wt 3.5gm
- Context 'Corbridge 215P, XIE, Box 7'
- Illustrated - Fig. 12
- applied silver sheet with repoussé triskele and crescents (damaged); ribbed border, V-shaped notch cut out, removing catchplate; 2 small pierced plates with head of hinged pin.
- Haverfield (1911, 181) referred to a brooch of this type from site XI CE.
106. Not numbered missing; diam (d) c33mm; Wt -
- Haverfield 1909b, 406 no 12; fig 22
- as above, edges damaged; catchplate missing; pin broken.
- Parallels:-
- South Shields (Allason-Jones and Miket 1984, 118 nos 3.148-150; and see also parallels cited there)

- Vindolanda (Bidwell 1985, 117 nos 1,2; fig 39) reverse too heavily corroded for details to be visible.
- Housesteads (L Allason-Jones, forthcoming a)
- Wallsend (L Allason-Jones, forthcoming b)
- Caerleon (Brewer 1986, 170 no 9; fig 54).
107. Not numbered missing; diam -; Wt -
- Haverfield 1913, 274
- '...a small circular 'disk' brooch shows a figure in low relief, unfortunately damaged, of a man standing in front of a horse, holding its bridle in his left and a whip (?) in his right hand.'
- Presumably a repoussé disc based on a coin type, cf brooches from Verulamium and Kirkby Thore (Goodchild 1941, 7-8; pl III). Coin types of Hadrian dated AD 134/5-7 show a personification of Mauretania holding two javelins and leading a horse by its bridle.
- 11.2 Blank disc
- 107.1 Acc no 75.3937 CM; diam 36mm; Wt 10gm
- large circular disc with traces of solder, edge of which bears impression of beaded rim; reverse very corroded; single pierced plate; spring and pin missing; catchplate complete with turnover.
- 107.2. Acc no 75.3937 CM; diam 25mm; Wt 5.5gm
- circular, rim slightly damaged; two pierced plates with iron axis; hinged pin missing; catchplate, turnover missing.
- 107.3. Acc no 75.3937 CM; diam 23mm; Wt 5gm
- circular, rim less damaged than previous example; remains of solder and/or corrosion products; two pierced plates, iron axis and head of hinged pin in position; catchplate, turnover missing.
- 107.4. Acc no 75.3937 CM; diam 23mm; Wt 5gm
- circular, face corroded and with remains of solder adhering; pin attachment and catchplate present, but
- 107.5. Acc no 75.3937 CM; diam (d) 23mm; Wt 2.5gm
- fragment of circular disc, very corroded; single pierced plate; spring pin missing; portion carrying catchplate now missing.
- 107.6. Acc no 75.400.54 missing; diam (s) 35mm; Wt -
- half of large disc brooch; fragment of catchplate present.
- GROUP 12. DISC, WITH CENTRAL PROJECTION
- 12.1 Buckler
108. Acc no 75.293 CM; diam 30mm; Wt 7gm
- Illustrated - Fig. 12
- raised rim with 6 small projections; centre rises in curving cone to a cupped setting with central projection; centre back hollow; 2 small plates for hinged pin, fragment present; catchplate complete.
109. Acc no 75.292 CM; diam 35mm; Wt 6.5gm
- Illustrated - Fig. 12
- as above; corroded; pin attachment damaged, axis and pin missing; remains of catchplate.
- Parallels:-
- Corbridge (cat no 168)
- Milecastle 39 (Bruce 1867, 178)
- Nor'nour (Hull 1967, 56 no 207, fig 22; and see parallels cited there, in Britain and Pannonia)
- Caerleon (Brewer 1986, 172 no 23; fig 55) and see parallels cited there
- Dura-Europos (Toll 1949, 40 no 21; pl IX).
- Dating:-suggested date of 2nd century (Hull, ibid).

0 5 cm

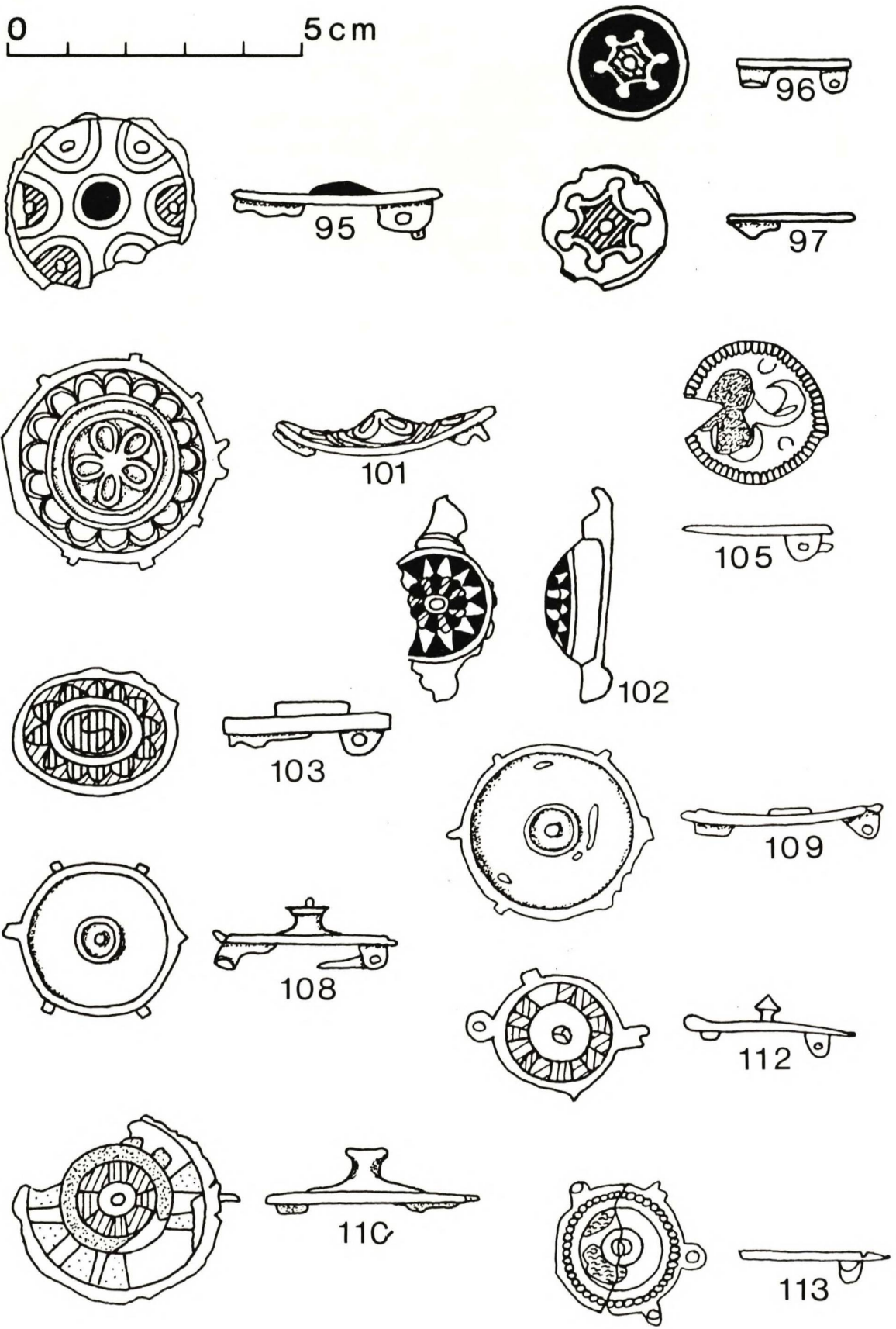


Figure 12. Brooches from Corbridge.

110. Acc no 75.479 CM; diam 34mm; Wt 5.5gm
Context 'P146'
Illustrated - Fig. 12
raised central boss, empty; 3 bands of enamel, inner chequered red and green, outer chequered (damaged), yellow visible only, band of orange enamel between; trace of pin attachment and catchplate.
There are no exact parallels, but there are two similar examples from Verulamium (Wheeler and Wheeler 1936, 209 no 36, with millefiori, no 37; fig 45). See also Coventina's Well (Allason-Jones and McKay 1985, 25 no 45; and parallels cited there.)
111. Not numbered missing; diam - ; Wt -
Haverfield 1912, 205
'... an enamelled round disc brooch with a central knob, apparently imitating a target or shield, with a red band round the circumference.'
- 12.3 Disc with separate rivet (other)
112. Acc no 75.482 CM: diam (max) 29mm; Wt 2.5gm
Illustrated - Fig. 12
very corroded; central bronze cone separately rivetted on; ring of enamel chequered green and red/orange; outer circular projections, 4 present (space for 8), broken but ? decorated with punched circle or circle of enamel; 2 pierced plates (1 broken) for pin, now missing; trace of catchplate.
There are no close parallels.
113. Not numbered MA; diam 21mm; Wt 3gm
Context 'Corbridge 215P, XIE, Box 7'
Illustrated - Fig. 12
2 fragments; central hole (? for rivet); 2 concentric rings of decoration, inner with traces of enamel, now brown, outer has beading between raised bronze ring; 6 outer projections as previous example, (2 missing, 4 broken); 2 pierced plates, pin missing; catchplate missing.
No exact parallels, but for similar types see:-
Nor'nour (Hull 1967, 54 no 200; fig 22: 62 no 251; fig 25)
Rudston (Stead 1980, 95 no 18; fig 61), tinned and with no beading.
- 113.1. Acc no 75.3937 CM; diam (max) 40mm; Wt 9gm
face circular, rim broken; 6 projecting lugs, with space for 4 more; trace of milling on outer edge; 2 concentric raised bands; central circular boss, appears to be separately rivetted on, but details obscure as back heavily corroded; back hollow; trace of pin attachment beneath one of projecting lugs, consisting of 2 pierced plates for hinged pin, now missing; catchplate missing.
- GROUP 13. UNCLASSIFIED DISCS
114. Acc no 75.298 missing; diam 24mm; Wt -
no details.
115. Acc no 75.200 missing; diam 26mm; Wt -
no details.
- 115.1. Acc no 75.3937 CM; diam 30mm; Wt 5.5gm
circular disc, rim damaged and corroded; flat outer rim 4mm wide; central space has central hollow, and traces of unidentifiable deposit at outer edges; space may have been for gemstone or possibly enamel; single pierced plate for spring pin, now missing; trace of catchplate; raised 'bar' between the two.
- 115.2. Acc no 75.2406 CM; diam (max) 25mm; Wt 4gm
Illustrated - Fig. 13
brooch damaged, only circular rim and four projections present, whole of centre missing; possibly brooch was an openwork one, or centre may have contained gemstone or enamelled plate; projections are circular,

decorated with circle of blue enamel and central yellow spot; 2 pierced plate for strongly arched hinged pin, complete; small catchplate, complete.

yellow ear; blue eye; central roundel with yellow centre, outer cells 2 red, 2 indeterminate; scrolls yellow and red.

116. Not numbered missing; diam c25mm; Wt -

Haverfield 1909b, 404 no 8

'... circular disc, with 4 small knobs on the circumference, diameter one inch, once enamelled. Much like Camelon A2.'

117. Not numbered missing; diam c33mm; Wt -

Haverfield 1909, 406 no 10

'... circular disc... much corroded. It seems to have borne some circular ornamentation, but its principal feature is a conical boss, projecting from its surface, but not concentric with it.'

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.1 S-shaped

118. Not numbered missing; L c44mm; Wt -

Haverfield 1911, 188; Bulmer 1938, 146; fig 2.8; Feachem 1951, 44; fig 9.11

14.2 Dragonisque

119. Acc no 75.236 CM; L 57mm; Wt 14gm

Haverfield 1909b, 403 no 7; fig 20; Bulmer 1938, 146; fig 2.11; Feachem 1951, 38; fig 6.11

120. Acc no 75.219 CM; L(s) 38mm; Wt 7gm

Bulmer 1938, 148; fig 3.G2; Feachem 1951, 38; fig 3.G2

very damaged since original illustration; head and tail missing; central panel has 5 rows of enamel, central and outer red, others blue; scroll and dot pattern has traces of red and blue enamel.

121. Acc no 75.237 CM; L 63mm; Wt 10gm

Haverfield 1909b, 403 no 7; fig 20; Bulmer 1938, 148; fig 4.H1; Feachem 1951, 38; fig 2.H1

122. Not numbered missing; L c40mm; Wt -

Context 'site XVI'

Haverfield 1911, 188; fig 28; Bulmer 1938, 148; fig 3.C2; Feachem 1951, 38; fig 5.C2

123. Not numbered missing; L c57mm; Wt -

Forster and Knowles 1915, pl 1.1; Bulmer 1938, 148; fig 3.D5; Feachem 1951, 38; fig 4.D5

Date range of dragoniques:- mid-first to late second centuries.

14.3 Zoomorphic

124. Acc no 75.284 CM; width 39mm; Wt 5gm

Illustrated - Fig. 13

Haverfield 1912, 205

running hare; legs broken; 5 spots of yellow enamel on ? black background; orange eye; 2 pierced plates and head of hinged pin; trace of catchplate.

125. Acc no 75.2442 CM; L(d) 33mm; Wt 3.5gm

Illustrated - Fig. 13

similar to the above, but very damaged; ears and feet missing; corroded, traces of blue enamel on body; blue enamel eye; 2 pierced plates for spring of 3 turns, fragment of pin present; catchplate complete.

This may be the example described as:-

'... small brooch in the form of a sitting hare or rabbit' (Forster 1908, 299, context 'site V').

Parallels:-

Old Winteringham (Stead 1976, 198 no 19; fig 100)

Pannonia (Patek, 1942, pl XXI.13-14)

See also Mackreth 1973a, 27-8 no 29.

126. Not numbered missing; width c37mm; Wt - enamel; trace of catchplate; pin attachments missing.
- Context 'site VI'
- Haverfield 1910, 271; *ibid* 1911, 186; fig 27
- horse and rider decorated with red enamel.
- Miss Butcher (1986, 316-9) lists the parallels and discusses the type, which may have been associated with a religious cult, as the majority are from 'sites with pagan religious associations'. Horse and rider brooches from Hockwold, Norfolk, and Lamyatt Beacon, Somerset, were from 4th century contexts. Apart from the Corbridge example, the distribution is southern, with two main groups, in Wessex and East Anglia. (In addition to the examples cited by Miss Butcher, a fragmentary brooch was also found at the shrine of Apollo at Nettleton, Wilts (Wedlake 1982, 132 no 73; fig 540.
127. Acc no 75.286 CM; L(2 frags) 26mm; Wt 2.5gm
- Illustrated - Fig. 13
- 2 fragments of a stag brooch; front legs missing, back legs and tail broken; antlers well modelled; eye ? green enamel; body ? red and green; 2 pierced plates, bronze axis, remains of spring of 2 turns; pin missing; trace of catchplate.
- This may be the brooch said to be found in 1910 (Haverfield 1911, 186), described as a horse enamelled in red and green.
- Parallels:-
- Stag with less well modelled antlers from Coventina's Well (Allason-Jones and McKay 1985, 23 no 40; and see parallels and discussion there).
- Pannonia (Patek 1942, pl XXI.12)
- Augst (Riha 1979, Taf 67.1735-6).
- 14.4 Shield
128. Acc no 75.286 CM; width (d) 27mm; Wt 3gm
- Illustrated - Fig. 13
- oval (1 end broken); raised outer rim with remains of projections; decoration in relief of raised central circle and other small circles; no
- 14.7 Wheel
129. Acc no 75.472 CM; diam(max) 53mm; Wt 19.5gm
- Green 1981, 254; fig 1.5c
- large, enamelled; 2 pierced plates; iron axis; fragment of hinged pin; small catchplate, turnover missing.
130. Acc no 75.369 CM; diam 33mm; Wt 8.5gm
- Illustrated - Fig. 13
- outer rim with raised edges; 'hub' with central projection; part of rim and one of 4 'spokes' missing; 2 pierced plates for hinged pin; catchplate missing.
131. Acc no 75.193 missing; diam 30mm; Wt -
- ? Haverfield 1909b, 406 no 11; fig 21
- The 1975 catalogue mentions a wheel brooch (damaged), but gives no details. Haverfield's illustration shows a brooch very similar to cat no 131, but lacking the pin, and with damage to the pin attachment and to a different section of the rim. The diameter is c31mm, and it may be identified as 75.193
- Paralleled in the Rhineland (Exner 1939, Taf 16.4)
- See also parallels and discussion in Green 1978, 18; 1981, 254-5.
- 14.8 Openwork
132. Acc no 75.368 missing; diam 38mm; Wt -
- disc with 3 circular cut-outs and raised central boss; ? simplified wheel.
- For discs with pelta-shaped cut-outs, see Allason-Jones 1983, 120 no 190; fig 77.

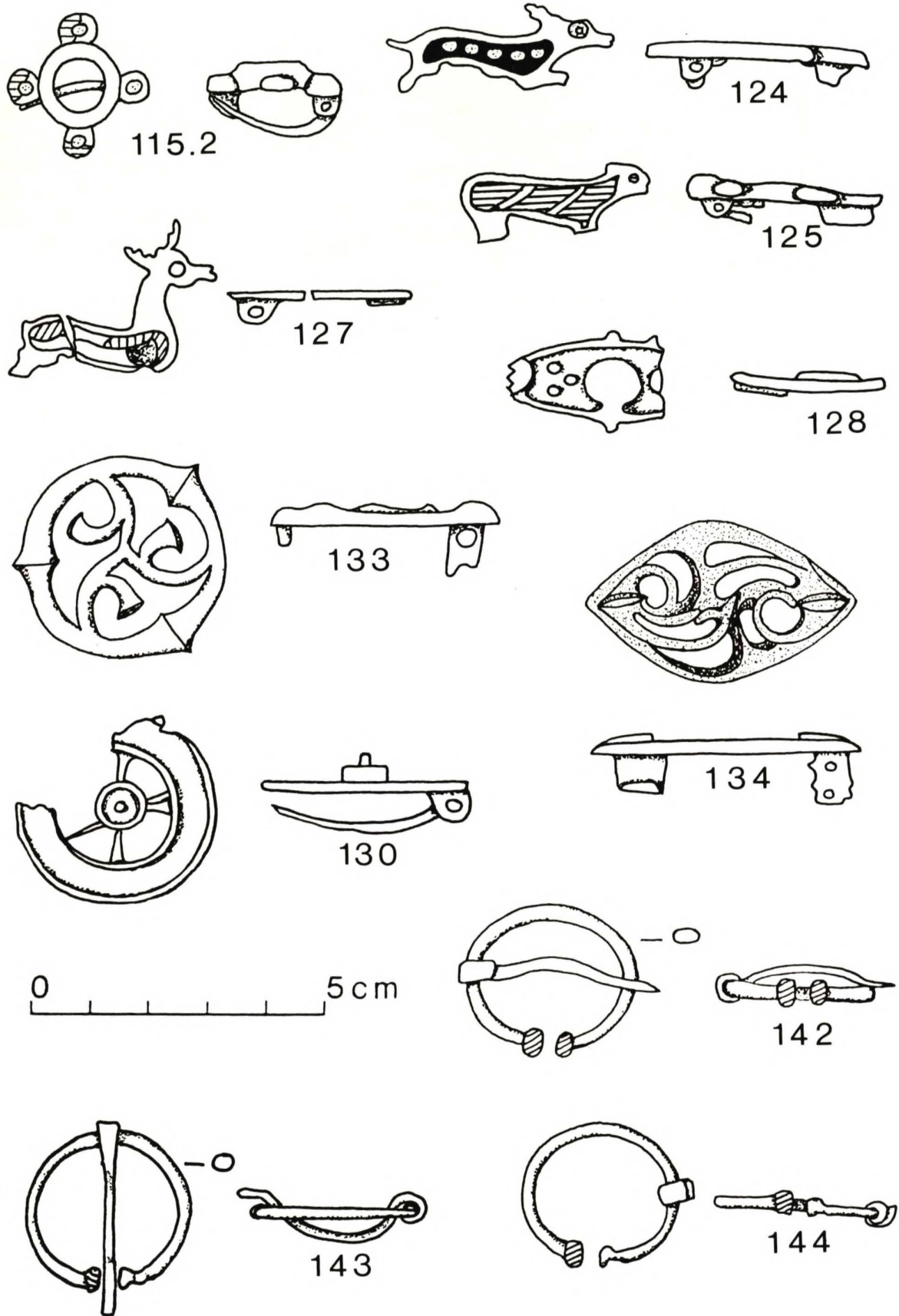


Figure 13. Brooches from Corbridge.

14.9 Trompetenmuster

133. Acc no 75.365 CM; diam 37mm; Wt 10.5gm

Illustrated - Fig. 13

openwork circle with 3 trumpet heads around circumference, 3 in centre; single plate with hole for spring (now missing), notch for chord; pin missing; trace of notched bar catchplate .

Paralleled at the Saalburg (Böhme 1972, Taf 29.1139).

134. Acc no 75.367 CM; width 45mm; Wt 12gm

Illustrated - Fig.13

unusual lozenge-shaped variant; 2 pierced plates, iron axis; pin missing; conventional catchplate, complete.

The are only two other trompetenmuster brooches from the region: a silver brooch from Housesteads (Bosanquet 1904, 286; fig 44; Charlton 1934, 197 no 15; pl XXIXE.B.1: Charlesworth 1961, 36 no 4; pl VIII.5), and an example from Old Penrith (Butcher 1991, 183-4 no 628; fig 90).

The motif is common in 2nd and 3rd century bronze work; see Böhme (1972, 43-4; Taf 29). For discussion of trompetenmuster mounts see Allason-Jones and Miket 1984, 224 no 3.768.

14.10 Swastika

135. Not numbered missing; width - ; Wt -

Haverfield 1913, 274

no details.

Swastika brooches are most commonly found on the German frontier (Böhme 1972, Taf 30.1179-83; Taf 31.1184'-1208), with some examples from Noricum, Pannonia, Italy, Dura-Europos and Britain (ibid, 69-70). In addition to the British examples listed by Böhme, there are two others :-

Benwell (Petch 1927, 188; pl XL.1)

Carlisle (cat no 284).

14.11 Pelta

136. Acc no 75.212 missing; L 18mm; Wt -

'pelta brooch fragments'.

GROUP 15. GILDED DISC AND GEM

15.1 Oval

137. Not numbered missing; width - ; Wt -

Haverfield 1911, 181

'... a gilt oval piece, mounted with a conical amethyst or similar stone, precisely resembles a specimen found at Swaffham, Norfolk, which I have figured in the Victoria History, 1, 321.'

138. Not numbered missing; width c31mm; Wt -

Charlesworth 1961, 36 no 8; pl VIII.8

'... millefiori flashed over green glass.'

139. Not numbered missing; width c34mm; Wt -

ibid, no 10; pl VIII.7

' 2 gilt bronze oval brooches, 2 zones of decoration ... dark brown glass.'

140. Not numbered missing; width c34mm; Wt -

see above.

Parallels:-

South Shields (Allason-Jones and Miket 1984, 115-6 nos 3.136-7; and see parallels cited there)

Piercebridge (Charlesworth 1961, 36 no 9; pl VIII.9)

Brancaster (Mackreth 1985, 44 no 5; fig 28)

See also Vindolanda (cat no 224).

15.2 Circular

141. Acc no 75.363 missing; diam 46mm; Wt -

The 1975 catalogue does not mention gilding, but the illustration shows incised guilloche decoration and an (empty) central setting characteristic of the type.

Parallels:-

South Shields (Allason-Jones and Miket 1984, 116 nos 3.138-9; and see parallels cited there)

Brancaster (Mackreth 1985, 204-5 no 16; fig 86)

See also Vindolanda (cat no 225).

Gilded disc and gem brooches are likely to be of British origin, although some examples are found on the Continent. For discussion see Mackreth *et al* 1986, 65-7, 73, where these brooches are said to be essentially third century in date, although still common in the fourth century.

are seven from Chesters (cat nos A295-A301), and three from South Shields (Allason-Jones and Milet 1984, 110 nos 3.113-4; and M E Snape, forthcoming). See also Vindolanda (cat no 227), and Corbridge (cat nos 170 and 171).

Date range 1st to 4th centuries AD.

c) Penannular Brooches

GROUP 16. PENANNULARS

16.1 Fowler A2

142. Acc no 75.323 CM; diam (max) 27mm; Wt 3gm

Illustrated - Fig. 13

complete; oval hoop, oval cross-section; pin strongly arched.

143. Acc no 75.322 CM; diam 28mm; Wt 3gm

Illustrated - Fig. 13

circular hoop, circular cross-section; one terminal corroded; tip of pin broken.

144. Acc no 75.317 CM; diam 25mm; Wt 2.5gm

Illustrated - Fig. 13

as above; pin barrel corroded on to hoop, rest of pin missing.

145. Acc no 75.311 CM; diam (max) 28mm; Wt 3gm

Illustrated - Fig. 14

slightly oval hoop, circular cross-section; pin missing.

145.1. Acc no 75.2441 CM; diam (max) 26mm; Wt 3gm

circular hoop, circular cross-section, corroded; uncollared, milled terminals; pin missing.

Type A2 has a wide distribution, the greatest numbers being from the Hadrian's Wall area and Traprain Law (Fowler 1960, 174; fig 14). There

Sub-group A3i

146. Acc no 75.324 CM; diam 22mm; Wt 2.5gm

Illustrated - Fig. 14

circular hoop, circular cross-section; unmilled, collared terminals; tip of pin missing.

147. Acc no 75.314 CM; diam(max) 41mm; Wt 13.5gm

Illustrated - Fig. 14

oval hoop, oval cross-section; pin missing.

148. Acc no 75.320 CM; diam c23mm; Wt 1gm

2 fragments; pin missing.

149. Acc no 75.321 CM; diam (d) 25mm; Wt 7gm

Illustrated - Fig. 14

as cat no 147, but bent, so that terminals overlap, ? to form finger ring.

Examples of type A3i are known from:-

Corbridge (cat nos 171.1 and 171.2)

Vindolanda cat nos 228, 229

Benwell (cat no A225)

Wallsend (L Allason-Jones, forthcoming b)

Housesteads (L Allason-Jones, forthcoming a)

See also Fowler 1960, 174.

Dating:-

Beginning in the 1st century AD. Some found in Anglo-Saxon graves.

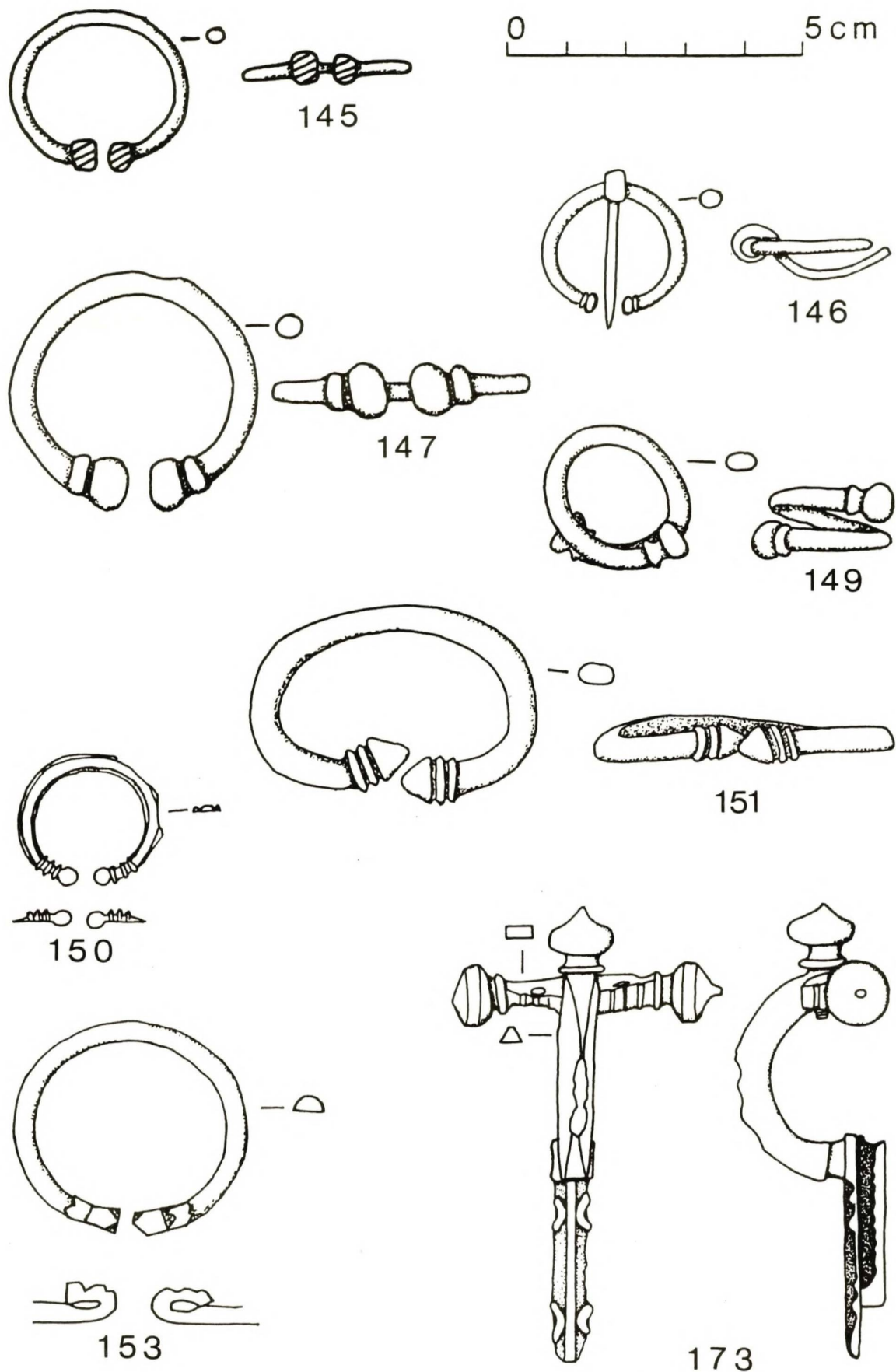


Figure 14. Brooches 145-53 from Corbridge, no 173 from Shorden Brae

Sub-group A3ii

150. Acc no 75.315 CM; diam (max) 25mm; Wt 0.5gm

Illustrated - Fig. 14

unusual penannular made from sheet bronze (surely not functional as a brooch?); oval hoop; terminals have double collars, not continuous around back; pin missing.

151. Acc no 75.319 CM; diam (d) 48mm; Wt 16.5gm

Illustrated - Fig. 14

distorted; oval cross-section; conical terminals with double mouldings; pin missing.

Paralleled at Chollerford, near Chesters (cat no A303)

See also Fowler 1960, 175.

'... variations on types A and D in particular were common on sites connected in some way with auxiliaries of the army' (ibid, 171).

16.2 Fowler B

Sub-group B2

152. Acc no 75.318 CM; diam (max) 34mm; Wt 16gm

Fowler 1960, 166; fig 10: Charlesworth 1961, 23 no 5; pl VIII.4

elaborately decorated silver penannular; circular hoop; quadrangular section, edges notched to give frilled appearance (larger notches on upper and lower edges than on sides); hoop tapering then bent back sharply to form 'acorn' terminals, a pair of 'dumbbells' fitted into the curve between each terminal and shank; pin complete, straight, barrel decorated with 2 bands of ridge and groove decoration either side; around hoop on either side of pin are 2 D-shaped wire rings.

An exact parallel from Newstead (Curle 1911, 326-7; pl XXXVIII.13) was found with a piece of silver chain. For other similar brooches, see Charlesworth 1961, 23-4.

The type is not closely dated, but may belong to the 1st century AD.

16.4 Fowler D

Sub-group D6

153. Acc no 75.313 CM; diam (max) 38mm; Wt 6.5gm

Illustrated - Fig. 14

oval hoop; D-shaped cross-section; terminals folded back and pinched into quasi-zoomorphic shape; pin missing.

Type D6 is found mainly in the South and West, and a date range of the 1st to the 3rd centuries AD (Fowler 1960, 176). There is an example from South Shields (ME Snape, forthcoming).

16.6 Unclassified

153.1. Acc no 75.4147 CM; diam 28mm; Wt 5gm

very corroded iron penannular; hoop roughly circular; widens towards terminals, no details visible; half of strongly arched pin present, barrel corroded on to hoop.

BROOCHES FROM RECENT EXCAVATIONS

The following brooches have been described by Miss L Allason-Jones (1988a).

a) Bow Brooches

GROUP 1. FIRST CENTURY

1.1 Nauheim derivative (Collingwood Group A)

154. Acc no 75.4614 CM; L 51mm; Wt -

Allason-Jones 1988a, 159-61 no 4; fig 76

1.8 Hod Hill derivative (Collingwood Group P)

155. Acc no 75.3945 CM; L(s) 30mm; Wt 2gm

ibid, 159 no 1; fig 76

1.9 Polden Hill (Collingwood Group E)

156. Acc no 75.3614 CM; L 51mm; Wt 6.5gm

ibid, 161 no 5; fig 76

repaired in antiquity.

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

2.5 Other bow brooches

157. Acc no 75.3466 CM; L(d) 48mm; Wt 7.5gm
ibid, 161 no 6; fig 76

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet (Collingwood Group R)

Sub-group Ri

158. Acc no 75.3547 CM; L 36mm; Wt -
ibid, 161 no 10; fig 76

Sub-group Rii

159. Acc no 75.3462 CM; L 64mm; Wt 9gm
ibid, 161 no 11; fig 76

4.4 Trumpet and fantail (Collingwood Group Si)

- 159.1. Not numbered CM; L 33mm; Wt -
ibid, 161-3 no 12; fig 76

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee

Sub-group 5.1B

160. Acc no 75.3461 CM; L 32mm; Wt 2.5gm
ibid, 165 no 29; fig 77

Sub-group 5.1D

161. Acc no 75.3613 CM; L 30mm; Wt 2.5gm
ibid, 165 no 27; fig 77
- 161.1. Acc no 75.3917 CM; width (s) 17mm; Wt -
ibid, 165 no 28; fig 77

GROUP 6. FANTAILED (Collingwood Group X)

162. Acc no 75.3399 CM; L(d) 43mm; Wt 5gm
ibid, 161 no 8; fig 76

163. Acc no 75.3341 CM; L(d) 35mm; Wt 3gm
ibid, 161 no 9; fig 76

GROUP 9. FRAGMENTARY

164. Not numbered CM; width 24mm; Wt 4gm
ibid, 165 no 30; fig 77

165. Acc no 75.3400 CM; L(s) 30mm; Wt 1.5gm
ibid, 165 no 41; fig 78

166. Not numbered CM; L(s) 30mm; Wt 1gm
ibid, 159 no 3; fig 76

- 166.1. Acc no 75.3399 CM; L 44mm; Wt -
ibid, 159 no 2; fig 76

- 166.2. Not numbered CM; L 36mm; Wt -
ibid, 165 no 31; fig 77

- 166.3. Acc no 75.2275 CM; L 11mm; Wt -
ibid, 165 no 32; fig 77

- 166.4. Acc no 75.3550 CM; L 14mm; Wt -
ibid, 165 no 33

- 166.5. Not numbered CM; L 35mm; Wt -
ibid, 165 no 34

- 166.6. Not numbered CM; L 22mm; Wt -
ibid, 165 no 35

- 166.7. Not numbered CM; L 18mm; Wt -
 ibid, 165 no 36
- 166.8. Acc no 75.3303 CM; L 45mm; Wt -
 ibid, 165 no 37; fig 78
- 166.9. Not numbered CM; L 24mm; Wt -
 ibid, 165 no 38; fig 78
- 166.10. Acc no 75.3303 CM; L 25mm; Wt -
 ibid, 165 no 39
- 166.11. Acc no 75.3947 CM; L 14mm; Wt -
 ibid, 165 no 40
- 166.12. Acc no 75.3400 CM; width 18mm; Wt -
 ibid, 166 no 42; fig 78
- 166.13. Acc no 75.2378 CM; L 36mm; Wt -
 ibid, 166 no 43; fig 78
- 166.14. Acc no 75.3917 CM; L 27mm; Wt -
 ibid, 166 no 44
- 166.15. Acc no 75.3917 CM; width 15mm; Wt -
 ibid, 166 no 45; fig 78

b) Plate Brooches

GROUP 10. SIMPLE ENAMELLED PLATES

10.4 Concentric circles and dots

Sub-group 10.4A

- 166.16. Acc no 75.3916 CM; diam 24mm; Wt -
 ibid, 163 no 22; fig 77

Sub-group 10.4B

167. Acc no 75.3468 CM; diam(max) 38mm; Wt 11.5gm
 ibid, 163 no 21; fig 77

10.11 Miscellaneous discs

- 167.1. Not numbered CM; diam - ; Wt -
 ibid, 163 no 23

10.13 Umbonate

- 167.2. Acc no 75.3916 CM; diam 22mm; Wt -
 ibid, 163 no 20; fig 77

GROUP 11. APPLIED REPOUSSÉ SHEET

11.2 Blank disc

- 167.3. Acc no 75.3916 CM; diam 30.5mm; Wt -
 ibid, 165 no 25; fig 77

GROUP 12. DISC, WITH CENTRAL PROJECTION

12.1 Buckler

168. Acc no 75.3400 CM; diam 31mm; Wt 3.5gm
 ibid, 163-5 no 24; fig 77

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.3 Zoomorphic

- 168.1 Not numbered CM; L 31mm; Wt -
 ibid, 161 no 7; fig 76

14.11 Pelta

169. Not numbered CM; L 31mm; Wt 2gm
 ibid, 165 no 26; fig 77

c) Penannular Brooches

Illustrated - Fig. 14

Gillam and Daniels 1961, 56-7

GROUP 16. PENANNULARS

16.1 Fowler A

Fowler A1

169.1. Acc no 75.3399 CM; L 26mm; Wt -

ibid, 163 no 18

Fowler A2

170. Acc no 75.3467 CM; diam (max) 22mm; Wt 1gm

ibid, 163 no 14; fig 77

171. Not numbered CM; fragments; Wt 2gm

ibid, 163 no 19; fig 77

171.1. Acc no 75.2275 CM; diam 24mm; Wt -

ibid, 163 no 15; fig 77

171.2. Acc no 75.3548 CM; diam 24mm; Wt -

ibid, 163 no 16; fig 77

171.3. Acc no 75.3945 CM; diam 23m; Wt -

ibid, 163 no 13

16.4 Fowler D (or ? E)

172. Not numbered CM; diam 20mm; Wt 1gm

ibid, 163 no 17; fig 77

brooch classified as Fowler type D6,
but could possibly be type E1.

SHORDEN BRAE

GROUP 8. P-SHAPED (Collingwood Group T)

8.8 Crossbow, heavy

Keller 3A

173. Not numbered CM; L 77mm; Wt 34.5gm

Context. In late burial close to mausoleum.

crosspiece of rectangular section, stepped out from bow, two holes pierced in it; collared, unfaceted terminal knobs, wider than long; headknob similar, but separate, rivetted on, set well forward over bow; notch for hinged pin, now missing; axis missing; 'knife-edged' bow, damaged, shorter than leg; step between bow and leg; leg damaged, ? central spine and cut-out decoration producing X at top and bottom of leg; catchplate complete, not extending full length of leg; hole at base.

Paralleled at München-Harlaching (Keller 1971, Taf 25.3).

Keller type 3A is dated cAD 340-60.

N.B. For general remarks about the brooches from Corbridge and Corbridge Red House see Chapter 2.6.

3.3 VINDOLANDA

All are located in the Vindolanda Museum, with the exception of cat no 232 (Tullie House Museum, Carlisle), and cat no 196 (possibly to be identified as an example in Corbridge Museum). All are of copper alloy. The Vindolanda Trust supplied details of contexts for brooches excavated by them in the 1970s. Also included are some examples noted by the author when they were previously on display in the Vindolanda Museum, and some examples known from published illustrations (Henig 1975: Birley 1977). Brooches from the 1980 excavation are mentioned briefly here; full details have already been published (Bidwell 1985, 117-9). Two examples (cat nos 196, 232) are from earlier excavations.

a) Bow Brooches

GROUP 1. FIRST CENTURY

1.1 Almgren form 16

174. Acc no 769 L 56mm; Wt 6gm

Illustrated - Fig. 15

Context 'XXXII/III alley. strat'

one-piece brooch formed from flat strip; spring originally of 4 turns, one turn and pin missing; bow steeply arched, central longitudinal groove with punched dots either side; file marks visible on back; leg narrow, flat, straight profile; foot is cylindrical tube formed from strip wound round base of leg, decorated with 4 transverse ridges; catchplate very thin, turnover missing.

Parallels :-

Birdoswald, stray find to south of fort (cat no A381)

'in the vicinity of Mainz' (Almgren 1923, 236; Taf 1.16)

Nijmegen (van Buchem 1941; pl XIII.6-9).

This form, commonly found in Belgian cemeteries, was said by Almgren to continue into the 2nd century; but this is now doubted, and this type, like Nauheim derivatives generally, is thought to have gone out of use before the end of the 1st century (Simpson, Hawkes and Hull 1979, 334, 338).

central spine, notched either side and grooved at the edges, ends in 2 transverse mouldings; foot splayed with 2 bands of moulding and flat circular base; catchplate distorted, turnover damaged.

This brooch is a simplified version of one found at Winterton (Stead 1976, 201 no 27; fig 101). The closest parallel is from the shrine of Apollo at Nettleton, Wilts (Wedlake 1982, 128 no 61; fig 53). See also :-

Gadebridge (Butcher 1974, 125-6 no 20; fig 54)

Caerleon amphitheatre (Wheeler and Wheeler 1928, 162 no 12; fig 13).

Dating :-

The Gadebridge example came from a pre-Antonine occupation layer, but Miss Butcher (1977, 64) cites a brooch from Chelmsford, similar except for a lattice pattern on the bow, from a layer sealed cAD 80.

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

2.4 'Severn'

175. Acc no 2239 L 64mm; Wt 21.5gm

Snape 1987, 309-12; fig 1b

See discussion following cat no 10.2.

GROUP 3. HEADSTUD AND DERIVATIVES

3.1 Headstud (Collingwood Group Q)

Sub-group 3.1Dii

176. Acc no 2255 L 44mm; Wt 7gm

Illustrated - Fig. 15

Context 'near doorway of E guardchamber of N gate, circular structure inside fort'

fixed headloop rising from narrow crosspiece, stepped out from bow (tip of one arm broken); cylindrical pin housing; hinged pin now detached; flat strip bow slightly hollow at back, now distorted; cast-in-one circular stud with incised cross; rest of bow has

3.2 'Thealby Mine'

177. Acc no 335 L 53mm; Wt 5.5gm

Context 'NW 1 between guardchambers'

fixed headloop, very corroded, set on rectangular plate with transverse groove; arms (1 broken) with 2 longitudinal ridges; notch for hinged pin, now missing; bow faceted, tapering; foot splayed, circular base, transverse moulding above; long catchplate, turnover missing.

178. Acc No 2269 L 46mm; Wt 13.5gm

Illustrated - Fig. 15

similar to the above, but heavier and with cylindrical crosspiece; iron axis and head of corroded hinged pin; bow of trapezoidal section, longitudinal ridge either side, hollow at back; foot cylindrical, corroded, double moulding above, lower band ?milled; catchplate turnover missing.

Parallels :-

South Shields (Allason-Jones and Miket 1984, 104-6 nos 3.66, 3.69, 3.71; Allason-Jones 1983, 119 no 165; fig 77)

Richborough (Henderson *et al* 1949, 114 no 37; pl XXVIII)

Newstead (Curle 1911, 323-4; pl LXXXVI.17,18)

Traprain Law (Curle and Cree 1921, 184; fig 21.3).

Dated to the 2nd century.

Henig 1975, pl IV: Birley 1977, pl 44, pl XII

as above, but repaired in antiquity; headloop fits loosely onto forward projection as spring is broken (2 turns one side, 1 at other); separate pin found with brooch, has been hooked around axis wire; Rii decoration has double moulding above and below.

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet (Collingwood Group R)

Sub-group Ri

179. Acc no 37 L (2 frags) 49mm; Wt 7.5gm

Context 'Bath house. In rubble fill to S of warm room'

narrow, poorly made specimen, head distorted, bent backwards; all pin attachments and headloop missing; Ri decoration of central oval disc, projecting more at front than back, notched around edge, but no acanthus; one band of continuous moulding below, corroded, possibly incised decoration, possibly similar band above; upper bow and leg V-sectioned; leg has trace of incised chevrons; splayed foot with double mouldings, flat semi-circular base; catchplate complete but corroded.

The closest parallel is from Culbin Sands (Curle 1932, 391-2; fig 69.1).

Sub-group Rii

180. Acc no 1525 L 58mm; Wt 15gm

Context 'A4/79 lower bog silt'

Henig 1975, pl IV: Birley 1977, pl 44, pl XII

complete, as cat no 22; spring of 6 turns; Rii decoration, single moulding above, double below, lower band milled; milled decoration on headloop collar and foot; catchplate complete.

181. Acc no 973 L 61mm; Wt 17.5gm

Context 'VI 24. To S of II'

Illustrated - Fig. 15

182. Acc no 956 L (s) 31mm; Wt 6.5gm

Unstratified

head and upper bow of similar brooch; no headloop or axis wire, iron pin encased in bronze cylinder; spring of 4 turns, pin missing; ? unfinished, broken during winding of spring.

For parallels, see cat no 28.

183. Number unknown L - ; Wt -

Rii trumpet with separate headloop, formerly on display in Vindolanda Museum.

184. Acc no 2149 L 98mm; Wt 57gm

Context 'site LXXXVI 16.Level IV'

Illustrated - Fig. 15

very large, heavy brooch, too corroded to determine material from which it is made, but it has originally been gilded; broad head with flange, separate headloop with collar; spring and pin complete, but heavily corroded; upper bow and leg sharply V-sectioned; Rii decoration, central button faceted, double mouldings above and below, each with central groove; leg has straight profile, countersunk into depression in cylindrical foot (possibly with grooved decoration, but corroded); base of foot has countersunk boss; catchplate ? with incised lines round edge, turnover missing; traces of gilding show decoration of scales round lower edges of head and extending downwards; 'eye' pattern on right; scale pattern down sides of leg.

The brooch closely resembles the silver gilt brooches from Backworth (Brewis 1924, 173-181; pl V), but is slightly smaller.

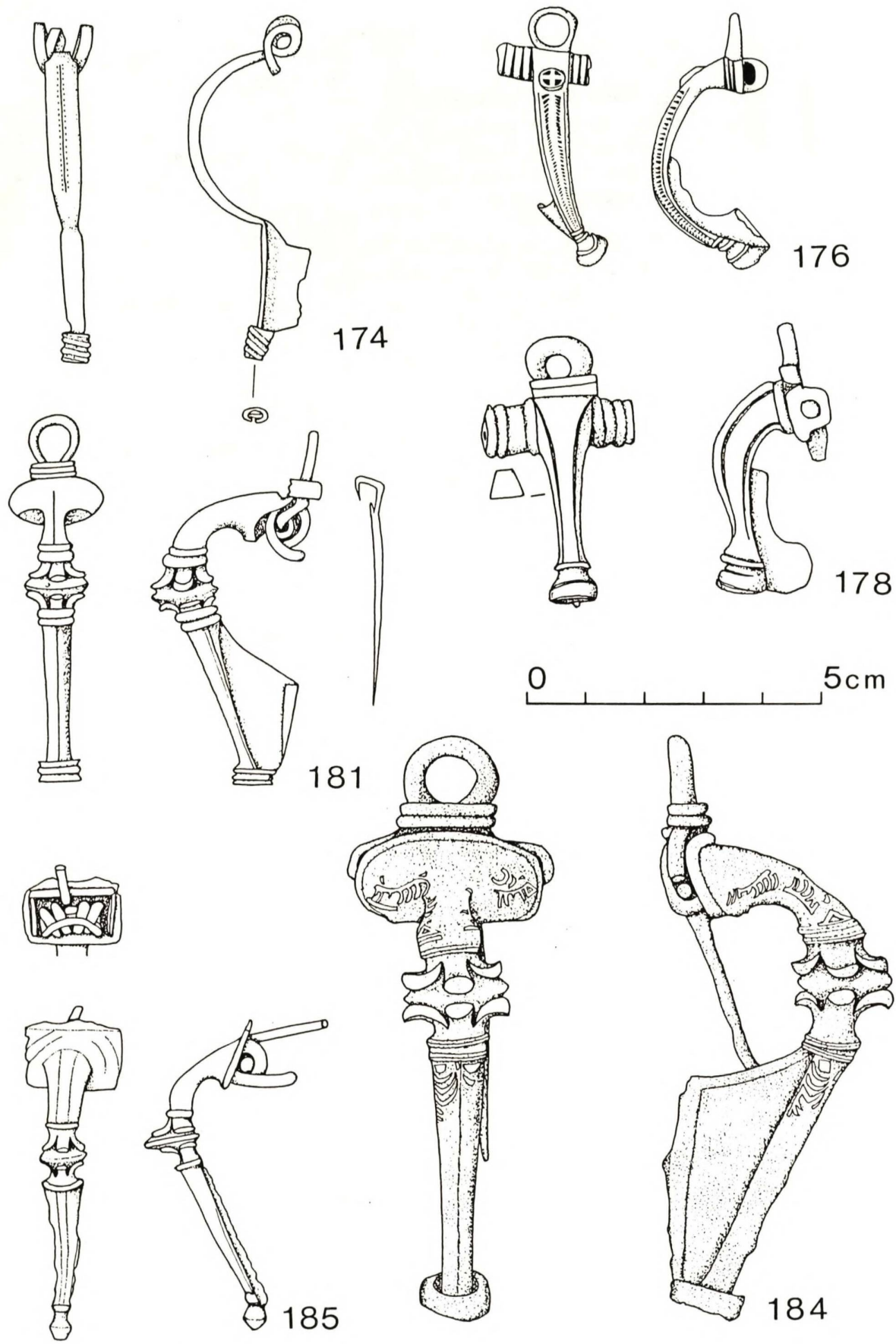


Figure 15. Brooches from Vindolanda.

185. Acc no 862 L 52mm; Wt 6.5gm
 Context 'XXXIII. S strat below 4th century rubble pack'
 Illustrated - Fig. 15
 trumpet head with wide squarish flange, incised concentric arcs; no surviving headloop or forward projection; spring housing, axis, spring of ? 4 turns (corroded); stump of pin; upper bow of oval section with flattened medial rib; waist decoration sharply defined, intermediate between Rii and Riv (central plate continues round back, acanthus and single mouldings do not); lower bow narrow, distorted; onion-shaped footknob, non-continuous single moulding above; trace of catchplate.
 There is an exact parallel from Winterton (Stead 1976, 201 no 29; fig 101).
- Sub-group Riv
186. Acc no 1405 L 67mm; Wt 15.5gm
 Context 'A4. On rough stone surface below 4th century floor'
 Illustrated - Fig. 16
 head damaged; spring, pin, headloop missing; upper bow corroded; Riv decoration with triple mouldings above and below; lower bow V-sectioned, narrow, distorted; foot semi-cylindrical, triple mouldings; flat base; remains of catchplate.
 Paralleled at Winterton (Stead 1976, 201 no 28; fig 101).
187. Acc no 88 L (s) 27mm; Wt 4.5gm
 Context 'Bath house. Rubble fill to S of cold plunge'
 head and upper bow only, distorted; spring, pin, and headloop missing; Riv well defined, single moulding above; broken below acanthus.
 Riv brooches have been found at :-
 Watercrock (Olivier 1979, 208-9 nos 6,7; fig 84)
 Mainz (Collingwood 1930, 50-1; fig 7)
- Traprain Law (rather poorly made) (Cree and Curle 1922, 233; fig 28.1).
- Unclassified trumpets
188. Number unknown L - ; Wt -
 formerly on display; with separate headloop.
189. Number unknown L - ; Wt -
 formerly on display; enamelled brooch with fixed headloop.
- For dating of trumpet brooches, see cat no 36.
- GROUP 5. KNEE BROOCH AND DERIVATIVES
- 5.1 Knee (Collingwood Group V)
- Sub-group 5.1A
190. Acc no 2147 L 31mm; Wt 20gm
 Illustrated - Fig. 16
 heavily covered in iron corrosion, no details of spring or pin visible; trace of type iii catchplate.
 Most common in Germany, and at Carnuntum; for parallels see Böhme 1972, 58-9. The date range is from the mid-2nd century to the 3rd.
- Sub-group 5.1C
191. Acc no 2416 L 38mm; Wt 14gm
 Bidwell 1985, 119 no 8; fig 39
- 5.2 Knee and fantail (Collingwood Group X)
192. Acc no 2660 L 37mm; Wt 6.5gm
 Bidwell 1985, 119 no 7; fig 39
193. Acc no 939 L (2 frags) 38mm; Wt 6gm
 Illustrated - Fig. 16
 Henig 1975, pl IV; Birley 1977, pl 44
 headplate damaged, 2 pierced plates for axis and spring, traces present; pin

missing; bow faceted, hollow back, broken across centre; fantail damaged; type i catchplate, turnover missing.

Illustrated - Fig. 16

cylindrical crosspiece (damaged); axis, spring, pin missing; bow of square section, milled central ridge, ending in transverse groove; step and moulding at top of bow, transverse moulding at base now damaged; leg of V-section, widening and splaying out at foot which has flat semi-circular base; catchplate extends full length of leg, broken.

194. Acc no 926 L (2 frags) 34mm; Wt 3gm

as above, but broken at junction of bow and headplate; iron axis, spring of 6 turns, pin missing.

For dating see cat no 61.

5.3 S-profile

198. Acc no 493 L (2 frags) 36mm; Wt 8gm

as above, spring of 10 turns, corroded; pin missing; bow broken across centre; base of bow has triangular plate and double moulding; leg straight, V-sectioned, lower half missing; trace of catchplate.

195. Acc no 3021 L 31mm; Wt 6gm

Bidwell 1985, 119 no 6; fig 39

A knee brooch from Vindolanda was included in a report on small finds from Housesteads (Charlton 1934, 195 no 2; pl XXIXC.2). Most of these finds are now in Corbridge Museum (Box no 75.4879), and the group includes a brooch resembling that illustrated in the above mentioned report. There is no accompanying evidence to indicate the provenance of the brooch (numbered 79208647), so the identification cannot be certain, but the example is described here:-

199. Acc no 1947 L 46mm; Wt 8.5gm

semi-cylindrical crosspiece with transverse step on top, one end damaged; iron axis, spring of 10 turns, pin missing; bow D-sectioned, deep central groove, remains of plate and vestigial moulding at base; leg has slightly recurving profile, flat base, damaged; catchplate not extending full length of leg, damaged.

196. No 79208647 CM; L 33mm; Wt 6.5gm

Illustrated - Fig. 16

catalogued as sub-group 5.3 because of general S-shape, but details of foot reminiscent of 5.4; semi-cylindrical springcase, open at back, ends pierced for axis, also containing central pierced plate through which wire had been threaded; axis, pin, and spring missing; bow has step at top and steps at front and back at point of recurve; foot upturned, not flat at base; notched bar catchplate (type iii).

200. Acc no 688 L (2 frags) 28mm & 17mm; Wt 3.5gm

crosspiece as above, spring of ? 12 turns, half pin present; upper bow only, narrow, square-section, distorted; separate fragment of leg and corroded catchplate.

An example from Cariisle (cat no 267.1) is an exact parallel, though slightly larger.

For dating see cat no 63.

201. Acc no 336/44 or 816 L (s) 31mm; Wt 2.5gm

fragment of semi-cylindrical crosspiece; bow very corroded, trace of double 'step' at top, broken at lower end.

GROUP 8. P-SHAPED (Collingwood Group T)

Parallels :-

8.1 P-shaped, plain

South Shields (Allason-Jones and Miket 1984, 104 no 3.59)

Sub-group 8.1A

Saalburg and Zugmantel (Böhme 1922, Taf 13.593-4; and see parallels cited there, mostly in Germany)

197. Acc no 57 L 47mm; Wt 6gm

Context 'Mansio. Above gutter, room IV'

Pannonia (Kovrig 1937, Taf XVI.170).

Date range from the early 3rd century to the 4th.
See cat no 78.

8.2 Divided Bow, double

202. Acc no 344 L 65mm; Wt 11.5gm

Illustrated - Fig. 16

Henig 1975, pl IV: Birley 1977, pl 44

semi-cylindrical crosspiece with remains of wavy headcrest; axis, spring of 10 turns, pin missing; arms V-sectioned, joined by crescent-shaped plate, small transverse moulding at junction; leg V-sectioned with slight recurve; catchplate not extending full length of leg, turnover missing.

203. Acc no 2951 L (s) 30mm; Wt 6gm

Bidwell 1985, 119 no 5; fig 39

For parallels, see cat nos 72-3; for dating, see cat no 78.

8.3 Divided bow, triple

Sub-group 8.3B

204. Acc no 2219 L (2 frags) 62mm; Wt 8.5gm

Context 'Area 2. Level 1' i.e. circular buildings outside N wall of fort, 1979 excavation, topsoil

Illustrated - Fig. 16

as cat no 75, but in 2 fragments; tip of triangular headplate broken; trace of iron axis; spring and pin missing; arms are 3 equally sized strips, joined at base by transverse plate with zig-zag edge; broken above junction of arms, distorted; small V-shaped moulding above junction with leg; leg flat, leaf-shaped; 3 pairs of stamped dot and circle motifs either side of spine; catchplate complete; head and bow white metal plated.

For parallels, see cat no 75; for dating, see cat no 78.

8.5 Crossbow, light (headknob only)

Sub-group 8.5B

205. Acc no 474 L 63mm; Wt 10.5gm

Unstratified

Illustrated - Fig. 16

Henig 1975, pl IV: Birley 1977, pl 44

almost identical to cat no 79, but facets on bow slightly different, and has white metal plating front and back.

For parallels, see cat no 79; for dating, see cat no 82.

8.6 Crossbow, light (three knobs)

Sub-group 8.6A

i) uncollared knobs

206. Acc no 2240 L 53mm; Wt 6.5gm

Bidwell 1985, 119 no 9; fig 39

ii) collared knobs

207. Acc no 725 L 56mm; Wt 6.5gm

Context 'below packing above original road flags, LXXIII'

Illustrated - Fig. 16

Henig 1975, pl IV: Birley 1977, pl 44

crosspiece D-sectioned; collared terminal knobs (flat at back); axis missing; hinged pin missing; plinth for headknob, broken off; bow D-sectioned, distorted, large semi-circular plate at base; leg D-sectioned, flat base, catchplate turnover damaged.

For parallels, see cat no 80; for dating, see cat no 82.

8.7 Crossbow, intermediate

208. Acc no 494 L (2 frags) 63mm; Wt 4gm

Context 'west gate, above road'

one arm of crosspiece present, no terminal knob; iron axis, hinged pin

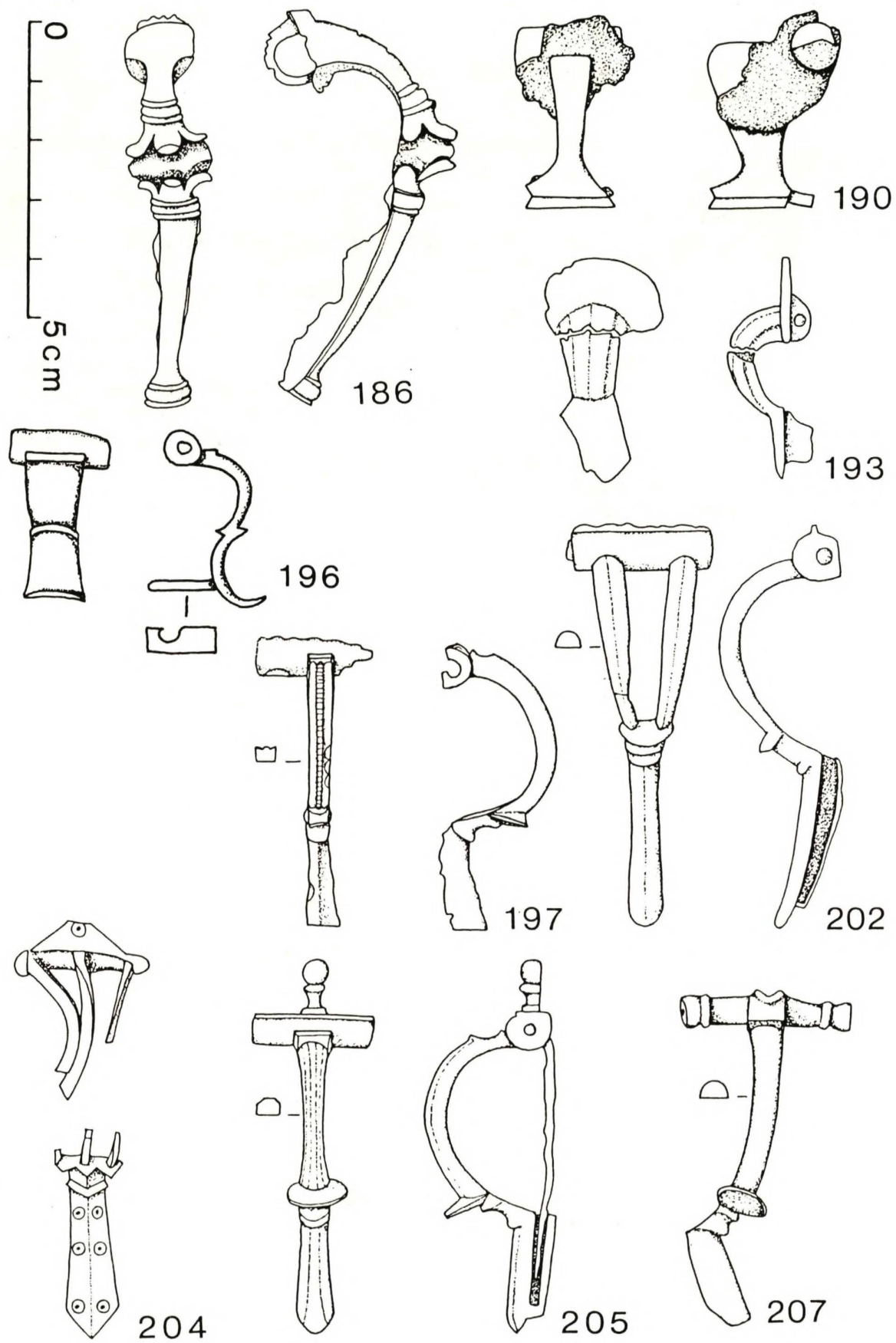


Figure 16. Brooches from Vindolanda.

missing; collared headknob set over bow; 'knife-edged' bow, distorted, broken off at junction with leg; leg straight, damaged, trace of catchplate; white metal plating.

Paralleled at South Shields (Allason-Jones and Miket 1984, 100 no 3.46).

8.8 Crossbow, heavy

209. Acc no 788 L (d) 53mm; Wt 14gm

Unstratified

Illustrated - Fig. 17

Henig 1975, pl IV: Birley 1977, pl 44

crosspiece of rectangular section; collared, oval terminal knobs, ends flattened; collared headknob on small plinth, set well forward over bow, (collars continuous around bow); axis and head of hinged pin present; square-sectioned bow, square moulding at junction of bow and leg; leg straight, lower end missing, two transverse grooves at top, one lower down; trace of catchplate.

Paralleled at Zugmantel (Böhme 1972, Taf 20.817).

Dating:- apart from the wide bow, this example has characteristics of Keller type 1A, dated cAD 290-320.

210. Acc no 2827 L (s) 33mm; Wt 4gm

Bidwell 1985, 119 no 11; fig 39

fragment of bow only.

GROUP 9. FRAGMENTARY

211. Number unknown L (s) c28mm; Wt -

Henig 1975, pl IV: Birley 1977, pl 44

damaged, but possibly a knee brooch.

212. Acc no 2507 L (s) 20mm; Wt 1.5gm

Bidwell 1985, 117-9 no 4; fig 39

213. Acc no 2996 L (s) 19mm; Wt 0.5gm

Bidwell 1985, 119 no 10; fig 39

b) Plate Brooches

GROUP 10. SIMPLE ENAMELLED PLATES

10.1 Concentric ovals

214. Acc no 397 width 27mm; Wt 4.5gm

Illustrated - Fig. 17

bronze rim; raised central setting, empty; traces of enamel in outer ring, stained green/blue; pierced plate, traces of iron axis, spring; pin missing; catchplate broken, turnover missing.

215. Acc no 380 width 28mm; Wt 4.5gm

Context 'site IV'

almost identical to the above, but traces of red enamel; one pierced plate, damaged and flattened; axis and pin missing; catchplate also flattened, turnover missing.

Parallel:- Birdoswald (Richmond 1931, 134 no 8)

See also Richborough (Henderson *et al* 1949, 117 no 48; pl XXIX).

10.2 Concentric circles

216. Number unknown diam - ; Wt -

formerly on display; outer ring of enamel blue, inner red; setting empty.

10.7 Star and dots

217. Acc no 2878 diam 23mm; Wt 2gm

Bidwell 1985, 117 no 3; fig 39

10.11 Miscellaneous discs

218. Acc no 1892 diam 20mm; Wt 3gm

Context 'KD. 3/4 II. Level 1' (? topsoil)

Illustrated - Fig. 17

bronze rim; quatrefoil motif in white enamel on a blue/green field; no central setting; 2 pierced plates, axis; spring and pin missing; small catchplate, complete.

There is an exact parallel from the Saalburg (Böhme 1972, Taf 26.984).

Dating of enamelled plates:- second century.

space flat, pierced for separately rivetted-on boss in the form of a hub and 5 spokes (1 now missing); 1 pierced plate, 2 turns of spring (corroded) remaining one side; pin missing; catchplate complete; face gilded, reverse white metal plated.

A very unusual brooch. There are similar examples from Chesters (cat no A290), and Housesteads (cat no A357), and a few others are known from other parts of Britain (Allason-Jones 1988c, 89-90: see also Hattatt 1985, 150-2). The Housesteads brooch came from a deposit dated to the mid-fourth century (Allason-Jones 1988c, 89)).

GROUP 11. APPLIED REPOUSSÉ SHEET

11.1 With repoussé sheet

219. Acc no 3060 diam 23mm; Wt 3gm

Bidwell 1985, 117 no 1; fig 39

220. Acc no 2436 diam 24mm; Wt 4gm

Bidwell 1985, 117 no 2; fig 39

For parallels and dating see cat no 106.

11.2 Blank disc

221. Acc no 2081 diam 30mm; Wt 6.5gm

circular disc, no trace of decoration; 2 pierced plates, axis and hinged pin; catchplate damaged, turnover missing.

GROUP 15. GILDED DISC AND GEM

15.1 Oval

224. Acc no 2212 width 27mm; Wt 11.5gm

Unstratified

Illustrated - Fig. 17

outer rim damaged; raised central setting now filled with 4 fragments of glass paste (yellow and black), possible replacement in antiquity of lost gemstone; central setting surrounded by beaded rim and traces of incised leaf-shaped decoration, very corroded; single pierced plate, pin missing; very deep catchplate, turnover slightly damaged; face gilded, reverse now corroded.

For parallels see cat no 140.

GROUP 12. DISC WITH CENTRAL PROJECTION

12.1 Buckler

Sub-group 12.1A

222. Number unknown diam c21mm; Wt -

Henig 1975, pl IV: Birley 1977, pl 44

For parallels and dating, see cat no 109.

12.2 Disc with separate rivet (wheel type)

223. Acc no (?) 788 diam 24mm; Wt 6.5gm

Illustrated - Fig. 17

Henig 1975, pl IV: Birley 1977, pl 44

2 concentric raised rings, decoration of small stamped circles between; central

15.2 Circular

225. Number unknown diam c50mm; Wt -

formerly on display; very large brooch in good condition; face gilded, no incised decoration; hemispherical black glass paste gemstone in raised central setting.

226. Number unknown diam c36mm; Wt -

Henig 1975, pl IV: Birley 1977, pl 44

similar to the above, but not possible to determine if gilded; central setting empty.

For parallels and dating see cat no 141.

c) Penannular Brooches

GROUP 16. PENANNULARS

16.1 Fowler A

Sub-group A2

227. Number unknown diam c28mm; Wt -

Henig 1975, pl IV: Birley 1977, pl 44
pin missing.

For parallels and dating see cat no 145.

Sub-group A3i

228. Acc no 938 diam (max) 30mm; Wt 4gm

Context 'Unstratified. Mansio, 2 yds from NE corner'

Illustrated - Fig. 17

hoop circular, corroded; pin missing.

229. Acc no 2679 diam (max) 28mm; Wt 3.5gm

Bidwell 1985, 119 no 12; fig 39

For parallels and dating see cat no 149.

16.3 Fowler C

230. Number unknown diam c33mm; Wt -

Henig 1975, pl IV: Birley 1977, pl 44
complete.

The distribution of type C is mainly southern, with one outlier from Scotland (Fowler 1960, 175). (The type C from Great Chesters mentioned by Mrs Fowler was not found in the course of this survey.)

Date range:-

From the 1st century BC, and has been found in Anglo-Saxon graves (ibid).

16.5 Fowler E

231. Acc no 6 diam (max) 39mm; Wt 5gm

Illustrated - Fig. 17

oval hoop of D-sectioned wire; very corroded, but some ribbing visible; terminals too corroded to determine details; pin complete; barrel of pin has central rib and flared edges.

An example from Birdoswald, in a sealed deposit dated AD 369-383, has continuous ribbing around the hoop (Richmond 1931, 132 no 2; fig 4.3D). Two brooches from South Shields have discontinuous zones of ribbing (Allason-Jones and Miket 1984, 112 no 3.117: M E Snape, forthcoming). Other parallels are quoted by H N Savory (1956, 51-4; pl V), who dated the type to the 3rd and 4th centuries, those with discontinuous ribbing being later in the series.

16.6 Unclassified

232. Not numbered THM; diam 36mm; Wt 8gm

Context 'site C. S, U. Vindolanda 1930'

Illustrated - Fig. 17

circular hoop, narrowing towards terminals; diamond-shaped cross-section with raised central rib around 2/3 of brooch opposite terminals; both sides of rib milled, top has raised wavy ridge (worn at back); terminals are hemispheres with wide flange, collared; pin missing.

There are almost exact parallels from Augst (Riha 1979, Taf 69.1829), and Caerleon (Galliou 1981, 289; fig 2.2). The type originated in Eastern Gaul.

Dating:-

The Augst brooch was from a Neronian/Flavian context (Riha 1979, 209), but brooches of similar type from France are said to be mainly late Gallo-Roman (Fowler 1960, 167; see also Galliou 1981, 288-9). Site C at Vindolanda is the late Roman building to the north of the east gate (Birley 1931, 195; pl XXV).

233. Acc no 1395 diam (max) 20mm; Wt 2gm

Illustrated - Fig. 17

Henig 1975, pl IV: Birley 1977, pl 44

oval hoop of D-sectioned wire; no real terminals, but slight broadening of ends, transverse groove at outer edge; pin detached as barrel broken; pin

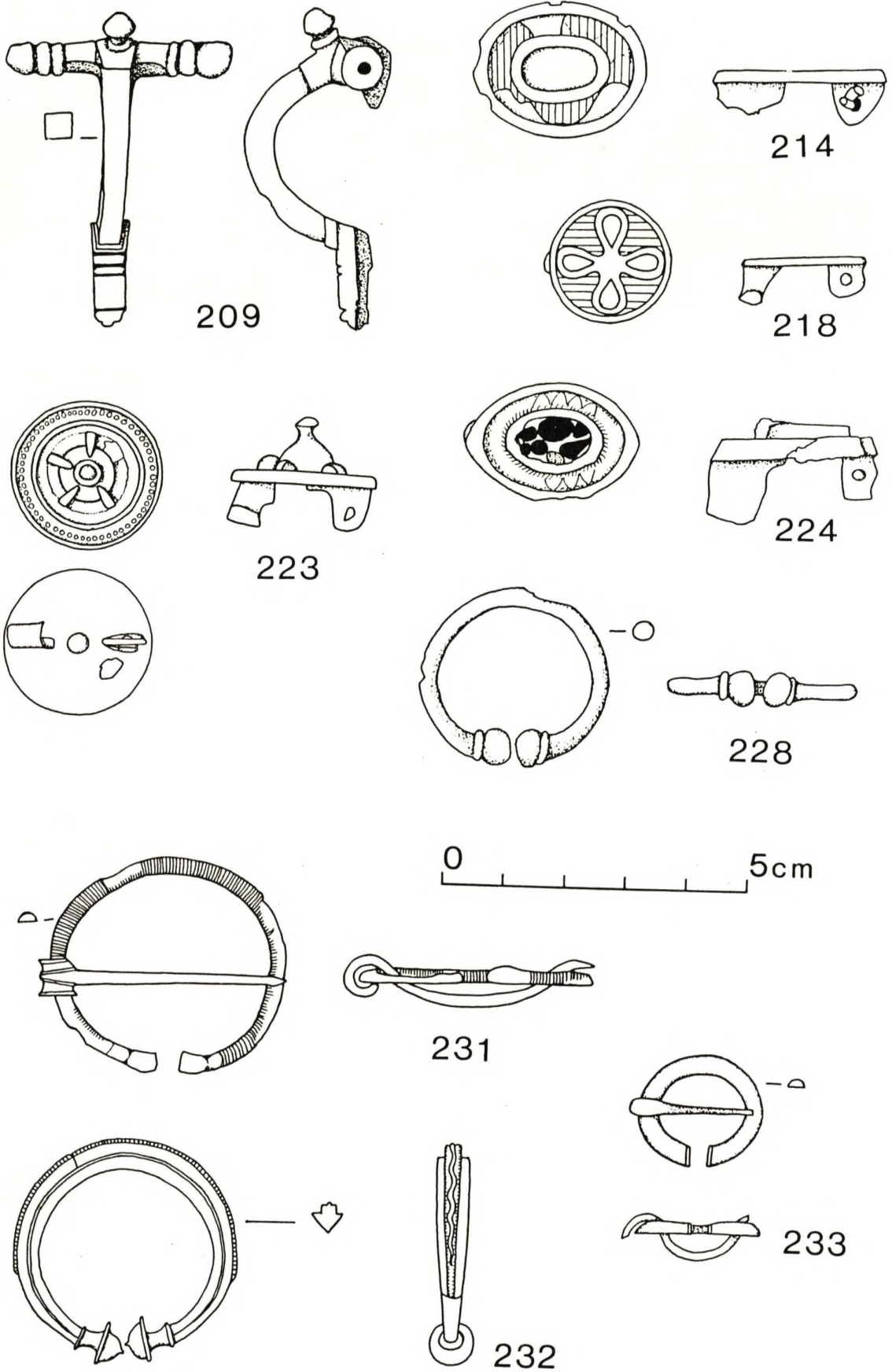


Figure 17. Brooches from Vindolanda.

strongly arched; white metal plating in good condition on hoop, trace on pin.

234. Number unknown diam c18mm; Wt -

Henig 1975, pl IV; Birley 1977, pl 44

very small brooch; pin present, but end of barrel broken; detail of terminals not visible in photograph.

N.B. For general remarks about brooches from Vindolanda see Chapter 2.6.

3.4 NETHER DENTON

Thirteen of the brooches from Nether Denton are described in an unpublished MLitt thesis from the University of Newcastle (Sockett 1971, 198; pl 15). The brooch shown on pl 15 of the thesis, numbered 242 in this catalogue, has apparently been damaged since 1971. Catalogue nos 235, 249, and 250 were not mentioned in the 1971 thesis.

All brooches are located in Chesters Museum; all are of copper alloy; there are no known contexts.

a) Bow Brooches

GROUP 1. FIRST CENTURY

1.2 Colchester (Collingwood Group F)

235. Acc no 2523 L (d) 42mm; Wt 7.5gm

Illustrated - Fig. 18

short plain crosspiece; spring of six turns; external chord held by forward hook; pin complete, but bent; bow of square section, sharp kick, end missing; foot and catchplate missing.

Parallels :-

South Shields (Allason-Jones and Miket 1984, 106 no 3.72)

Hofheim (Ritterling 1913, Abb 23.10)

Nijmegen (van Buchem 1941, pl V.16-19).

Dating:- The type is found in pre-Flavian contexts on the Continent, and in Britain is not likely to be later than AD 75 (D Mackreth, pers comm).

1.4 Almgren form 19

236. Acc no 2535 L 60mm; Wt 19.5gm

Illustrated - Fig. 18

narrow crosspiece slanting back slightly from bow; spring of 8 turns (with a modern repair); half of pin present; external chord held by forward hook which widens towards end, is flat, and has grooves at sides; upper bow of diamond shaped section with milled ridge down centre; double moulding at waist; lower bow tapering, slightly recurved profile, slight V-section, plain; tip ?broken; traces of catchplate.

237. Acc no 2525 L 54mm; Wt 7gm

Illustrated - Fig. 18

as previous example, but upper bow plain, also triple moulding at waist; crosspiece distorted; pin missing; stumps of spring and forward hook remaining; catchplate missing.

The closest parallels are from Augst (Riha 1979, 71; Taf 8.215-9; and see other parallels cited there, on the German and Danubian frontiers).

Dating :- mid- to late first century (ibid, 71).

1.10. Kräftig profiliert

238. Not numbered L 41mm; Wt 5gm

Illustrated - Fig. 18

trumpet-shaped head; short narrow crosspiece behind, with stumps of spring and forward hook; pin missing; bow tapers from trumpet head; double moulding at waist, now distorted; lower bow narrow, now very damaged, tapers to sharp point; catchplate missing.

Parallels :-

Lauriacum (Jobst 1975, Taf 2.10)

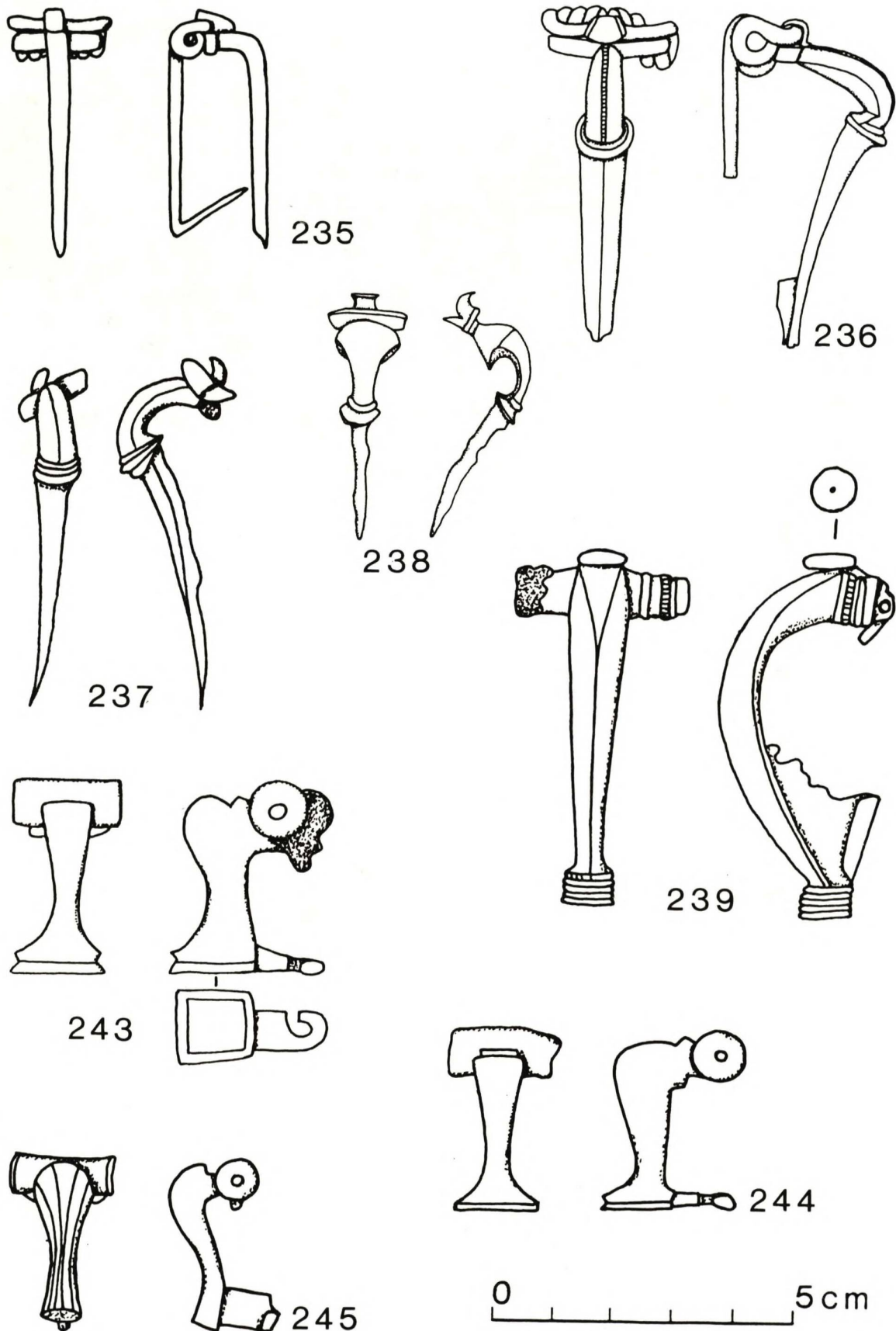


Figure 18. Brooches from Nether Denton.

Dacia (Crişan 1979, pl 1-11: Gudea and Lucăcel 1979, pl I-IV: Popescu 1941/4, 490-2; Abb 4.32-43)

Colchester (Crummy 1983, 10-12; fig 6.37)

For discussion see Hull 1968, 83; pl XXIX.37-9 and Riha 1979, 72-5; Taf 9-10.231-62).

Dating :- mid- to late first century.

GROUP 3. HEADSTUD AND DERIVATIVES

3.1 Headstud (Collingwood Group Q)

Sub-group 3.1E

239. Not numbered L 61mm; Wt 24.5gm

Illustrated - Fig. 18

unusual headstud brooch with no headloop; front of crosspiece damaged and corroded, but has been decorated with longitudinal ridge and groove, at least one band milled; cylindrical casing for axis, now missing; notch for hinged pin, head corroded into position, rest missing; stud, cast-in-one, with small hole in top, set on top of bow; bow has slightly recurved profile; upper bow of D-section, tapering into 'knife-edge'; back of bow slightly hollowed out; foot cylindrical, cast-in-one, damaged, decorated with five grooves; base flat, with trace of 'runner'; catchplate very thick, complete with turnover, which has squared edge; trace of pin corroded onto catchplate; white metal plating.

No close parallels known at present.

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet (Collingwood Group R)

Sub-group Rii

240. Acc no 2336 L (d) 46mm; Wt 14gm

as cat no 22; damaged and corroded; headloop, collar, spring and pin missing; waist decoration with ?triple moulding above and below; foot and catchplate missing.

For parallels and dating see cat no 28.

241. Not numbered L (d) 47mm; Wt 12gm

unusual, acanthus is continuous, but double mouldings above and below are non-continuous; also traces of white metal plating; head damaged; spring of 6 turns, axis present; pin, headloop and collar missing; traces of catchplate.

Unclassified trumpet

242. Acc no 2569 L (s) 23mm; Wt 4.5gm

head and upper bow only; axis, spring, pin, headloop and collar missing; bow broken below single moulding and above acanthus.

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee (Collingwood Group V)

Sub-group 5.1A

243. Acc no 2533 L 32mm; Wt 22gm

Illustrated - Fig. 18

as cat no 45, but with incised square on base of foot as well as groove around edges; iron axis, stump of pin, spring obscured by corrosion; step between head and bow, bow has straight back; catchplate complete.

244. Acc no 2534 L 30mm; Wt 17.5gm

Illustrated - Fig. 18

as above, but base of foot undecorated and slight step under head at back of bow; spring, pin and axis missing.

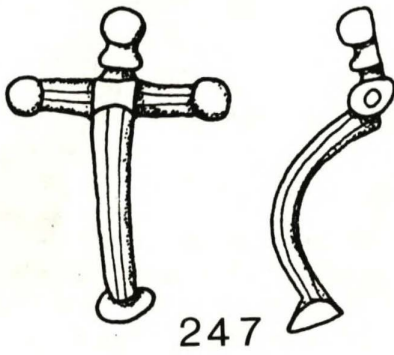
For parallels and dating see cat no 46. Incised decoration on the base of the foot is more common on the Continental examples than north British ones; see cat no 44.

Sub-group 5.1B

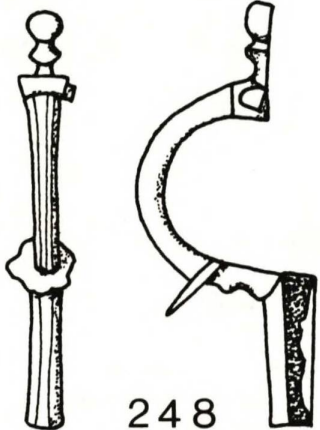
245. Not numbered L 27mm; Wt 6.5gm

Illustrated - Fig. 18

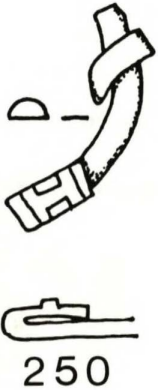
semi-cylindrical springcase, ends slightly raised; iron axis, spring of 7 turns, pin missing; bow faceted and hollow at back, groove between it and



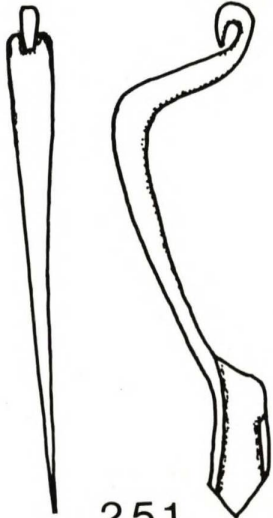
247



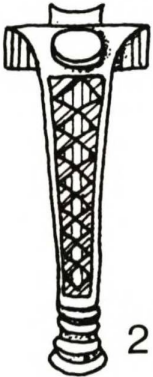
248



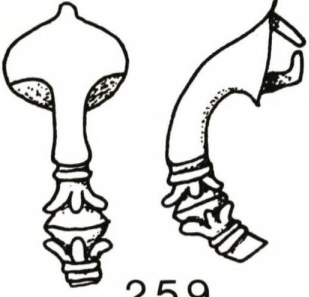
250



251



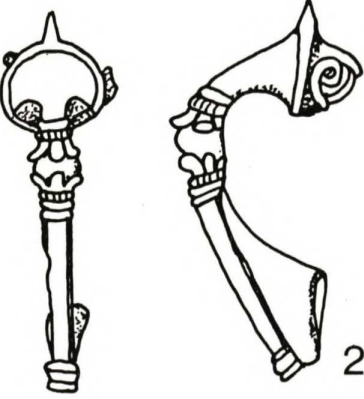
256



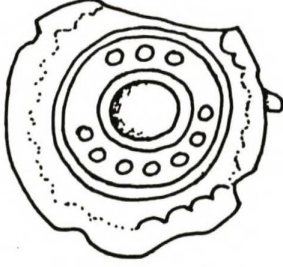
259



267



261



277

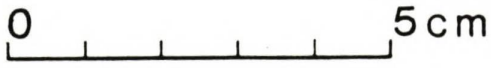


Figure 19. Brooches 247-50 from Nether Denton; nos 251-77 from Carlisle

head; foot has semi-circular base; type ii catchplate, corner broken; white metal plating on lower leg.

For parallels and dating see cat no 48.

GROUP 8. P-SHAPED (Collingwood Group T)

8.5 Crossbow, light (headknob only)

Sub-group 8.5B

246. Acc no 2532 L(2 frags) 25mm, 26mm; Wt 6gm

semi-cylindrical springcase, ends pierced for iron axis, now missing; spring and pin missing; uncollared headknob, flat at back, set above crosspiece; bow broken halfway down, lower fragment very corroded, but has large semi-circular plate; leg and catchplate missing.

For parallels and dating see cat no 79.

8.6 Crossbow, light (three knobs)

247. Acc no 2527 L (s) 39mm; Wt 6.5gm

Illustrated - Fig. 19

as cat no 81, but leg and catchplate missing; hexagonal crosspiece, iron axis, pin missing; traces of white metal plating at back of head.

For parallels and dating see cat no 82.

Unclassified crossbow

248. Not numbered L 54mm; Wt 5gm

Illustrated - Fig. 19

as above but crosspiece missing, therefore uncertain whether originally single knob or 3; axis and pin missing; leg present, straight profile, widens towards flat base; catchplate extending full L of leg, turnover damaged.

GROUP 9. FRAGMENTARY

249. Not numbered L -; Wt -

fragment of pin of bow brooch.

c) Penannular Brooches

GROUP 16. PENANNULARS

16.4 Fowler D

250. Acc no 2561 L (frag) 31mm; Wt 3.5gm

Illustrated - Fig. 19

fragment of unusual brooch, ? should be classed as D1; originally large; hoop of D-section, plain; terminal turned back and notched; barrel of pin corroded, rest of pin missing.

No close parallels.

N.B. For general remarks about the brooches from Nether Denton see Chapter 2.6.

3.5 CARLISLE

Seventy three brooches from Carlisle are catalogued here, the majority from recent excavations by the Carlisle Archaeological Unit (CAU). I am grateful to M R McCarthy and staff of the Unit for discussing the brooches and their contexts with me in 1990, and allowing me to study 16 examples from the Castle street excavations and 42 from Annetwell street. Since then the Castle street brooches have been published (Padley 1991, 105-8). In addition, an example recovered during a watching brief in Castle street is included here (cat no 284), as is a fragmentary crossbow brooch (cat no 275) which is to be published separately later. All are of copper alloy except cat no 275, which is probably silver. Brooches from excavations at Blackfriars and The Lanes, and from other watching briefs were not available for study. The brooches from Blackfriars are now published (Mackreth 1990).

The remaining thirteen brooches are located in Tullie House Museum, Carlisle (THM), and most were published by Professor F Haverfield in 1919. An example from either Carlisle or Old Carlisle is included here (cat no 277). All are of copper alloy; none is from a well dated context.

a) Bow Brooches

GROUP 1. FIRST CENTURY

1.1 Nauheim derivative (Collingwood Group A)

251. Acc no RF 306 THM; L 66mm; Wt -

Illustrated - Fig. 19

Haverfield 1919, 8 no 6B

head broken, one loop present; pin missing; bow of oval section, sharp angle, slightly recurved profile, tapers to a point; catchplate damaged.

251.1. No Ae 1012 CAU; L 50mm; Wt -

Annetwell street, Period 3B (AD 84/5 - c100/5)

P Cracknell and T G Padley, forthcoming, no F68

Parallels :-

Corbridge (cat no 154)

Colchester (Hawkes and Hull 1947, 312-3)

Richborough (Bushe-Fox 1928, 40-1)

Saalburg (Böhme 1972, Taf 3,4)

Nijmegen (van Buchem 1941, pl XII)

Augst (Riha 1979, Taf 3.112-3).

Dating :- mid to late first century.

251.2. No Ae 1014 CAU; L (d)44mm; Wt -

Annetwell street, Period 3 constr (cAD 71/2 - 78/9)

ibid, no F67

pin, ? from a Nauheim derivative.

252. Acc no OM 204 THM; L 56mm; Wt -

Haverfield 1919, 8 no 6A; pl 1

an uncommon variant with a footknob; restored since original illustration; spring of ?2 turns, distorted; pin complete; catchplate small, turnover damaged.

Paralleled in the North at Newstead (Curle 1917, 231; fig 1.1) and at Old Winteringham (Stead 1976, 195 nos 1,2; fig 98).

See also Hambleton (Cocks 1921, 190-1; fig 21; and parallels cited there).

Augst (Riha 1979, Taf 3.127)

Hofheim (Ritterling 1913, Taf IX.169-75)

Nijmegen (van Buchem 1941, pl XII.7,8,11).

A variant dated to the last half of the 1st century (D Mackreth, pers comm).

1.8 Hod Hill derivative (Collingwood Group P)

253. No Ae 954 CAU; L 44mm; Wt 3gm

Annetwell street, Period 3 constr (cAD 71/2 - 78/9)

P Cracknell and T G Padley, forthcoming, no F69

Paralleled at Augst (Riha 1979, Taf 38.1040).

1.9 Polden Hill

253.1. No Ae 1043 CAU; L 69mm; Wt -

Annetwell street, Period 3A/1 (cAD 71/2 - 78/9)

ibid, no F70

1.11 Other early bow brooches

254. No SF 8 CAU; L 83mm; Wt 25gm

Annetwell street

ibid, no F71

an unusual brooch, closely resembling cat nos 1 and 2: it is suggested that the type is a derivative of the Colchester, and represents a transition between the 'true' Colchester derivative and the headstud (P Cracknell, pers comm).

Parallels:- Corbridge Red House (cat nos 1 and 2).

1.12 Sawfish

254.1. No Ae 953 CAU; L 42mm; Wt -

Annetwell street, Period 3A/2? (cAD 78/9 - 84/5)

ibid, no F83

headloop with chain attached; at the end is a fragment of a silver disc.

For sawfish brooches, see Hull 1968, 82-3 no 36; pl XXIX; France and Gobel 1985, 79 no 69; fig 41. Previously the most northerly example was said to be from Templeborough (ibid).

GROUP 3. HEADSTUD AND DERIVATIVES

3.1 Headstud (Collingwood Group Q)

Sub-group 3.1Bi

255. No SF 9 CAU; L 89mm; Wt 42.5gm

Annetwell street

ibid, no F73

Sub-group 3.1Biii

255.1 No SF 72 CAU; L 55mm; Wt -

Annetwell street

ibid, no F75

length of chain attached to headloop.

For parallels and dating, see cat nos 11 and 12.

Sub-group 3.1Di

256. Acc no 10-1927 THM; L (d)47mm; Wt -

Illustrated - Fig. 19

trace of fixed headloop; crosspiece stepped out from bow; cylindrical casing for hinged pin, upper half in position; cast stud, very worn; steeply arched bow with lozenge decoration; enamel (modern restoration) of 8 green lozenges on red background; foot with 2 double mouldings, flat semi-circular base; catchplate broken.

257. No Ae 944 CAU; L 46mm; Wt -

Annetwell street, Period 3B/2 (AD 92/3 - c100/5)

ibid, no F72

257.1 Nos SF 5, SF 10 CAU; L (2 frags)64mm; Wt -

Annetwell street

ibid, no F74

Paralleled at Blackfriars, Carlisle (Mackreth 1990, 107 no 5; fig 100), and see cat no 16; for dating, see Chapter 2.5.2 (Group 3).

3.3 Headstud derivative

The following example, is described by T G Padley as a 'trumpet / T-shape hybrid', but has a decorative crest and enamelled lozenges resembling some headstud brooches, and is catalogued here as a headstud derivative. It is exactly paralleled at Corbridge (see cat no 19.1).

258. No Ae 152 CAU; L 46mm; Wt 12.5gm

Castle street, Period 5 (AD 105)

Padley 1991, 106 no 11; fig 64

remains of chain attached to headloop.

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet (Collingwood Group R)

Sub-group Rii

259. Acc no 16-1927-2 THM; L (s) 33mm; Wt 7gm

Illustrated - Fig. 19

as cat no 22, but pin, spring, headloop and collar missing; waist decoration slightly flatter at back, double moulding above and below; leg and catchplate missing.

260. Acc no RF 304 THM; L 54mm; Wt -

as above, but very poorly defined waist decoration; head damaged at one side; pin, spring, headloop, and collar missing; leg sharply V-sectioned, damaged, but side grooves visible; foot poorly cast, ? cylindrical; catchplate with trace of turnover.

261. Acc no 18-1905.1 THM; L 48mm; Wt 9gm

Illustrated - Fig. 19

a better casting than the above, but the waist decoration is so poorly defined at the back that the brooch is intermediate between Rii and Riv; headloop, collar, and pin missing, remains of spring corroded into position; bow narrow and distorted; waist decoration has double moulding above and below; lower bow V-sectioned with side grooves, convex profile; foot cylindrical with triple moulding; catchplate complete.

repaired in antiquity; remains of chain attached to headloop.

262. No Ae 125 CAU; L 53mm; Wt 13gm

Castle street, Period 3A/B (mid- to late Antonine)

Padley 1991, 105 no 7; fig 63

For parallels of Riv trumpets see cat no 34.

This brooch provides useful dating evidence for type Riv.

The following two examples are enamelled:-

262.1. No Ae 979 CAU; L 64mm; Wt -

Annetwell street, Period 3A/2 (cAD 78/9 - 84/5)

P Cracknell and T G Padley, forthcoming, no F77

The following fragments are unclassified:-

266. No Ae 263 CAU; L (s) 42mm; Wt 5gm

Castle street, unstratified

ibid, 106 no 10; fig 64

262.2. No SF 73 CAU; L (d) 54.5mm; Wt -

Annetwell street

ibid, no F78

266.1. No Ae 1047 CAU; L (s) 42mm; Wt -

Annetwell street, Period 3A/2 (cAD 78/9 - 84/5)

P Cracknell and T G Padley, forthcoming, no F76

For parallels of type Rii see cat no 28. Cat no 262.1 provides useful dating evidence for the type.

266.2. No Ae 1085 CAU; L (s) 30mm; Wt -

Annetwell street, Period 5B/3 (cAD 120 - CAD 140/50)

ibid, no F79

Sub-group Riv

263. Acc no O 1892-16 THM; L 60mm; Wt -

Haverfield 1919, 5 no 3; pl 1

distorted bow straightened since original illustration; spring of 6 turns; headloop has wear on right side, collar with triple moulding, central band ?milled; upper bow D-sectioned; waist decoration very wide and flat, upper moulding corroded, but probably triple, triple moulding below, central band milled; lower bow V-sectioned, distorted, with side grooves; foot cylindrical with triple moulding, central band ?milled, trace of runner in base; catchplate complete.

266.3. No Ae 177 CAU; L (s) 14mm; Wt -

Annetwell street, Period 12B (medieval)

ibid, no F80

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee (Collingwood Group V)

Sub-group 5.1A

264. No Ae 273 CAU; L 50mm; Wt 8gm

Castle street, Period 3A/B (mid 80s to AD 92)

Padley 1991, 106 no 9; fig 63

266.4. No Ae 719 CAU; L 30mm; Wt -

Annetwell street, Period 7 (mid- to late Antonine)

ibid, no F84

265. No Ae 260 CAU; L 71mm; Wt 21gm

Castle street, Period 4A (AD 92 - 105)

ibid, 105 no 8; fig 63

266.5. No Ae 721 CAU; L 33mm; Wt -

Annetwell street, Period 15 (modern)

ibid, no F88

- 266.6. No Ae 541 CAU; L (s) 26mm; Wt -
 Annetwell street, Period 10A (AD 320/30 - post AD 375)
 ibid, no F87
 fragment.
- 266.7. No Ae 75 CAU; L (s) 18mm; Wt -
 Castle street, Period 12 (Anglian or late Saxon)
 Padley 1991, 107 no 15
 fragment.
- 5.2 Knee and fantail (Collingwood Group X)
- 266.8. No Ae 647 CAU; L 40mm; Wt -
 Annetwell street, Period 9A (late 2nd century)
 P Cracknell and T G Padley, forthcoming, no F85
 For parallels, see cat no 61.
 This may be the earliest dated context for a knee and fantail brooch.
- 5.3 S-profile
267. Acc no RF 451 THM; L (s) 15mm; Wt 2.5gm
 Illustrated - Fig. 19
 fragment; semi-cylindrical springcase, corroded spring in position, pin missing; trace of S-shaped bow with step at top.
 For parallels and dating see cat no 63.
- 267.1. No Ae 615 CAU; L 37mm; Wt -
 Annetwell street, Period 9B (?3rd - early 4th century)
 ibid, no F86
 Exact parallel at Vindolanda, see cat no 196.
- GROUP 6. FANTAILED
- 267.2. No Ae 678 CAU; L 45mm; Wt -
 Annetwell street, Period 14 (19th century)
- ibid, no F81
 Paralleled at Corbridge (cat nos 162 and 163).
- GROUP 8. P-SHAPED (Collingwood Group T)
- 8.1 P-shaped, plain
 Sub-group 8.1A
268. No Ae 74 CAU; L (s) 33mm; Wt 3gm
 Castle street, Period 11-12 (Anglian or late Saxon)
 Padley 1991, 106-7 no 13; fig 65
 For parallels, see cat no 68.
- 8.1 Fragmentary
269. No Ae 7 CAU; L (s) 35mm; Wt 1.5gm
 Castle street, unstratified
 ibid, 106 no 12
- 8.2 Divided bow, double
- 269.1. No Ae 116 CAU; L (s) 33mm; Wt -
 Castle street, Period 9 (late 2nd to mid-3rd century)
 ibid, 107 no 14; fig 66
270. No Ae 552 CAU; L (total) 62mm; Wt 10gm
 Annetwell street, Period 9 (cAD 180/90 - cAD 320/30)
 P Cracknell and T G Padley, forthcoming, no F89
271. No Ae 311 CAU; L (s) 33mm; Wt 4.5gm
 Annetwell street, Period 12C (medieval)
 ibid, no F90
 For parallels, see cat nos 71, 73; for dating, see cat no 78.
- 8.4 P-shaped, bow knobs
272. No Ae 542 CAU; L 62mm; Wt -
 Annetwell street, Period 11 (post Roman)

ibid, no F92

For parallels and dating, see cat no 78.

8.5 Crossbow, light (headknob only)

Sub-group 8.5B

273. No Ae 537 CAU; L 67mm; Wt 7.5gm

Annetwell street, Period 10B (AD 320/30 - post AD 375)

ibid, no F91

For parallels, see cat no 79.

8.6 Crossbow, light (three knobs)

Sub-group 8.6B

274. No Ae 504 CAU; L 61mm; Wt 7.5gm

Annetwell street, Period 11B (post Roman)

ibid, no F93

Paralleled at South Shields, cat no A78.

8.7 Crossbow, intermediate

274.1. No Ae 469 CAU; L (s) 25mm; Wt -

Annetwell street, Period 11C (post Roman)

ibid, no F94

fragment of foot only.

275. No Ae 266 CAU; L (s) 29mm; Wt 4gm

Annetwell street, watching brief

head and upper bow of unusual silver crossbow .

GROUP 9. FRAGMENTARY

276. No Ae 266 CAU; L 60; Wt -

Castle street, unstratified

Padley 1991, 108 no 22

bow brooch pin.

b) Plate Brooches

GROUP 10. SIMPLE ENAMELLED PLATES

10.4 Concentric circles and dots

Sub-group 10.4B

277. Acc no RF 308.2 THM; diam 34mm; Wt 8.5gm

Carlisle or Old Carlisle

Illustrated - Fig. 19

disc with central setting, now empty; 2 bands enamel, colour indeterminate, inner band with bronze dots; bronze rim, inner edge scalloped, damaged and corroded; housing for spring pin, now missing; trace of catchplate.

Parallels :-

Corbridge (cat no 167)

Newstead (Curle 1911, pl LXXXIX.1,6)

Turret 33B (Miket and Maxfield 1972, 171-4; fig 8.1)

Coventina's Well (Allason-Jones and McKay 1985, 25 no 43; fig 43)

Zugmantel (Böhme 1972, Taf 26.987).

Dated to the second century.

10.13 Umbonate

Sub-group 10.13B

278. Acc no O 1892-7 THM; width 31mm; Wt -

Haverfield 1919, 12 no 14; pl 11

very good description by Haverfield; projection above pin attachment is pierced, forming loop; back of brooch hollow; two pierced plates with axis and complete pin; catchplate complete.

For parallels and dating see cat no 102.

10.16 Other shapes

278.1. No Ae 644 CAU; L 23mm; Wt -

Annetwell street, Period 9A (cAD 180/90 - cAD 320/30)

P Cracknell and T G Padley, forthcoming, no F97

enamelled lunula.

Paralleled at Wallsend (cat no A203; L Allason-Jones, forthcoming b)

The following two examples are fragmentary; their original shape is unknown.

278.2. No Ae 86 CAU; L (s) 22mm; Wt -

Castle street, Period 11 (Anglian)

Padley 1991, 108 no 20

278.3. No Ae 122 CAU; L (s) 12mm; Wt -

Castle street, unstratified

ibid, no 21

GROUP 11. APPLIED REPOUSSÉ SHEET

11.2 Blank disc

279. No Ae 98 CAU; diam 34mm; Wt 2.5gm

Castle street, Period 10 (late Roman)

ibid, no 19

GROUP 12. DISC WITH CENTRAL PROJECTION

12.3 Disc with separate rivet (other)

280. Acc no OM 205 THM; diam 37mm; Wt 12.5gm

Haverfield 1919, 11-12 no 12; pl 11

central stud, separate, rivetted on, top filled with orange enamel; 3 concentric bands of decoration, inner and outer concave, central band enamelled (originally white enamel with millefiori flowers, each consisting of 8 blue dots around a red dot; original illustration shows 11 dots, not evenly sized or spaced, and room for about 6 others); outer edge milled; 2 pierced plates for pin, which is more sharply bent than usual; small catchplate, slight ridge between catchplate and pin plates; Haverfield suggested modern repair and marks on side of pin attachment and edge of turnover would confirm this; brooch has also been

damaged and heavily cleaned since original illustration.

No close parallels.

GROUP 13. UNCLASSIFIED

280.1. No SF 10 CAU; L 47mm; Wt -

Annetwell street

P Cracknell and T G Padley, forthcoming, no F82

an unusual example, described as a 'pin brooch'; length of chain attached.

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.1 S-shaped

281. No Ae 807 CAU; L 52mm; Wt -

Annetwell street, Period 5B/2 (cAD 120 - cAD 140/50)

ibid, no F 95

simple S-shape; pin missing

14.2 Dragonisque

282. Acc no 34-1956-14 THM; L 53mm; Wt 15.5gm

Hogg 1964, 26-7; pl VII

282.1. No Ae 937 CAU; L 56mm; Wt -

Annetwell street, Period 12C (medieval)

ibid, no F96

unenamelled, but relief decoration, and possible silver plating.

14.3 Zoomorphic

283. No Ae 528 CAU; diam 32mm; Wt 7.5gm

Annetwell street, Period 10B (AD 320/30 - post AD 375)

ibid, no F99

three dolphins joined to form a circular openwork design.

14.4 Shield

Padley 1991, 107 no 18

283.1. No Ae 6613 CAU; L 27mm; Wt -

Annetwell street, Period 9 (cAD 180/90 - cAD 320/30)

ibid, no 98

in the shape of a rectangular shield.

The following, recovered during a watching brief in Castle street, is to be published separately from those found in the Castle street excavations.

14.10 Swastika

284. No Ae 5 CAU; diam 33mm; Wt 12gm

One of only three from the North; see cat nos 135, A223.

14.12 Other shapes

284.1. No Ae 272 CAU; L 39mm; Wt 7.5gm

Castle street, Period 3B (mid 80s - AD 92)

Padley 1991, 107 no 16; fig 67

an unusual brooch; four arms curved into spirals rather than being straight like those of the swastika.

Unparalleled so far, but the sinuous shape of is reminiscent of north British S-shaped brooches.

285.1. No SF 69 CAU; diam (max) 40mm; Wt -

Annetwell street, Period 3 (cAD 71/2 - cAD 100/5)

P Cracknell and T G Padley, forthcoming, no F102

286. No Ae 904 CAU; diam (max) 31mm; Wt 9gm

Annetwell street, Period 3C/1 (cAD 100/5)

ibid, no F101

286.1. No Ae 952 CAU; diam (max) 41mm; Wt -

Annetwell street, Period 3 constr (cAD 71/2 - 78/9)

ibid, no F100

286.2. No Ae 1089 CAU; diam (max) 17mm; Wt -

Annetwell street, Period 5B/3 (cAD 120 - cAD 140/50)

ibid, no F103

286.3. No Ae 694 CAU; diam (max) 37mm; Wt -

Annetwell street, Period 6B (cAD 165- 70)

ibid, no F104

For parallels and dating see cat no 149.

c) Penannular Brooches

GROUP 16. PENANNULARS

16.1 Fowler A

Sub-group A2

284.2. No Ae 691 CAU; diam 28mm; Wt -

Annetwell street, Period 6B (cAD 165-70)

P Cracknell and T G Padley, forthcoming, no F105

Sub-group A3

285. No Ae 286 CAU; diam (max) 28mm; Wt 8gm

Castle street, Period 3B (mid 80s - AD 92)

Sub-group A derivative

287. No Ae 274 CAU; diam (max) 34mm; Wt -

Castle street, Period 3A (mid 80s - AD 92)

Padley 1991, 107 no 17

Sub-group D1

287.1. No Ae 354 CAU; diam 29mm; Wt -

Annetwell street, Period 12B (medieval)

ibid, no F108

16.5 Fowler E

Sub-group Ei

288. No Ae 378 CAU; diam (max) 30mm; Wt 1.5gm

Annetwell street, Period 12B (medieval)

ibid, no F107

16.6 Unclassified

289. No Ae 587 CAU; 3 frags (unmeasurable); Wt -

Annetwell street, Period 9 (c180/90 - post AD 375)

ibid, no F106

16.7 Fragmentary

290. Acc no RF 451 THM; L -; Wt -

possible penannular brooch pin.

For general remarks about the brooches from Carlisle see Chapter 2.6.

CHAPTER 4. FIRST CENTURY BROOCHES FROM THE TYNE-SOLWAY FRONTIER

4.1 Introduction

Out of the total of over 800 brooches catalogued in this volume, 36 belong to types thought to have gone out of use before the end of the first century. The presence of such early examples on Flavian sites in the north is not unexpected, but 13 examples come from sites on Hadrian's Wall and from South Shields, where the earliest known structures are thought to be of Trajanic or early Hadrianic date (Bidwell and Speak forthcoming). Initially it seems surprising that such simple objects, some of them essentially the equivalent of the modern safety pin, should be found in contexts two or three decades beyond their accepted date range.

However, the dating of these is largely derived from the dates of the sites in southern Britain at which most examples have been found. The following study of the 36 first century brooches from the region, their distribution and a comparison with Scottish material suggests that the accepted dating should be modified.

Early brooch types present in the region are shown in Table 6, and catalogue numbers of these examples are listed in Appendix IV. Few of these brooches are from dated contexts, but most have parallels elsewhere. Only brooches said to be of exclusively first century date have been included: headstuds, trumpets and dolphin brooches were omitted as all three types continued in use into the second century.

Table 7 shows the numbers of first century brooches occurring at sites along the frontier. (Brooches have been found at several milecastles and turrets along Hadrian's Wall, but only in numbers too small to be useful here: these sites have been omitted, with the exception of milecastle 48, Poltross Burn, at which seven examples have been found.) Table 8 shows the distribution of the different types of early brooch.

GROUP	ACCEPTED DATE RANGE	TOTAL NO
1.1 Naueim derivative		7
1.2 Colchester		3
1.3 Eye brooch derivative	early to	1
1.4 Almgren form 19	mid-first	2
1.5 Aucissa	century	1
1.6 Aesica		1*
1.7 Almgren form 16		2
1.8 Hod Hill derivative		4
1.9 Polden Hill	later first	4
1.10 <i>Kräftig profiliert</i> and derivative	century	2
1.12 Sawfish		1
1.11 Other early bow brooches	not closely	4
16.2/16.6 Early penannulars	dated	2

34

Table 6. Numbers of exclusively first century brooches from the Tyne-Solway frontier. (* denotes possible early brooch.)

SITE	TOTAL NO BROOCHES	NO OF 1st CENTURY TYPES	% OF 1st CENTURY TYPES
Stanegate sites			
Corbridge Red House	7	2	
Corbridge	218	5	
Vindolanda	61	2	
Nether Denton	16	4	
Carlisle	73	8	
Total for Stanegate	375	21	5.6
South Shields			
	209	7	3.3
Hadrian's Wall			
Wallsend	33	1	
Benwell	9	.	
Halton Chesters	7	.	
Housesteads	52	.	
Chesters	78	2	
Carrawburgh	12	.	
Great Chesters	14	1*	
Birdoswald	8	1	
Stanwix	11	.	
MC 48	7	1	
Total for Hadrian's Wall	231	6	2.6

Table 7. Numbers of exclusively first century brooches from sites on the Tyne-Solway frontier, showing percentages of early brooches from Stanegate sites, Hadrian's Wall and South Shields. (* denotes possible early brooch.)

4.2. Possible explanations for their presence

Survival in use: The most likely reason for the presence of first century brooches in the north can be seen with reference to Table 7, which seems to show a pattern of survival in use. The small numbers suggest that very few examples may have outlived the previously accepted date range. Nevertheless they appear to have done so by as much as two or three decades, the highest percentage of early brooches being found on Flavian sites, the slightly lower percentage at South Shields perhaps suggesting some survival into Trajanic times, and rare examples surviving on Hadrian's Wall.

Obviously there are several other explanations which could be put forward to account for the presence of these finds on sites of much later date. Factors include residuality, unrecognised pre-Hadrianic Roman occupation, pre-conquest trade with native sites, and in special cases, the copying of an antique style or deposition in modern times. These will be discussed, and can largely be discounted, before going on to consider in more detail survival in use and the modification of accepted dating.

Residuality: Discarded brooches might have arrived in metalworkers' scrap.

Antique style: Although the revival in Roman times of an antique style is possible, it is generally unlikely to have occurred with one-piece brooches when much more decorative examples were available in the second century. A special case is perhaps the 'Aesica brooch' from Great Chesters. Although of a basically Flavian form, the fact that it is of exceptional size and made of precious metal may indicate that it and a very large silver trumpet brooch from the same site are something other than the normal personal ornaments. They were certainly valuable enough to have become heirlooms, and might have been copies of antique styles. All other examples of the type come from the Midlands and central southern England, another reason for supposing that the example from Great Chesters is untypical. This factor, however, is surely not applicable to any of the other early brooches discussed in this survey.

Modern deposition: An unusual problem at South Shields is the deposition of ships' ballast on the southern edge of the site from the early nineteenth century: it was subsequently spread over other parts of the site (Bidwell and Speak forthcoming). It consisted mainly of riverine gravels from southeast England, and may have been the source of at least one early find, a coin of Tasciovanus. However the possibility that the seven first century brooches arrived in the ballast can be discounted, in spite of the fact that most of them appear to have been found in Victorian times. (Cat no A7 is from a recent excavation, and the accession number of A6 indicates it was found during the excavations of 1966-7; the accession numbers of the other six suggest discovery in the nineteenth century (L Allason-Jones, pers comm).) It would be too great a coincidence if so many brooches, and such a wide variety, had all arrived in ballast which contained no other early finds in proportional quantity.

Modern disturbance is perhaps one of the factors which should be taken into account to explain the presence of the Polden Hill brooch at Poltross Burn milecastle. The brooch was actually found in the make-up of a wagonway used during the building of the railway in the nineteenth century, and material for the wagonway had been brought in from elsewhere (Gibson and Simpson 1911, 442; fig 20 no 4).

However, in general modern deposition cannot possibly be used to explain the presence of so many early brooches in the region.

Pre-Hadrianic occupation of sites: Earlier occupation can be suggested at some of the Hadrianic sites at which first century brooches have been found.

An early fort at Chesters has been suggested by Professor E Birley, on the basis of South Gaulish samian, and changes in the direction of the southward road as seen in air photographs. He also noted Horsley's belief that Chesters had links with the Stanegate and Dere Street (Birley 1961, 173).

In addition to the reasons suggested above for the single early brooch at Poltross Burn milecastle, its presence could also be explained by the proximity of the site to the fortlets

of Throp and Haltwhistle Burn, which are thought to be Trajanic (Daniels 1978, 178, 207). The fact that the Stanegate runs very close to the Wall at that point is relevant; one might also postulate an earlier road associated with the Agricolan advance.

There was more than one period of occupation at Birdoswald before the construction of the fort (Simpson and Richmond 1934, 120-30). A small quadrangular site and a ditched enclosure were found at the southern end of the promontory, and a stone tower beside the southeast corner of the fort (Wilmott 1989, 36). However since none of these is closely dated, it is not possible to link the brooch in question with any of them.

The single early brooch from Birdoswald (cat no A381) was a stray find said to come from 'south of the fort'. It is an unusual type, Almgren form 16; apart from a missing foot it is an almost exact parallel of a previously unpublished brooch from Vindolanda (cat no 174). There are no other published examples of this type from Britain. It is however, common in Belgium, and this may provide a clue to the presence of an apparently late first century brooch at Birdoswald. As mentioned above (p 13), the connection may be provided by the Tungrians who were stationed at Vindolanda in the Trajanic period and may have been in the vicinity of Birdoswald early in the Hadrianic period (or perhaps even before?).

Pre-conquest trade to native sites: Early native trade with southern Britain might have brought the occasional Roman brooch to the region, where its scarcity would perhaps have led to its being preserved for longer than would have been likely in a Roman context. Such an heirloom might have subsequently appeared in a northern Hadrianic fort as the property of a British slave or captive.

The presence of Roman objects on non-military sites in Scotland is well documented (Robertson 1970, 198-226), and it is also known that objects of Celtic origin were imported from pre-Roman times, including many from southeast England and some possibly from Ireland (Breeze 1982, 32). Hoards from southern Scotland contain Roman metalwork, and also metalwork Piggott considered to be Romano-Belgic (Piggott 1953, 17-19). He thought the latter was more likely to represent the deliberate settling of people from southeast England after the Agricolan conquest rather than the northern flight of refugees in advance of the Roman army.

Stevenson also attempted to distinguish between objects which came north as a result of the Roman presence and those which arrived later (Stevenson 1966, 24-5). He thought it likely that 'the distant scattering of brooches represents a move northwards ahead of the Roman army, but that the bulk of southeastern objects from hoards came later.' But he also felt that coastal trade in pre-Roman times was unlikely.

There are too few finds of brooches from Scotland to form a definite conclusion, but the distribution hints at a difference

between those brooches which may be connected with the advance of the army and those which may not.

A La Tène II derivative brooch found at Craig's Quarry near North Berwick is a type said to have a restricted distribution in Belgic areas of southeast England (Piggott 1960, 70-4). Its date in the early first century surely makes it more likely the result of southern native contact than Roman.

Another first century type, an Aucissa derivative, was found far beyond the known extent of the Agricolan conquest, at the northern end of Loch Ness (Curle 1932, 395). Other finds, including later brooches from the north shores of the Moray Firth (ibid, 336), and the mouthpiece of a carnyx or trumpet from Deskford, Banff (Piggott 1959, 19-32) suggest sporadic contact with the south from the first to the fourth centuries, brooches being the most popular of imports.

Three early brooch types found in Scotland seem clearly to be associated with the Agricolan advance. A Polden Hill was found at Newstead (Curle 1911, 318-9; pl XXXV.4), and is paralleled by an example from Carlisle (cat no 253.1) which came from a context dated cAD 71/2-78/9. A very fine example from Polmaise near Stirling (Curle 1932, 336-7, 385) could relate to the advance to Ardoch. (Dating of the Polden Hills from milecastle 48 and the main site at Corbridge is discussed below.)

A silver penannular brooch from Newstead (Curle 1911, 326-7; pl LXXXVIII.13) parallels that from Corbridge (cat no 152). Also from Newstead was an unusual Nauheim derivative with footknob (Curle 1917, 231-2; fig 1.1) which is paralleled at Carlisle (cat no 252). Although Nauheim derivatives are generally early, that particular variant is known in late first century contexts elsewhere, namely Wroxeter (Bushe-Fox 1916, 22; pl XV.1), and Hambleton (Smith 1920-1, 190-4).

It is less easy to decide whether the other early brooches from northern England and southern Scotland arrived with the army or through native trade. The two Nauheim derivatives from Luce Sands, Wigton (Curle 1932, 329, 376; fig 57.3) are within the conquered area, but lie well to the west of any Flavian fort, and their location suggests trade along the west coast. A Langton Down brooch apparently found in a burial of unknown date near Merlsford, Fife, is also within the province but near the coast (Stevenson 1966, 25, 40).

Early brooches have been found at two native sites in north Northumberland, a Nauheim derivative from Doubstead (Jobey 1982, 15-17; fig 7.2), and two unusual early types from Dod Law (Allason-Jones, 1990, 23-4; Fig 18). It is not possible to say whether the foundation date of Doubstead is pre- or post-Agricolan (ibid, 20). The latest phase of defences at Dod Law was represented by a rampart constructed in the second century BC, which remained standing until about AD 100 (Smith, 1990, 1). Both sites are near a Roman road. (A stray find has also been recorded, its provenance given only as 'Northumberland' (British Museum 1964, 18 no 26; fig 10)). Brooches from other sites are discussed below.

It seems then that some of the early brooches found in the Tyne-Solway frontier region could have arrived by pre-Roman native trade. Residuality or survival could account for their subsequent appearance at Roman forts, although this is likely to be rare.

Traces of earlier native occupation have recently been found underlying Hadrianic sites. Ploughmarks have been found immediately under the Hadrianic fort at Wallsend (*Britannia* 7 (1976), 308). They were not heavily weathered, suggesting that cultivation was taking place not long before the construction of the fort (C M Daniels, pers comm). However, as yet there has been no positive evidence of pre-Roman native structures on the site.

Recent excavations have revealed a pre-Roman Iron Age round-house beneath a late Hadrianic/early Antonine parade ground at South Shields (*Britannia* 23 (1992), 267); ploughmarks underlying the earliest *vicus* roads on the site are undated (*Britannia* 20 (1989), 272).

However, the lack of other comparable finds relating to pre-Roman occupation at these sites makes it extremely unlikely the pre-conquest trade with the native population could explain the presence of first century brooches, especially in view of the large number found at South Shields. Not only do the Scottish sites mentioned above produce far fewer early brooches than South Shields, but the native sites under Tynemouth Priory and at Marden near Tynemouth have produced none at all. Second century pottery and first and second centuries querns were found at Marden (Jobey 1963, 30), but no imported metalwork. At Tynemouth Priory there was one Romano-British phase, shown by late second century pottery; the earlier phase could have belonged to the Iron Age or to the Roman period (Jobey 1967, 35-41, 67-70). With one possible exception (see below), it seems unreasonable to suggest that pre-Roman native trade brought seven early brooches to South Shields but none to the opposite side of the river mouth.

In conclusion, although residuality, unrecognised pre-Hadrianic occupation and pre-conquest trade may account for the presence of a few of the first century brooches at the sites mentioned, it seems that survival in use is a much more important factor, and this will now be discussed in more detail.

4.3 Modifications to the dating of some first century brooch types

Modifications to the accepted dating can best be described with reference to Table 8, which clearly shows a difference in distribution of various types between sites of Flavian and of Hadrianic foundation. Brooches traditionally assigned to the early to mid-first century are not surprisingly more common on Stanegate sites than on Hadrian's Wall. If, as suggested above, the 'Aesica brooch' was something other than an ordinary item of personal jewellery, then there is only a single example of an early to mid-first century brooch from a Wall fort: late first century examples, though rare, are better represented.

SITE	BROOCH TYPE												
	early to mid-first century						late first century					not closely dated	
	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	1.12	1.11	16.2/16.6
Stanegate sites													
Corbridge Red House	.	.	.	.	.	.	.	.	.	.	.	2	.
Corbridge	1	.	.	.	.	.	.	1	1	.	.	1	1
Vindolanda	.	.	.	.	.	.	1	.	.	.	.	.	1
Nether Denton	.	1	.	2	.	.	.	.	1	.	.	.	.
Carlisle	4	.	.	.	.	.	.	1	1	.	1	1	.
South Shields													
	1	2	1	.	1	.	.	1	.	1	.	.	.
Hadrian's Wall													
Wallsend	.	.	.	.	.	.	.	.	1	.	.	.	.
Benwell	.	.	.	.	.	.	.	.	.	.	.	.	.
Halton Chesters	.	.	.	.	.	.	.	.	.	.	.	.	.
Housesteads	.	.	.	.	.	.	.	.	.	.	.	.	.
Chesters	1	.	.	.	.	.	.	1	.	.	.	.	.
Carrawburgh	.	.	.	.	.	.	.	.	.	.	.	.	.
Great Chesters	.	.	.	.	.	1*	.	.	.	.	.	.	.
Birdoswald	.	.	.	.	.	.	1	.	.	.	.	.	.
Stanwix	.	.	.	.	.	.	.	.	.	.	.	.	.
MC 48	.	.	.	.	.	.	.	.	1	.	.	.	.

Table 8. Distribution of exclusively first century brooch types at sites on the Tyne-Solway frontier. (* denotes possible early brooch.)

It seems that the lifespan of some brooches thought to have gone out of use by the mid-first century should be extended at least into the 80s AD: several types thought to have gone out of use by the end of the century apparently survived into Trajanic or early Hadrianic times.

A distinction should be made here between chance survival of individual brooches and the survival of a type as a whole, the production of which might have continued longer than previously thought.

An example of the former case is provided by the Polden Hill from Corbridge (cat no 156), which had been repaired in antiquity. Three of the Polden Hills from north Britain, especially that from Polmaise, are of very fine workmanship and that must have helped to prolong their life. For the simple one-piece brooches such as the Colchester and the Nauheim derivative, essentially the equivalent of the modern safety pin, it is harder to imagine individual examples being treasured for decades. However, perhaps the very fact that they were so simple to make ensured that the type as a whole continued to be produced for longer than has been assumed, at least in north Britain in the early years of occupation, away from sources of supply in the South.

4.4 Early brooches from South Shields

At first sight, the range of brooches from South Shields appears to resemble that from the Flavian forts. This is unexpected, as no Flavian structures have been found on the site and stray finds of early pottery occur in very small numbers (Bidwell and Speak, forthcoming). It has been suggested that there could be an as yet undiscovered Flavian fort somewhere to the northeast or the southeast of the

known fort (Bidwell in Daniels 1989, 84), and it is possible that one or two of the early brooches might derive from such a source. However, the large number of early examples from South Shields and their date range require further explanation.

The two late first century brooches (Groups 1.8 and 1.10 on Table 8) are both derivatives with unusual features and may be of a later date than the standard forms; this is also true of the eye brooch derivative (1.3 on Table 8).

The presence of the remaining four early to mid-first century brooches is less easy to explain. Perhaps, as suggested above, simple Nauheim derivatives and Colchester derivatives (1.1 and 1.2 on Table 8) continued to be made in small numbers even after the 80s AD. One of the Colchester derivatives (Allason-Jones and Miket 1984, 106 no 3.72) is a Continental type very rarely found in Britain (cf an example from Colchester (Crummy 1992, 208 no 13; fig 6.1). The Aucissa (1.5 on Table 8) is represented by only the pin and head of a brooch. Although the distinctive decoration on the latter makes the identification reasonably secure, possibly such a fragment might be part of a hoard of metalworker's scrap rather than a brooch surviving in use for a long time. Alternatively, it is just possible that a single example might have reached the Tyne by pre-conquest trade with southeast England (cf the Aucissa derivative from the northern end of Loch Ness; however, this is a very unusual variant not closely resembling the fragment from South Shields).

In conclusion, the number and variety of first century brooches from South Shields could be consistent with the rate of survival expected on a site of Trajanic rather than Hadrianic foundation. However, there remain those few puzzling examples of possibly even earlier date.

CHAPTER 5. CONCLUSIONS

1. The main aim of the this study was to catalogue brooches from the Stanegate forts. A total of 375 have been catalogued (Chapter 3); of these, 156 are previously unpublished, and roughly half of the remainder have been published only in illustration, or with a very brief description or one that is now outdated. All these examples have been fully described in the catalogue, but for brooches already fully published in recent reports, or about to be included in forthcoming publications, only the reference is given. Previously unpublished brooches have been illustrated, with the exception of a few which are fragmentary or very corroded.

2. The entries in the catalogue have been arranged according to a classification system based on a study of 845 brooches, comprising those from the Stanegate, and a further 470 from Hadrian's Wall. The latter are listed in Appendix I; most are already published or about to be, but 55 are unpublished and the 78 brooches from Chesters have only a very brief mention in the catalogue by Budge (1903).

The classification (Chapter 2.5, Figs. 2 and 3) contains full descriptions of all brooch groups found in the region. The following points emerge from this study:-

i) the composition of the collection is significantly different from that which would be found in a comparable area of southern Britain (Chapter 2.2). There are proportionately more penannulars and plate brooches, very few first century types, but large groups of trumpets and headstuds. There are many third and fourth century types, particularly knee brooches, P-shaped brooches, and crossbows, including a large group of fully developed late crossbows. The proportion of brooches repaired in antiquity is slightly lower than might be expected in a comparable collection from southern Britain (Chapter 2.2).

It is hoped that this large amount of data will provide a useful starting point for further study.

ii) a revised typology has been suggested for headstuds, and a new classification for knee brooches and derivatives:

the dating evidence has been reviewed (Chapter 2.3).

iii) a little more can be said about the area of origin of some brooches (Chapter 2.4). The evidence appears to confirm a north British origin for headstuds. Although knee brooches, P-shaped brooches, and crossbows are commonly found on the German frontier, a few minor variants may have been made in north Britain, as they are unparalleled on the Continent. In general, though, the large numbers of Germanic brooches like the P-shaped and crossbow, particularly at sites such as South Shields and Housesteads, suggests that further study might shed some light on patterns of trade with the Continent.

iv) the type D7 penannular brooch may be diagnostic of late Roman or sub-Roman re-occupation of Roman sites (Chapter 2.5.2).

3. Some new suggestions can be made about details of the manufacture of brooches (Chapter 1.3). Shrinkage of the foot and presence of a 'runner' is evidence that some bow brooches were cast head downwards in a mould, and this is confirmed by new discoveries from Prestatyn. The ridge running across the back of some plate brooches shows that a die was pressed into a clay mould. The casting of crossbows with terminal knobs must have been a more complex process than that used for earlier bow brooches. A two-stage process has been proposed, which would lend itself well to mass-production.

4. Little can be added to what has already been said about the way brooches were worn, but the observation of wear on the headloops of some examples confirms that brooches were sometimes worn in linked pairs (Chapter 1.5).

5. The study of first century brooches from the region (Chapter 4) shows an unexpected concentration at South Shields, which has interesting implications about the earliest occupation of the site. It also shows that Romano-British brooches may sometimes be more useful as dating evidence than is sometimes thought, provided distribution patterns are used rather than individual brooches.

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APPENDIX 1. Brooches from sites on Hadrian's Wall and South Shields

1. SOUTH SHIELDS

Most brooches are catalogued in two recent publications, Allason-Jones and Milet 1984, *The Catalogue of small finds from South Shields*, and Allason-Jones, the bronzes, in Milet 1983, *The Roman fort at South Shields: excavation of the defences 1977-81*. References below are abbreviated to year of publication, page number and catalogue number, i.e. 1984, 96 no 3.14, or 1983, 114 no 88. Nine examples have been re-examined following conservation (Allason-Jones and Page 1988, 245-50). Some brooches are at South Shields Roman fort and some in the Museum of Antiquities, Newcastle upon Tyne. Brooches from excavations of 1983-7 are to be included in a forthcoming report (Snape, in Bidwell and Speak, forthcoming), others in subsequent volumes. All are of copper alloy.

GROUP 1. FIRST CENTURY

- 1.1 Nauheim derivative
 - A1. 1984, 96 no 3.16
- 1.2 Colchester
 - A2. 1984, 106 no 3.72
 - A3. 1984, 96 no 3.15
- 1.3 Eye brooch derivative
 - A4. 1984, 104 no 3.68
- 1.5 Aucissa
 - A5. 1984, 109 no 3.102
- 1.8 Hod Hill derivative
 - A6. 1984, 96 no 3.14
- 1.10 Kräftig profiliert derivative
 - A7. 1983, 114 no 88

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

- 2.1 'Harlow'
 - A8. M E Snape, forthcoming
- 2.2 Dolphin derivative
 - A9. 1984, 96 no 3.13
- 2.5 Other bow brooches
 - A10. 1984, 104 no 3.64
 - A10.1 no BR 372, unpublished
 - A10.2 no BR 262, unpublished

GROUP 3. HEADSTUD AND DERIVATIVES

- 3.1 Headstud
 - A11. M E Snape, forthcoming
 - A12. 1984, 98 no 3.19

- 3.2 'Thealby Mine'
 - A13. 1984, 104 no 3.66
 - A14. 1984, 104-6 no 3.71
 - A15. 1983, 119 no 165
 - A16. 1984, 104 no 3.69
 - A17. 1984, 104 no 3.70

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet

Sub-group Rii

- A18. 1984, 100 no 3.40: Allason-Jones and Page 1988, 246 no 4; fig 1
- A19. 1983, 113 no 85
- A20. 1984, 100 no 3.41
- A21. 1983, 112 no 51
- A22. 1983, 117 no 142
- A23. 1984, 98 no 3.32
- A24. 1984, 98 no 3.35
- A25. 1984, 98-100 no 3.36
- A26. 1983, 117 no 137
- A27. 1983, 116 no 126
- A28. 1984, 98 no 3.31: Allason-Jones and Page 1988, 246-7 no 5; fig 1
- A29. 1984, 100 no 3.37: Allason-Jones and Page 1988, 245-6 no 3; fig 1
- A30. 1984, 98 no 3.30

Sub-group Riv

- A31. 1984, 100 no 3.39
- A32. 1984, 100 no 3.42
- A33. 1984, 98 no 3.33
- A34. 1984, 98 no 3.34

Unclassified trumpets

- A35. 1983, 115 no 102
- A36. 1984, 100 no 3.38
- A37. M E Snape, forthcoming
- A37.1 unpublished

4.2 Trumpet and plate

- A38. 1983, 113 no 84
- A38.1 no E19, unpublished

4.3 Trumpet, plate and fantail

- A39. M E Snape, forthcoming

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee

Sub-group 5.1A

- A39.1 no BR 450, unpublished

Sub-group 5.1B

- A40. 1984, 98 no 3.22
- A41. M E Snape, forthcoming

Sub-group 5.1D

- A42. 1984, 98 no 3.23

- A43. 1984, 98 no 3.24
A44. no BR 182, unpublished
A44.1 no BR 446, unpublished
- 5.2 Knee and fantail
A45. 1983, 118 no 163
A45.1 1983, 111 no 45
- 5.4 Incurved S-profile
A46. 1983, 111 no 49
- Unclassified knee brooch
A47. 1984, 98 no 3.25
- GROUP 6. FANTAILED
- A48. 1984, 115 no 3.135
A49. 1984, 98 no 3.21
A49.1 no BR 236, unpublished
- GROUP 7. MISCELLANEOUS
- A50. 1984, 104 no 3.63
- GROUP 8. P-SHAPED
- 8.1 P-shaped, plain
A51. 1984, 104 no 3.59: Allason-Jones and Page 1988, 247-8 no 8; fig 2
A52. 1984, 104 no 3.60: Allason-Jones and Page 1988, 248 no 9; fig 2
A53. 1984, 109 no 3.91
A54. 1984, 104 no 3.65
A55. 1984, 106 no 3.79
A56. 1984, 106 no 3.83
A57. 1984, 109 no 3.103
A58. 1984, 109 no 3.96
A59. 1984, 109 no 3.97
A60. 1984, 106 no 3.77
- 8.2 Divided bow, double
A61. 1984, 98 no 3.27
A62. 1984, 98 no 3.29
A63. 1984, 98 no 3.28, 106 no 3.76
(2 halves of same brooch)
A63.1 no BR 243, unpublished
A63.2 no BR 379, unpublished
A63.3 no BR 383, unpublished
A63.4 no BR 631, unpublished
A63.5 no BR 637, unpublished
- 8.3 Divided bow, triple
A64. 1984, 98 no 3.26
A65. 1983, 109 no 1
A66. 1983, 118 no 158
A67. 1984, 109 no 3.94
A67.1 no BR 223, unpublished
A67.2 no BR 589, unpublished
- 8.4 P-shaped, bow-knobs
A68. 1984, 96-8 no 3.18
- 8.5 Crossbow, light (headknob only)
A69. 1984, 104 no 3.58
A70. 1984, 104 no 3.62
A71. 1984, 104 no 3.67
A72. 1984, 109 no 3.90
- 8.6 Crossbow, light (three knobs)
A73. 1984, 104 no 3.55: Allason-Jones and Page 1988, 247 no 7; fig 2
A74. 1984, 106 no 3.87
A75. 1984, 106 no 3.74
A76. 1984, 106 no 3.84
A77. 1984, 104 no 3.56
A78. 1984, 100 no 3.52
A79. 1984, 106 no 3.82
A80. M E Snape, forthcoming
A81. 1984, 100 no 3.51
A82. 1984, 100-4 no 3.54
A83. 1984, 100 no 3.47
A84. 1984, 100 no 3.43
A85. 1984, 106 no 3.73
A86. 1984, 106 no 3.81
- 8.7 Crossbow, intermediate
A87. 1984, 100 no 3.53
A88. 1984, 98 no 3.20
A89. 1983, 110 no 38
A90. 1984, 100 no 3.46
A91. 1984, 100 no 3.48
A92. 1984, 106 no 3.80
- 8.8 Crossbow, heavy
A93. 1984, 100 no 3.45
A94. 1984, 106 no 3.78
A95. M E Snape, forthcoming
A96. 1984, 100 no 3.44
A97. M E Snape, forthcoming
A98. 1984, 106 no 3.86
A99. 1984, 100 no 3.50
A100. 1984, 100 no 3.49
A101. 1984, 104 no 3.57
A102. 1984, 106 no 3.85
A103. 1984, 106 no 3.75
- GROUP 9. FRAGMENTARY
- A104. 1984, 109 no 3.92
A105. no BR 125, unpublished
A106. 1984, 109 no 3.95
A107. 1984, 109 no 3.93
A108. 1984, 110 no 3.110
A109. 1984, 104 no 3.61
A110. 1984, 106 no 3.88
A111. 1984, 106-9 no 3.89
A112. 1984, 109 no 3.98
A113. 1984, 109 no 3.99
A114. 1984, 109 no 3.100
A115. 1984, 109 no 3.101
A116. 1984, 109 no 3.104
A117. 1984, 109 no 3.105
A118. 1984, 109 no 3.106
A119. 1984, 109 no 3.107

- A120. 1984, 109 no 3.108
- A121. 1984, 109 no 3.109
- A122. 1984, 110 no 3.111
- A123. 1984, 110 no 3.112
- A124. 1983, 119 no 170
- A124.1 no BR 422, unpublished

GROUP 10. SIMPLE ENAMELLED PLATES

- 10.1 Concentric ovals
 - A125. no BR 209, unpublished
- 10.2 Concentric circles
 - A126. 1984, 116 no 3.140
 - A127. 1984, 118 no 3.146: Allason-Jones and Page 1988, 245 no 2; fig 1
 - A128. 1984, 118 no 3.147
- 10.4 Concentric circles and dots
 - Sub-group 10.4A
 - A129. 1984, 118 no 3.145
 - A130. M E Snape, forthcoming
- 10.7 Star and dots
 - A130.1 no BR 488, unpublished
- 10.8 Rings and dots
 - A131. 1984, 118-20 no 3.151
- 10.9 Six-armed motif
 - A132. 1984, 120 no 3.152
 - A133. 1984, 120 no 3.153
 - A133.1 no BR 470, unpublished
 - A133.2 no BR 523, unpublished
- 10.11 Miscellaneous discs
 - A134. 1984, 116-8 no 3.142
- 10.13 Umbonate
 - Sub-group 10.13B
 - A134.1 no BR 229, unpublished
- 10.16 Other shapes
 - A135. 1984, 116 no 3.141
 - A135.1 no BR 493, unpublished

GROUP 11. APPLIED REPOUSSÉ SHEET

- 11.1 With repoussé sheet
 - A136. 1984, 118 no 3.148
 - A137. 1984, 118 no 3.150
 - A138. 1983, 111 no 50
 - A139. 1984, 118 no 3.149
 - A140. 1984, 118 no 3.143
 - A140.1 no Br 449, unpublished
- 11.2 Blank disc
 - A141. 1984, 118 no 3.144
 - A141.1 no BR 457, unpublished

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

- 14.2 Dragonesque
 - A142. 1984, 114-5 no 3.131
 - A143. 1984, 115 no 3.132
- 14.3 Zoomorphic
 - A144. 1983, 113 no 87
 - A145. 1984, 115 no 3.133
 - A146. 1984, 115 no 3.134
 - A146.1 no BR 671, unpublished
- 14.5 Axe
 - A147. 1984, 114 no 3.129
 - A148. 1984, 96 no 3.17
- 14.6 Sandal
 - A149. 1984, 112-4 no 3.128
- 14.8 Openwork
 - A150. 1983, 120 no 190
- 14.11 Pelta
 - A151. 1984, 120 no 3.154
 - A152. 1984, 120 no 3.155

GROUP 15. GILDED DISC AND GEM

- 15.1 Oval
 - A153. 1984, 115-6 no 3.136
 - A154. 1984, 116 no 3.137
- 15.2 Circular
 - A155. 1984, 116 no 3.138: Allason-Jones 1988, 245 no 1; fig 1
 - A156. 1984, 116 no 3.139
 - A157. no BR 4, unpublished
 - A157.1 no BR 358, unpublished

GROUP 16. PENANNULARS

- 16.1 Fowler A
 - Fowler A1
 - A158. 1984, 112 no 3.120
 - A159. 1984, 112 no 3.123
 - A160. M E Snape, forthcoming
 - Fowler A2
 - A161. 1984, 110 no 3.113
 - A162. 1984, 110 no 3.114
 - A163. M E Snape, forthcoming
 - A163.1 no BR 232, unpublished
 - A163.2 no BR 282, unpublished
 - A163.3 no BR 678, unpublished
 - Fowler A3 iv
 - A164. 1983, 114 no 93; fig 72
 - Fowler A4
 - A165. 1983, 112 no 52; fig 71

Fowler A unclassified

- A166. 1984, 112 no 3.125
- A167. 1984, 112 no 3.124

16.4 Fowler D

Fowler D3

- A168. 1984, 112 no 3.127: Allason-Jones and Page 1988, 247 no 6; fig 1

Fowler D6

- A169. M E Snape, forthcoming

Fowler D7

- A170. 1984, 112 no 3.119
- A171. M E Snape, forthcoming
- A172. M E Snape, forthcoming

16.5 Fowler E

Fowler Ei

- A173. 1984, 112 no 3.116
- A174. 1984, 115 no 3.115

Fowler Eii

- A175. M E Snape, forthcoming
- A176. 1984, 112 no 3.117
- A177. 1984, 112 no 3.118
- A178. M E Snape, forthcoming

16.6 Unclassified

- A179. 1984, 112 no 3.126

16.7 Fragmentary

- A180. 1984, 112 no 3.122
- A180.1 1984, 112 no 121

2. WALLSEND

The following brooches are to be published by Miss L Allason-Jones. All are of copper alloy.

GROUP 1. FIRST CENTURY

1.9 Polden Hill

- A181. no 2326

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet

Sub-group Rii

- A182. no 1487
- A183. no 210
- A184. no 703

Sub-group Riit

- A185. no 213

Sub-group Riv

- A186. no 1550

Unclassified trumpet

- A187. no 510

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee

Sub-group 5.1B

- A188. no 18
- A189. no 1118

Sub-group 5.1C

- A190. no 2578

Sub-group 5.1E

- A191. no 194

Unclassified knee brooches

- A192. no 1344
- A193. no 1136

GROUP 8. P-SHAPED

8.1 P-shaped, plain

- A194. no 1978
- A195. no 2493

8.2 Divided bow, double

- A196. no 1930

8.6 Crossbow, light (three knobs)

- A197. no 1345

8.8 Crossbow, heavy

- A198. no 2542

GROUP 9. FRAGMENTARY

- A199. no 791
- A200. no 240
- A201. no 1304

GROUP 10. SIMPLE ENAMELLED PLATES

10.4 Concentric circles and dots

Sub-group 10.4A

- A202. no 1353

10.16 Other shapes

- A203. no 18

GROUP 11. APPLIED REPOUSSÉ SHEET

11.1 With repoussé sheet

- A204. no 1287
- A205. no 273
- A206. no 2041

GROUP 12. DISC WITH CENTRAL PROJECTION

12.1 Buckler

- A207. no 1158

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.2 Dragonisque
A208. no 2026

14.8 Openwork
A209. no 1310

GROUP 15. GILDED DISC AND GEM

15.2 Circular
A210. no 1641

GROUP 16. PENANNULARS

16.1 Fowler A
Fowler A1
A211. no 2594

Fowler A2
A212. no 1146

Fowler A3
A213. no 772

3. NEWCASTLE

The first two examples were found in the river Tyne near Newcastle upon Tyne. All examples are of copper alloy; all are located in the Museum of Antiquities, Newcastle upon Tyne.

GROUP 3. HEADSTUD AND DERIVATIVES

3.3 Headstud derivative
A214. Brewis 1924, 178-9 no 5; pl VIII

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet
Sub-group Rii
A215. *ibid*, no 5

Sub-group Riv
A216. Unpublished; MA 1978.23

4. BENWELL

All are of copper alloy except A221, which is silver. All are located in the Museum of Antiquities, Newcastle upon Tyne except A218 and A220, which are missing.

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet
Sub-group Ri
A217. Petch 1927, 160, 188; pl XL.1

Unclassified trumpet
A218. *ibid*, 72; pl XXII.1 no 10

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee
Sub-group 5.1B
A219. Unpublished; MA 1936.5

Unclassified knee brooch
A220. Petch 1928, 72

GROUP 7. MISCELLANEOUS

A221. Petch 1927, 188; pl XL.1: Allason-Jones and Page 1988, 248-9 no 10; fig 2; pl VII

GROUP 9. FRAGMENTARY

A222. Petch 1927, 188

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.10 Swastika
A223. Petch 1927, 188; pl XL.1

GROUP 15. GILDED DISC AND GEM

15.1 Oval
A224. Charlesworth 1961, 3 no 11

GROUP 16. PENANNULARS

16.1 Fowler A
Fowler A3
A225. Unpublished; MA 1926.23

5. HALTON CHESTERS

All are unpublished, and located in the Museum of Antiquities, Newcastle upon Tyne. All are of copper alloy.

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee
Sub-group 5.1A
A226. no 329

Unclassified knee brooch
A227. no 335

GROUP 9. FRAGMENTARY

A228. no 343

GROUP 11. APPLIED REPOUSSÉ SHEET

11.1 With repoussé sheet
A229. no 332

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

- 14.3 Zoomorphic
A230. no 336

GROUP 16. PENANNULARS

- 16.1 Fowler A
Fowler A2
A231. no 344

- 16.7 Fragmentary
A232. no 346

6. CHESTERS

All are located in Chesters Museum with the exception of nos A295 and A303, which are in the Museum of Antiquities, Newcastle upon Tyne. Most of the Chesters brooches were catalogued by Budge (1903, 363-402), but few were illustrated (*ibid.*, 127,167) and most given only a very general description. Some have a museum accession number as well as the Budge catalogue number. All are of copper alloy. A303 was found at Chollerford, near Chesters.

GROUP 1. FIRST CENTURY

- 1.1 Nauheim derivative
A233. Budge 1459; acc no 1208
- 1.8 Hod Hill derivative
A234. Budge 1581

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

- 2.2 Dolphin
A235. Budge 1407
- 2.3 Southwestern enamelled
A236. Budge 1414
A237. Budge 1421
- 2.4 'Severn'
A238. Budge 1441

GROUP 3. HEADSTUD AND DERIVATIVES

- 3.1 Headstud
Sub-group 3.1Bii
A239. Budge 1422
A240. Budge 1410; MacGregor 1976; fig 5.5

GROUP 4. TRUMPET AND DERIVATIVES

- 4.1 Trumpet
Sub-group Rii
A241. Budge 1420
A242. Budge 1409; acc no 1158
A243. Budge 1440; acc no 1189

- A244. Budge 1445
A245. Budge 1439; acc no 1188

- Sub-group Riv
A246. Budge 1411; acc no 1160
A247. Not numbered

- 4.2 Trumpet and plate
A248. Budge 1587; acc no 3090

- 4.4 Trumpet and fantail
A249. Budge 1448

GROUP 5. KNEE BROOCH AND DERIVATIVES

- 5.1 Knee
Sub-group 5.1A
A250. 2 fragments: head, Budge 1442;
foot, Budge 1586, acc no 3089
A251. Budge 1429

- Sub-group 5.1B
A252. Budge 1426; acc no 1175
A253. Budge 1423
A254. Budge 1460; acc no 1209
A255. Budge 1430

- Sub-group 5.1C
A256. Budge 1436

- Sub-group 5.1D
A257. Budge 1416

- 5.2 Knee and fantail
A258. Budge 1419
A259. Budge 1456; acc no 1205
A260. Budge 1215; acc no 1154
A261. Budge 1450

- 5.3 S-profile
A262. Budge 1431
A263. Budge 1427; acc no 1176

GROUP 8. P-SHAPED

- 8.1 P-shaped, plain
A264. Budge 1443
- 8.2 Divided bow, double
A265. Budge 1408
A266. Budge 1418; acc no 1167
A267. Budge 1415
- 8.4 P-shaped, bow-knobs
A268. Budge 1413
A269. Budge 1435
- 8.5 Crossbow, light (headknob only)
A270. Budge 1425
- 8.6 Crossbow, light (three knobs)
A271. Budge 1412

- 8.7 Crossbow, intermediate
A272. Budge 1428; acc no 1177
- 8.8 Crossbow, heavy
A273. Budge 1405
A274. Budge 1406

- A296. Budge 1398
A297. Budge 1597; acc no 1139
A298. Budge 1392; acc no 1140
A299. Budge 1394; acc no 1142
A300. Budge 1400; acc no 1149
A301. Budge 1403; acc no 1152

GROUP 9. FRAGMENTARY

- A275. Budge 1462
A276. Budge 1398; acc no 2943
A277. Budge 1438
A278. acc no 1060
A279. Budge 1458; acc no 1207
A280. acc no 1027

- Fowler A3 i
A302. Budge 1395
- Fowler A3 ii
A303. Not numbered; Museum of Antiquities;
findspot, Chollerford
- Fowler A4
A304. acc no 2089

GROUP 10. SIMPLE ENAMELLED PLATES

- 10.1 Concentric ovals
A281. Budge 1373
A282. Budge 1376; acc no 1123
A283. Budge 1375
- 10.12 Disc, raised enamelled centre
A284. Budge 1378
A285. acc no 1033
- 10.15 Equal ended
A286. Budge 1595; acc no 3092
- 10.16 Other shapes
A287. Budge 1595; acc no 3092
A288. Budge 1388; acc no 1137

- 16.4 Fowler D
Fowler D1
A305. Budge 1393; acc no 1141
- Fowler D6
A306. Budge 1353; acc no 1100
A307. Budge 1532; acc no 1317
- Fowler D unclassified
A308. Budge 1520; acc no 1234
A309. Budge 1399; acc no 1105
A310. Budge 1402; acc no 1151

7. CARRAWBURGH

Number A321 was found in Carrawburgh Mithraeum and is now in the Museum of Antiquities, Newcastle upon Tyne; it is unpublished. The remainder were found in Coventina's Well and have been published (Allason-Jones and McKay 1985). They are located in Chesters Museum. All are of copper alloy.

GROUP 11. APPLIED REPOUSSÉ SHEET

- 11.1 With repoussé sheet
A289. Budge 1359; acc no 1106

GROUP 12. DISC WITH CENTRAL PROJECTION

- 12.2 Disc with separate rivet (wheel type)
A290. Budge 1372

GROUP 13. UNCLASSIFIED DISCS

- A291 Budge 1366

GROUP 15. GILDED DISC AND GEM

- 15.1 Oval
A292. Budge 1365
- 15.2 Circular
A293. Budge 1355
A294. Budge 1358

GROUP 16. PENANNULARS

- 16.1 Fowler A
Fowler A2
A295. Not numbered; Museum of Antiquities

GROUP 8. P-SHAPED

- 8.6 Crossbow, light (three knobs)
A311. Allason-Jones and McKay 1985,
24-5 no 49
- 8.8 Crossbow, heavy
A312. *ibid*, 24-5 no 48

GROUP 10. SIMPLE ENAMELLED PLATES

- 10.4 Concentric circles and dots
Sub-group 10.4A
A313. *ibid*, 23-4 no 42
- Sub-group 10.4B
A314. *ibid*, 24-5 no 43
- 10.6 Semi-circles
Sub-group 10.6B
A315. *ibid*, 25 no 44

- 10.8 Rings and dots
A316. *ibid*, 24-5 no 46

GROUP 11. APPLIED REPOUSSÉ SHEET

- 11.1 With repoussé sheet
A317. *ibid*, 25 no 47

GROUP 12. DISC WITH CENTRAL PROJECTION

- 12.1 Buckler
A318. *ibid*, 24-5 no 45

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

- 14.3 Zoomorphic
A319. *ibid*, 22-3 no 40

GROUP 15. GILDED DISC AND GEM

- 15.1 Oval
A320. *ibid*, 22-3 no 41

GROUP 16. PENANNULARS

- 16.1 Fowler A
A321. Unpublished; acc no MA 1956.10.42

* For additional brooch A432, see end.

8. HOUSESTEADS

Brooches from Housesteads are in museums at: Housesteads (HM), Chesters (ChM), Corbridge (CM), and the Fulling Mill, Durham (FMM). Some published in the 1930s are now missing. Some others are due to be published by Miss L Allason-Jones, and two (nos A328, A357) are from J G Crow's excavations in 1984. All are of copper alloy except no A360, which is silver.

GROUP 3. HEADSTUD AND DERIVATIVES

- 3.1 Headstud
Sub-group 3.1Biii
A322. L Allason-Jones, forthcoming

GROUP 4. TRUMPET AND DERIVATIVES

- 4.1 Trumpet
Sub-group Rii
A323. CM; Charlton 1934, 196 no 12;
pl XXIXC.5
A324. Missing; *ibid*, pl XXIXC.6

- Sub-group Riv
A325. HM; not numbered

- 4.4 Trumpet and fantail
A325.1. CM; 2 frags, acc nos 792208642b,
79208644

GROUP 5. KNEE BROOCH AND DERIVATIVES

- 5.1 Knee
Sub-group 5.1A
A326. L Allason-Jones, forthcoming

- Sub-group 5.1B
A327. Missing; Charlton, *ibid*, no 1; pl XXIX.1

- 5.2 Knee and fantail
A328. Allason-Jones 1988c, 89 no 10; fig 9
A329. Missing; Charlton, *ibid*, no 6; pl XXIX.7

GROUP 7. MISCELLANEOUS

- A330. Missing; Simpson (G Simpson ed) 1976,
126; fig 65.11
A331. ChM; acc no 3681
A332. L Allason-Jones, forthcoming

GROUP 8. P-SHAPED

- 8.1 P-shaped, plain
A333. MA; Charlton, *ibid*, no 3; pl XXIX.2
A334. L Allason-Jones, forthcoming
A335. Missing; Charlton, *ibid*, no 7; pl XXIXE.6

- 8.2 Divided bow, double
A336. Missing; Charlton, *ibid*, no 8; pl XXIX.3
A337. Missing; *ibid* no 9
A338. ChM; acc no 3680

- 8.4 P-shaped, bow knobs
A339. FMM; Leach and Wilkes 1962,
92-3 no 1; fig 3
A340. L Allason-Jones, forthcoming

- 8.5 Crossbow, light (headknob only)
A341. MA; Charlton, *ibid*, no 5; pl XXIXA.1

- 8.6 Crossbow, light (three knobs)
A342. Missing; Charlton, *ibid*, no 4; pl XXIX.5
A343. HM; not numbered
A344. HM; not numbered
A345. HM; not numbered

- 8.7 Crossbow, intermediate
A346. ChM; acc no 3682

- 8.8 Crossbow, heavy
A347. HM; not numbered
A348. L Allason-Jones, forthcoming

GROUP 9. FRAGMENTARY

- A349. L Allason-Jones, forthcoming
A349.1. CM; acc no 79208642a

GROUP 10. SIMPLE ENAMELLED PLATES

- 10.1 Concentric ovals
A350. L Allason-Jones, forthcoming
- 10.2 Concentric circles
A351. L Allason-Jones, forthcoming
- 10.5 Plain enamel, bronze dots
A352. Unpublished; acc no MA 1956.151.13A
- 10.9 Six-armed motif
A353. L Allason-Jones, forthcoming
- 10.16 Other shapes
A354. Missing; Charlton, *ibid*, no 10; pl XXIX.6

GROUP 11. APPLIED REPOUSSÉ SHEET

- 11.1 With repoussé sheet
A355. L Allason-Jones, forthcoming
- 11.2 Blank disc
A356. L Allason-Jones, forthcoming

GROUP 12. DISC WITH CENTRAL PROJECTION

- 12.2 Disc with separate rivet (wheel type)
A357. Allason-Jones 1988c, 89 no 103; fig 9

GROUP 13. UNCLASSIFIED DISCS

- A358. Missing; Charlton, *ibid*, no 14;
pl XXIXB.3

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

- 14.7 Wheel
A359. HM; Charlton, *ibid*, no 15; pl XXIXC.1
- 14.9 Trompetenmuster
A360. Bosanquet 1904, 286; fig 44;
Charlton, *ibid*, no 15; pl XXIXE.B.1;
Charlesworth 1961, 36 no 4; pl VIII.5

GROUP 15. GILDED DISC AND GEM

- 15.2 Circular
A361. L Allason-Jones, forthcoming; Charlton,
ibid, no 11; pl XXIX.4
A362. L Allason-Jones, forthcoming

GROUP 16. PENANNULARS

- 16.1 Fowler A
Fowler A2
A363. MA; acc no MA 1956.151.9A
A363.1. CM; acc no 79208639
A363.2. CM; acc no 79208640
- Fowler A3
A364. L Allason-Jones, forthcoming

- 16.4 Fowler D
Fowler D6
A365. HM; not numbered
A365.1. CM; acc no 79208641

- Fowler D unclassified
A366. MA; acc no MA 1956.151.

* For additional brooches A433, A434, see end.

9. GREAT CHESTERS

Most examples are located in the Museum of Antiquities, Newcastle upon Tyne (MA); the following are in Chesters Museum (ChM) :- A369, A371, A373, A375, A379. All are of copper alloy except A367, 'the Aesica brooch', which is silver gilt.

GROUP 1. FIRST CENTURY

- 1.6 Aesica
A367. MA; Evans 1896, 179-94; fig 9;
Collingwood 1930, 38-58; pl XI

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

- 2.2 Dolphin
A368. MA; acc no MA 1956.150.18A

GROUP 4. TRUMPET AND DERIVATIVES

- 4.1 Trumpet
Sub-group Rii
A369. ChM; acc no 2452
A370. MA; acc no MA 1956.150.18A
- Sub-group Riv
A371. ChM; acc no 2456
A372. MA; Evans 1896, 179-94; fig 4; Brewis
1924, 179 no 8; pl VII no 8, pl IX. fig 111,
pl X; Collingwood 1930, 51; fig 9

GROUP 5. KNEE BROOCH AND DERIVATIVES

- 5.1 Knee
Sub-group 5.1E
A373. ChM; acc no 2457
- 5.3 S-profile
A374. MA; acc no MA 1956.150.18A

GROUP 8. P-SHAPED

- 8.1 P-shaped, plain
Sub-group 8.1A
A375. ChM; acc no 2439
- 8.8 Crossbow, heavy
A376. MA; acc no MA 1956.150.18A

GROUP 11. APPLIED REPOUSSÉ SHEET

- 11.1 With repoussé sheet
A377. MA; acc no MA 1956.150.18A

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

- 14.7 Wheel
A378. MA; acc no MA 1956.150.18A

GROUP 15. GILDED DISC AND GEM

- 15.1 Oval
A379. ChM; acc no 2074

GROUP 16. PENANNULARS

- 16.1 Fowler A
Fowler A2
A380. MA; acc no MA 1956.150.18A

10. BIRDOSWALD

All are located in Tullie House Museum, Carlisle, with the exception of A384 and A387, which are missing. All are of copper alloy.

GROUP 1. FIRST CENTURY

- 1.7 Almgren form 16
A381. acc no 100-1962-3

GROUP 4. TRUMPET AND DERIVATIVES

- 4.1 Trumpet
Sub-group Riv
A382. acc no 31-1929
A383. acc no 100-1962-2

GROUP 8. P-SHAPED

- 8.2 Divided bow, double
A384. Missing; Richmond 1931, 132 no 5;
fig 4.4B
- 8.5 Crossbow, light (headknob only)
Sub-group 8.5B
A385. acc no 31-1929; *ibid*, 132 no 4; fig 4.2C

GROUP 10. SIMPLE ENAMELLED PLATES

- 10.1 Concentric ovals
A386. *ibid*, 134 no 8
- 10.11 Miscellaneous discs
A387. Missing; *ibid*, 132 no 3; fig 4.5C

GROUP 16. PENANNULARS

- 16.5 Fowler E
Fowler Ei
A388. acc no 31-1929-2; *ibid*, 132 no 2; fig 4.3D

11. STANWIX

All are located in the Tullie House Museum, Carlisle. Number A392 was found near Eden Bridge, Stanwix, and A394 in the *vallum* filling at Greeny Bank. All are of copper alloy.

GROUP 3. HEADSTUD AND DERIVATIVES

- 3.1 Headstud
Sub-group 3.1Biii
A389. acc no 41930.2; Collingwood 1931b,
72 no 2; fig 1.2, fig 3

GROUP 4. TRUMPET AND DERIVATIVES

- 4.1 Trumpet
Sub-group Rii
A390. *ibid*, 71-2; fig 1.1, fig 3
A391. *ibid*

GROUP 8. P-SHAPED

- 8.3 Divided bow, triple
A392. acc no 63-1973

GROUP 9. FRAGMENTARY

- A393. *ibid*, 72 no 3; fig 1.3, fig 3

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

- 14.2 Dragonisque
A394. acc no 62-1934.2; Bulmer 1938,
153 no H3; fig 4; Kilbride-Jones 1938,
342; Feachem 1951, 36; fig 2.H3
- 14.3 Zoomorphic
A395. acc no 41930; Collingwood 1931b,
72-3 no 4; fig 1.4, fig 3
- 14.6 Sandal
A396. acc no RF 278; Haverfield 1919, 13 no 17;
pl II

GROUP 16. PENANNULARS

- 16.1 Fowler A
Fowler A2
A397. Collingwood 1931b, 73 no 5; fig 1.5, fig 3
A398. *ibid*, 77 no 45; fig 2.45
- 16.7 Fragmentary
A399. *ibid*, 73 no 6; fig 1.6, fig 3

12. MILECASTLES

Brooches from Poltross Burn, mc 48 (nos A410-16) and Walton, mc 56 (no A418) are located in Tullie House Museum, Carlisle (THM). Numbers A404-5, A407-9 and A417 are missing. The remainder are located in the Museum of Antiquities, Newcastle upon Tyne (MA). All are of copper alloy except A415 which is base silver.

MILECASTLE 9

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

- 2.2 Dolphin
A400. MA; acc no MA 1930.39,40

MILECASTLE 33

GROUP 4. TRUMPET AND DERIVATIVES

- 4.1 Trumpet
Sub-group Riv
A401. MA; acc no MA 1956.16

MILECASTLE 35

GROUP 5. KNEE BROOCH AND DERIVATIVES

- 5.1 Knee
Sub-group 5.1D
A402. Allason-Jones 1984, 75 no 1; fig 11

GROUP 11. APPLIED REPOUSSÉ SHEET

- 11.2 Blank disc
A403. Allason-Jones 1984, 75 no 2; fig 11

MILECASTLE 37

GROUP 3. HEADSTUD AND DERIVATIVES

- 3.1 Headstud
Sub-group 3.1Biii
A404. Missing; Hunter Blair 1934, 117 no 1

GROUP 4. TRUMPET AND DERIVATIVES

- 4.1 Trumpet
Sub-group Riv
A405. Missing; *ibid*, no 2

GROUP 9. FRAGMENTARY

- A406. A; Hunter Blair 1934, 117 no 3

MILECASTLE 39

GROUP 10. SIMPLE ENAMELLED PLATES

- 10.2 Disc, raised enamelled centre
A407. Missing; Bruce 1867, 178

GROUP 12. DISC WITH CENTRAL PROJECTION

- 12.1 Buckler
A408. Missing; *ibid*

MILECASTLE 40

GROUP 5. KNEE BROOCH AND DERIVATIVES

- 5.3 S-profile
A409. Missing; Haverfield 1909b, 402

MILECASTLE 48

GROUP 1. FIRST CENTURY

- 1.9 Polden Hill
A410. HM; Gibson and Simpson 1911, 442 no 4;
fig 20: Haverfield 1919, 6-7 no 4; pl I

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

- 2.4 'Severn'
A411. THM; Gibson and Simpson 1911,
441 no 2; fig 20: Haverfield 1919,
14 no 21; pl III

GROUP 3. HEADSTUD AND DERIVATIVES

- 3.1 Headstud
Sub-group 3.1D
A412. THM; Gibson and Simpson 1911,
441-2 no 3; fig 20: Haverfield 1919,
14 no 20A; pl III

GROUP 4. TRUMPET AND DERIVATIVES

- 4.2 Trumpet
Sub-group Rii
A413. THM; Gibson and Simpson 1911,
441 no 1; fig 20: Haverfield 1919,
4-5 no 2A

GROUP 8. P-SHAPED

- 8.7 Crossbow, intermediate
A414. THM; Gibson and Simpson 1911,
442 no 6; fig 20: Haverfield 1919,
9 no 8D
- 8.8 Crossbow, heavy
A415. THM; Gibson and Simpson 1911,
442 no 6; fig 20: Haverfield 1919, 9 no 8C

GROUP 16. PENANNULARS

- 16.1 Fowler A
Fowler A4
A416 THM; Gibson and Simpson 1911,
443 no 16; fig 21

MILECASTLE 50

GROUP 9. FRAGMENTARY

A417. Missing; Simpson 1913, 338 no 13; fig 38

MILECASTLE 56

GROUP 10. SIMPLE ENAMELLED PLATES

10.16 Other shapes

A418. THM; Haverfield 1919, 13 no 18; pl III

13. TURRETS

Brooches A425-8 are located in Tullie House Museum, Carlisle (THM); number A424 is missing; numbers A419.1-419.2 are in Chesters Museum (ChM). The remainder are in the Museum of Antiquities, Newcastle upon Tyne (MA). All are of copper alloy.

TURRET 18B

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.8 Openwork

A419. MA; Woodfield 1965, 99: Allason-Jones 1988b, 198-9 no 1; fig 1

TURRET 29B

GROUP 16. PENANNULARS

16.1 Fowler A

Fowler A2

A419.1. ChM; Allason-Jones 1988b, 205 no 1; fig 2

A419.2. ChM; Allason-Jones 1988b, 205 no 2; fig 2

TURRET 33B

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet

Sub-group Rii

A420. MA; Miket and Maxfield 1972, 175-6; fig 8.2: Allason-Jones 1988b, 206 no 2; fig 3

GROUP 10. SIMPLE ENAMELLED PLATES

10.4 Concentric circles and dots

Sub-group 10.4B

A421. MA; *ibid*, 171-4; fig 8.1: Allason-Jones 1988b, 206 no 1; fig 2

TURRET 34A

GROUP 2. LATE FIRST TO MID-SECOND CENTURY

2.2 Dolphin

A422. MA; acc no MA 1975.15: Allason-Jones 1988b, 208 no 1; fig 3

TURRET 35A

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.7 Wheel

A423. MA; Woodfield 1965, 155, 160: Green 1981, 254; fig 1.18: Allason-Jones 1988b, 209 no 1; fig 3

TURRET 48A

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Unclassified knee brooch

A424. Missing; Shaw 1926, 444: Allason-Jones 1988b, 211

TURRET 49B

GROUP 14. REPRESENTATIONAL AND SYMBOLIC

14.3 Zoomorphic

A425. THM; Simpson 1913, 303, 337; fig 38.1: Haverfield 1919, 12 no 15; pl II: Allason-Jones 1988b, 212 no 1; fig 4

TURRET 50B

GROUP 16. PENANNULARS

16.1 Fowler A

Fowler A3 iv

A426. THM; Simpson 1913, 338 no 5; fig 38: Haverfield 1919, 14-15 no 22C: Allason-Jones 1988b, 213 no 1; fig 4

Fowler A4

A427. THM; Simpson 1913, 338 no 6; fig 38: Allason-Jones 1988b, 213

TURRET 52A

GROUP 4. TRUMPET AND DERIVATIVES

4.1 Trumpet

Sub-group Riii

A428. THM; acc no 69-1937.4: Allason-Jones 1988b, 215 no 1

14. HADRIAN'S WALL

Brooch A429 may be from Peel Gap Turret (39B); it is now missing. Number A430 was found outside Pike Hill signal tower; it is also missing. Number A431 was found along the line of Hadrian's Wall and is now in the Tullie House Museum, Carlisle (THM). All are of copper alloy.

GROUP 16. PENANNULARS

16.1 Fowler A

Fowler A2

A429. Missing; F G Simpson (G Simpson ed) 1976; fig 65.2

GROUP 14. TRUMPET AND DERIVATIVES

Unclassified trumpet

A430. Missing; Simpson and McIntyre 1933, 272

GROUP 10. SIMPLE ENAMELLED PLATES

10.6 Semi-circles

Sub-group 10.6B

A431. THM; not numbered

* Additional brooches

CARRAWBURGH

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee

Sub-group 5.1A

A432. Missing; Mohammed 1972, 143 no 175; fig 16

HOUSESTEADS

GROUP 5. KNEE BROOCH AND DERIVATIVES

5.1 Knee

Sub-group 5.1B

A433. Missing; Butcher 1975, 37-8

GROUP 8. P-SHAPED

8.8 Crossbow, heavy

A434. Missing; Wilkes 1961, 294 no 1; fig 3

APPENDIX II

IIa. Brooches of Group 3.1 (headstud) listed according to site

Site	no	Sub-group	cat nos
Corbridge Red Ho	3	Ci(2);Ciii	3,4;5
Corbridge	8	Bi;Biii;Ci;Cii; Di(2);E(2)	11;12;13;14; 15,16;17,18
Vindolanda	1	Dii	176
Nether Denton	1	E	239
Carlisle	5	Bi;Biii;Di(3)	255;255.1;256; 257;257.1
South Shields	2	Biii;Ci	A11;A12
Wallsend	-		
Newcastle	-		
Benwell	-		
Halton Chesters	-		
Chesters	2	Bii(2)	A239,A240
Carrawburgh	-		
Housesteads	1	Biii	A322
Great Chesters	-		
Birdoswald	-		
Stanwix	1	Biii	A389
mc 37	1	Biii	A404
mc 48	1	Di	A412

IIb. Brooches of Group 5 (knee) listed according to site

Site	no	Sub-group	cat nos
Corbridge Red Ho	-		
Corbridge	27	5.1A(3);5.1B(3); 5.1A/B;5.1C;5.1D(7); 5.1E;5.2(6);5.3(2); 5.4;Unclassified(2)	44-6;160,47-8; 49;50;51-5,161,161.1;56; 57-61,60.1;62-3;64;64.1, 65
Vindolanda	7	5.1A;5.1C;5.2(3); 5.3(2)	190;191;192-4 195,196
Nether Denton	3	5.1A(2);5.1B	243,244;245
Carlisle	7	5.1A(4);5.2;5.3(2)	266.4-.7;266.9;267-267.1
South Shields	8	5.1B(2);5.1D(3); 5.2;5.4;Unclassified	A40,A41;A42-4 A45;A46;A47
Wallsend	6	5.1B(2);5.1C;5.1E; Unclassified(2)	A188,A189;A190 A191;A192,A193
Newcastle	-		
Benwell	2	5.1B;Unclassified	A219;A220
Halton Chesters	2	5.1A;Unclassified	A226;A277
Chesters	14	5.1A(2);5.1B(4); 5.1C;5.1D;5.2(4); 5.3(2)	A250,A251;A252-5; A256;A257;A258-61 A262,A263
Carrawburgh	1	5.1A	A432
Housesteads	5	5.1A;5.1B(2) 5.2(2)	A326;A327,A433; A328,A329
Great Chesters	2	5.1E;5.3	A373;A374
Birdoswald	-		
Stanwix	-		
mc 35	1	5.1D	A402
mc 40	1	5.3	A409
turret 48A	1	Unclassified	A424

APPENDIX III

APPENDIX IV

Brooches of Group 8.8 (developed crossbows) listed according to site

cat no	Site	Keller type
A415	mc 48	1A
209	Vindolanda	?1A
A93	South Shields	1A
A94	South Shields	1A
A347	Housesteads	1B
A95	South Shields	1-3/4
173	Shorden Brae	3A
83	Corbridge	3A
A96	South Shields	4A
A273	Chesters	4A
84	Corbridge	4A
A97	South Shields	?4B
85	Corbridge	4B
A198	Wallsend	4B/C
A434	Housesteads	4B/C
86	Corbridge	?4C
A274	Chesters	4C
87	Corbridge	4C
A312	Carrawburgh	?4C
A376	Great Chesters	fragmentary
A98	South Shields	fragmentary
A99	South Shields	fragmentary
A100	South Shields	fragmentary
A101	South Shields	fragmentary
A102	South Shields	fragmentary
A103	South Shields	fragmentary
A348	Housesteads	fragmentary
210	Vindolanda	fragmentary
87.1	Corbridge	fragmentary

In addition there are two fragments from Corbridge which probably belonged to late crossbow brooches (cat nos 166.2 and 166.3); both are spherical knobs of the kind which was sometimes separately rivetted on.

Brooches of exclusively first century date

- 1.1 Nauheim derivatives
cat nos 154, 251, 251.1, 251.2, 252, A1, A233
- 1.2 Colchester
cat nos 235, A2, A3
- 1.3 Eye brooch derivative
cat no A4
- 1.4 Almgren form 19
cat nos 236, 237
- 1.5 Aucissa
cat no A5
- 1.6 Aesica
cat no A367
- 1.7 Almgren form 16
cat nos 174, A381
- 1.8 Hod Hill derivatives
cat nos 155, 253, A6, A234
- 1.9 Polden Hill
cat nos 156, 233.1, A181, A410
- 1.10 Kraftig profiliert and derivatives
cat nos 238, A7
- 1.11 Other early bow brooches
cat nos 1, 2, 8, 254
- 1.12 Sawfish
cat no 254.1
- 16.2 Penannular
cat no 152
- 16.6 Penannular
cat no 232

