# Dress Pins from Anglo-Saxon England: their production and typo-chronological development

## VOLUME II




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# Chapter 7

# The Function of Anglo-Saxon Pins

> The position of the pin in the grave when this comes to be opened, would be much the same whether it had been used in the hair or to fasten a part of the dress under the chin, and in any case position in the grave like every other piece of archaeological evidence has to be received in a critical spirit (Brown 1915: 368).

## 7.i.Introduction

In earlier chapters we examined the change in the form of pins in common use in Anglo-Saxon England before 1100 AD. Although it has proved possible to divide them into formal groups their function is not so clear. Between the middle of the fifth century and the end of the seventh some evidence for use is conveyed by the way in which these pins were buried. In Table 7.1 I have listed many of the published and a limited number of unpublished graves including pins where some details of context of use are available. There are, therefore, pins from sites such as Hingham (Kent) (Payne 1909: xc-xcii), Kempston (Beds) and Sarre (Kent) which are excluded. In neither the records of these finds, nor in those from many other sites, did the excavator report the position of the finds. Even in those cases where the position was noted the data is open to multiple interpretations. The context of the pins from grave 4 at Chartham illustrates this. In recording the opening of this grave Faussett reported that there were two pins adjacent to the skull of the woman buried there (1856: 169). The natural inclination, almost without a moment's hesitation, is to propose that these pins had been used to secure a head-covering or hair-band of some kind, but it might be equally plausible that they had been used to fasten tightly knotted plaits.

The Anglo-Saxons used pins to secure head-dresses (e.g. veils or headbands), fasten cloaks, and hold-up hair (particularly true for women wearing braids). Local fashions and individual needs dictated the specific functions pins served. Overall it is not possible to see a difference in the use of pins between Saxon regions and Anglian regions or even between these areas and Kent during the fifth and first half of the sixth centuries. During the late sixth and seventh centuries Kent seems

to have gone its own way and during this period we find a large number of pins associated with the heads of women (see Table 7.1). For pins changes in function over time seem to be more important than change over space. We see different uses in the seventh century from those of the sixth or fifth centuries, but in most cases the differences are consistent across the areas where we find pins. Our problems with the evidence become more complex in the post–700 period. Except for the occasional Anglo–Scandinavian burial furnished burials are virtually unknown. Pins are a common find on middle Saxon sites, but the context of recovery is little help in the identification of their function. As we have seen (chapters 5 & 6 above) not long after 700 the form and decoration of pins converged on a narrow range of types and showed a limited amount of regional and chronological variation. The lack of evidence for context–of–use(s) presents a major problem when we attempt to draw conclusions about function. In the face of a paucity of context–of–use evidence we must turn to other sources to verify our suppositions. These additional sources include sculptures, manuscript illuminations and texts.

The first material we shall examine is the fifth– and sixth–century occurrences of pins in burial contexts. Then we shall look back to the variety of uses known from the late Roman period and at the evidence from the Germanic regions. This discussion will be enhanced by touching on the evidence provided by mosaics, coins, sculptures, and cemetery data. These sources point to a diversity of use and, in particular, ongoing variation in the way women wore their hair. As Ovid reported about the hair of women in his *Art of Love*:

> But you will not count the acorns on the Oak's numerous boughs, nor how many bees there are in Hybla, nor wild beasts upon the Alps; nor can I enumerate all the fashions that there are: each day adds more adornments[1]

Evidence from the late Roman world indicates that women wore their hair in plaits that where pinned–up, others wore hairnets, headbands, or veils and still others curled their hair with irons. This variety is evident in Anglo–Saxon contexts as well. The variation in possible explanations for pin use is particularly diverse in the pins from the seventh century. Here pins were certainly used

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[1] Ovid, *Artis Armatoriae Liber III*, 149 – 152. *'Sed neque ramosa numerabis in ilice glandes,/ Nec quot apes Hybla, nec quot in Alpe ferae,/ Nec mihi tot positus numero conprendere fas est: Adicit orantus proxima quaeque dies'*.

to secure a number of different hairstyles and may also have clasped veils. It seems plausible, and hardly original, to suggest that the pins recovered in fifth and sixth century graves in the middle of the chest area were used to secure versatile cloaks which could be worn at the shoulders or could have been pulled up over the head, as necessary.

Turning to the period after the seventh century we must examine non-archaeological sources for our evidence, because although we have numerous finds of pins for this period we lack evidence supporting suggestions about their use. The available sources include manuscripts, sculptures and texts. Manuscripts, it must be admitted are notoriously difficult to use. The illuminations tend to be heavily influenced by earlier work, much of which may be non-insular. Therefore, although illustrations can provide evidence, this information must be treated with the greatest of caution. Just how constrained we must be in our use of illuminations as evidence for fashion can be seen by a comparison of the wise men in two Adoration of the Magi scenes from widely separated times and places: the fifth century mosaic at S. Apollonari Nuovo and the Sacramentry of Robert of Jumièges (c.1008). In the fifth century mosaic the wise men can be identified and distinguished one from the other by the gifts they bear, and the eastern origin of the three is made evident by their Phrygian caps. These caps held a long standing iconographic role. Five centuries later in the Sacramentry of Robert of Jumièges we can see little difference in their form. It seems safe to allow manuscripts to guide us in the general trends only. Even in this, though, they can be of great help.

From occasional references in both textual sources (from laws to poems) and in manuscript illuminations we know only a little about how women wore their hair during much of our period. In the few cases where women appear with their hair uncovered from the earliest representation in the *Vienna Genesis* to the latest in British Museum Cotton Claudius B.IV they all wore their hair long.[2] On Anglo-Saxon sculptural pieces hair is rarely evident, but on the Ruthwell Cross the long-haired Mary Magdalene can be seen at the feet of Jesus.

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[2] In the *Codex Sinopensis*, the women at Herod's feast with Salome, who is depicted receiving John the Baptist's head, all have long hair confined by bands or fillets.

Problems associated with explaining the function of pins are not confined to the Anglo-Saxon period. In a review of discussions of material from diverse periods and locations the difficulties incumbent in determining the function of pins are evident. Some instructive ideas might be gleaned from work investigating pins of other periods. Eva Hjärthner-Holdar's examination of pins from the 'younger stone age' offers fruitful hypotheses. First, she divided the pins into two primary categories (category A included eight sub-groups and category B included ten sub-groups). Then she studied their form, examined them for wear marks, and noted the relative position in the grave. She suggested that those pins with a hole in their head may have had a thong passed through the hole which was hooked around the tip after the pin had been passed through the fabric and this thong was then passed back through the head (1977: 240 & fig 3). She proposed that these pins were worn point upwards and fastened mantles either at the shoulder or at the medial point of the body. Some of the pins were recovered in contexts which suggested to her they were used as hair fasteners, but in these instances she felt it was difficult - given the short length of these pins - to accept that they had been used independently of other material to hold a woman's hair in place. It seemed more likely that they had been used in combination with a leather strip and the hair was secured between the pin and the leather strip. The pin would be held in place by the leather strip. The proposal that pins were used in conjunction with other items, such as clasps or leather thongs, has merit, even though little archaeological evidence can be marshalled in support of it. Indeed, I know of only one pre-modern example of this arrangement. In this Roman find a pair of pins was associated with a small silver plaque with a chi-rho symbol on the obverse face and two small hooks on the reverse for the pins to 'pop into'. This find came from *Noviomagus* (1979). But we see ethnographic examples of this every day in our contemporary world - in women who bind their hair with thongs and head cloths.

Securing pins in place must itself have been a problem. They have a natural tendency to pull out of the fabric into which they have been pushed, especially as through the course of normal daily activity the garment is tossed to and fro. Stevenson argued that a piece of string or thread was used to hold the ringed-pins securely to the garments they fastened. A thread was knotted on to the ring

at one end and then passed around the point of the pin where it emerged from the fabric. This thread then passed back up to the ring where it was tied off (1955). Wilson followed Stevenson in this and his contribution to the Stevenson *Festschrift* argued a case, as had Hencken earlier (1950: 194), for the use of string to secure the pig's fibula pins; in this instance he was describing the pin from Sconsburgh, Dunrossness (1983: 343). In his reconstruction he pointed the pin downwards and the string passed as Stevenson had proposed (ibid. fig 146). Stevenson and Hencken had put forward this hypothesis for string or thread without the benefit of confirmatory evidence, but by the time Wilson was writing at least two pins were known with strings still attached. One is a polyhedral-headed pin with a plain ring from a ninth or tenth century context at the site of Tjørnuvík, Faroes (Dahl 1965: 137 & fig 2; 1970: 65 & fig 23) and the other is a polyhedral-headed pin with a kidney ring from an eleventh century building level at Dublin (Fanning 1988: 164, fig 7.2). It was the discovery of the former pin that gave credence to Stevenson's proposal (1968: 29, note 8).

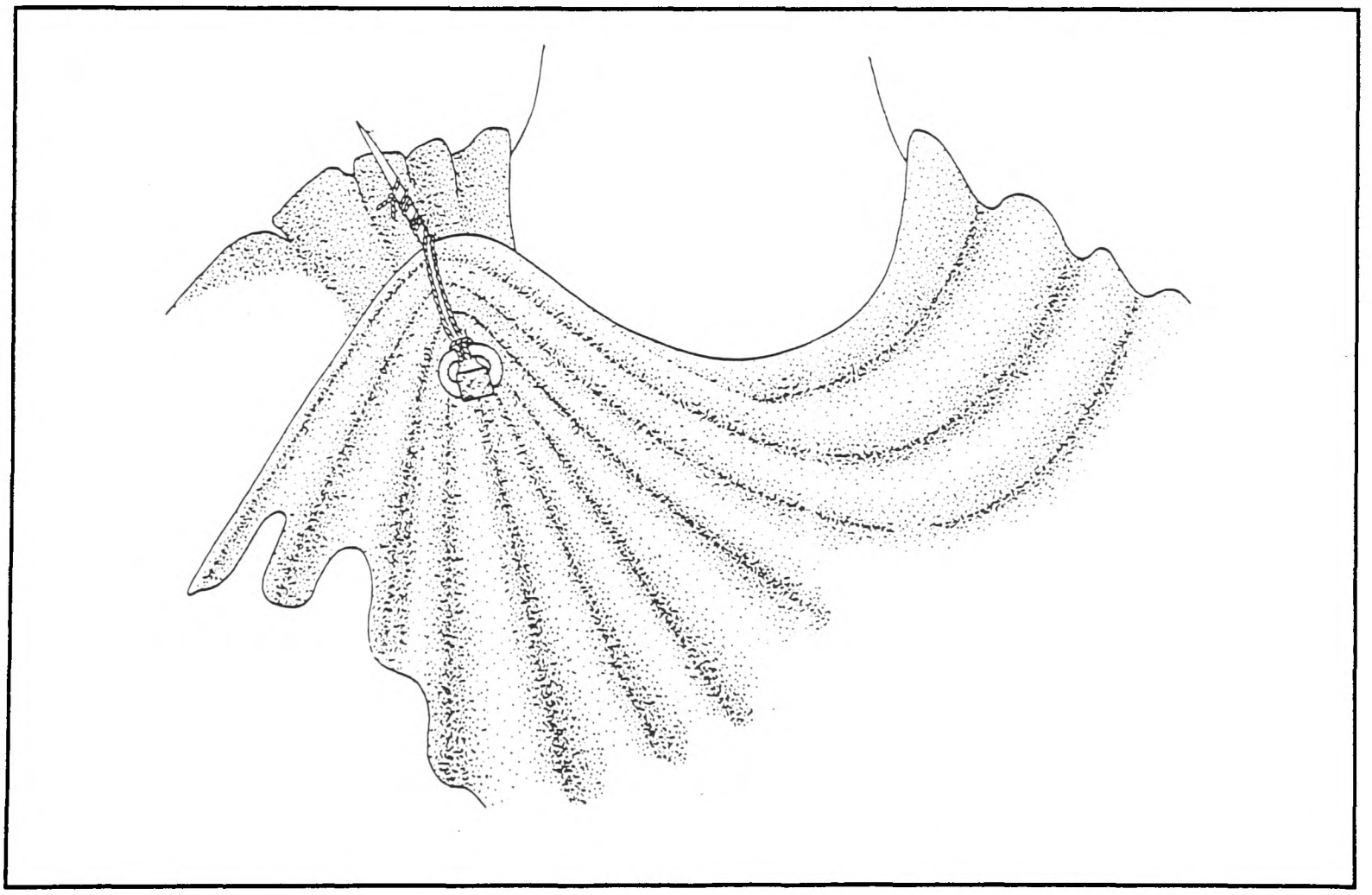


**Figure 7.1:** Reconstruction of Pin Secured by String (from Fanning 1989: Fig.7:3).

Fanning further broadened our understanding of how pins were secured with string. He proposed that a length of string was folded to form two equal strands. The loop–end was passed over the end of the ringed head and the double strands passed through this loop. The two strands were carried down to the point where the pin point emerged from the fabric. The string was then wrapped around the shaft and tied–off. He postulated that the pin actually pointed upwards across the shoulder. This suggestion, he argued, was supported by both the archaeological and art historical evidence (1989: 169–172, fig 7.3 & 7.4) [Fig 7.1]. If this reconstruction is correct then the string makes a great deal of sense. If the pin had been placed point down the weight of the head would have helped to inhibit it from slipping. However, if the pin is placed point upwards the weight of the pin is pulling downwards and the probability of slippage is increased. Thus the string becomes essential to make fast the pin.

The suggestions of Hjärthner–Holdar, Stevenson, Wilson, and Fanning should be borne in mind throughout the following discussion. It would appear that similar explanations can be applied to other ringed pins and possibly to non–ringed pins. We ought to wonder whether the use of the string was intended solely to hold the pin in place. Pins are notoriously inadequate as a device for closing a cloak or any other garment. The string might have served a dual purpose. While strings might have fixed the pin, they might also have helped to secure the garment. They acted much like a sureté, a device notably absent from almost all pins of the early Middle Ages. One exception from Ireland is a pin from Loughnaglack Crannog (Co. Monaghan).[3] This 86 mm long cast copper alloy pin has a discoid head decorated on both faces by a circle formed by an incision into the head of the pin

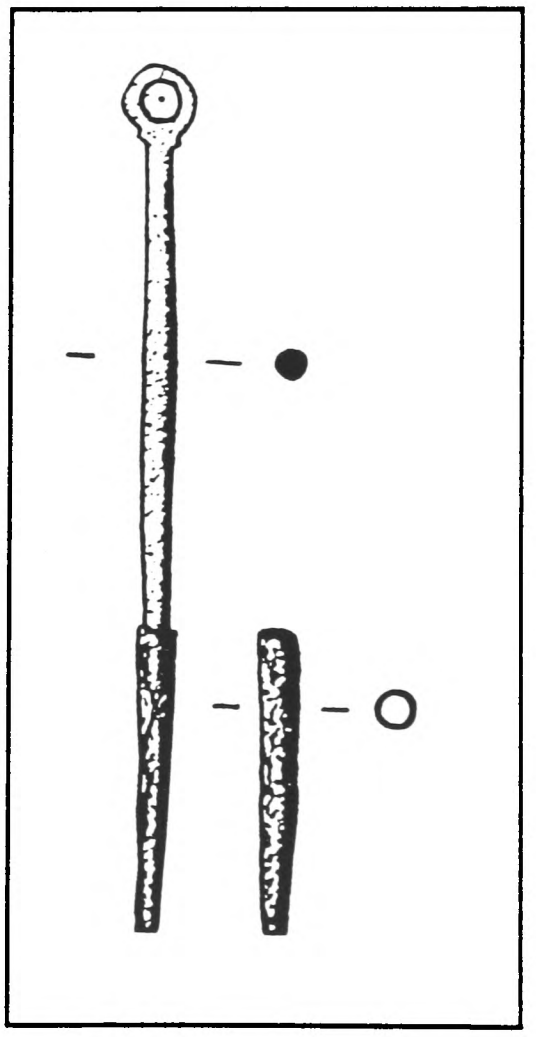


**Figure 7.2:** Pin with Sureté from Loughnaglack Crannog.

[3]National Museum of Ireland, acc no: 1965:338 (a & b). Two other similar pins from Co. Monaghan were recovered without the sureté (Rahans Lough [National Museum of Ireland, acc no: 1965:326] and Monalty Crannog [National Museum of Ireland, acc no: 1965:321]).

(Fig 7.2). At the point where the head of the pin joins the shaft two pointed projections are evident. The pin was inserted into a 31 mm long tapering tube made from sheet copper alloy.

## 7.ii. Pins in Fifth and Sixth Century Graves

Pins recovered from fifth and sixth century burials have with few exceptions been recovered in a zone from the neck to the upper pelvis.[4] Of these, as the evidence presented in Table 7.1 makes clear, the majority occur in the upper chest area. In addition the majority of graves including pins are those of women, although occasionally pins occur in graves of children (some of which may have been female). It must be pointed out that not all the graves in our table have been sexed independently of their grave goods. This has occurred for several reasons. First, osteological study had not been done for many burials excavated during the nineteenth and early twentieth century and in many cases the conditions of burial led to an almost total decay of sexable skeletal material (e.g. Morning Thorpe). The identification, therefore, of an individual's sex was determined by the items with which the dead had been buried. What has <u>not</u> been accepted is an attribution of a grave as female where the only item in the grave was a pin and all osteological confirmation was lacking.

In considering the functional capabilities of pins it might be useful to compare the diameter of the pin shafts to the actual size of the pins on contemporary brooches. When we do this it quickly becomes apparent that these straight pins have comparable, if not greater, mechanical strength than the pin attached to most brooches. The lack of a catch, which is a major asset of the brooch pin, limits the actual uses to which our pins could be put. A general, but unfounded, assumption that pins lacked the mechanical strength of a brooch pin seems to have been implicit in the thinking of many archaeologists. This has in the past led to confusion about the likely functions of these fasteners. If string or thread had been used in conjunction with the pin as Fanning, Hjäthner–Holdar, Hencken, Stevenson and Wilson have suggested they are at least as strong.

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[4]One such exception is the pin from Chessell Down (Isle of Wight) grave 81 which was 'found at the back of the skull of the wearer' (Hillier 1856: 35).

The problem of determining the function of the sub-triangular headed pins from Marston St Lawrence offer a useful starting point. The excavator, Dryden, unfortunately did not carefully record the positions of the objects and in so doing he severed these pins from their context of use. He reported that a number of hairpins had been found. We should not be misled by this attribution since the discovery of a pin in the nineteenth century, regardless of its context, was often described as the discovery of an hairpin (see for example Wright 1854: 12 & again 1855: 14). Even Akerman made such claims while recording something different. He reported that grave 8 at Filkins contained the:

> Skeleton of a woman, with two saucer-shaped fibula on the breast, and a hair-pin. At the waist, a large iron buckle and a knife ... , (1857b: 142).

Well-recorded finds of this type of pin do not support Dryden's attribution. Almost none of the known associations from contexts dating before the very end of the sixth or early seventh century indicate pins were used in hair and the only sure associations that do suggest use of pins in hair are Kentish. The pin from grave 52 at Portway, Andover was recovered on the right side of the chest of the interred in association with the right disc brooch of a pair (Cook & Dacre 1985: 39 & figs 39 & 64). The pin from Abingdon B36 was below the right upper arm at the lower ribs (Leeds & Harden 1936: 38). During burial some shifting of the costume must have occurred in this grave. The left side of the costume was pulled upwards and the left disc brooch ended up above the left shoulder and the right disc brooch and pin shifted downwards on the chest. Ken Annable recovered the pin from grave 53 at Blacknall Field 'within the area of the upper half vertebral column. The point of the pin was towards the left scapula position' (pers comm.). The pin from grave 13 at Droxford was found on the left breast of the interred (Aldsworth 1978: 117 - 118). At Abingdon in grave B60 the pin was on the left breast (Leeds & Harden, 1936: 43), in grave B66 it was on the centre of the chest (ibid. 44), and in grave B113 it was located on the right breast (ibid. 53). The position of these pins in conjunction with the brooches would seem to indicate that they were used to close an outer cloak. The distance the pin is recovered to the right or left of the medial line of the body may represent how far across the body the outer garment had been pulled before being secured (or alternatively it might reflect how the outer garment shifted during deposition or as a result of depositional and post-depositional changes.) The appearance of the pin on the left side

rather than the right side might be indicative of the direction in which the cloak was closed. This might indicate either the ethnicity or the right-handed or left-handedness of the individual who dressed the dead person for burial.

The hook-headed pin in grave 38 at Andover was recovered with two disc brooches on the 'left side of the chest parallel to the spine and pointing towards the feet' (Cook & Dacre 1985: 33). In grave 11 at Wallingford the iron loop-headed pin was recovered on the breast in association with two small-long brooches (Leeds 1938: 97). This pin from grave S.6 at Horndean (Knocker 1958) is illustrative of the possible alternative functions these pins might have served. A pin was recovered from under the jaw of an adult female. A couple of different possibilities could all equally explain the position of this pin: first, it could have been closely tucked under her chin because the cloak was pulled tight at her neck; second, it might have clasped a close fitting head-covering just under her neck; third, the woman's cloak may have been pulled-up over her head and fastened snugly under her chin; fourth, it might be a shroud pin. The third hypothesis is favoured, although the grounds for rejecting the other three are hardly unquestionable.

The rolled pins with perforated heads of a sub-triangular or curved form are particularly problematic. These are often referred to as prickers and frequently considered to have been part of a toilet set (cf. Leeds 1938: 95). In many cases objects of this form do occur on wire rings in conjunction with other items which are often considered to have been part of a woman's cosmetic set. When they occur in such a combination this attribution may be correct. However, when they occur independently I think they were pins. These pins have been recovered in conjunction with brooches. The pin from grave 1 at Portway, Andover lay horizontally across the dead woman's chest associated with two disc brooches (Cook & Dacre, 1985: 23-24, figs 28.1 & 41). On her lower chest lay three beads and at her pelvis an iron knife.

From among the pins of set A (see chapter 6 above) whether the pin was of type x or type y does not seem to have mattered in determining how it was worn. Chronology seems to have had a greater influence on pins. In grave 11 at Wallingford a girl under the age of 12 was found with a 'flat Maltese-cross head-plate, arched bow, and flat sub-triangular foot' brooch below each

shoulder (Leeds 1938: 97 & Pl I). On her breast was a loop-headed pin. The pin probably secured an outer garment. This might be contrasted with the burial in the same cemetery of a woman from grave 15. She lay on her back. Above the back of her head which was turned to the left was an annular brooch, on the left and right side at the mid-breast were a pair of 'dished brooches of the applied type'(ibid.). An hour-glass headed pin (type **XXIII**) with its head near the right brooch and its tip resting on the left brooch lay perpendicular to the vertebrae. Another annular brooch was on the lower left breast. Just above the pelvis was another pin which had lost its head, lying perpendicular to the body, and parallel to the pin with the hourglass head (ibid. Pl VI). How do we interpret the function of this combination of fasteners ? It would seem likely that this woman had her garment pinned along its medial line, but during burial the garment had shifted slightly. More recently from grave 18 at Lechlade two pins were recovered in a similar arrangement suggesting a similar function.

Grave 86 at Morning Thorpe is another example of the deposition of a woman wearing both brooches and a pin. In this case the woman had two penannular brooches on either side of her chest. Below each brooch lay a number of beads the majority of which were amber. At the woman's waist lay a knife, strap ends and an iron ring. Across the left penannular brooch lay a 135 mm long copper alloy pin with a 15 mm wide wedge or spatulate head. In the upper corner was a hole through which a wire ring had passed from which had been suspended several triangular sheet metal pendants (Green, et.al. 1987: 59, fig 71). The pin must have held closed an outer garment as the woman's dress was probably secured by the two penannular brooches. A similar find occurred in grave 45 at Barrington (Cambs). Here Foster recovered a pin 'lying across fibula on right shoulder' (1880: 20) [the brooches were square-headed]. Further confirmation of this distinction in function comes from the Upper Thames Valley cemetery at Lechlade. In grave 19 a young girl was buried with among other material two saucer brooches, one on each side of her breast. Lying diagonally across one of these was a pin with its point downwards. Similar arguments made to explain the function of the pin from Morning Thorpe grave 86 can be made for this pin.

The similarity between the function of the Lechlade and Morning Thorpe pins illustrates an interesting point. Whereas we can see clear material culture differences between Anglian and Saxon areas including in the forms of some of our pins it is not possible to see a difference in function. In both cases pins are used to close outer garments. It may seem imprudent to make such a claim on the basis of only two examples, but a glance down Table 7.1 shows numerous others which support this suggestion.

Therefore, based on a comparison between the position of the pins from Abingdon (Berks), Alfriston (Sussex), Barrington (Cambs), Bergh Apton (Norfolk), Blacknall Field (Wilts), Brighthampton (Oxon), Kingsworthy (Hants), Lechlade (Glos), etc. (see Table 7.1) and those from other graves, would suggest that these pins were used as cloak fasteners. It seems to indicate that most pins lie between 90° and 270° in relationship to the medial line of the body – that is between the point of the pin pointing left across the body perpendicular to the medial line to the point of the pin pointing right across the body forming a perpendicular transection of the medial body line. The great majority appear to fall in the range between 50° to either side of the 180° mark, but the conclusion is not based on precise evidence because the detail of the grave records are not suitable for achieving such precision. It represents a general impression left by the evidence. I am aware of only one fifth – seventh century pin recovered with its point towards the head of the grave. This type **IV** pin came from grave 182 at Finglesham. This grave can be assigned to the end of the sixth century. The pin was quite old when buried and was associated with, among other late sixth/early seventh century finds a pin of type **LI.**

The imported pins of the Faversham bird–headed type (**XXXII**) and those of the Flat–plate animal–headed type (**XXXIX**) were probably not intended to be worn as hairpins. Pins of both these types terminate in a long flat plate decorated only on the obverse face. The form of these pins made them best suited for use as dress fasteners in positions where the flat back plate could lie against the body. Some were intended to lie parallel to the vertical line of the body whereas others were probably worn perpendicular to that line. Pins of the Faversham flat–plate animal–headed type were probably worn perpendicular to the vertical line of the body, as in this position the animal appears

to hurry along (**BM M&LA 1131'70A**). This can be contrasted with the Faversham bird-headed pin which was designed to be worn parallel to the main line of the body (**BM M&LA 1130'70**).

## 7.iii. Pins in Late Sixth and Seventh Century Graves

There are several groups of pins which have been found in seventh-century graves; these include the Kingston-disc-headed pins (Type L), composite-headed pins (e.g. Wingham type [LX], Wigber Low-cross type [LIX]), linked pins (**LXIV**), spiral-headed pins (**LXVI**), and facet-headed pins (**LXXII.i**). These pins were recovered in three different positions: (1) those associated with the head (e.g. Chartham g.4; Gilton g.8; Kingston g.6, g.119, g.156; Melbourn, g.7, g.9; etc); (2) those associated with the neck (e.g. Dover, g.60, g.142); (3) and those found in the chest area.

Faussett's records from Kingston Down and Sibertswold Down assist us in offering some suggestions as to pin function. He recorded that at Kingston Down a small-disc headed pin (L) in grave 6 had been recovered 'close by the side of the skull', and he concluded that it had been used as a 'pin for hair' (1856: 43). Whether it was used to hold a hair style in place or to secure a headband or a veil remains an open question. On account of the size of these pins the use to hold a headband or veil seems the most plausible interpretation. In the case of some with hipped shafts (i.e. the type L pin from Bampton) the latter suggestion is favoured since the presence of hipping would have kept the pin (once pressed between the fibres of the fabric) from slipping out. Perhaps these pins fixed veils to headbands. While we can point to significant numbers of these pins associated with the skull of some Kentish woman, we can also see other functions. An alternative suggestion might be postulated by considering the location of similar pins in the grave excavated by Evison at Dover. The Kingston-disc-headed pins she recovered from this cemetery were all recovered at the neck just below the chin (Evison 1987: 82). In this position they may have fastened a head scarf closed. This suggestion appears all the more plausible because the relatively small size of these pins would have made it impossible for the pin to have secured a cloak. This information continues to support the supposition that these pins held a head-covering of some kind, although we now see that possibly a variety of headdresses might have been worn.

Examination of the function of linked pins leads us to provide an alternative explanation of the use to which pins were put, but it also points towards the concept of a veil. Baldwin Brown considered the function of these pins in 1915. He proposed:

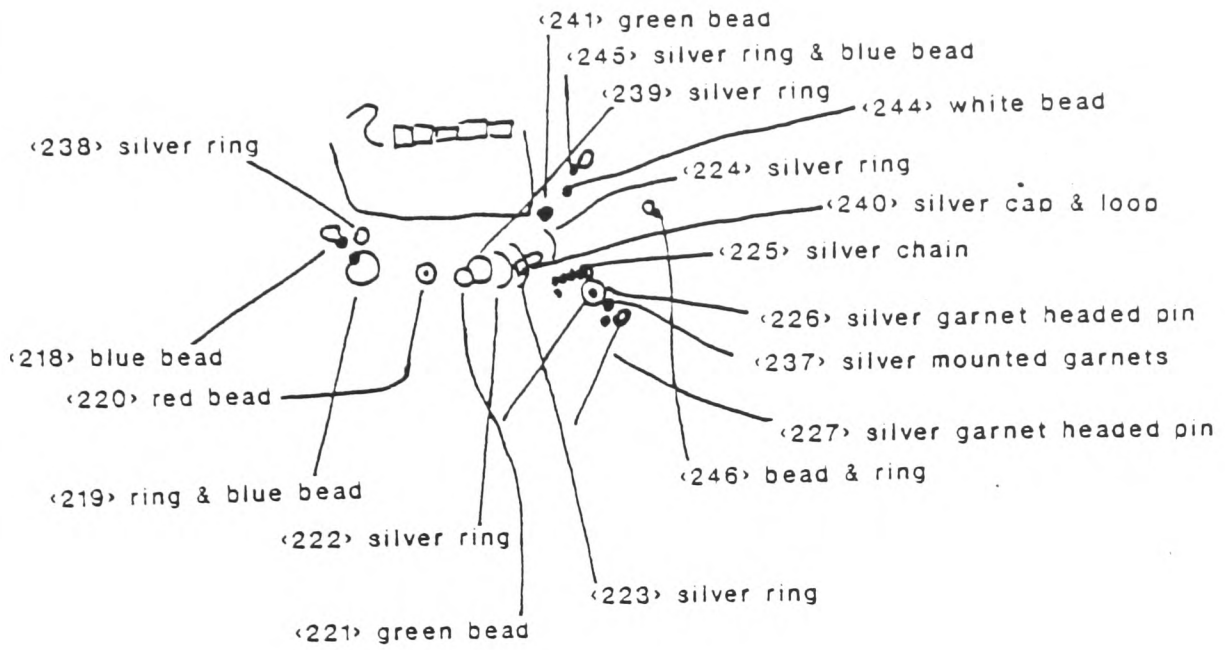
> The shortness of the space allowed by the chain between the pins, in the Roundway Down example at Devizes about 5 in., makes the use of them on the head rather than the breast practically certain. (1915: 387).

This hypothesis is now known to be incorrect. It was Leeds who, based upon information sent him by F.T. Gurney who excavated linked pins at Leighton Buzzard (Beds), first proposed that this pin suite was intended to be worn to secure a headdress or veil (1948: 173).[5] There can now be little doubt of this. Nearly all the examples for which contextual evidence exists came from the upper chest of the burial. The context of the pins from graves 50 and 1092 at Lechlade is typical in this regard [Fig 7.3 & Fig 7.4].[6] A supposition drawn from the positions of these pins would naturally be that they were used to close a cloak. This does not seem an acceptable explanation when the fragile character of the pins is taken into account. They were gold and/or silver and have an average shaft diameter of around 1.5mm as such they would not have been capable of supporting a cloak. The fact that Anglo-Saxon nuns are known to have worn long veils, the appearance of rare items in Anglo-Saxon seventh-century contexts and the ostentatious character of the contexts in which these finds occur (e.g. with necklaces and other decorative jewellery) would suggest to me that these pins were not used for fastening even a light cloak. Instead, they were used for closing a veil of silk or very fine linen which was dropped over the head with the opening in the front. A veil like this would have been easily fastened to the undergarment using linked pins with the light fragile proportions suggested by the known examples. Fastening a veil of this kind would have required the positioning of pins in the upper chest area. This location is confirmed by the archaeological evidence from, at least, Lechlade (graves 50 and 1092) and Chamberlains Barn (graves 39 and 55). Hyslop in discussing the

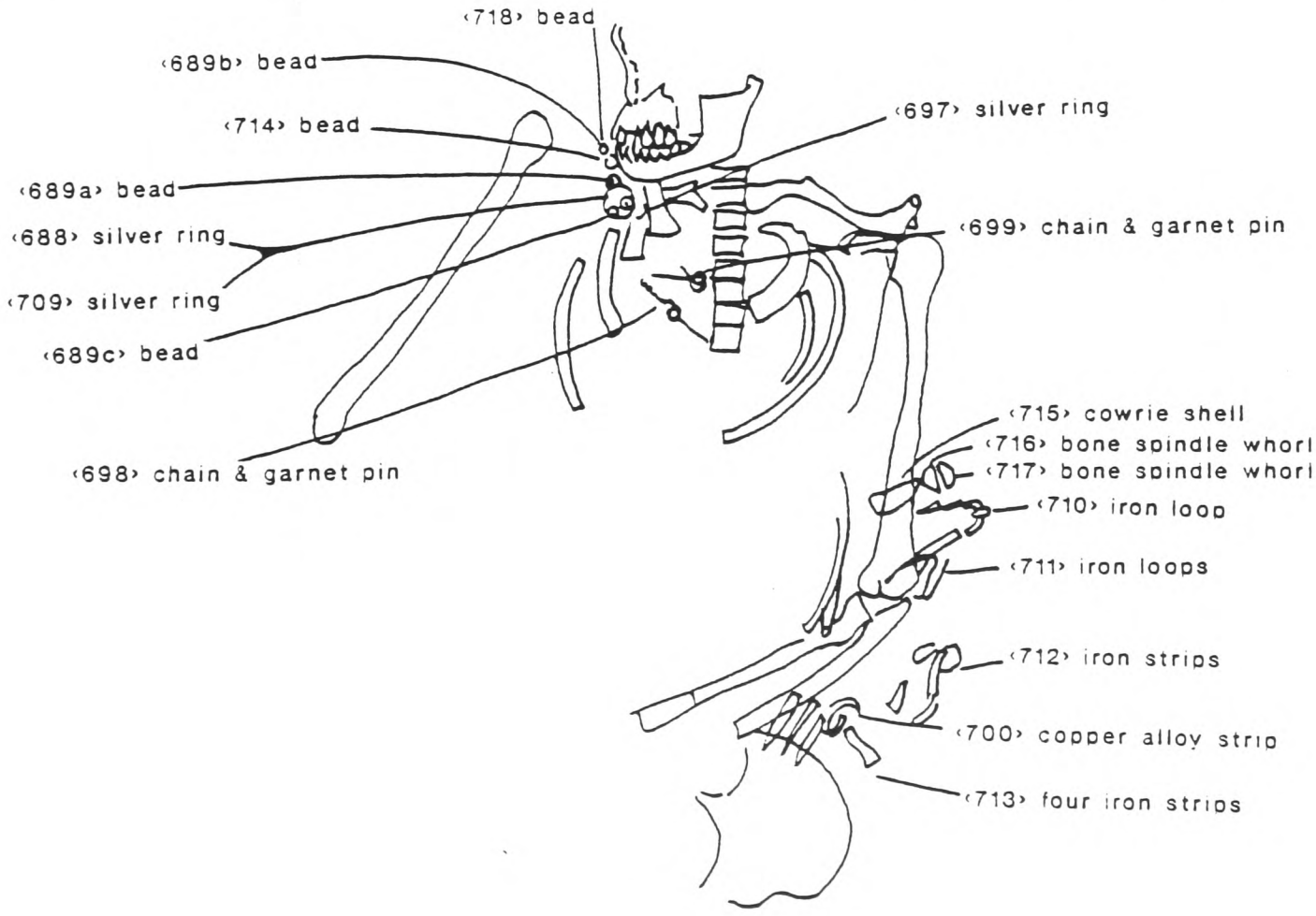
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[5]It would be difficult, however, to accept Leeds' suggestion that the similarity between the method of fastening the brooches and the pins indicated a similarity between fashions of dress (1948).

[6]One counter example is from grave 7 at Winnall where the pin was recovered between the frontal part of the skull and head of the grave.




**Linked pins from grave 50 at Lechlade in situ.**
**(Drawing after plan of the Oxford Archaeological Unit).**




**Linked pins from grave 1092 at Lechlade in situ.**
**(Drawing after plan of the Oxford Archaeological Unit).**

**Figures 7.3 & 7.4:** The Position of Linked Pins in graves 50 & 1092.

recovery of the linked pins in grave 39 suggested:

> The pins from Chamberlains Barn contribute much to our information on how such linked pins were worn. From the fragments of textile still intact at the time of excavation, it was clear that the pins had been used to fasten a cloak or outer garment to the dress underneath it. The necklace worn by the woman in grave 39 was partially covered by the outer garment, and undoubtedly separated by it from the pins. The possibility that this outer garment was some form of headdress cannot be excluded, but the possibility is not a practical one, and no textile remains were found in the region of the skull (Hyslop 1963: 198).

Her rejection of the veil was overly cautious. In three cases, at least (Chamberlains Barn grave 39, Lechlade graves 50 and 1092) the pins were recovered just longitudinally below a choker-style or ring-and-bead necklace. The particular design of the type of head-covering suggested here would have explained the wearing of necklaces underneath the veil because a portion of the necklace would still have been visible through the frontal opening in the veil. Indeed the lower the linked pins are placed the greater the opening would have been.

There is some art-historical evidence that can be marshalled to suggest that Hyslop could have safely argued that these pins were veil fasteners. This includes scenes on the Franks Casket (Plate 7.I) and illuminations in the Stuttgart manuscript (Plate 7.II.a-c). The Franks Casket was probably made in Northumbria some time around AD 700. The whalebone panels that make up the top and sides of this box are adorned with scenes as diverse as the story of Romulus and Remus, the Adoration of the Magi[7] and the Revenge of Weland. If we look at this latter scene Baduhild can be seen accepting a cup from Weland (left scene in Plate 7.I). She wears, as does the woman standing behind her, a cloth draped across her head. The cloth hangs down breaking across her shoulders and below this point it falls across the front of her body as well as her back. This drapery ends just below her knees. In the front it is pulled closed at the uppermost point of her sternum. This leaves her face and her neck uncovered. The craftsman who made this casket has not explicitly indicated how the garment was fastened closed. One suggested method for fastening the garment appears in the Stuttgart Psalter, a continental manuscript completed about AD 800. In the

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[7] One can see a remarkable similarity between the Adoration of the Magi on the Franks Casket and the one depicted on 84r of the Stuttgart Psalter. The comparison is particularly striking in the case of the three wise men. For example, in both presentations of the Wise Men the oldest approaches first as represented by the length and style of his beard. They all wear short tunics and Phrygian caps.

illustrations of women in the Stuttgart Psalter we see both women with uncovered hair[8] and women wearing a garment similar to that worn by Baduhild (Plate 7.I).[9] For example, in the scene depicting the Judgement of Solomon a woman rushes in from the right wearing a long orange/red cloak draped over her head.[10] In several instances where women are shown wearing this garment the illustrator of the Stuttgart Psalter has explicitly shown the garment closed below the chin by a single brooch (e.g. 146v). The location from which the linked pins and the complementary pairs of pins have been recovered during excavations would suggest that they were used like the single brooch of the women in the Stuttgart Psalter to close a garment like the one Baduhild wears. The pins of precious metals, such as the Roundway Down and the Wigber Lowe pins probably fastened fine fabrics, and the later pins in copper alloy, such as those from Winnall grave 8 and those from Castle Dyke grave 46, may have clasped light woollen fabrics. Most finds of linked pins have been of individual pairs. However excavations at Flixborough have recently seen the recovery of at least a half-a-dozen suites (of the cast sub-type **LXIV.ii**) from this single site.[11]

On the basis of the positions of the pins from grave 12 at the seventh-century cemetery of Eccles (Kent) and those from the burial at Bourton-on-the-Water it seems safe to suggest that these pins might have functioned in a similar manner to the linked-pins of the seventh century. In grave 12 at Eccles the 77 mm long pins were recovered 'side by side on the chest' (Detsicas & Hawkes 1973: 283). In these instances the spiral-headed pins were probably used to fasten a head-covering of some kind to the undergarment at a point around the upper chest. We can safely conclude that there was a group of pins used to secure head-coverings of seventh century women. These women, if we can make correlations between pin types and function, wore this dress from Kent to London

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[8] *Der Stuttgarter Bilderpsalter* (Württembergische Landesbibliothek Stuttgart BBL. fol. 23). Women with long, unbound, flowing hair appear in the scenes on 54r, 65v, 151r, & 152v. The women in the scenes on 115v & 163r have long hair but also wear a headband (*vitta*). Their over-cloak is held in the front just below the top of the sternum by a single brooch.

[9] ibid., See, for example, the women in 41v, 61r, 129v, 132r, 135v, 143r, 146v & 161v each with her head covered by a long garment. In some instances this garment is fastened closed by a brooch just below the top of the sternum (e.g. 94v, 146v).

[10] ibid., 83v.

[11] Flixborough, small find nos: SF1815, SF3454, SF3675, SF4157, SF5213, SF5750, SF6076.

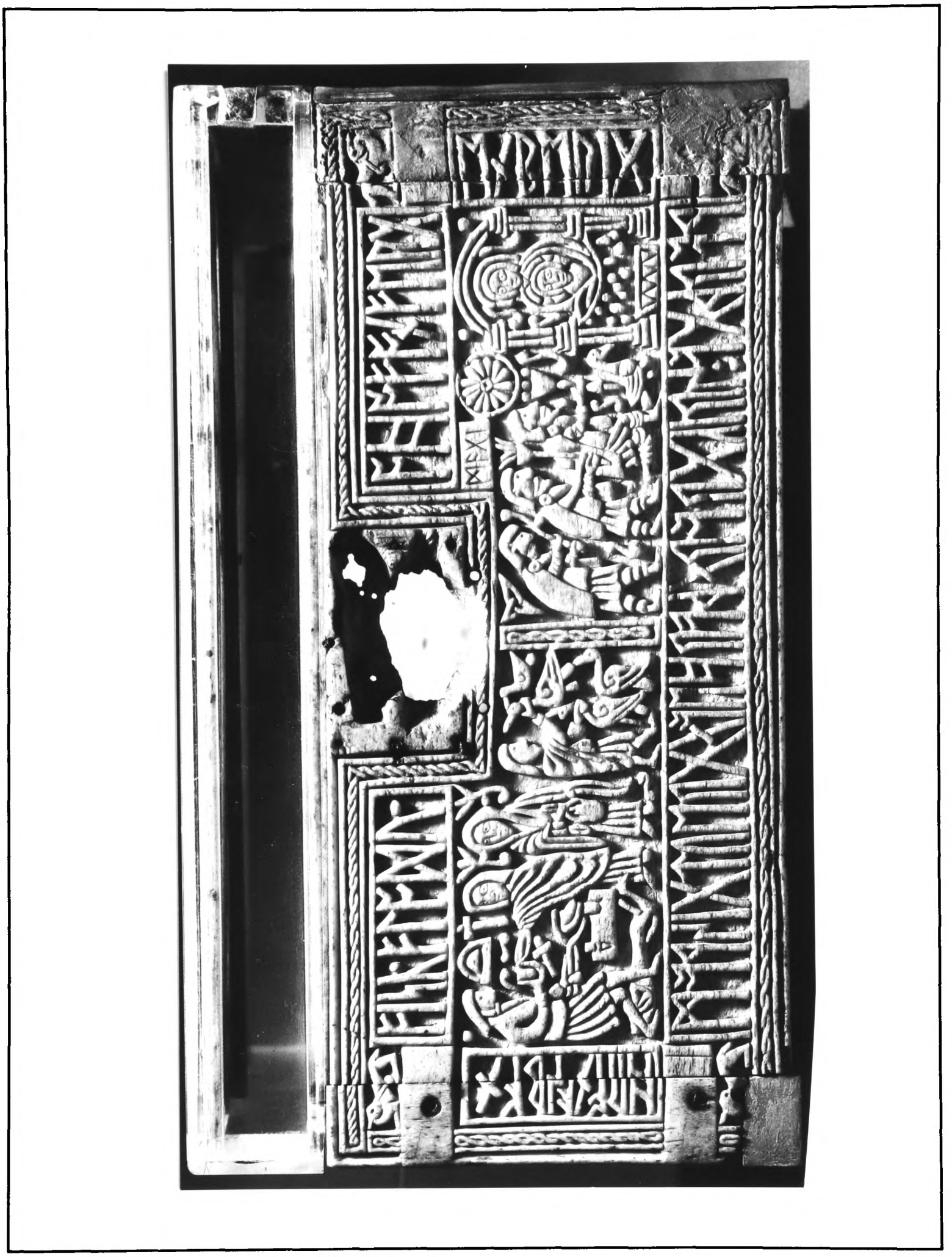


**Plate 7.I:** A Scene from the Franks Casket (from Wilson 1984).

to Wiltshire to the Upper Thames to Derbyshire – at least when they were buried with their pins.

While using this evidence to argue that a group of seventh–century pins were used to secure a veil, a burial of a woman from Kingsworthy gives us cause to suggest that all is not so simple. The function of the pins from the undisturbed grave 62 can not be so clearly established – one pin was



a



c



b

**Plate 7.II.a–c:** Women from the Stuttgart Psalter.

recovered near the woman's left elbow and the other just outside of the middle of her left femur. It is worth noting that both these pins lie on a parallel angle across the body. From their positions it would seem safe to conclude that they functioned to close an outer garment which was originally secured along the medial line of the body. In the deposition of the body the garment shifted to the left, the looser fabric below the waist swinging further to the left than the rest. So while we can see

some shifting of the costume we do not see enough to convincingly argue that these spiral-headed pins served a function similar to linked pins. But it seems obvious that women's costumes would vary somewhat from region to region. However, in this instance it may be safe to say that when this woman was prepared for burial these pins were used out of convenience to secure her burial garments. Their position, therefore, may not reflect the way she wore them in life. This kind of context ought to make us wonder whether the positions in which we find pins buried with the dead really reflect the way they wore them in life or whether they reflect burial customs (maybe even on occasion pins used to fasten shrouds). The answer to the question is, unfortunately, not entirely clear (Ross, forthcoming f).

So, in the seventh century we can say that in a few rare cases pins were used to secure a cloak, but in general it seems likely that they were used to hold a head-covering in place. This headcovering needed to be secured either by pairs of pins at the chest or by pins at the back or sides of the head or just below the chin. Future archaeological research and continued studies of the art historical and documentary evidence will eventually provide data to allow us to develop these hypotheses further.

## 7.iv. Pins of the Eighth Century and Beyond

Our archaeological evidence after the end of the seventh century is for the most part from settlement sites and does not provide us with good guidance as to the function of the pins. This is especially true of pins in pits and on ground surfaces in settlement sites. A pin with a faceted head from grave 8 at St Peter's Church, Holton-Le-Clay (Lincs) was recovered 'at the left shoulder' (Sills 1982: 40 & fig 11A) and is about the only post-seventh century burial including a pin (other than Anglo-Scandinavian burials). Sills argued that this grave belonged to the eighth to tenth centuries. What is the purpose of such a pin in such a position? Could the pin have been intended to secure a cloak?

In the case of some monastic sites such as Whitby the concentration of pins is remarkable. Concentrations of this kind can only point to their having been used as common dress fastening

mechanisms. The nature of the contexts of the finds indicates that the pins were subject to casual loss in the course of daily life. It seems likely therefore that they carried out a functional, but not immediately noticeable activity when holding the clothes of an individual together. This can be supposed from the fact that if the loss were immediately apparent to the wearer the search would begin very soon after the loss had occurred and the object probably recovered. Therefore we would expect lower levels of casual loss than those suggested by our concentrations of finds. The plethora of pin finds suggests to me that these pins were used to assist in fastening of braided hair, caps, headbands and even wimples. Braided hair would have remained in place for sometime even after the pin had slipped from position – depending upon the rigors of a woman's daily life. In fixing caps, headbands and wimples a woman would only have used the pin as an ancillary fastening mechanism and as such their function would probably not have been crucial.

The monastic site of Whitby and the possible monastic sites at Barking and Flixborough have produced a higher density of pins in spatial and chronological terms than more heavily populated urban sites (e.g. Southampton or Ipswich). These concentrations could be explained if members of religious communities used pins to fasten garments. This general idea seems safe to accept. We must then ask which garments and whether they were items of dress worn by women only, men only, or by both sexes. As was mentioned in Chapter 4 above, the four silver pins found during excavations in 1985 at Barking Abbey were all partially gilded.[12] This gilding was confined to the head, collar and first two millimetres of the shaft. Such restricted gilding indicates that this was the only portion of the pin the wearer expected would be exposed to view. The most likely position for these pins was where only the heads would need to be visible and where the weight of the pin could hold it in place. Where could be better than on top of a woman's head? But not all pins were suited to being worn in this position.

The form of flattened-facet-headed pins (**LXXII.iv**) provides some information about their function. They were probably intended for fastening clothing. These pins had an advantage over pins like the cuboid or rectangular facet-headed pins (**LXXII.i–ii**) because they would have lain

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[12] Passmore Edwards Museum, Barking Abbey excavations, SF1699; SF1748; SF1764; SF1895.

flatter against the clothing. This would have caused less tension between the pin head and the cloth. In some groups this tension would have been enough to have caused the pins to shift slightly from their placement. This loosening of the pin might have been sufficient to have caused the pin's eventual loss. The flattening of the head also meant that it was possible to retain the uniform head weight. The weight of the heads of these pins is quite functional. They serve to hold a pin in place by natural gravity. We would therefore, be likely to see spherical, faceted and inverted-pair headed pins as intended to be used for fastening head-dresses. In contrast those pins with flat planes were most likely garment pins. A similar argument must apply to the racquet-headed or lollipop-headed type **LXXVI**. A good illustration, **W.329** has ring-and-dot decoration on only one face. The reverse plate is plain.

The globular-headed pins **(LXXIX)** are another group of pins about which we might be able to give some details relating to function. Some of the globular headed pins have a small loop at the junction of the head and the shaft. The silver pin from Sawdon (Waterman 1948: Plate XXVIII.a), the pin from Gilton Ash (ibid. Plate XXVIII.b) and the gold pin from Bredfield (Martin, et.al. 1984: 321, fig 79) are all examples showing this feature. These delicate loops were probably for fastening the pin to the garment either by sewing or possibly by a string or a thread. Positioning the loop just below the head would not interfere with the aesthetics of the pin and would enable the loop to be hidden from observers. The heads of these pins are their most prominent (perhaps some might say their most ostentatious) feature. If a woman were to wear this in her headdress, it would be done to maximum effect. It would be difficult to give such a pin a prominent position in the folds of any other garment. The globular heads like the spherical-headed pins are well weighted for this purpose.

Other groups of eighth- or ninth-century pins are decorated on only one face: the York relief zoomorphic type **(LXXIII)** and the Witham type **(LXXIV)** pins. These pins with their large flat-heads would have been most impractical as fasteners for veils and would have been much more practically worn on the chest to secure dress garments (Clark 1942: 336). The Ely lozenge-headed type **(LXXX)** pins were probably also used to fasten garments as opposed to head-coverings; the Leiden example which was decorated on only one face lends support to this supposition (Roes 1965:

PL II.8). Whether these pins were worn by men or women is open to question, although the appearance of an Ely lozenge-headed type pin in the grave of Wulfstan of York might indicate the use of these pins by men. Unfortunately, we do not have a detailed record of Wulfstan's grave. This does raise the question of whether other types of pins were worn by men, or whether in Wulfstan's case this was merely a shroud pin. There is a very compelling argument to reject the idea that the pin from Wulfstan's grave was for a shroud.

Some historical evidence might help us to explain the function of the pin from Wulfstan's grave. It would seem that the pin was used to fix the pallium. The pallium is a plain band of wool cloth worn on the shoulders and breast (Lesages 1960: 139-140). Braun, in his remarkable study of Roman ceremony and vestment, investigated how the pallium was worn. He reported that, according to the first Roman *Ordo*, the pallium was to be fixed with pins: one at the Archbishop's back and the other two pins were fixed one in the front and one at the shoulder (Braun 1907: 644-5). Curiously only one pin came from Wulfstan's grave: we might have expected three. In the case of one Archbishop of Canterbury two pins were found in his grave. St John Hope reported that in the tomb of Archbishop Hubert:

> Where it crossed the shoulders lay two silver-gilt pins, each 4½ inches long, with a flat head, five-eighths of an inch in diameter, in the form of a daisy or marygold of 16 petals. No pin was found on the breast (1893: 5 & fig 1).

It would appear that there were various ways of fixing the pallium and rules of dress were not always followed.

While we know pins were used to hold the pallium in place we must wonder from what period this was the practice. Braun found that the earliest paintings and mosaics did not show the pallium fixed with pins (1907: 644). John the Deacon expressed surprise at the fact that the pallium of Gregory the Great was not fastened with pins (PL 75, 231). But about a century later the practice of fixing the pallium with pins was established in Church Regulations. The first Roman *Ordo* established that the deacon or subdeacon was to fix the pallium with pins (PL 78, 940). The Roman *Ordo* must have been developed during the seventh century and came into use in the eighth century (Vogel 1981: 135ff). Braun noted that on the mosaic of the *Lateran Triclinium* (commissioned by

Leo III [795 - 816]) the style of wearing a pallium fixed by pins was evident (1907: 645). So, certainly there is art historical evidence at the end of the eighth century for this practice. This must raise questions about whether pins were not used to secure other clerical vestments.

We turn now to the group of swing-headed pins. The few burials in which ringed-pins have been recorded include those from Cronk Mooar and Ballateare (Fanning 1983b: 30), grave 1007 at Birka (Arbman 1940; 1943), and Kneep (Welander, et.al. 1987: 170). At Kneep the evidence strongly points to the use of the pin to secure the woman's over-cloak in place. It is generally agreed that ringed pins seem to be acceptable fasteners for the clothing of both men and women. Petersen noted this in his discussion of this group of pins in the Norwegian Viking graves (1928), as did Vera Evison in her investigation of the weaponed-burial at Sonning (1969). Excavations at Buckquoy, led by Ritchie, resulted in the recovery of a ringed pin lying 'across the lower vertebrae' of the weaponed male burial (1977: 190).

Since the archaeological evidence for this material is so scanty we might be able to gain some ideas about the possible functions of pins by turning to other classes of evidence. We have suggested that the forms of these pins indicate that some of these groups were worn in hair possibly as veil fasteners (e.g. facet-headed, etc) and some types were probably worn to secure cloaks or maybe religious garments (Ely lozenge-headed type [LXXX]).

## 7.v. The Historical Evidence for Hair Style

Some of the uses of pins might be explained if we were to examine how women wore their hair in Europe before AD 1200. Long hair was the Northern European fashion for women at least from the Iron Age. In the *Germania*, Tacitus reports that a married woman guilty of adultery had her hair cut off by her husband (Tacitus, *Germania* 19). In Rome, at the time Tacitus was writing, Linus, the successor of St Peter, 'decreed that a women should cover her head when entering a church'.[13] By this decree he established as a matter of canonical regulation the concepts expressed

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[13] 'Hic ex percepto beati Petri constituit, ut mulier in aecclesia velato capite introiret', Gestorum Pontificum Romanorum (Vol I), Libri Pontificalis pars prior, ed Th. Mommsen, *Monumenta Germaniae Historica*, Berlin, 1898.

by the early apostles of the Church, such as St Paul and St Peter. Writing to the Corinthians about the propriety of worship, Paul laid great stress on the importance of a woman covering her hair when at prayer.[14] But, Paul, like Tacitus, recalled the common honour of women to wear long hair when he wrote 'if a woman has long hair, it is to her glory'.[15] In this, women within the Empire seem to have been united with their sisters outside the boundaries of Empire.

From its earliest days the Church emphasized modesty in women's dress. Paul in his first letter to Timothy exalted women 'to dress modestly with decency and propriety, not with braided hair or gold or pearls or expensive clothes'.[16] In the late fourth century Jerome reported that when Marcella began to follow Christ she replaced her elaborate hairstyle with a veil. So, from these early epistles to the complaints of the early fathers of the Church, such as Tertullian in *On Dress*, to the diatribe of Aldhelm against the excesses of the nuns of Barking Abbey, the Roman Church fought to encourage simplicity in dress among its female followers. The edicts of the Council of Clovesho (747) stressed the importance of modesty in dress for nuns and sought to encourage propriety of behaviour (Haddan & Stubbs 1871 (III): 369).

The simplicity of dress hoped for by the developing hierarchy of the Church seems to have included a woman covering her hair, much as Marcella did. Indeed, Gregory of Tours, writing in that city in the last quarter of the sixth century, described the selection of a successor for Venerandus, an early Bishop of Clermont-Ferrand. It was the intervention of a woman 'wearing a veil over her head to mark the fact that she was a true servant of God'[17] which proved to be crucial in breaking the deadlock. A nun or holy-woman by Gregory's day was encouraged to cover her head - indeed could be identified by her covered head. Gregory tells us of the raid undertaken on the nunnery at Portier in an effort to arrest the abbess. By mistake the agents grabbed the Prioress.

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[14] I Corinthians, 11:5 - 11:8 & 11:13. "And every women who prays or prophesies with her head uncovered dishonours her head..."

[15] 1 Corinthians 11:15.

[16] 1 Timothy 2:9. This exhortation to modesty is repeated in 1 Peter 3.3 when women are instructed: 'Your beauty should not come from outward adornment, such as braided hair and the wearing of gold jewellery and fine clothes'.

[17] Gregory of Tours, *The History of the Franks*, II.12. (Hereafter *Franks*).

They ripped off her veil and let her hair fall (*Franks*, X.15). It is interesting to note that the implication of this story is that not only was this woman's hair covered, but her hair was piled-up under her veil and it fell when her veil was removed. While veiled hair may have been the norm for pious Christian women it is difficult to establish whether it was general continental practice in the sixth century to wear a veil. Gregory wished to vividly describe the mental anguish visited on Susanna, the wife of Bishop Priscus, for participating in the evil suppression of his predecessor's, Nicetius', supporters. Gregory wrote that 'in her madness she ran through the whole city, with her hair loose about her shoulders' (*Franks*, IV.36). Whether this reference in 573 was to his surprise that she let her hair down or to his horror that her hair was both left to hang loose and uncovered is difficult to establish. Certainly the continental secular legislation by the end of this century suggests that women did cover their hair.

It was not only Gregory who expressed his fears about a woman uncovering her head. Continental legislation, such as the *Lex Salicis* and the *Lex Baiwariorum*, include penalties to be levied against those women who went about unveiled or against those who remove a woman's head-covering. Such legislative injunctions do not occur in the surviving corpus of Anglo-Saxon law and they are of little assistance in our quest to understand how women were expected to dress in our period.

## 7.vi. Long-Hair in Illuminations and Sculptures

In spite of the legislation noted above, secular women were portrayed with long-hair through-out Europe during much of our period. In the scene of the Death of Dido from the *Vatican Virgil*, all the women attending the reclining Dido wear their hair long. This fifth-century manuscript marks a continuation of the older fashions. The distinction between women with covered hair and those with uncovered hair comes to be a method for differentiating Christian from non-Christian women. Later it evolves into a device for separating the pious from the sinner. In the scene from the sixth-century *Vienna Genesis* showing Rebecca drawing water at the well for a servant of Abraham her manner and her dress is contrasted with that of the personification of the

river: Rebecca's hair is covered and the deity's hair has been left long and loose.[18] The contrast between the good and the fallen woman is continued in the manuscript traditions. Over time it became conventional to distinguish holy women from sinning women by the presence or absence of a veil. In the scene of Christ and 'the woman taken in adultery' illustrated in the ninth century *Carmen Paschale* manuscript we can see Christ with three of his disciples behind him facing a woman with three men standing behind her. The barefoot woman has long hair falling well below her shoulders.[19] This is a continental manuscript, but in his study of continental manuscripts, Alexander found good reason to argue that this work was based upon Insular models. In the British Museum Cotton Claudius B.iv (*Illustrated Hexateuch*), a manuscript dated to the second quarter of the eleventh century, we see the daughters of Lot with their hair covered except when they sleep with Lot (f.33v upper and lower). In the latter scene the long hair of the daughter in bed with Lot is depicted.

## 7.vi.a. The Fashions in the Stuttgart Psalter

I explored some of the evidence that this manuscript can provide about hair when I considered the function of the linked pins, but this scarcely tapped the richness of this source. The hair and head-coverings of women in the Psalter is treated in an number of different ways (Plate 7.III.a-c). There are examples of women with unbound long-hair (i.e. 54r, 65v, 79r, 151r, 152v). Two women are depicted wearing headbands. These *vitta* go around the head on top of the hair. In both the instances represented in the Psalter these women wear gowns secured by a brooch in the centre of their chest (i.e. 115v, 163v). Sometimes we see women wearing a crown (i.e. 57v & 148r). In 100v *unten* we see the crowned Mary in the company of Elizabeth who has pulled her cloak up over her head thereby covering her hair. Mary appears with her hair held in place by a series of criss-crossed golden bands, above which she wears a crown (see 83v, 84r, 100v unten). This same

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[18] The Meeting of the Messenger of Abraham and Rebecca. The Vienna Genesis, Vienna Oesterreichische Nationalbibliothek, Ms. theol. gr. 13. fo VII, p.13.

[19] Antwerp, Museum Plantin-Moretus, Ms M.17.4, f.30r. (Alexander 1978: 295).



a



c



b

**Plate 7.III.a–c:** Women from the Stuttgart Psalter.

pattern of criss–crossed bands can also be seen in 49r and 58r. The bands probably represent the

artist's attempts to show the bands of a hairnet. A net of the kind depicted in this manuscript can be seen most clearly on the fifth century bronze head in the Rheinisches Landesmuseum in Bonn (Delbrueck 1950: 87ff). Peter Wild in his discussion of 'Clothing in the North-West Provinces of the Roman Empire' offered an extremely concise description of this bonnet:

> The hair on the bronze head is divided into two plaits which are wound in opposite directions round her head above the brow. Over the coiffure is fitted a cap of fine material (cross-hatched on the crown of the head), which covers the hair and upper part of the ears. A simple net of cord holds the cap down over the plaits which ring the head. It consists of an upper cord, which passes round the head completely, and a parallel outer cord at the edge of the cap against the forehead. This cord appears to stop short of the ears and is joined to the inner cord by a series of criss-cross strings at intervals. Where the strings cross or join, they are fastened with a small round button, which may at the same time attach the framework of the net to the underlying cap. Where the last of the cross-strings joins the outer to the inner cord above the left ear, the inner cord is pulled slightly out of position by the tension. It may be that the net was fastened at this point (1968: 212).

There is some debate about the small pin/tube which protrudes from the hairnet along the right cheek. Wild has suggested that this was a mechanism by which the bands were tied off and the net pulled tight (ibid.). This is a possible interpretation, but not necessarily the only one. Alternatively this tag may have represented a pin with a sureté. Unfortunately, there is little evidence that early pins were given protective ends but if these were organic it is unlikely such evidence would survive (but see the pin from Loughnaglack Crannog described above). Wild and Delbrueck investigated the possibilities of whether this hairnet was a fourth century fashion. We continue to see the use of hairnets in the historical evidence long after this period. Archaeologically they have been found in contexts from the pre-Roman Iron Age to the eleventh century. A similar hairnet to that worn by the bronze head in the Rheinisches Landesmuseum in Bonn has been seen in a sixth century mosaic in S. Apollinari Nuovo (Ravenna). This is worn by the woman of Samaria who is greeted by Christ as she draws water from the well. In her cap the two bands appear to run above and below the main plait all the way around her head. The lattice of vertical and diagonal bands which would have connected and secured the two horizontal bands does not appear to have been depicted. It would be sensible to interpret the headdresses worn by the women who accompany Theodora in her mosaic at San Vitali in the same way.

Hairnets of this kind can be supposed from graves 13 (Mengarelli 1902: 226), 26 (ibid. 232), 31 (ibid. 233) and 157 (ibid. 314 & fig 219) at the Lombard cemetery of Castel Trosino (nr Ancona, Italy). In these four graves eight trefoil objects were recovered. These were made from three small rings soldered together to form a trefoil piece. At the centre was placed a bead surrounded by a wire ring. These trefoil rings acted as distributors. They were recovered in conjunction with pins: in grave 26 there were five pins, and graves 31 and 157 each had three. These were probably used to make hairnets. The bands of the hairnet were pulled through the rings of the distributors. These graves belong late in the sixth or early in the seventh century. Such hairnets may not have been confined to Italian sites. There is certainly one recovered from the female Grave Q at Mels in Switzerland (Grüninger et.al. 1988). The graves were associated with the seventh – ninth century church of Saints Peter and Paul. In a lengthy discussion of the find Max Martin argued that the grave was of sixth–century date (1988). The woman had six three–part rings associated with her head along with two pearl–headed bronze pins.

Hairnets need not be made using metal objects, they may have been made with a sprang technique like that used to make the hairnets which were recovered from medieval sites in Dublin excavations.[20] But the evidence here does point us to the conclusion that pins might have been an important device for securing hairnets.

## 7.vii. Women in Anglo–Saxon Literature

There are few references to female dress in Anglo–Saxon literature. We shall examine those of Aldhelm in his *De Virginitate*, Bede's slender comments, and the reference in the Judith. These, though, give us precious little information. Just how meagre our information is can be seen in recounting Bede's reference to the miracles that occurred at the site of the savage murder of Oswald. Bede records the story of a young girl who was cured of a paralysis after having a short sleep on the spot of Oswald's martyrdom. After awakening cured, she washed her face, arranged her hair

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[20] Curriculum Development Unit, 1978. *Viking Settlement to Medieval Dublin*, Dublin: O'Brien Educational, p.45.

and covered her head with linen (Bede, *HE* iii, 9). It is impossible to establish from this short reference what is meant 'by arranged her hair'. Did she gather it in a knot, comb it, plait it or merely shake it into shape? It was obvious to Bede that a woman of faith, which a woman must have been to be cured by a miracle, was modest in her appearance. A woman displayed such modesty by covering her head. The women at the seventh-century nunnery of Barking, however, while covering their heads did so in an immodest manner which incurred the wrath of Aldhelm. In one of the finest passages in her study of *Dress in Anglo-Saxon England*, Gail Owen-Crocker investigated the alternative readings of the passage in *De Virginitate* which describes fashion. It seems that to the horror of Aldhelm the late seventh or early eighth century nuns at Barking Abbey were crimping their locks of hair at the temple and the forehead and wearing instead of dark-grey veils long white and coloured veils which hung down to their ankles. These were fastened in place by fillets or headbands (see section 7.viii). Fillets are well-recorded in the archaeology (Crowfoot & Hawkes 1967) and can be seen worn by Germanic women from the Roman period until the eleventh century. They also appear in literature; from Gregory of Tours to the Will of Wynflæd. The long flowing veil is more difficult to document archaeologically as the quality of textile evidence required to demonstrate the existence of such a garment is often lacking. The only grave from which we can securely say the evidence is of a woman wearing a long veil is grave 49 at S. Denis.[21] Here the occupant had been buried wearing a red or violet head-veil which according to later reconstructions hung down to her hamstrings. This must not have been unlike those described by Aldhelm. The art historical evidence from the mosaics in Ravenna provides further guidance here. Two decades ago Hawkes noted the procession of the virgins at S. Apollinari Nuovo with their jewelled headbands terminating in the front at a great red stone securing long white veils the tassel ends of which dangle to their feet (Crowfoot & Hawkes 1967). Hawkes was, no doubt, correct that it was just this sort of fashion which provoked Aldhelm's diatribe.

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[21] This use has long been conjectured for pairs of pins found in this location. The excavator of Nocera Umbra, A. Pasqui thought the pins from grave 101 were used to hold a veil in place. ["c) Due spilli di argento, fusi, con capocchi sferica trovati ai lati del cranio e usati per appuntare il velo ai capelli." (Paribeni 1919: 293)]. There was no textile evidence to support this suggestion.

Anglo-Saxon words for head-covering survive, but there are few references either to head-coverings or to hair in the texts. This seems an anomaly since the presence of combs and other hair fixtures such as possibly pins indicate a great interest on the part of these women in their hair. In one of these rare descriptions of a woman, the heroic Judith is described by the poet as 'with curling tresses'. Another rare glimpse of a woman's hair, comes from the Riddle of the Horn. Here the poet wrote 'sometimes the fair-haired queen, the earl's daughter...'. Both these references, although limited, indicate that women's hair could at times be seen. Indeed, in the case of Judith, it seems that if her head had been covered, her 'curling tresses' would have only been peeping out from undercover of her veil above her forehead.

We can obtain some information from wills. Wynflæd's will of mid-tenth century records the bequests made from her property; among the items she distributed were several elements of head-gear. These included a '*cuffian 7 bindan*' and '*hyre be<t>sd haliryft 7 hyre bestpan bindan*'. She is known to have left in her will both a veil and several headbands (Whitlock 1930: III [13-15]). Gail Owen subjected this will and the problem of head-gear in the late Saxon period to detailed scrutiny. Besides this and other Anglo-Saxon wills, she made use of art historical and textual evidence. The *Indicia Monasterialia*, surviving in British Library Ms Cotton Tiberius Aiii, dated to c. 1050 and written at Christ Church Canterbury, details of the code of monastic sign language used by 'a silent order of nuns' (Sherlock 1989). Owen found that according to this source 'the sign for any unconsecrated woman is that you [indicate] with your fingers your forehead from one ear to the other in the sign of a *binde*' (Owen 1979: 214 note 4 after Kluge 1885: 129, para 127). This led her to conclude that the *binde* was a kind of fillet which was not obscured by any head-covering but was visible (Owen 1979: 214). Others are known from the wills of Athelgifu, Wulfwaru, Aelfswith (Whitelock 1930: 26,26; 64,20-1; 13,46).

Her study showed that there were two other garments mentioned in the will of Wynflæd that probably corresponded with head-coverings: the *cuffia* and the *rift*. She proposed that the cuffia might have been a garment not unlike the wimple - '...a head-dress which enveloped the head and the neck...'(Owen 1979: 216). The *rift* was a loosely used term which, based on the evidence from

glosses, appears to have referred at various times to garments from cloaks to curtains to veils (ibid. 217). She proposes that this garment may have been more of the character of a veil made from a square of cloth. In all these things we are still unclear as to the final meaning of these terms. She suggests that the *rift* may have been more likely to have been associated with a veil. In the *Monasterialia Indicia,* 'the sign of nuns is that you set your two fingers on your head in front, and afterwards move them down along your cheeks in indication of the holy veil' (Owen 1979: 218; Kluge 1885: 129, para 122).

## 7.viii. Headbands

There is a long tradition in both Southern and Northern Europe of women using bands or fillets to restrain their hair. Diocletian's Edict of AD 301 sets the maximum price for headbands produced in a range of linens from fine to coarse (Gervers 1983: Table 16.1, 286–287). Headbands of the latter type were usually worn by the common people and slaves (ibid.). The variance in quality and the fact that they were a significant enough component of dress to be mentioned in the Edict suggests that they were a general feature of female attire. The graduated types indicate that bands of different material reflected the wearer's social status. A headband held in place by a short copper alloy pin with a glass head was found in the fourth century Roman cemetery from Lankhills (nr Winchester) in grave 323, a child's burial (Clarke 1979: table 2, p.67 & 317). Headbands can be seen in the sixth century Sinope Gospels.[22] Crowfoot and Hawkes closely examined 95 burials in which gold thread was recovered and in many of these the threads were associated with the heads of the women (1967). In these cases the gold thread had adorned a fabric band.

The most enduring image of headbands can be seen in the eleventh Century British Library, , Cotton Claudius, Biv in f77r. In this the seven daughters all wear yellow coloured bands which hold their wimples in place. Similar headbands are worn by the men in this scene, although they wear no other head–covering. Numerous women with their hair bound in place by headbands can be seen in folios 76r, 76v, 78v, 90v, 92r, 92v, 116v.

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[22] Codex Siopensis, Paris, Bibliothèque Nationale, Ms suppl gr 1286.

'Queen Ælfgifu in BL Stowe 944 wears a decorated band across her forehead' (Owen 1979: 215). Owen has maintained that the two long strips which hang down at the back of her veil were associated with this band. This does not seem a convincing argument. The band at the head is decorated, whereas the strips which appear from under her wimple are only decorated on the tags (see Owen 1979: Pl Ia). The similar band which Owen notes as worn in BL Add 24199 21v is decorated throughout. The length and decoration of these headbands do not fit with the archaeological evidence.[23]

Near contemporary archaeological evidence for headbands is found in the Birka graves and from the settlement at Dublin. Agnes Geijer suggested that the tablet-woven bands, several of which indicated that they were composed of gold and silk, were used as head-gear (Geijer 1983: 99). Other bands came from these graves, but as Hägg has explained not all of these were headbands; some were decorative bands mounted on silk which itself was sewn on to wool or linen (1983: 316ff). But some of the bands were certainly used in conjunction with the hair. One silk band from Dublin was recovered with its ends knotted together. Heckett reported that the cloth between the knots measured 390 mm; a long enough piece to go about the head (1987: 164). One other silk band of similar length but unknotted came from the excavations in Dublin. Not all bands were silk, two measuring 385 mm in length were made of wool (1987: 165). Four silk bands, similar to these, were recovered at Coppergate, and ranged between 30 and 17 mm in length. Although these bands are severed from their archaeological context, they compare fairly closely to those from the Dublin settlement and the Scandinavian graves.

What was the function of these headbands? Did women use them independently to secure their hair or were they worn in conjunction with other garments? The clue to answering these

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[23]Although our evidence for hairstyles of women on Roman coins is rich, the same is far from true when it comes to Anglo-Saxon coins. The Mercian King, Offa, AD 757-796 did strike a coin with the image of his wife on it. Offa appears on the obverse of the *sceatta* and his wife, Cynethryth, on the reverse. Before considering her hairstyle, it is necessary to note that in striking coins Offa was looking to Roman antecedents or Byzantine models. So how much we can say Cynethryth's hairstyle on the coins reflected what she wore in reality is difficult to ascertain. Cynethryth's hair is bound by a band not unlike the one which held Galla Placidia's hair in place on her coins. In the end we must wonder whether the fashion worn by Cynethryth is true to life or an idealised form for the coin. If we were to assume it was a head-band we could find plenty of archaeological evidence to support this supposition.

questions is provided by the Wynflæd will. The headbands in Wynflæd's will appear in conjunction with veils. The fact that one was not given without the other suggests that they were seen by the giver and by the receiver as an inseparable set of garments.

Owen expressed surprise that since these headbands seem to have been a component of dress they do not appear more often in manuscript illuminations (1979: 215). The way the majority of women wore their headbands had a major influence on whether they would have been visible. Some eleventh-century illuminations seem to show women with headbands on the outside of their veils. It seems clear that women also wore headbands to provide a secure foundation on to which to fasten their veil. Headbands are tied off in the back under the hair. The veil is then pinned to the headband. In some instances this might have been done by pinning the veil to the headband and in others by tying the headband over the veil. The headband worn by the daughters of Reull is one illustration of the latter arrangement. This illustration may call attention to a fashion which was popular during a very short period in the twelfth century. In the cases of headbands worn outside of the veil pins could have been used for several purposes. Why, we may wonder, if this is the case do we have the archaeological evidence of the headbands and not the similar number of veils? The answer would seem to be in the nature of the weave of the textile. The headbands were with few exceptions made of a tablet weave (e.g. silk or wool ?) which – although requiring unique conditions (waterlogged or arid) to assure its preservation – seem to have been more likely to have survived than other, lighter and more fragile, weaves used for veil production.

Headbands may not have been the only garment to provide a foundation for securing a veil. It would be possible to pin a veil to a stiff hat similar to the one worn by the Virgin in the ninth-century Carolingian manuscript (Goldschmidt 1928: Pl 62).[24]

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[24]This is from Vienna Nationalbibliothek, Cod.2687.

## 7.ix. Archaeological Evidence for Veils or Head-gear

The seventh century graves so far published have given us little evidence that women were buried with their hair covered. We do have evidence - as yet unpublished - of a headdress from Grave 67 at the Winchester Cathedral cemetery.

> The head of the body had probably been wrapped in a veil edged with gold braid, and there may have been a band round the brow supporting the rosette-like decoration in gold thread found at the forehead. It would have been part of a fillet, but might have been attached to a cap (Owen-Crocker 1987: 103).

This is a rare piece of evidence. While I can point to pins associated with the head of women we have little evidence of the association of textiles. This is undoubtedly the result of the natural processes of decay and the rare and unique occurrence of conditions required for textiles to survive.

These unique conditions exist for some later periods. Excavations on the urban site of Coppergate (York) have led to the recovery of a good deal of textile evidence. Two finds from 16-22 Coppergate (Walton 1989) and one from 5-7 Coppergate (Muthesius 1982) can be identified as head-gear. All three finds are silk. One of the finds from 16-22 Coppergate (YAT 1372) was complete and provided evidence for concluding that the fine silk head-gear was a hood-shaped cap. Penelope Walton argued that the head-dress was made from a single rectangle of fabric. She proposed "that linen ribbons were stitched here for tying the cap under the chin (Pl xxxi)" (Walton 1989: 360). This method of tying off the cap explains the stitched end of silk ribbon recovered from a tenth century context at Milk St (London) (Pritchard 1982: 197).[25] Muthesius studied the silk tabbies from 5 - 7 Coppergate [YAT SF 651] (York) and Saltergate (Lincoln) (1982: 132-6). She argued that these fragments were the remains of caps and the basis on which this conclusion was drawn was later confirmed by the finds from 16-22 Coppergate. There is also a 'ragged fragment in plain weave' from a tenth-century context at Milk St. This, Pritchard postulated, was like those from Lincoln and Coppergate, and was 'probably the remains of a silk headdress' (1982: 197).[26]

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[25]Museum of London, acc no: 485 (MLK 76, context 1041).

[26]Museum of London, acc no: 17 (MLk76, context 48).

The only possible reconstruction for these caps must reflect a comparison with YAT 1372. Only one of these York headdresses has a back seam, the others were made from a single piece of cloth.

However, as Walton has noted these garments do not compare favourably with the late Anglo-Saxon manuscripts which portray head-dresses of a wimple type. This has led her to argue that 'the presence of the silk caps within the area of Viking influence may point to their being Scandinavian in origin' (1989: 375). This would have represented a significant change. If the few sculptural representations of women are to be used as evidence for contemporary dress fashions it is evident that Viking women did not wear any head-covering before the tenth century. In most of the earlier examples these women appear to wear their hair either in a bun or in a knotted pony-tail fashion (see figure in Bau 1981). The style of hair pulled back and secured in a bun can be seen worn by the woman bearing a drinking cup from Klinta, Köping, Öland (Bailey 1980: Pl 33) and on an amber amulet from Kaupang (Blinheim 1958-61: fig 2). The fashion of wearing a knot in long hair can be seen on the pendant from Tuna (Krsp. Alsike, Up) (Graham-Campbell 1980: 114) or on the pendant from Birka grave 507 (Geijer 1938: Pl 38.1) or on numerous plaques from Helgö.[27] These hairstyles continued to be worn by Viking women during their initial years on English soil, if our sculptural evidence is a safe guide. Just below the crucifixion scene on the Gosforth Cross (Cumbria) (Bailey 1980: Pl 32) a woman wearing her hair in a knot is depicted. A knot of this type functioned to pull a woman's hair tightly to the back of the head. The hair would then have been secured out of the way by its own weight. These are not the only sculptures showing this hairstyle to be seen in Northern England.[28] These sculptures probably date before the middle of the tenth century with many belonging late in the ninth. We do not have evidence of hairstyles of this kind in later periods, but then we have few secular or popular representations of women.

'Almost all female figures depicted in Anglo-Saxon art wear hood-like head-dresses which cover hair, neck and shoulders' (Owen, 1979: 216). These garments can be seen worn by the three

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[27]In plate 38.2 she also shows the same knot in the hair of a women depicted in a pendant from Krsp. Grödinge, Sö. See also the goldfoil from Norway showing a similar knot (Graham-Campbell 1980: 114).

[28]Other depictions can be seen on the hogback from Sockburn, Co. Durham (Cramp, 1984: no. 15 [pl 138, 741] and on the Sockburn Cross Shaft (Cramp, 1984: no. 3a [pl 130, 710].

women in the Bayeaux Tapestry.[29] Other forms of headdress do occur. Owen mentions that loose flowing scarfs were not unknown. For instance this was the type of garment worn by the 'dancing figure of Luxuria in the eleventh century Prudentius manuscript' (Owen 1979: 216; British Library, Add. 24199, 18r). In our manuscripts of about 975 we have noted that the common head-covering was a wimple type garment, but if we are to accept this evidence then we must see a divergence between fashion and depictions of women or at least concede the existence of multiple styles of dress. These different styles may either be ethnically or socially determined. The style of the head-covering worn by at least three women in York, one woman in Lincoln and two women in London were different. This should not trouble us, as a reading of the tenth-century will of Wynflæd makes it evident that both caps and veils were part of a woman's cabinet. Wynflæd gave a veil to Ceolthryth and a cap[30] with a headband to Æthelflæd. As Owen-Crocker makes clear, in her investigation of the Wynflæd Will, both the veil, the cap, and the headbands may have been valuable commodities. Surely if the cap was silk, like those from York or Lincoln, it would have represented a significant gift.

Veils are known from Scandinavian settings. Ingstad's detailed investigation of the textiles from the Oseberg ship burial has resulted in detailed evidence about the garments worn by the two women buried in the Queen's tomb. The burial, which was excavated in 1904, had been disturbed by earlier visitors. Among the many textiles, which included wall hangings, sails and clothing, were veils. She argued that the Queen's head 'was covered with a fine, white linen veil, in a weave very similar to gauze' (Ingstad 1982: 94). The Queen's companion in this shipburial was buried with 'a veil of fine, white wool, in the same weave as the Queen's linen veil' (ibid.). The Queen was buried in a red tunic which 'was decorated with embroidery and appliqué in silk'; her companion wore a blue tunic.

Among the 2000 textiles from Dublin Heckett found '38 wool and 27 silk textiles representing caps and other possible head-coverings from the tenth to the eleventh century' (Heckett

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[29]A fourth woman appears beneath Harold at the meeting with William. This long-haired women is naked.

[30]We are, of course, relying on the accuracy of Whitelock's translation, since the *cuffia* is rare.

1987: 159). Among these it was possible to identify fourteen scarfs/kerchiefs, one long silk veil, and probably twelve caps of either silk or wool (ibid. 162). The wool and silk caps were not unlike those from Coppergate.[31] Some of them belong to the same period and one silk cap was found with 'A penny of Aethelstan of A.D. 924' (Heckett 1987: 159).

## 7.x. Late Roman Hairstyles

We might find it instructive to note something about hair at the close of the late Roman period. As we saw earlier the majority of women depicted on fourth-century sculptures, coins and intaglios wore braided-hair closely secured to their heads (Chapter 2). In the images of Helena, produced early in the fourth century, we can see the Roman Empress with her hair plaited and snugly secured to her head (Delbrueck 1933: Taf.75.4 & Taf.75.6). In one of the earliest studies of women's hair fashion, Mrs Evans examined the coins in her husband's Medal Cabinet around 1905 or 1906 and wrote for the Numismatic Society what can only be described as a remarkably original piece of research and a now classic study (1906). She concluded that women on the late Roman series without exception wore tight-hairstyles - perhaps it was the style of coinage or perhaps the style of everyday life.

While some of our women used pins to secure their headbands (i.e. the child in grave 323 at Lankhills) others possibly used the pins to secure braids. The sculpture of Poppea dating to about AD 380, now in the Capitoline Museum, is a good example. Her hair is braided in plaits which were fastened round her head. This could best be fixed by small but heavy pins, just the types of pins Cool and Greep found common in the fourth century (see Chapter 2 above). Möller has argued that late Roman fashions of hair were adopted in Northern Europe (1976b: 16ff). In later periods women with plaited hair are not easily identified in manuscript illumination or in sculpture because the drapery obscures their hair, but a representation of the Virgin on a late tenth-century English

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[31]Heckett figured those from both Fishamble Street and St John's Lane (1987: 166 & fig 3). The wool caps were E172:4253, E172:10241, E172:10300, E172:10540; E172:11066, E172:13241, E172:14499; E190:7431. The silk caps were E172:10959; E172:12831; E172:13590; E172:14370.

book–cover shows her with plaited hair underneath her veil (Beckwith 1972: no. 24).[32] We wonder whether this might not have been a more common practice.

## 7.xi. Historical References to Pins

Pins rarely occur in Anglo–Saxon texts. In the will of Wynflæd she grants '*hyre mentelpreon*' to her daughter.[33] Obviously a *mentelpreon* had a very specific function, that of securing a mantle (e.g. a cloak). This need not have been a dress–pin, but might have been a brooch, used in a similar fastening arrangement as seen in the Stuttgart Psalter. She bequeathed '*hyre ealdan gewiredan preon*' to Eadgifu. In her will Wulfwaru (984 x 1016) left her '*twegea preonas*' to her daughter (Whitelock 1930: 64 [line 11]). We would be hard–pressed to say that these were our dress pins but there is no reason why a woman would not have collected a large

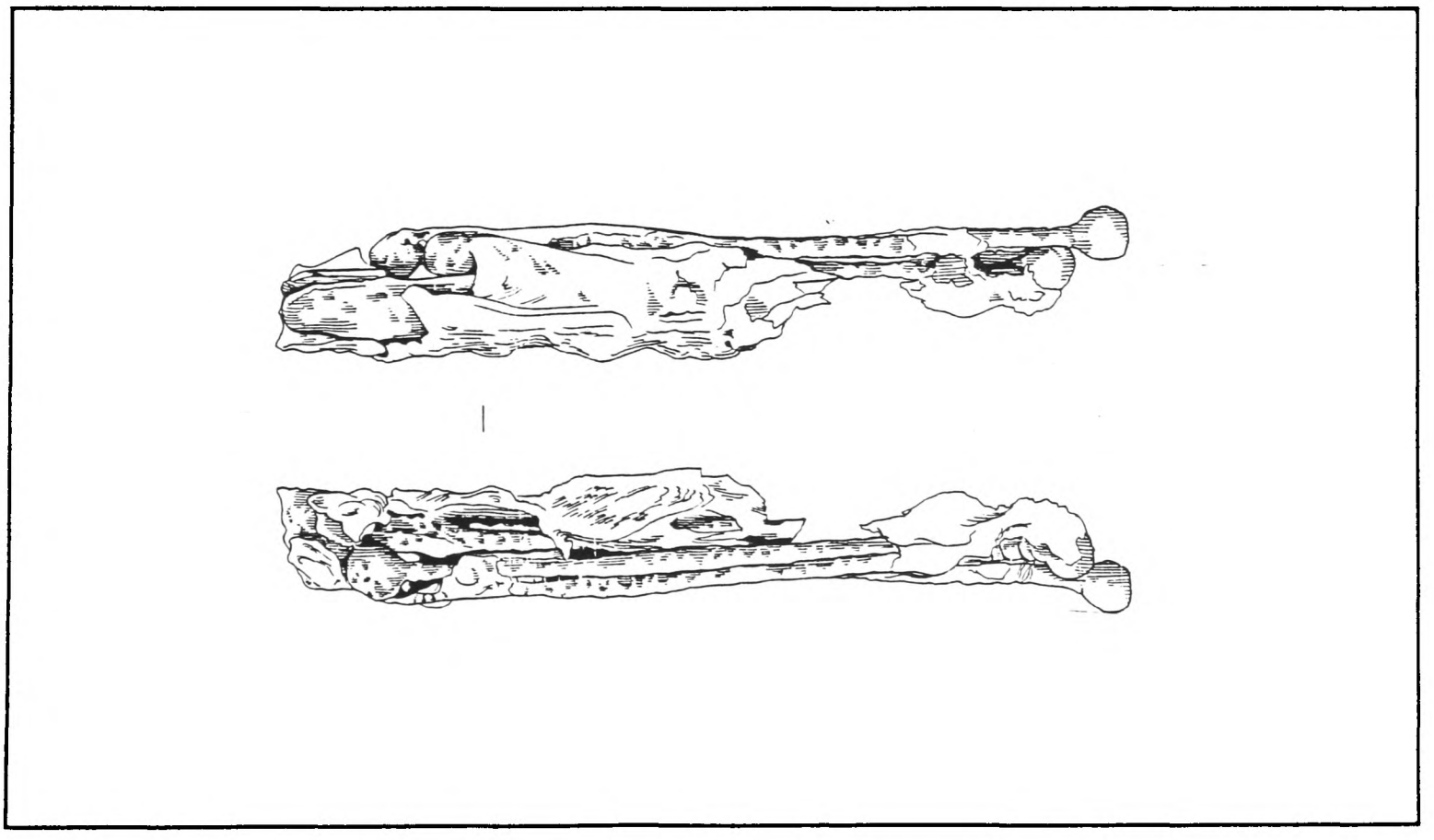


**Figure 7.5:** Bundle of Pins from Ipswich (Drawing by Ipswich Archaeological Unit).

[32]Paris Bibliothèque Nationale, Cod. lat.323.

[33]Numerous words are known from Old English Glossaries for pins. These were collected by Owen–Crocker in an appendix to her book on Anglo–Saxon Dress (1986: 207–208). None of the words is know from literature other than glossaries. The words for pin: *cæfing, feax–preon, hær–nædl, prawing–spinel, up–legen.*

number of them during her life. A group of five spherical-headed pins found wrapped in a small wood box at Ipswich might represent a woman's pin set (Fig 7.5).[34]

## 7.xii. Conclusion

By the end of the seventh century we cease to find pins in contexts which can offer us guidance as to their use. As I have pointed out, pins could be put to quite diverse uses. Their function was partially dependent upon the form of the objects themselves. Within early Anglo-Saxon contexts these pins seem to indicate their use by the position of their recovery. As we have seen, the great majority of long pins were recovered in the central chest zone. Where our evidence has allowed us to speak of function, the pins usually overlie associated brooches. This would seem to indicate that they were used in fastening a garment which was open along the medial line of the body and was an outer garment. The precise position of the pin was dependent upon how far across the body the cloth was pulled when it was closed. This garment was a derived from the gallic cloak, (if it was not the very one) described by Wild at length in his study of Roman dress in the Northern Empire (Wild 1968; 1985). The cloak, as our later evidence indicates, survived in some areas well into the eighth century. In Germany, for instance, the evidence from the Stuttgart Psalter shows us that women continued to wear this garment. This fashion was certainly disappearing in Anglo-Saxon England in the seventh century. As we have seen, the proliferation of garments fastened by light pins under the neck or in pairs on the upper chest suggest that the cloak was replaced by a head veil. These pins, which show minimal fracturing and bending, could only have secured a light fabric. Even a well supported cloak could not be secured by pins which would have only been long enough to pass through two layers of fabric, although, if we were to take the evidence from the Stuttgart Psalter as indicative, it is possible for the pin of a disc brooch to secure a woman's outer cloak (i.e. 61r, 146v, 161v). In many instances this outer garment was used to cover the woman's head as well (i.e. 41v, 129v, 132r, 135v, 146v, 161v).

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[34]Ipswich Archaeological Unit. Copper alloy pins in a wooden box clasped by iron. This was found in a middle Saxon pit (context: IAS 5901 0238).

The pins used to hold the veil in place need not have been large because the bulk of the weight of the garment was not carried by the pin but by the head of the woman wearing it. This is a crucial point neglect of which can lead to many misleading conclusions. For instance, by assuming that pins carried the weight of the garment we are forced to limit the uses of pins themselves. The pins only held the veil in place by securing it to the undergarment (or possibly the cloak). They did not carry the weight of the veil. The fashion of a large square of cloth being used as a veil seems to have given way to caps, wimples and head scarfs. Indeed it is possible that women wore braided hair underneath and these head-covering garments were held in place by pins as well.

There is no reason that a woman needed to have fastened her veil or cap using pins. The caps from Coppergate and Lincoln all produced evidence that they had ties sewn to the cap itself. From the stitching marks it appeared to Heckett that many of the caps from Dublin probably had ties (Heckett 1987: 167). But even other forms of head-covering need not have been secured by pins or mechanical fastening devices. Heckett demonstrated that there were at least five alternative ways of wearing a knotted silk scarf (i.e. knot under chin, shoulder scarf, twisted and knotted) (ibid. 163 & fig 1 [Dublin, small find no: E172: 15348]). Microscopic examination of the Dublin textiles produced evidence that they had been worn. The evidence came in the form of hair fragments embedded between the threads of the fabric (Heckett 1987: 162). 'The numbers of caps, both in wool and silk, surviving from ten dwelling sites in Dublin would suggest a widely accepted fashion for the townspeople' (ibid. 171).

We find it difficult to ascertain whether the wimple was the fashion for all women or whether it was confined to holy women only. The rise in the popularity of these garments that did not require pins may help to explain why pins, which were so popular during the middle Saxon period, are not quite as common during the late Saxon period. It seems most odd that, if the conjectures proposed here are correct, we do not find any trace of pins in post-700 graves. Surely, if women had fastened her hair-up with pins or used pins to hold her cap closed under her chin, or secured her wimple or veil to her plaited hair, some women would have inadvertently been buried

as they ended their days with a pin in their hair. But a survey of the literature does not produce more than one.

Finally it is not all that simple either. While I have at length focused here only on women, men also used pins (for instance, Wulfstan of York), but this is not quite as well documented. Long after our period closes Chaucer, providing an insight into the character of each of the pilgrims he was travelling to Canterbury with, wrote in the Prologue to the *Canterbury Tales* of the monk:

> And for to fasten his hood under his chinne,
> He hadde of gold ywroght a curious pinne.

It is not impossible that Anglo-Saxon men wore pins in a similar fashion.[35]

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[35]One might even consider the figure from Codford St Peter (Wilts) (Swanton 1979: fig 7.1; Forbes 1967: Pl 1). His outer cloak appears to be closed by a long rod-like object. Could this be a long pin. Forbes, a local resident who studied the sculpture over many years certainly thought so (Forbes 1967: 34). If it is, does the pin not enter a sureté after passing through the two corners of the garment at the centre of the man's chest?

## Notes to Table 7.1

### Abbreviations used in the table:

PNRBE = position not recorded by the excavator.
INA = information not available, awaiting publication of the site.

alternate = alternate sides of the chest
l = left
l&r of neck = right and left of neck
l&r should = right and left shoulder
r = right
should = shoulder(s)
und skull = under skull
u. chest = upper chest

Notes:

[1] one brooch 'at top of right arm', other 'to r. of cervical vertebrae' (Leeds & Harden 1936: 36).
[2] one brooch 'on r. scapula', one 'above l. shoulder' (ibid. 38).
[3] 'on l. shoulder' (ibid. 42).
[4] 'on r. shoulder' (ibid. 43)
[5] 'On body from breast to pelvis'(ibid. 43)
[6] Tutulus brooch & applied brooch
[7] one applied brooch 'on r. clavicle', one tutulus brooch 'on l. clavicle' (ibid. 52)
[8] one 'behind head, over right shoulder' with the other 'at chin, over l. shoulder' (ibid. 53)
[9] 'Near the skull were two brass pins, with round heads; and a small piece of rusty iron, to which some very fine linen cloth adhered.' (Faussett 1856: 165)
[10] This pin may have been a toilet implement. Akerman in his description makes this suggestion.
[11] Akerman noted that the brooch showed evidence that textile had covered its face (Akerman 1860b: 342).
[12] This appears to have been a double burial. The material mentioned here was associated with the women.
[13] Two brooches: (a) a decorated copper alloy annular brooch; (b) an undecorated iron annular brooch. Both were associated with the upper chest area.
[14] Two brooches: (a) a sheet metal annular brooch; (b) a cast pennanular brooch. Both were associated with the upper chest area.
[15] One disc brooch on right shoulder with the other at the left of the neck.
[16] One brooch on left shoulder with the other to the right of neck.
[17] One brooch right of neck and a second on left shoulder.
[18] Quoit brooch and a reused Roman brooch.
[19] Silver discs.
[20] Beads found in a line from the breast to the pelvis.
[21] The beads were at the waist.
[22] Grave 15 also included two annular brooches. One was above the head and one was at the waist.
[23] 'Gilt bronze brooch at upper chest with a gilt bronze saucer brooch on left chest' (Miles, pers comm)

| Site | Grave ref | Sex | Neck-lace | Fastener Type | Fastener Location | Position of Pin | Reference | Page & Figure |
|---|---|---|---|---|---|---|---|---|
| Abingdon (Berks) | 9 | child | | | | "on ribs". | Leeds & Harden, 1936: | p. 32 & plate VII.9. |
| Abingdon (Berks) | 26 | F | ? | 2 disc brooches. | [1] | "on l. breast" with "ear-scoop". | Leeds & Harden, 1936: | p.36 & plate VIII. |
| Abingdon (Berks) | 32 | F | y | 1 saucer brooch. | r. scapula | "in r. armpit"". | Leeds & Harden, 1936: | p.37 & plate VIII. |
| Abingdon (Berks) | 34 | F | ? | 2 saucer brooches. | on breast | "on neck – two prickers". | Leeds & Harden, 1936: | p.37 & plate X. |
| Abingdon (Berks) | 36 | F | y | 2 disc brooches. | [2] | "below r. upper arm and ribs". | Leeds & Harden, 1936: | p.38 & plate X. |
| Abingdon (Berks) | 38 | F | | | | Underneath skull – three pins. | Leeds & Harden, 1936: | p.38. |
| Abingdon (Berks) | 51 | F | ?y | 2 button brooches. | l. pelvis | "on and around l. pelvis". | Leeds & Harden, 1936: | p.40 & plate XI. |
| Abingdon (Berks) | 51 | F | ?y | 2 button brooches. | l. pelvis | "on and around l. pelvis". | Leeds & Harden, 1936: | p.40 & plate XI. |
| Abingdon (Berks) | 53 | F | y | 2 disc brooches. | shoulders | "on r. shoulder, below brooch". | Leeds & Harden, 1936: | p.41 & plate XI. |
| Abingdon (Berks) | 59 | F | ?y | 2 disc brooches. | [3] | "on centre of breast". | Leeds & Harden, 1936: | p.42 & plate XII. |
| Abingdon (Berks) | 60 | F | y | 1 saucer brooches. | [4] | "on l. breast". | Leeds & Harden, 1936: | p. 43 & plate XII. |
| Abingdon (Berks) | 61 | F | y[5] | 2 pennanular brooches. | | "on l. breast". | Leeds & Harden, 1936: | p.43 & plate XIII. |
| Abingdon (Berks) | 66 | F | ?y | 2 gilt button brooches. | | "on centre of chest". | Leeds & Harden, 1936: | p.44 & plate XIV. |
| Abingdon (Berks) | 75 | F | y | 2 disc brooches. | | "to l . of top vertebrae". | Leeds & Harden, 1936: | p.45 & plate XIV. |
| Abingdon (Berks) | 78 | F | y | 2 disc brooches. | | "on r. shoulder". | Leeds & Harden, 1936: | p.46 & plate XV. |
| Abingdon (Berks) | 106 | F | | [6] | [7] | "on breast". | Leeds & Harden, 1936: | p.52 & plate XV. |
| Abingdon (Berks) | 114 | F | | 2 annular brooches. | [8] | "on breast". | Leeds & Harden, 1936: | p.53 & plate XVII. |
| Abingdon (Berks) | 117 | F | | 2 small sq headed. | shoulders | "in crook of r. elbow". | Leeds & Harden, 1936: | p.54 & plate XVI. |
| Abingdon (Berks) | 119 | F | | 2 applied brooches. | shoulders | "under r. forearm". | Leeds & Harden, 1936: | p.54 & plate XVII. |
| Alfriston (Sussex) | 5 | ? | | | | in remains of skull | Welch, 1983: | p.349 & fig 4b. |
| Alfriston (Sussex) | 8 | A | | annular brooch | r. shoulder | "on adults breast" | Welch, 1983: | p.350 & fig 4d. |
| Alfriston (Sussex) | 29 | F | | 1 button brooch | at neck | "diagonally across breast" | Welch, 1983: | p.356 & fig 13a. |
| Alfriston (Sussex) | 62 | F | | 2 saucer brooches | on chest | on chest | Welch, 1983: | p.367 & fig 29a. |
| Alfriston (Sussex) | 65 | F | | 1 saucer brooch | near head | near head | Welch, 1983: | p.368 & fig30b. |
| Alton (Hants) | 12 | F | y | 2 gilt saucer brooches | r. & l. ches | "between right humerus & ribs" | Evison, 1988: | p.74 & fig 26.7. |
| Alton (Hants) | 23 | F | y | 2 saucer brooches | shoulders | "Across top of chest" | Evison, 1988: | p.77 & fig 29.5. |
| Alton (Hants) | 35 | F | y | 2 button brooches | r&l chest | "Mid-chest" | Evison, 1988: | p.80 & fig 32.4. |
| Alton (Hants) | 47 | F | y | 2 saucer brooches | shoulders | "Lower spine" | Evison, 1988: | p.83 & fig 37.6. |

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| Barfriston Down (Kent) | 48 | F | y | | | pin near neck | Faussett, 1856: | p.143. |
| Barrington (Cambs) | 2 | PF | y | | | PNRBE | Foster, 1880: | p.15. |
| Barrington (Cambs) | 10 | PF | y | 2 saucer brooches | shoulders | "On chest". | Foster, 1880: | p.16. |
| Barrington (Cambs) | 15 | F | y | | | 'on right breast' | Foster, 1880: | p.17. |
| Barrington (Cambs) | 22 | PF&I | | | | At head of infant. | Foster, 1880: | p.17. |
| Barrington (Cambs) | 25 | PF | y | square –headed brooch | at neck | Not recorded by excavator. | Foster, 1880: | p.18. |
| Barrington (Cambs) | 41 | PF | | | | "On breast". | Foster, 1880: | p.20. |
| Barrington (Cambs) | 45 | PF | | 2 square headed | shoulders | "lying across fibula on right shoulder" | Foster, 1880: | p.20. |
| Barrington (Cambs) | 46 | PF&I | | | | "at head" of infant. | Foster, 1880: | p.20. |
| Barrington (Cambs) | 66 | PF | y | brooches | shoulders | "...neck and small iron shroud-pin" | Foster, 1880: | p.23. |
| Barrington (Cambs) | 80 | PF | | brooches | shoulders | Not recorded by excavator. | Foster, 1880: | p.25. |
| Beakesbourne (Kent) | 29 | F | y | | | "near it (but, I think, under the skull)" | Faussett, 1856: | p.151. |
| Bekesbourne (Kent) | 2 | M | | | | associated with spear | CAT, pers. comm. | |
| Bekesbourne (Kent) | 3 | M | | | | found at left hip | CAT, pers. comm. | |
| Bekesbourne (Kent) | 16 | PF | y | 2 cruciform brooches | | PNRBE | CAT, pers. comm. | |
| Bekesbourne (Kent) | 16 | PF | y | 2 cruciform brooches | | PNRBE | CAT, pers. comm. | |
| Bekesbourne (Kent) | 16 | PF | y | 2 cruciform brooches | | PNRBE | CAT, pers. comm. | |
| Barton Court Farm (Oxon) | 820 | F | y | 1 saucer brooch | r. shoulder | left side of chest | Miles, 1984. | |
| Bergh Apton (Norfolk) | 11 | F | y | 2 annular brooches | shoulders | centre of chest. | Green & Rogerson, 1978: | p.14, fig. 14 & 72. |
| Bergh Apton (Norfolk) | 42 | F | y | 2 annular brooches | clavicles | neck between brooches [3]. | Green & Rogerson, 1978: | p.31, fig. 42 & 89–90. |
| Bergh Apton (Norfolk) | 44 | F | y | 2 annular brooches | clavicles | lon. above l. brooch. | Green & Rogerson, 1978: | p.33, fig. 38–39. |
| Bergh Apton (Norfolk) | 54 | F | y | 2 annular brooches | clavicles | lon. above, but between brooches. | Green & Rogerson, 1978: | p.37, fig 42 & 92. |
| Bergh Apton (Norfolk) | 62 | F | | | | ?position? | Green & Rogerson, 1978: | p.40, fig 51 & 94. |
| Bergh Apton (Norfolk) | 65 | F | y | 2 annular brooches | cavicles | below r. brooch across necklace. | Green & Rogerson, 1978: | p.42, fig. 54 & 95–6. |
| Bergh Apton (Norfolk) | 67 | F | | | | ?position? | Green & Rogerson, 1978: | p.43, fig. 56 & 97. |
| Bevis' Grave, Ports Down | 44 | F | | | | "found at throat" (museum has different record) | Rudkin, pers. comm. | 20.1.86 |
| Bidford–on–Avon (Glos) | 6--9 | child | | | | ?position? | Humpherys, et. al., 1923: | p.111. |
| Bidford–on–Avon (Glos) | 79 | F | y | 2 saucer brooches | shoulders | "across chest" | Humpherys, et. al., 1923: | p.114. |
| Bidford–on–Avon (Glos) | 81 | F | y | | | "below chin" | Humpherys, et. al., 1923: | p.114. |
| Bidford–on–Avon (Glos) | 82 | F | y | 2 saucer brooches | shoulders | "below left of chin"--fabric attached | Humpherys, et. al., 1923: | p.115. |

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| Bidford-on-Avon (Glos) | 90 | F | y | 2 saucer brooches | shoulders | "five pieces of iron on breast" | Humpherys, et. al., 1923: | p.115. |
| Bidford-on-Avon (Glos) | 96 | F | | | | "pin set with garnet under skull" | Humpherys, et. al., 1923: | p.115. |
| Bidford-on-Avon (Glos) | 100 | child | y | | | at neck "under jaw" | Humpherys, et. al., 1923: | p.115. |
| Bifrons (Kent) | 5 | F | y | 2 button brooches. | waist | "left side of chest". | Godfrey-Faussett, 1876: | p.303 & see fig. |
| Bifrons (Kent) | 6 | F | | circular brooch. | mid-chest | "at left shoulder" | Godfrey-Faussett, 1876: | p.303. |
| Bifrons (Kent) | 15 | F | | (?)brooches. | at neck | "beyond the head among dark soil" | Godfrey-Faussett, 1876: | p.305. |
| Bifrons (Kent) | 85 | PF | y | | | "near the neck" | Godfrey-Faussett, 1880: | p.555-6. |
| Bifrons (Kent) | 89 | PF | | 2 brooches. | near pins | upper part of chest and shoulders | ibid. | ibid. |
| Bifrons (Kent) | 89 | PF | | 2 brooches. | near pins | upper part of chest and shoulders | ibid. | ibid. |
| Blacknall Field (Wilts.) | 18 | F | y | | | "parallel to left humerus and near scapula" | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 30 | F | | | | "outside left humerus" | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 44 | F | | brooches | INA | "Lying across upper half of vertebral column" | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 53 | F | y | INA | INA | "within area of upper half of vertebral column" | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 57 | F | | INA | INA | 'head of pin almost touching left clavicle' | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 60 | F | y | INA | INA | 'lying across and at right angles to upper l. hum | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 78 | F | | 2 brooches | INA | 'lying on right scapula to r. of r. disc brooch' | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 85 | F | y | pair of brooches | INA | lower rib cage 'parallel with vertebral column' | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 93 | F | y | 2 brooches | INA | lower rib cage 'parallel with vertebral column' | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 95 | F | | INA | INA | 'on r. scapula, immediately above r. small long' | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 102 | F | | INA | INA | 'across right clavicle and top of vertebral colum | K. Annable, pers. comm. | 3-Apr-90 |
| Blacknall Field (Wilts.) | 104 | F | | INA | INA | 'between two saucer brooches, head touching r. | K. Annable, pers. comm. | 3-Apr-90 |
| Blewburton Hill [Berks] | V | F | | pair of disc brooches | shoulders | 'straight iron pin lay close to the beads, on ches | Collins, 1953: | 52-53. |
| Bourton-on-the-Water [Glos] | | | | none | none | 'on either side of lower jaw' | | |
| Breach Down (Kent) | | F | y | none | na | 'on left side of skeleton' | Bartlett, 1845: | p.316-317. |
| Brighthampton (Oxon) | 13b | PF | | brooch | on breast | "near the head" | Akerman, 1857b: | p.395 |
| Brighthampton (Oxon) | 17 | PF | y | | | "on breast a taper bronze hair-pin" | Akerman, 1860a: | p.85. |
| Brighthampton (Oxon) | 18 | PF | | | | "on breast a stout bronze pin" | Akerman, 1860a: | p.85. |
| Brighthampton (Oxon) | 39 | PF | | | | "on breast" | Akerman, 1860a: | p.88. |
| Brighthampton (Oxon) | 58 | PF | y | | | "in lap" | Akerman, 1860a. | |
| Broadwell (Glos) | 1 | ?F | | | | "found near the shoulder" | Donovan & Dunning, 1936: | p.167. |

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| Burpham (Sussex) | 2 | M | | | | "on the breast"" | Welch, 1983: | p.489. |
| Burwell (Cambs) | 61 | F | | | | "on right collar bone" | Lethbridge, 1931: | p.59 & fig. 29.2. |
| Caistor-by-Norwich (Norfol | 16 | F | | | | on thorax | Myres & Green, 1976: | p.224-5. |
| Caistor-by-Norwich (Norfol | 31 | F | y | annular | | at mouth | Myres & Green, 1976: | p.214. |
| Cassington (Oxon) | III | M | | | | "third lumbar vertebra" | Leeds & Riley, 1942: | p.66 & fig 16.b-d. |
| Cassington (Oxon) | VII | F | amber | saucer brooches | shoulders | "on left breast" | Leeds & Riley, 1942: | p.67 & fig 16.e. |
| Chamberlains Barn I (Beds) | 2 | PF | | | | PNRBE | Hyslop, 1963: | p.167 & fig 4.t. |
| Chamberlains Barn I (Beds) | 6 | ? | | | | PNRBE | Hyslop, 1963: | p.169. |
| Chamberlains Barn II (Beds) | 39 | F | y | | | 'just below chin' | Hyslop, 1963: | p.181 & fig. 13. |
| Chamberlains Barn II (Beds) | 55 | F | | | | 'not recorded' | Hyslop 1963: | p.185 & fig. 16.c. |
| Chartham (Kent) | bar. a | F | | y | ? | ? | Faussett, 1856: | p.164. |
| Chartham (Kent) | bar. e | F | y | | | "near neck" | Faussett, 1856: | p.165. |
| Chartham (Kent) | 4 | F | | | | "near the skull"[9] | Faussett, 1856: | p.169. |
| Chartham (Kent) | 4 | F | | | | "near the skull"[9] | Faussett, 1856: | p.169. |
| Chartham (Kent) | 17 | F | | | | "near the neck" | Faussett, 1856: | p.171. |
| Chartham (Kent) | 44 | F | Py | | | "near the neck" | Faussett, 1856: | p.173. |
| Chavenage Slight (Glos) | ? | ? | | | | PNRBE | Wright, 1849: | p.53. |
| Collingbourne Ducis (Wilts) | 20 | F | | 2 gilt saucer brooches | shoulders | "just longitudinally below saucer brooches" | Gingel, 1976: | p.85, fig 11 & 19a. |
| Compton, Appledown (WS) | 170 | PF | | | | "iron pin at throat" | Med. Arch., 32 (1988): | p.278. |
| Cow Lowe (Derbyshire) | barrow | F | y | | | "at neck" | Bateman, 1848: | p.93 - 94. |
| Dover (Kent) | F | F | y | silver disc brooch | at neck | 'at neck' | Evison, 1987: | p.215 & fig. 4.F.2. |
| Dover (Kent) | 6 | PF | y | | | 'at neck' | Evison, 1987: | p.217 & fig. 7.6.9. |
| Dover (Kent) | 10 | PM | | | | to right of skull under spearhead | Evison, 1987: | p.217 & fig. 8.10.1. |
| Dover (Kent) | 18 | PF | y | | | 'at neck' | Evison, 1987: | p.220 & fig. 11.18.3. |
| Dover (Kent) | 20 | PF | y | garnet set disc brooch | at neck | 'at neck' | Evison, 1987: | p.220-221 & fig. 12.20.3. |
| Dover (Kent) | 30 | PF | y | garnet set disc brooch | at neck | 'at neck' | Evison, 1987: | p.224-225 & fig. 18.30.2. |
| Dover (Kent) | 33 | PM | | | | 'at hip' | Evison, 1987: | p.225 & fig. 20.33.4. |
| Dover (Kent) | 38 | PF | y[10] | disc brooch | at neck | 'at neck' | Evison, 1987: | p.226-227 & fig. 22.38.2. |
| Dover (Kent) | 42 | ? | y | | | 'at neck' | Evison, 1987: | p.228-229 & fig.25.42.2. |
| Dover (Kent) | 43 | ? | | | | 'right chest' | Evison, 1987: | p.229 & fig. 25.43.1. |

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| Dover (Kent) | 44 | ?F | | | | 'at neck' | Evison, 1987: | p.229 & fig 26.44.1. |
| Dover (Kent) | 50 | M | | | | 'at left waist' | Evison, 1987: | p.230 & fig.28.50.3. |
| Dover (Kent) | 60 | PF | y | | | 'at neck' | Evison, 1987: | p.233 & fig. 34.60.1. |
| Dover (Kent) | 78 | PF | | | | 'right neck' | Evison, 1987: | p.236 & fig.39.78.1. |
| Dover (Kent) | 83 | ? | ? | | | 'at neck' | Evison, 1987: | p.236 & fig. 39.83.2. |
| Dover (Kent) | 96a | M | | | | 'to right of skull' | Evison, 1987: | p.239 & fig. 45.96a.2 |
| Dover (Kent) | 96b | M | | | | 'at neck' | Evison, 1987: | p.239 & fig. 46.96b.8. |
| Dover (Kent) | 100 | ? | | | | 'at neck' | Evison, 1987: | p.240 & flg. 48.100.1. |
| Dover (Kent) | 101 | ? | | | | 'at neck' | Evison, 1987: | p.240 & fig, 48.101.1 |
| Dover (Kent) | 107 | PF | y | | | in 'workbox' | Evison, 1987: | p.240 & fig. 48.107.5a. |
| Dover (Kent) | 132 | PF | y | | | 'at neck' | Evison, 1987: | p.245 & fig. 54.132.1. |
| Dover (Kent) | 134 | F | y | | | 'at neck' (associated with the necklace) | Evison, 1987: | p.245 & fig 55.134.5. |
| Dover (Kent) | 136 | M | | | | under skull | Evison, 1987: | p.247 & fig. 56.136.2. |
| Dover (Kent) | 138 | F | | | | 'at neck' | Evison, 1987: | p.247 & fig. 57.138.1. |
| Dover (Kent) | 138 | F | | | | 'at left hip' | Evison, 1987: | p.247 & fig. 57.138.2. |
| Dover (Kent) | 138 | F | | | | 'at left hip' | Evison, 1987: | p.247 & fig. 57.138.4. |
| Dover (Kent) | 142 | F | | | | 'at right neck' | Evison, 1987: | p.249 & fig. 58.142.1. |
| Dover (Kent) | 147 | F | | | | 'at neck' | Evison, 1987: | p.249 & fig. 59.147.1. |
| Dover (Kent) | 155 | F | y | | | 'at neck' (with necklace) | Evison, 1987: | p.250 & fig. 60.155.1. |
| Dover (Kent) | 157 | F | y | | | 'at neck' | Evison, 1987: | p.250 & fig. 61.157.3. |
| Dover (Kent) | 158 | M? | | | | 'at left waist' | Evison, 1987: | p.251 & fig. 62.158.3. |
| Dover (Kent) | 160 | F | y | | | 'at neck' (with necklace) | Evison, 1987: | p.251 & fig. 62.160.1. |
| Dover (Kent) | 161 | F | | | | 'mid-chest' | Evison, 1987: | p.251 & fig 63.161.1. |
| Dover (Kent) | 161 | F | | | | 'at waist' | Evison, 1987: | p.251 & fig. 63.161.3. |
| Droxford (Wilts) | 13 | F | | pair gilt saucer brooches | | "on left breast" | Aldsworth, 1978: | p.118 & fig. 20.3. |
| Droxford (Wilts) | ? | ? | ? | ? | ? | PNRBE | Aldsworth, 1978: | p.136 & fig 31.35. |
| East Shefford (Berks) | III | F | | | | 'on breast' | Peake & Hooton, 1915: | p.110. |
| Eccles (Kent) | 12 | F | | | | "side by side on the chest" | Detsicas & Hawkes, 1973: | p.282 & fig. 4. |
| Filkins (Oxon) | 5¯1oct | PF | | 2 disc brooches | shoulders | "on breast" | Akerman, 1857a: | p.142. |
| Filkins (Oxon) | 8¯1oct | PF | | Saucer brooches | on breast | "on breast" | ibid. | |

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| Frilford (Berks) | 17`Mar | F | | 2 saucer brooches | shoulders | "on left breast" | Rolleston, 1870: | p.472. |
| Frilford (Berks) | ii–1Apr | F | | 2 square–lozenge foot | shoulders | "left shoulder" | Rolleston, 1870: | p.475. |
| Frilford (Berks) | iii–1Apr | F | | | | from 'right elbow to its shoulder' | Rolleston, 1870: | p.477. |
| Gilton (Kent) | 8 | PF | | | | "among remains of skull" | Faussett, 1856: | p.6. |
| Gilton (Kent) | 19 | PF | poss | disc brooch | at neck | "among remains of skull" | Faussett, 1856: | p.9. |
| Girton (Cambs) | 11 | PF | y | 1 small long | l. clavicle | near left clavicle | Hollingworth & O'Reilly 192 | Pl IV.Ib. |
| Grimston 'Bell' (Norfolk) | C | PF | | annular brooch | na | 'at left shoulder' | Notes in King's Lynn Museum | |
| Guilddown (Surrey) | 206 | F | y | 2 small square headed | on breast | on breast | Lowther, 1931: | p.23 & plate XIe. |
| Harnham Hill (Wilt) | 42 | PF | | gilt brooches | on breast | "a bronze pin on right side" | Akerman, 1853: | p. 263 & Pl XIII.1. |
| Hartford (Hunts) | ? | ? | | "iron fibula" | unknown | PNRBE | Wyatt, 1870: | p. 33. |
| Highdown (ES) | 14 | M | | | | "close by right humerus" | Welch, 1983: | p. 466. |
| Holdborough (Kent) | 15 | F | | | | 'mid–chest' | Evison, 1956: | p. 122 & fig 19 (15.2). |
| Holdenby (Northants) | 3 | F | | pair of iron pen. brooche | on breast | on breast | Leeds, 1909: | p. 96 & plate I, fig 8.b. |
| Holdenby (Northants) | 8 | F | | circular bronze ring | l. clavicle | near left clavicle | Leeds, 1909: | p. 93–94 & plate I, fig.3.b. |
| Holywell Row (Cambs) | 7 | F | y | 2 annular brooches | | '4 inch long iron pin lay near the throat' | Lethbridge, 1931: | p.4. |
| Holywell Row (Cambs) | 37 | F | y | cruciform brooch | | 'at hip' | Lethbridge, 1931: | p. 19 & fig.9.3. |
| Holywell Row (Cambs) | 70 | F | y | | | 'lay crosswise on right clavicle' | Lethbridge, 1931: | p. 34 & fig.18.A. |
| Jevington (Sussex) | 3 | F | | | | "among skull bones" | Welch, 1983: | p. 343. |
| Jevington (Sussex) | 6 | F | | | | not mentioned | Welch, 1983 | p. 344. |
| Kemble (Glos) | 1 | PF | | | | upper chest | Wilkinson, 1988: | p. 200, fig. 12 & 13. |
| Kingsworthy (Hants) | 2 | F | | INA | | "under distal shaft of right humerus" | In Hawkes, forthcoming | |
| Kingsworthy (Hants) | 3 | F | | INA | | "in centre of chest––point towards foot" | In Hawkes, forthcoming | |
| Kingsworthy (Hants) | 10 | F | y | INA | | "left side of chest, head towards chin" | In Hawkes, forthcoming | |
| Kingsworthy (Hants) | 12 | F | | INA | | 'just below mandible' | In Hawkes, forthcoming | |
| Kingsworthy (Hants) | 30 | F | y | button brooch | at neck | 'underneath left temporal bone of skull' | In Hawkes, forthcoming | |
| Kingsworthy (Hants) | 33 | M | | INA | | 'right of and parallel to right humerus' | In Hawkes, forthcoming | |
| Kingsworthy (Hants) | 39 | F | | INA | | 'left side of upper chest' | In Hawkes, forthcoming | |
| Kingsworthy (Hants) | 58 | F | | INA | | 'centre of neck' | In Hawkes, forthcoming | |
| Kingsworthy (Hants) | 62 | F | | INA | | 'below right elbow' | In Hawkes, forthcoming | |
| Kingsworthy (Hants) | 62 | F | | INA | | 'left of mid–shaft of the left femur' | In Hawkes, forthcoming | |

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| Kingsworthy (Hants) | 76 | F | y | INA | | 'at left side of waist near iron ring' | In Hawkes, forthcoming | |
| Kingston (Kent) | 6 | PF | y | | | "close by the side of the skull" | Faussett, 1856: | p. 43. |
| Kingston (Kent) | 7 | PF | y | | | "linked to toilet set" | Faussett, 1856: | p.43. |
| Kingston (Kent) | 72 | PF | | | | near skull & slip knot ring | Faussett, 1856: | p.54. |
| Kingston (Kent) | 119 | PF | | | | "near head" | Faussett, 1856: | p.61. |
| Kingston (Kent) | 142 | PF | y | | | associated with neck | Faussett, 1856: | p.67. |
| Kingston (Kent) | 156 | PF | | | | "near the head" | Faussett, 1856: | p.70. |
| Kingston (Kent) | 161 | PF | y | disc brooch | at neck | "near the neck" | Faussett, 1856: | p.71. |
| Kingston (Kent) | 171 | PF | | | | "close by the skull" | Faussett, 1856: | p.73. |
| Kingston (Kent) | 183 | PF | | | | "near the skull" | Faussett, 1856: | p.75. |
| Kingston (Kent) | 185 | PF | | | | "near head, but possibly assoc with box" | Faussett, 1856: | p.76. |
| Kingston (Kent) | 211 | PF | pos | | | position unknown, but beads near skull | Faussett, 1856: | p.79. |
| Kingston (Kent) | 222 | PF | | | | "near skull" | Faussett, 1856: | p.81. |
| Kingston (Kent) | 232 | F | | | | 'near skull' | Faussett, 1856: | p.82. |
| Leagrave (Beds) | 1 | F | ? | 2 disc brooches | ? | "on left clavicle" | Read, 1906: | p. 60–61 & fig A. |
| Lechlade (Glos) | 18 | ?F | | 2 saucer brooches | clavicles | over sternum--'pointing across body' | Miles, pers comm. | |
| Lechlade (Glos) | 18 | ?F | | 2 saucer brooches | clavicles | over upper l.ribs-- | Miles, pers comm. | |
| Lechlade (Glos) | 19 | ?F | y | 2 saucer brooches | INA | across brooch on l. clavicle, pt downwards | Miles, pers comm. | |
| Lechlade (Glos) | 42 | infant | | 1 disc brooch | pelvis | outside l. elbow | Miles, pers comm. | |
| Lechlade (Glos) | 50 | F | y | INA | INA | on r. upper chest | Miles, pers comm. | |
| Lechlade (Glos) | 57 | F | y | 2 saucer brooches | clavicles | inside r. upper arm ?elbow? | Miles, pers comm. | |
| Lechlade (Glos) | 67 | F | y | brooch | r. clavicle | l. upper shoulder | Miles, pers comm. | |
| Lechlade (Glos) | 74 | F | | ?brooch? | und. skull | to r. of skull | Miles, pers comm. | |
| Lechlade (Glos) | 79 | F | y | INA | | over l. chest | Miles, pers comm. | |
| Lechlade (Glos) | 106 | ?F | | 2 disc brooches | INA | against l. neck | Miles, pers comm. | |
| Lechlade (Glos) | 107 | M | | INA | | centre of upper chest | Miles, pers comm. | |
| Lechlade (Glos) | 110 | F | Py | 2 saucer brooches | INA | lower r. thorax | Miles, pers comm. | |
| Lechlade (Glos) | 113 | F | y | 1 saucer brooch | r. shoulder | r. upper humerus | Miles, pers comm. | |
| Lechlade (Glos) | 113 | F | y | 1 saucer brooch | r. shoulder | under skull | Miles, pers comm. | |
| Lechlade (Glos) | 131 | F | | INA | INA | under skull | Miles, pers comm. | |

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|---|---|---|---|---|---|---|---|---|
| Lechlade (Glos) | 135 | F | y | 2 disc brooches | INA | just below lower ribs | Miles, pers comm. | |
| Lechlade (Glos) | 141 | F | ? | saucer brooches | INA | upper l. chest | Miles, pers comm. | |
| Lechlade (Glos) | 1000 | F | y | 2 disc brooches | INA | lower centre r. ribs | Miles, pers comm. | |
| Lechlade (Glos) | 1001 | F | ?y | 2 saucer brooches | INA | ?r. thorax? | Miles, pers comm. | |
| Lechlade (Glos) | 1006(3) | F | y | disc brooches | INA | l. shoulder and chest | Miles, pers comm. | |
| Lechlade (Glos) | 1018 | F | y | INA | INA | pelvic area | Miles, pers comm. | |
| Lechlade (Glos) | 1035 | F | y | Roman brooch | INA | between l. clavicle and chin | Miles, pers comm. | |
| Lechlade (Glos) | 1053 | F | | INA | INA | r. upper chest | Miles, pers comm. | |
| Lechlade (Glos) | 1072 | F | y | button & disc brooches | INA | across r. upper arm | Miles, pers comm. | |
| Lechlade (Glos) | 1082 | F | y | INA | INA | l. thorax | Miles, pers comm. | |
| Lechlade (Glos) | 1085 | F | | INA | INA | at back of skull | Miles, pers comm. | |
| Lechlade (Glos) | 1092 | F | | INA | INA | r. upper ribs | Miles, pers comm. | |
| Lechlade (Glos) | 1011 | F | | INA | INA | under chin | Miles, pers comm. | |
| Lechlade (Glos) | 1125(1) | F | | INA | INA | centre of chest--pt towards wrist | Miles, pers comm. | |
| Lechlade (Glos) | 1125(2) | F | ?y | INA | INA | chest-- & r arm | Miles, pers comm. | |
| Lechlade (Glos) | 1128 | F | ? | INA | INA | inside l. upper arm | Miles, pers comm. | |
| Lechlade (Glos) | 1129 | F | ? | 2 saucer brooches | INA | under r. elbow | Miles, pers comm. | |
| Lechlade (Glos) | 1131 | ?C | | INA | INA | ?chest? | Miles, pers comm. | |
| Lechlade (Glos) | 1159(2) | F | y | INA | INA | above r. shoulder | Miles, pers comm. | |
| Lechlade (Glos) | 1168 | F | | INA | INA | left upper ribs | Miles, pers comm. | |
| Lechlade (Glos) | 1175 | ?F | | INA | INA | r. shoulder | Miles, pers comm. | |
| Lechlade (Glos) | 1178 | ?F | y | INA | INA | l. clavicle | Miles, pers comm. | |
| Lechlade (Glos) | 1180 | ?F | | INA | INA | r.clavicle | Miles, pers comm. | |
| Linton Heath (Cambs) | 16 | ? | | | | Not recorded by excavator. | Neville, | p. 99 & fig XIV. |
| Linton Heath (Cambs) | 24 | F | | 2 square headed | shoulders | on left shoulder | Neville, | p. 101. |
| Linton Heath (Cambs) | 99 | ? | | | | this lay by the feet | Neville, | p. 113. |
| Linton Heath (Cambs) | 104 | ?M | | | | by left arm | Neville, | p. 113. |
| Long Wittenham I (Berks) | 6 | | | disc brooch | l.breast | PNRBE | Akerman, 1860b. | |
| Long Wittenham I (Berks) | 29 | PF | | disc brooch | shoulder | 'in the lap a knife and pin' | Akerman, 1860b: | p. 339. |
| Long Wittenham I (Berks) | 33 | PF | y | disc brooches | shoulders | with brooches | Akerman, 1860b: | p. 340. |

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|---|---|---|---|---|---|---|---|---|
| Long Wittenham I (Berks) | 34 | PF | | | | 'on breast' | Akerman, 1860b: | p. 340. |
| Long Wittenham I (Berks) | 47 | PF | | 1 disc brooch | breast | [12] | Akerman, 1860b: | p.341. |
| Long Wittenham I (Berks) | 51 | PF | | | | 'on the breast' | Akerman, 1860b: | p. 341. |
| Long Wittenham I (Berks) | 58 | F | y | disc brooch [11] | l. shoulder | on breast | Akerman, 1860b: | p.342. |
| Long Wittenham I (Berks) | X | urn | | | | not applicable | Akerman, 1860b: | p. 343. |
| Long Wittenham I (Berks) | 68 | F | y | 2 disc brooches | shoulders | at neck with necklace | Akerman, 1860b: | p. 343. |
| Long Wittenham I (Berks) | 75 | child | y | disc/saucer brooches | ? | PNRBE | Akerman, 1860b: | p. 343. |
| Long Wittenham I (Berks) | 80 | PF | | 2 applied saucer broohes | shoulders | right breast | Akerman, 1860b: | p. 344. |
| Long Wittenham I (Berks) | 98 | ?AF | y | | | PNRBE | Akerman, 1860b: | p. 346. |
| Long Wittenham I (Berks) | 110 | F | y | 2 disc brooches | shoulders | 'on the breast ' -- between the brooches | Akerman, 1860b: | p. 347. |
| Long Wittenham I (Berks) | 111 | F | y | 2 gilt saucer brooches | shoulders | 'on the left breast' | Akerman, 1860b: | p. 347. |
| Long Wittenham I (Berks) | 114 | ?AM | | | | 'on the breast' | Akerman, 1860b: | p. 347. |
| Long Wittenham I (Berks) | 122 | F | | | | 'on the breast a small bronze pin' | Akerman, 1860b: | p. 347. |
| Long Wittenham I (Berks) | 140 | F | | | | PNRBE | Akerman, 1860b: | p. 139. |
| Long Wittenham I (Berks) | 151 | F | | | | at neck | Akerman, 1862: | p. 140. |
| Long Wittenham I (Berks) | 160 | F | | | | on breast | Akerman, 1862: | p. 140. |
| Long Wittenham I (Berks) | 163 | F | | 2 disc brooches | shoulders | ? | Akerman, 1862: | p. 140. |
| Long Wittenham I (Berks) | 164 | F | | 2 small long brooches | shoulders | ? | Akerman, 1862: | p. 141. |
| Long Wittenham I (Berks) | 187 | F | | 2 disc brooches | ? | 'in the lap' | Akerman, 1862: | p. 142. |
| Long Wittenham II (Berks) | add 3 | F | y | | | 'at neck' | Akerman, 1862: | p. 134. |
| Long Wittenham II (Berks) | add 8 | F | | | | 'on the breast' | Akerman, 1862: | p. 135. |
| Melbourn (Cambs) | 7 | F | | silver disc pendant | shoulder | 'by left hand side of skull' | Wilson, 1956: | p. 32 & pl IV.o. |
| Melbourn (Cambs) | 9 | F | y | | | 'under head' | Wilson, 1956: | p. 32. |
| Melbourn (Cambs) | 26 | AM | | | | 'pin under chin' | Wilson, 1956: | p. 37 & ?pl IV.q ? |
| Mitcham (Surrey) | 140 | ? | | | | "by the left side was a bronze rod" | Bidder & Morris, 1959: | p. 69 & pl XV. |
| Mitcham (Surrey) | 229 | F | | disc brooch | below pin | "across the breast" | Bidder & Morris, 1959: | p. 75, 110 & pl XV. |
| Morning Thorpe (Norfolk) | 18 | F | y | pair of annular brooches | (?)Chest | (?) plan indicates upper chest near r. brooch | Green, et. al., 1987: | p. 38, figs. 20 & 299.C. |
| Morning Thorpe (Norfolk) | 50 | F | y | pair of annular brooches | (?)should | On centre of chest overlying necklace. | Green, et. al., 1987: | p. 48, figs. 44 & 313.E. |
| Morning Thorpe (Norfolk) | 51 | F | | pair of annular brooches | (?)shoulds | Centred between the pair of annular brooches | Green, et. al., 1987: | p. 50, figs. 45 & 314.B. |
| Morning Thorpe (Norfolk) | 76 | F | | pair of annular brooches | (?) | between left annular brooch and knife | Green, et. al., 1987: | p. 56, figs. 65 & 319.All. |

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|---|---|---|---|---|---|---|---|---|
| Morning Thorpe (Norfolk) | 86 | F | y | pair of annular brooches | shoulders | across left annular brooch | Green, et. al., 1987: | p. 59, figs. 71, & 322.Cl. |
| Morning Thorpe (Norfolk) | 108 | F | y | pair of annular brooches | shoulders | where centre of chest would have lain | Green, et. al., 1987: | p. 65, figs. 83 & 332.A/B. |
| Morning Thorpe (Norfolk) | 116 | child | | | | chest area | Green, et. al., 1987: | p. 68, figs. 88 & 336.All/B. |
| Morning Thorpe (Norfolk) | 134 | F | | pair of annular brooches | shoulders | adjacent to left annular brooch | Green, et. al., 1987: | p. 73, figs. 100 & 342.C. |
| Morning Thorpe (Norfolk) | 140 | F | py | pair of annular brooches | r&l should | longitudinally above left annular brooch | Green, et. al., 1987: | p. 74–5, figs. 102 & 343.B,C,D. |
| Morning Thorpe (Norfolk) | 148[12] | F | | 2 small long | r&l should | at neck | Green, et. al., 1987: | p. 76–7, figs. 107 & 346.M. |
| Morning Thorpe (Norfolk) | 221 | F | | 2 annular brooches | r&l should | between annular brooches | Green, et. al., 1987: | p. 94, figs. 146 & 369.C. |
| Morning Thorpe (Norfolk) | 249 | F | | 2 annular brooches | r&l should | on chest below left annular brooch | Green, et. al., 1987: | p. 103, figs. 168 & 377.Dl. |
| Morning Thorpe (Norfolk) | 259 | M | | | | ?chest area? | Green, et. al., 1987: | p. 108, figs. 178 & 383.H. |
| Morning Thorpe (Norfolk) | 293 | F | y | 2 annular brooches | ? | ?with brooches? | Green, et. al., 1987: | p. 115–6, figs. 199 & 389.B. |
| Morning Thorpe (Norfolk) | 316 | F | y | 2 small long brooches | ? | with necklace right of right brooch | Green, et. al., 1987: | p. 122, figs. 215 & 398.G,K. |
| Morning Thorpe (Norfolk) | 334 | F | y | 2 annular brooches | r&l should | with necklace to left of right brooch | Green, et. al., 1987: | p. 129, figs. 230 & 406.D(334). |
| Morning Thorpe (Norfolk) | 337 | M&F | y | pair small long brooches | alternate | just below small long brooches | Green, et. al., 1987: | p. 131, figs. 232 & 406.B. |
| Morning Thorpe (Norfolk) | 351 | M&F | | | | PNRBE | Green, et. al., 1987: | p. 135, figs. 241 & 412.C. |
| Morning Thorpe (Norfolk) | 369 | F | y | annular brooch | unclear | with wrist clasp | Green, et. al., 1987: | p. 143–4, figs. 257 & 427.J. |
| Morning Thorpe (Norfolk) | 369 | F | y | annular brooch | unclear | with brooch | Green, et. al., 1987: | p. 143–4, figs. 257 & 427.M. |
| Morning Thorpe (Norfolk) | 378 | F | y | 2 annular brooches | alternate | ?upper mid-chest? | Green, et. al., 1987: | p. 147–8, figs. 264 & 436.N. |
| Morning Thorpe (Norfolk) | 384 | PF | y | annular brooch | right chest | ?upper mid-chest? | Green, et. al., 1987: | p. 149, figs. 270 & 438.C. |
| Morning Thorpe (Norfolk) | 387 | F | y | [13] | [13] | ?upper mid-chest? | Green, et. al., 1987: | p. 151, figs. 273 & 441.G. |
| Morning Thorpe (Norfolk) | 398 | M | | | | ?upper chest? | Green, et. al., 1987: | p. 155, figs. 281 & 451.C. |
| Morning Thorpe (Norfolk) | 407 | F | y | [14] | [14] | ?upper chest? with beads & brooches | Green, et. al., 1987: | p. 157–8, figs. 285 & 454.J. |
| Morning Thorpe (Norfolk) | 409 | ?M | | | | ?upper chest? based on grave plan | Green, et. al., 1987: | p. 158, fig. 286 & 454.B. |
| Morning Thorpe (Norfolk) | 414 | ?M | | | | given grave layout it may be safe to assume ch | Green, et. al., 1987: | p. 159, fig. 290 & 456.A. |
| Nassington (Northants) | 15 | F | | 2 swastika brooches | clavicles | "on breast" | Leeds & Atkinson, 1944a: | p. 106. |
| Nassington (Northants) | 22 | M | y | | | "near knife" | Leeds & Atkinson, 1944a: | p. 107 & pl xxx. |
| Netheravon (Wilts) | 1 | M | | | | close to the right of the skull | W.A.M. xliii (1927): | p. 400. |
| Ozengell (Kent) | 14 | F | | | | junction of left clavicle and vertebrae | G. Grainger, pers comm | |
| Ozengell (Kent) | 23 | F | y | | | below right shoulder among five beads | G. Grainger, pers comm | |
| Ozengell (Kent) | 79 | F | ? | ? | ? | mid-right clavicle | G. Grainger, pers comm | |
| Ozengell (Kent) | 92 | F | ? | ? | ? | lower body area | G. Grainger, pers comm | |

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|---|---|---|---|---|---|---|---|---|
| Ozengell (Kent) | 157 | M | | CA buckle | u. chest | mid-chest | G. Grainger, pers comm | |
| Ozengell (Kent) | 220 | ?F | y | | | 'at throat' | G. Grainger, pers comm | |
| Ozengell (Kent) | 220 | ?F | y | | | 'at throat' | G. Grainger, pers comm | |
| Poulton Down (Wilts) | 1 | F | y | | | "unknown" associated with women in well | Meyrick, 1950: | p. 221. |
| Petersfinger (Wilts) | xxix | F | y | applied brooch | | PNRBE | Leeds & Shortt, 1953: | p. 24 & pl viii. |
| Petersfinger (Wilts) | xli | M | | | | "lying across body" | Leeds & Shortt, 1953: | p. 29 & pl ix. |
| Portway Andover (Hants) | 1 | F | y | 2 disc brooches | [15] | 'horizontally across vertebrae on chest' | Cook & Dacre, 1985: | p. 23-24, figs. 27 & 41. |
| Portway Andover (Hants) | 3 | F | | | | 'diagonally across right side of chest' | Cook & Dacre, 1985: | p. 24, figs. 29 & 42. |
| Portway Andover (Hants) | 9 | ? | y | 2 Fe annular brooches | r & l chest | 'horizontal upper part of chest' | Cook & Dacre, 1985: | p. 25, figs.30 & 44. |
| Portway Andover (Hants) | 11 | F | | | | 'on right shoulder pointing toward feet' | Cook & Dacre, 1985: | p. 26, figs. 31 & 40. |
| Portway Andover (Hants) | 18 | M | | | | 'between feet' | Cook & Dacre, 1985: | p. 28 & fig. 32. |
| Portway Andover (Hants) | 22 | ? | | 2 disc brooches | [16] | 'to left of skull' | Cook & Dacre, 1985: | p. 29, figs. 33 & 48. |
| Portway Andover (Hants) | 25 | F | y | 2 small long brooches | l&r of neck | 'lying vertically on centre of chest' | Cook & Dacre, 1985: | p. 30, fig. 33 & 49. |
| Portway Andover (Hants) | 32 | F | | 2 disc brooches | l&r of neck | 'lying diagnonally on left side of chest' | Cook & Dacre, 1985: | p. 31-32, figs. 34 & 53. |
| Portway Andover (Hants) | 38 | F | | 2 disc brooches | [17] | 'left side of pelvis' | Cook & Dacre, 1985: | p. 33, figs. 35 & 56 |
| Portway Andover (Hants) | 48 | PF | | 2 saucer brooches | l&r of neck | 'vertical on left side of chest' | Cook & Dacre, 1985: | p. 36-37, figs. 38 & 61.. |
| Portway Andover (Hants) | 51 | PF | | | | 'diagonally on left side of chest' | Cook & Dacre, 1985: | p. 39, figs. 38 & 64. |
| Portway Andover (Hants) | 52 | F | y | 2 disc brooches | shoulders | 'right side of chest' | Cook & Dacre, 1985: | p. 39, figs. 39, & 64. |
| Portway Andover (Hants) | 64 | F | | | | 'left shoulder pointing away' | Cook & Dacre, 1985: | p. 41, figs. 40 & 68. |
| Portway Andover (Hants) | 67 | F | | [18] | l&r should | 'left of neck' | Cook & Dacre, 1985: | p. 42 & fig.37. |
| Roundway Down (Wilts) | Barrow | F | y | | | "near the neck" | Akerman, 1843: | p. 13. |
| Ruskington (Lincolnshire) | 1 | Child | | annular | | "at head" | Kendrick, 1946: | p. 69 & plate X.8. |
| Sarre (Kent) | 20 | F | y | | | 'at head' | Brent, 1864: | p. 160. |
| Searby (Lincs) | | F | | | | PNRBE | BAA, (xvi), 1860: | p. 311 & plate 23.5. |
| Sibertswold (Kent) | 13 | PF | y | | | close to the upper part of the skull | Faussett, 1856: | p. 105. |
| Sibertswold (Kent) | 24 | child | | | | PNRBE | Faussett, 1856: | p. 106. |
| Sibertswold (Kent) | 31 | PF | y | | | "this lay under the skull" | Faussett, 1856: | p. 108. |
| Sibertswold (Kent) | 39 | PF | | | | "near the skull" | Faussett, 1856: | p. 109. |
| Sibertswold (Kent) | 60 | PF | y | | | "near the head" | Faussett, 1856: | p. 112. |
| Sibertswold (Kent) | 103 | PF | y | | | "close to the skull" | Faussett, 1856: | p. 118--119. |

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| Sibertswold (Kent) | 138 | PF | y | | | "near skull" | Faussett, 1856: | p. 123. |
| Shudy Camps (Cambs) | 65 | F | | | | on sternum | Leithbridge, 1936: | p. 20. |
| Shudy Camps (Cambs) | 95 | F | | | | near throat | Leithbridge, 1936: | p. 24. |
| Sleaford (Lincs) | 3 | PF | | annular brooch | shoulder | "at chest" | Thomas, 1887: | p. 389. |
| Sleaford (Lincs) | 95 | F | y[19] | swastika brooches | ? | "in front of chest" | Thomas, 1887: | p. 394. |
| Sleaford (Lincs) | 191 | F | y | 2 annular brooches | chest | "on chest" [broken] | Thomas, 1887: | p. 401. |
| Sleaford (Lincs) | 209 | PF | | small cruciform | shoulders | "on breast" | Thomas, 1887: | p. 403. |
| Snell's Corner (Hants) | S.6 | F | y | ring | n | at neck, "under jaw" | Knocker, 1957: | p. 127, 135, fig. 4 & 10.5. |
| Stanton Harcourt (Oxon) | 2 | C | | disc | l. shoulder | on r. shoulder, pt toward breast bone | | |
| Wakerley (Northants) | 5 | F | | annular | shoulder | left shoulder | Adams, 1983: | p. 18 & fig 1. |
| Wakerley (Northants) | 10 | F | | | | under skull | Adams, 1983 | p. 20 & fig 1. |
| Wakerley (Northants) | 17–18 | F | y | annular brooches | shoulders | centre of thorax | Adams, 1983: | p. 25–26 & fig 2. |
| Wakerley (Northants) | 30 | F | | swastika | chest | right of chest | Adams, 1983: | p. 33 & fig 4. |
| Wakerley (Northants) | 54 | F | | | | on neck | Adams, 1983 | p. 51 & fig. 7. |
| Wakerley (Northants) | 61 | F | | | | associated with neck area | Adams, 1983: | p. 54–55 & fig 8. |
| Wakerley (Northants) | 78 | F | y | swastika | shoulders | right forearm | Adams, 1983: | p. 64–5 & fig 10. |
| Wakerley (Northants) | 82 | F | | annular | shoulders | right chest | Adams, 1983: | p. 69–70 & fig 10. |
| Wallingford (Berks) | 9, 1924 | PF | y | 2 gilt saucer brooches | PNRBE | PNRBE | Leeds, 1938: | p. 95. |
| Wallingford (Berks) | 7, 1937 | PF | y [20] | 2 small long brooches | shoulders | at breast | Leeds, 1938: | p. 97. |
| Wallingford (Berks) | 15 | F | y [21] | applied saucer brooches | on breast | 'lying across breast' | Leeds, 1938: | p. 98–99. |
| Wallingford (Berks) | 15 | | y [22] | applied saucer brooches | on breast | at right pubis | Leeds, 1938: | p. 98–99. |
| Wally Corner, Berinsfield | 5 | F | y | small long | shoulders | right shoulder | Miles, forthcoming. | |
| Wally Corner, Berinsfield | 30 | M | | | | "lying between ribs and left arm" | Miles, forthcoming. | |
| Wally Corner, Berinsfield | 106 | F | y | [23] | [23] | pelvic area | Miles, forthcoming. | |
| Wally Corner, Berinsfield | 134 | F | y | | | near right shoulder | Miles, forthcoming. | |
| Wheatley (Oxon) | 14 | F | y | 2 gilt saucer | breast | "on breast" | Leeds, 1916: | p. 52 & fig 4.5. |
| Wheatley (Oxon) | 28 | PF | | | | "on right side of breast" | Leeds, 1916: | p. 55. |
| Wheatley (Oxon) | 38 | PF | | 2 disc brooches | r&l scapula | "on the breast" | Leeds, 1916: | p. 57. |
| Winkelbury Hill (Wilts) | II | ?M | | | | "on the breast" | Pitt-Rivers, 1889: | p. 266 & 284; fig. 30. |
| Winkelbury Hill (Wilts) | 22 | F | | | | "on the breast" | Pitt-Rivers, 1889: | p. 265 & 285; fig. 18. |

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| Winkelbury Hill (Wilts) | 19 | M | | | | ? | Pitt-Rivers, 1889: | p. 265 & fig. 19. |
| Wingham (Kent) | 4a | PF | y | plated disc brooch | ? | PNRBE | Conyngham, 1844: | p. 551. |
| Winnall (Hants) | 7 | F | | | | at head of grave between skull and end | Meaney & Hawkes, 1970: | p. 11 & fig. 9.7.1. |
| Winnall (Hants) | 7 | F | | | | under chin | Meaney & Hawkes, 1970: | p.11. |
| Winnall (Hants) | 8 | F | | 2 pennanular brooches | {x} | "on left shoulder" | Meaney & Hawkes, 1970: | p.11 & fig. 9.8.1 |
| Winnall (Hants) | 10 | F | | | | disturbed | Meaney & Hawkes, 1970: | p.12 & fig. 9.10.2 |

# Chapter 8

# Some Conclusions, Possible Directions

# &

# Thoughts on Methods of Presentation

## 8.i. Introduction

Each of the earlier chapters reached specific conclusions and it is not the intention of this chapter to repeat these. Chapter 3, for example, proposed among other things a detailed method for typological research; Chapter 4 charted the processes of pin production and discussed how the use of these methods changed over time; and Chapter 5 examined the typo-chronology of pins recovered from Anglo-Saxon sites. This chapter addresses a number of other issues: it will bring together the points about change over time; it will raise some issues about social and economic change in Anglo-Saxon England as seen through pins; it will point to areas where further research might be directed; and it will look at an issue of archaeological epistemology. This latter point is a new one, but it is a natural outgrowth of the work described here. It must be self-evident that to use the typology set forth here the intended user must understand it, and to do this must read it and study it (although it might be possible to work by comparison from the figures back to the text). To become conversant with every typology used within areas of archaeological study is not practical. While some find it critical to examine in detail a typology for many the most important criterion for the success of a typology (after its `correctness') is its `usability'. By using a computer program known as an expert system it is possible to meet this requirement. This seems likely to offer a useful method for the presentation of a typology. Furthermore

in Chapter 3 I examined the important concept of formalising knowledge; an expert system offers a mechanism for doing this.

## 8.ii. Questions and Implications

After surveying the evidence it is difficult to accept that there was continuity between Roman pins and Anglo-Saxon pins in Britain. None of the pins dated by their associated finds or parallels from either fifth or sixth century contexts can be shown to owe any of their form to types known to have been used in the Roman West during the 4th century. In Chapter 6 we noted that a break could be demonstrated - the complete disappearance from the archaeological record in the fifth century of forms common in the 4th century. It would be unsafe to draw any far reaching conclusions from this fact. Indeed the only prudent conclusion is that types common in Britain in the 4th century ceased to be made or used in the fifth century. I argued that the supposed similarity between the middle Saxon pins and the Roman ones reflected the reintroduction of these forms from Southern Europe in the seventh century (see pages 374-9).

The pins of the fifth century and possibly the sixth owed much to the continental types. In chapters 5 and 6 I argued that certain pins found in England may be derived from continental types (e.g. **VIII**) but that most were indigenous. Some types of imports had little impact on Anglo-Saxon forms (e.g. **XXXII** or **XXXIX**). In some forms we can see English types being developed in the last quarter of the fifth century (e.g. **XV**). The forms tended to be simple. Some reflected, as in the case of pins of variants **XV.i.a** & **XV.ii.a**, attempts to make metal pins similar to the bone pig fibula pins. Or others such as the hook-headed (**XVII**) or loop-headed (**XVIII**) pins were made from rod and could hardly be considered complex objects; they were probably produced for their functional purposes only. Though indicative of innovation in form the actual types of pins made were restricted in general to the cold-working of the materials and the production of functional forms; it will be argued

this was mainly scrap metal. In the last quarter of the fifth century or the first quarter of the sixth we see pins fashioned from sheet metal (e.g. **XV.i**) or wrought from rods (e.g. **XV.ii**).

Fisher in `Style and Sociopolitical organization: a preliminary study from Early Saxon England' pointed out that an analysis of 6 cemeteries showed `that the types of dress fasteners which differed significantly from area to area are technologically and stylistically simple' (1988: 143). She suggested that

> annular brooches, swastika brooches and pins may indicate that these dress fasteners emphasized and fostered relationships within local communities while simultaneously differentiating community members from those outside the group. (ibid.)

There may be some general truths to her claims, although the forms of the pins may not in this period have been intended as statements about identity. Instead they may reflect the available materials and techniques. It is possible that some of these varied from area to area. However, the small sample size makes it is difficult to be confident about regional variation, although it seems to be prevalent in the period up to the seventh century. I would propose that regionalism needs to be viewed in a variety of contexts: at the level of the local community on a cemetery by cemetery basis and within regional cemetery groups.

The distribution of pins in the seventh century reflects a temporary end to regional variation and this can be paralleled by the movements of individuals mentioned in the historical sources. In the middle Saxon period we notice a growth in the similarity of types distributed at trading sites such as Ipswich, Southampton and middle Saxon London. But this homogeneity of types only lasted a couple of centuries as I have shown that among the latest types some regionalism is displayed; the *upside-down conical/trapezoid-headed type (LXXV)* and the *loaf-headed type (LXXVII)* are known from a few sites showing a north of England distribution.

Analysis of the evidence for the seventh-century pins shows two dominating themes. The first is that of diversity in the production of composite objects and the second is the beginning of a tradition of producing cast pins shorter than 80 mm. Both these traditions may have originated in Kent. Certainly the concentration of *Kingston disc-headed pins [L]*

is in Kent, with a small number of examples outside. Roughly 20 are known from cemetery and settlement sites in Kent, 2 from the Upper Thames,[1] 2 from the Humber and 6 from Essex and Suffolk. Those outside Kent may have been imported from Kent or they could have been derived from the Kentish series. The pins provide further evidence (as if more were needed) for interaction between Kent and the Upper Thames Valley in the sixth and seventh centuries and for contact between Kent, Essex and Suffolk during the same period and between Kent and Humberside in the seventh and eighth centuries. The evidence for the interaction between Kent, the Upper Thames, Essex and Suffolk comes from the distribution of our Kingston type discoid-headed pins. But it is not this evidence alone that we can call to support such interaction. Other researchers have shown a whole host of other evidence shows similar contact. But if we return for a moment to the *curled-headed type* **XII** it might be possible to argue that the distribution of these pins in the late sixth and early seventh century indicated a continuation of contact between Kent and Essex that had begun at least by the mid-sixth century. The *curled-headed* pins came from sites in Kent, Essex and Northamptonshire. Curiously they did not come from the Upper Thames Valley.

The types of pins in use in England in the late seventh century and in later periods were markedly different from those available in Scandinavia or at other Northern European emporia. A comparison between the types and quantities of pins coming from contexts at Birka, Haithabu, and Ribe and those recovered from Ipswich, Southampton and York makes this claim evident.[2] This divergence between the pins on the continent and in England contrasts with the pottery which is the primary indicator of contact between the various regions. Excavators at London, Ipswich and Southampton have all noted large quantities of imported pottery. None of the pins from middle Saxon contexts appear to have been imported from outside England and as far as I am aware middle Saxon pins are not known

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[1]A large number of bone examples came from Swindon.

[2]Some sites like Medemblik might add further evidence, but as Bestman pointed out we do not have a good understanding of the finds from the site other than pottery (1974: 97).

from the continent. But there has been a concentration of study on foreign material found in England, and while study of English material in Scandinavia has taken place little effort has been put into the study of English material on the continent. There are, as Ypey has pointed out eighth and ninth century English pieces on continental sites (1968). Two copper alloy facet-headed pins were published by Périn and he argued these were seventh-century pins (1985: items 507 & 508). Is it merely an anomaly that the divergence between pin types exists between English and Continental sites or can some explanation be found? For example, if pins were mainly used by women does the difference in the material culture indicate that the fashions of Anglo-Saxon women were different from their counterparts elsewhere in Europe. There is little evidence that can be marshalled to either confirm or deny this hypothesis. Hodges & Moreland have pointed out that during the middle Saxon period England was a `net recipient of ideas from the continent' (1988: 82). One would be surprised if continental fashions did not influence the dress of the Anglo-Saxons. These problems remain unresolved.

There is evidence of three main shifts in production and these changes can be related to changes in the socio-political structure of England. In the earliest phase, pre-seventh century, we noted localized production using a variety of production methods (e.g. casting, cold-working, folding and rolling). In the second phase, late sixth and seventh century, we can identify the importance of composite pins which share a strong Kentish bias with outliers in Wiltshire, East Anglia, the Upper Thames Valley and the Peak District. This gives way to a third, middle Saxon phase, during which cast pins were the main types available. Maybe this change in manufacturing methods reflected a change in the market structure and social organization of Anglo-Saxon England. To determine whether this had occurred we must investigate the process of exchange of commodities. The phases of `production technique prevalence' map well on to the `phases of exchange'.

As a commodity pins needed to be exchanged between both the producer and the eventual wearer. In the exchange of pins as commodities we may see three different stages.

In the initial period pins are produced as a regionally specific commodity owing something of their form to their continental background and available resources. In the second phase, comprising much of the seventh century, pins functioned as status markers and as such were the product of jewellers who were tied to patrons, if only by the patron's control of the supply of scarce raw materials. As Rowlands argued, the ethnographic evidence suggests that in the prehistoric world the patron provided the raw materials and the craftsman the labour (1971). In this situation pins were made from goods obtained as a result of the spoils of war (or raiding), trade or gift exchange. Finished pins represented a transformed use of raw materials. The construction of a pin, like the making of a composite brooch, added value to or rather modified the nature of the material. When the materials re-entered the gift exchange (or possibly the trade) network they did so as a significantly more desirable item. As Charles-Edwards has pointed out, gifts played an important role in Anglo-Saxon society (1978). In the transition to phase 3 exchange, the nature and role of gift exchange in the economy must have been breaking down. In this phase pins seem to have been produced at two kinds of sites: monastic and urban workshops. In the monastic context they were probably made mostly in the monastic workshop as required. The production of surplus pins might have been a way of generating extra wealth. In all three cases value is added to the raw material by the addition of labour.

Pins produced within the urban world would have been subject to exchange in either a monied or a bartered economy. How the mechanism worked is unknown. One difficulty, that has not been investigated here but which needs study, is whether pins had an `established' value. Did they have a standard set of weights which gave the finished objects an agreed worth? The bundle of pins from Ipswich might indicate that this was so (See Fig 7.5). Did the quantity of labour involved in making a pin influence value? For instance, it would seem more difficult to produce a facet-headed pin than to make a spherical-headed pin. Does this mean that the former had greater value than the latter? Does the decorative

pattern tell us about the value and even the weight of the pin? One wonders how pins moved from being gifts or special purchases to being a commonly exchanged commodity.[3]

A craftsman making pins had to keep track of his materials. Presumably he had to be able to value his finished product against both the raw materials he had used and the labour he had expended to create the piece. Obviously he would have wished to exchange his work for the highest return he could obtain on his investment, but he would have to have a minimum return if he were to remain in business and earning a livelihood.

The middle Saxon set of pins indicates that contact between the regional centres was quite extensive. The similarity between the biconical, spherical, faceted, and inverted–pear–headed at types Ipswich, York (esp Fishergate), Canterbury, Southampton, and London cannot be coincidental. It must owe something to similar fashions. This perceived insularity must be balanced against claims of the international character of trade. If pins, like strap–ends, are artefacts that appear as indicators of personal identity in the eighth century, then the middle Saxon towns must be closely linked. It is most remarkable that the pins that come from these middle Saxon sites are known in very small numbers from rural Anglo–Saxon sites. This could reflect excavation, but it might also be a reflection of the level of material culture in the emporia; that is higher concentrations of population using greater quantities of metals than was common across the rest of Anglo–Saxon England. A scenario of this kind would increase the possibility of loss and the contact between different English trading sites. The recent interest in English trade overseas has obscured the fact that a great deal of trade between ports along the English coast must have existed during the middle Saxon period. Certainly the similarity between the pins at Southampton, London, and

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[3]The development and uses of commodities in exchange is a particularly common problem. In the instances of our material the increased popularity of the objects could have played a role. Possibly it was the concentration of population in areas where there were goods to exchange. At some point the increased availability of raw materials made it impossible to increase return on investment with adding value to the material. Of some interest therefore is the find at Ipswich of four copper alloy ball–headed pins bound in a wooden box clasped by iron [Ipswich Archaeological Unit]. The pin was recovered from a pit which produced middle Saxon pottery. We can only speculate about the function of this: Was it a hoard of a woman? Or pins ready for exchange by a craftsman? Or do we need to seek some other explanation?

Ipswich, to name only three sites, must be indicative of regular contact between these centres. Trade between these local ports is most likely to have fostered the exchange of ideas about objects of dress. The microcosm of English trade has been overlooked in attempts to place Anglo-Saxon exchange networks into an international sphere. Further investigation of these networks might prove productive.

This is not to deny the importance of contact outside Anglo-Saxon England. The pins themselves indicate this occurred long before the middle Saxon period. The pair of pins from Bifrons grave 89 could only have come from Eastern Scandinavia. That pins should give evidence of contact in the sixth century with Scandinavia can hardly be surprising or novel. Hawkes in her discussion of bracteates (Hawkes et.al. 1981), Karras in her examination of Frisian jewellery (1985), Welch in his discussion of button brooches (1987) and Hines (1985) and Vierck (1966), all have shown the richness of this interaction. While this contact is important for the Early period, the appearance of a type of pin which James Graham-Campbell has shown to have been East Scandinavian at Meols shows a similar type of contact in a later period. It was Bu'Lock who in 1961 first noted the similarity between the Meols pin (Fig 5.52.f) and a pin from a grave at Birka.

The Viking invasions, settlements, and shifting exchange patterns brought an influx of new pins and motifs from Scandinavia and new contacts with Ireland led to a number of types from there being brought to England (many of the ringed series **LXXXIII** and the Watch-winder type, **LXXXI**). These changes did not lead to a fundamental change in the types of pins in common use. Indeed, these foreign types seem to have been in use alongside the local types. There was some indigenous development of these pins in only two types but their distribution is mainly restricted to areas of Anglo-Scandinavian settlement and only rarely do they intrude outside of this region. These were the types which were widely distributed in the Viking-cultural province. The cuboid-polyhedral-plain-ringed pin has been recovered from sites in Denmark, Norway, Scotland, Northern England, Ireland and the Faeroes (Hansen 1989: 139). This evidence though represents only a small part of the

Scandinavian material that can be found in England, and even fifty years ago the amount of material was formidable as a look at Sheletig's list of material found up to 1940 indicates (40–56).

Among these overseas contacts were links with Dublin. We have pointed to a number of types of pins from English contexts which show Irish influence in both form and occasionally in decoration. Oddly a search of the Irish material does not seem to produce indications that Irish pins were influenced by English forms or English decoration. The vibrant character of Irish ornament, one might argue, excluded the adoption of English style in pins in which ornamental motifs were restricted. That there was no exchange in this area may strike us as slightly odd. Wallace has convincingly argued that the `new Irish towns of Dublin, Limerick, and Waterford were probably styled more on English than any other models' (1986: 207) and there can be little doubt from the historical records that contact between Dublin and ports such as Bristol, Chester and York were frequent and extensive. This contact is clearly evident in the coins recovered from Dublin (ibid. 210–2, & Tables 12.1 & 12.2).[4] What is true for coins is also true for the pottery (evidence of Stamford and Chester wares [ibid. 213]) and Anglo–Saxon disc–brooches, with 30 examples so far recovered all indicate a level of interchange). It is odd that the same was not true of imported pins. Indeed, when I examined the pins from Dublin I did not see any English material. As Wallace has noted there is little evidence of Irish material in England. We have only been able to identify the occasional imported pin whether a Fanning type ring–pin – three crutch–headed pins, one ring of a spiral–ringed pin, a couple of polyhedral headed ringed pins or O'Rahilly type stick–pin – a single example of the watch–winder pin and one bramble–headed pin from York is typical of these.

In this regard we ought to note that excavations of late Saxon sites have produced few pins. From the years of diggings at Winchester, London and even places such as

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[4]When one reflects on the coin evidence from Dublin I am left with a sense of wonder about the dimensions of this contact. The Dublin excavations only produced 25 coins from Alfred to Cnut.

Norwich only a small number of pins (less than a dozen) have been recovered. Numerous explanations can be called upon to explain this data: differential excavation, soil conditions promoting decay, continual maintenance of sites by contemporary users etc, but none of them is satisfactory. Many of these towns have included excavation across a range of types of sites, which have produced a full range of types of dress fasteners especially strap-ends. The most logical explanation for the scarcity of pins is that late Saxon women did not use pins to anything like the extent that their forbearers had done. If we take a look back at the late Saxon manuscripts we see women wearing wimples. These might have been secured with pins, but they need not have been. A similar argument can be made for the caps known from excavations at Lincoln, London and York. So it is conceivable that pins went out of fashion. If so why? Was it because fashion changed or did fashion change because pins were scarce etc.

Having now become familiar with pins I can not help but argue that pins are social documents as much as they are material culture documents. Let me turn for a moment to the Wingham and Wigber Low pins. These, like those from Roundway Down and Cowe Low represent access to scarce resources that can be seen as tied to control of material culture. On the other hand, as I explained in chapter 4, they are the products of artists working perhaps on specific commissions. This control of material by a small segment of society, and control of the means of production, which in this case means the artist, is indicative of a society based around the bonds of loyalty and patronage. The entire concept of the ring-giver as exemplified in the poems of *Beowulf* and *The Wanderer*, to take only two literary pieces, ought as readily to be applied to artists as it can be to warriors. The vast majority of these pins reflect this social structure, but others probably represent different types of social organization. The large groups of folded and rolled pins from late fifth- and early sixth-century contexts primarily from the Upper Thames Valley and Wessex, must tell a different story. These pins were produced from strips of sheet metal. There was no high level of expertise involved in the preparation of the metal for casting in moulds. The aim

was to produce functional objects with recourse to only the simplest methods. Pins of this type are associated with less complex and poorer grave groups – such as burials furnished with disc brooches and toilet sets made of hammered metal sheets. This metal was probably residual. The types themselves seem to be modelled predominately on bone types, such as the pig's fibula pins. Metal probably added to the prestige of the object. Some lack of imagination must have prevailed and this led craftsmen to be constrained not by the material but by their very idea of what a pin should be like, thus constraining what they were able to make. So we probably have in these late fifth or early sixth century evidence of groups of poor settlers who have neither access to wealth nor resources. This simple pin form was distributed widely from Wessex to East Anglia, but production was limited.

Against the backdrop of variation in access to production it is necessary to return to Werner's proposal that after the `abandoning of the provinces' metalworking became `an extremely sporadic and disorganized activity mainly practised by independent and itinerant goldsmiths and bronze casters'. The permanent workshops were, in his view, only at political and religious centres. This claim may actually have a great deal of validity. The evidence for the production of pins is quite limited as we saw in chapter 4. Only in the middle Saxon period does the concentration begin to occur at the major trading and monastic sites.

It ought to be borne in mind that the commonly used pins were in keeping with the other types of jewellery that were in vogue at different times. In the seventh century the pins that were being made reflected other trends: composite jewellery. The same relationship between techniques of metalworking and pins can be seen in the eighth and ninth centuries. Where we have gilt objects we also have gilt pins, but we do not have composite objects and we do not have composite pins.

The middle Saxon sites of Brandon, Canterbury, Flixborough, Ipswich, Southampton, and Whitby have proved rich in the finds of pins. Finds from other less well–known sites are reported to have included pins. These are sites such as Bawsey, Tilbury, `nr Royston',

Coddenham, Newbold and Ferriby. All these sites have also yielded a wealth of other metalwork finds. Such sites are quickly becoming the norm. New evidence continues to emerge to testify to the unprecedented wealth of middle Saxon England. Recent work, indeed ongoing work, at the site of Flixborough (South Humberside) has already led to the recovery of more than 320 pins among a wealth of other material. The excavator thinks this site was in use from about 700 to around 875; the coins end in 874–5 and there are no pottery fabrics later than Tating ware. Sites such as Brandon and Barham and Flixborough are typical of a growing number of sites which are comparable to the trading ports of Southampton and Ipswich. The two preliminary discussions of the excavations at Brandon testify to the wealth of this site (Carr 1985 & Carr, et.al. 1988). It was used mainly during the middle Saxon period and seems, according to Carr, to have gone out of use shortly after the earliest appearance of Thetford ware in the mid–ninth century. The settlement with 21 post–hole buildings was highly organized with enclosure boundaries and three areas of burial. The site appears to have produced a number of commodities and showed areas of craft specialization; the areas of the waterfront were used for dying cloth (Carr 1985: 38). The concentration of pins at the site is remarkable. In 1986 I examined 180 pins from the site including some silver pins of the Witham disc–headed type (**LXXIV**) and a pin with a pig–like head and inset with blue glass eyes [**LXVII**](Carr 1985: 13.5) which indicated highly skilled craft production. The great majority of the pins had the geometric heads and were less than 80 mm in length. Many of these were decorated with ring–and–dot ornament (see for example, ibid. 13.2, 13.3, & 13.4).

While many of these sites producing pins may have been settlements they need not all have been. In some instances the concentrations of pins are indicative of either settlement sites or markets. Two examples which come to mind are Market Weighton in North Humberside and Barham in Suffolk (Newman, forthcoming). Work with metal detectors `near Market Weighton west of South Newbold in the fields north of Mill Farm' has resulted in the recovery of a number of pins. These included by 1986 two medial–

banded–biconical–headed pins, a flattened–facet–headed pin, one rectangular–facet–headed pin decorated with ring–and–dot ornament and a spherical–headed pin with a ring collar. The concentration of these pins is probably indicative of a mid–Saxon site. Further confirmation came in the form of 124 coins belonging to the period 740–867 which surely must indicate that the site was used during much of this period. Similar claims have been put forward for Barham. But here we encounter a difficulty. Trial–trenching on the site did not produce any settlement evidence. This would indicate that the site was intensively used for only short periods of time and not for permanent occupation. The kinds of sites which are commonly used for intense activity but which would leave little permanent evidence are markets. A similar explanation could be provided for other sites along the eastern coast (i.e. Felixstowe). These markets must be indicative of a vast production being exchanged over a long period of time. The sheer quantity of lost coinage is remarkable. The character of these sites has now led us to wonder about the character of the site at Brandon. Could this not have been a market, a wealthy monastic site or was it a monastery at which a regular market took place. Might other monastic sites have been the focus of local markets.

Do these sites cease after 875 ? The coins certainly disappear from the archaeological record. It was interesting to hear Mark Blackburn recently state that: `it might be mistaken to put too much emphasis on the cessation of coin finds when determining the end of sites'. At Brandon, the fact that the coinage and the pottery sequence cease at nearly the same time would appear to give support to the hypothesis that the sites went into decline in the mid–late ninth century. Certainly the location of the site shifted:

> We are confident that we have found the intermediate late Saxon settlement, but it is interesting to note that the finds from this excavation were less spectacular than those from the island, which may indicate a change in the nature of Brandon during this period. (Gill & Caruth, PSIAH, XXXVII[2] [1990]: 158).

So conceivably at this site a change in settlement pattern may have occurred at this time, but while the site shifted and the character of the settlement changed, settlement in the area continued.

It is obvious that the dating of middle and late Saxon pins is problematic. So far I have been unable to provide satisfactorily refined dates for the middle Saxon and late Saxon pins. That is beyond the preliminary hypothesis that pins of sub-groups **LXVIII.ii**, **LXIX.ii**, **LXX.ii**, and **LXXII.ii** are middle Saxon and those of sub-groups **LXVIII.iii**, **LXIX.iii**, **LXX.iii**, and **LXXII.iii** are late Saxon. This imprecision reflects the imprecision involved in dating of contexts at middle and late Saxon sites. But, several cases give me pause to wonder about ascribing an end to some of these rich-sites in the late ninth century. One such case is the find of a spatulate lozenge-headed pin at the site of Newbold. K. Leahy has suggested that this site ceases in the ninth century. However, we have shown above that the spatulate lozenge-headed pins date to the tenth and eleventh centuries. Maybe this pin was at Newbold a stray loss, on the other hand a careful review of the finds of other sites may reveal further anomalies. These might suggest that the site was used considerably beyond the end of the ninth century. Flixborough provides further anomalies. I have noted the existence of a sub-group of Flixborough animal-headed pins that date to the late ninth if not the tenth century. With these few examples, and there may be others, there is certainly evidence to suggest that some of these sites may have continued into later periods even if in a much reduced condition.

This question looks slightly different if we examine the problem of London. Here there is a noticeable difference between the middle Saxon and late Saxon pins as well as the location of settlements. In the area lying along the Thames from the Fleet to the Tyburn pins of classes which we could demonstrate belonged to the middle Saxon period were recovered. These included our facet-headed, ball-headed, hot-air-balloon-headed and biconical-headed groups. These were the groups which we saw widely distributed in Middle Saxon contexts at Southampton, Ipswich, Flixborough, and Whitby, and some similar finds came from the site of Barking Abbey to the east of the City. The area between the Fleet and Tyburn showed a concentration of *sceattas* and lacked any evidence for broad pennies. In contrast at least three globular-headed pins were recovered from within the city (i.e.

Heigham St., King St., & Botolph St). The pin evidence fits well with the arguments put forward by Hobley in his discussion Lundenwic and Lundenburh. Excavation within the area which had been Londinium points to occupation only after the late ninth century. Whereas occupation in the area between the Fleet and Whitehall seems concentrated most heavily in the eighth and ninth centuries (Hobley 1988; Vince 1988: 83); settlement within the area which had encompassed Roman London appears to have been concentrated in the later period. There is little evidence before the end of the tenth century. The sites between the Fleet and Whitehall have produced little settlement evidence after the end of the ninth century. This has led some to suggest an end to settlement in the area. The pins would appear to confirm this shift in settlement pattern.

The availability of the raw materials must certainly have had some influence on the types of pins made. The late fifth and early sixth century group of pins produced from metal rolled from sheet or wrought from rod [**Type XV**] raises interesting questions about the nature of workshops and the sources of raw materials. These pins were probably produced from scrap. They were made from sheet metal and this could easily have been collected from Roman sites, such as Silchester, Dorchester etc. There is little to support or question the suggestion that the majority of these pins were made from residual Roman metal sources. Callmer argued that much of the metal resources at Århus came, until the eighth century, from Roman bronze scrap (Callmer 1984: 71–3). This was, as he pointed out, commonly the case in Northern Europe, as the reuse of Roman scrap at Helgö might also indicate (Holmqvist & Arrhenius 1964: 64). Certainly there are silver hoards in northern Europe; the Hostenthrop hoard is one such find (Voss 1954). But we need not look only to the continent for these early hoards. The hoard at Traprain Law (Curle 1923) is one of many Insular examples and hoarding was certainly not a practice which ended with the early Saxon period. Sadly we have no Saxon hoards. Graham–Campbell has noted numerous late hoards from Scotland. The extent of such metal reuse remains undetermined. Leigh et.al. argued that residual Roman silver and copper alloy formed the backbone of Kentish resources in at least

the sixth century (1984: 39). There is little reason to suppose better sources of copper alloy elsewhere existed in Britain. White (1988) noted the presence of numerous pieces of Roman material in Anglo–Saxon graves right into the seventh century. Finds of copper alloy must have been more common than usually imagined if we reckon that large objects such as statues and building fixtures were remelted as necessary. The Romans had demonstrated their awareness of the potential value of scrap. When the Roman army abandoned the unfinished legionary fortress at Inchtuthil in the first century they buried 10 tons of iron composed of c. 875,428 nails (Pitts & St Joseph 1985: 112 & 289). Roman towns must have been rich sources of metal and not have been merely a source of brick, as the builders of the first churches on the site of St Augustine's Abbey appear to have considered Canterbury. The Roman scrap metal in the rubbish in the huts at West Stow provides tangible evidence that the Anglo–Saxons were reusers of secondhand metal. There may have been a vigorous trade in scrap and it need not be Roman scrap alone, it could also have included Germanic metalwork as well. Dinas Powys, for example, has produced Anglo–Saxon scrap metal as well as glass (Alcock 1963: 104–5). How long scrap continued to be the primary source of copper alloy is an unanswered question.

A major problem with typological method is that it is intended to create individual types that allow us to simply group artefacts together. The concentration of interest therefore is on the homogeneity of culture. The efforts of the typologist often resist the description of the presence of individuality in the sample. Individuality is as strong a force in the understanding of the past as homogeneity. Indeed homogeneity is a natural phenomena that has been the focus of numerous studies, but variation and uniqueness are less well understood. Uniqueness seems to be the result of artistic and creative patronage. This might explain the diversity of the seventh century as opposed to the conservative character of the pins in the middle Saxon period. Alternatively one might argue that individuality owes much to the need for status markers. Christlein has argued that one–off

items reflect significant status. This is a suggestion that we think is particularly true as an explanation of the unique pins that come from seventh century contexts.

## 8.iii. Future Directions

There appears to be a great deal of potential for expanding on this area of research and some problem areas have already been noted. Some further work could be directed into the particular analysis of pin groups to develop either a better understanding of their distribution, chronology or even their production. Future investigations of pins might usefully be directed in the following problem areas:

a. A more detailed analysis of the middle Saxon contexts producing pins will probably lead to a refinement of the chronology of middle Saxon pins. For this we must await the publication of the pottery, small finds and contextual evidence from sites such as Brandon, Ipswich, Southampton and Fishergate/Coppergate (York). This data can then be inserted into the pins database (the computer-based version of Appendix 1) and be used to examine the relationships in date between different contexts producing similar types of pins across Anglo-Saxon England.

b. Much of the middle Saxon material comes from emporia and stray or small finds from Eastern Britain (especially Norfolk, Suffolk and Lincolnshire). More information is needed about central and southern Britain particularly the areas which would have included central and western Mercia and Wessex; here pins current elsewhere during the middle and late Saxon periods appear to be absent. This may well be an anomaly caused by modern or natural factors and not indicative of a lack of pin use by people living in these areas during the middle Saxon period. As Martin, et.al. point out:

In counties where a good repoire exists between the metal detector user and the museums it may be possible to build up a good picture of the character and distribution of middle Saxon and late Saxon sites...(*SIAH*, XXXVII(1)[1989]: 61)

In 1989, for instance, metal detector work on a site a Shalbourne led to the recovery of a number of middle Saxon pins from a site producing Merovingian tremisis ('Wiltshire Archaeological Register for 1989', *WAM*, 84(1991): 146–151). Is this site unique or were pins common at similar sites? Although the better reporting of metal detector finds would provide an opportunity to understand not only site but also artefact distribution and use patterns, the information lost about the context of recovery will be regretted in the long–term. This is particular true in the area of stratigraphic dating and dating by means of associated finds. Certainly if metal detector users can not be discouraged from the practice the material should be noted with care.

c. The closeness in the dimensions of the middle Saxon material suggests that information about the weights or/and volume of these pins might tell us something about standards governing production. It might also help us to understand the `value or worth' these objects had. A comparison between the weights of silver pins and the weights of *sceattas* might be instructive in this regard. This would give quite different information than a demonstration of the claim that copper alloy pins across most of Anglo–Saxon England were made to nearly similar weights or that pins of the different types had similar weights. Among the questions opened by an answer to the latter problem include the factors governing standardization both on a regional level and across regions.

d. Both monastic and urban sites of the middle Saxon period are rich archaeological sources of pins. Does this mean that the fashions were similar in both settings? Or were pins put to different uses?

e. Publication of the finds from the sites of Flixborough and Brandon are essential in developing our understanding of the material of the middle Saxon period.

f. It is worth asking questions about the gender basis of pin production. Were pins made solely by men? There is little reason to assume that women helped to make pins. In ethnographic examples we rarely see female metalworkers. There is, however, historical evidence from the eighteenth and nineteenth century that women, actually young girls, were involved in making wound-wire-headed pins. Most of their effort was concentrated on the placing of the heads on the pins.

g. The decline in the number of pins from late Saxon contexts needs to be better explained. Of particular interest is the question of whether pins went out of common use because fashion changed or whether fashion changed because pins became scarce as a result of a change in the availability of copper alloy.

h. A much more detailed understanding of the end of middle Saxon sites is needed. The role that pins may play in establishing this dating has not yet been determined.

i. More detailed investigation of local exchange within Anglo-Saxon England appears might give us a better understanding of the homogeneity of pin forms in the middle Saxon period.

## 8.iv. The Presentation of Knowledge about Artefacts

The contribution of this thesis is in the area of typology and chronology. I have established the typological groups and sub-groups of Anglo-Saxon pins and in so doing have provided a framework against which further research might be directed. The typology could be further refined by integrating the details of new finds.

In this concluding section I would like to outline a more general problem of archaeology: the problem of the dissemination of archaeological information and the rigour with which it is presented. This is a difficulty confronted not just in my study of pins but common to most studies of artefact groups. In this area I have experimented with the use of *expert systems* techniques as a method for conveying archaeological information. I will outline a number of reasons for turning to this technological solution to the problem.

Before discussing expert systems I wish to call attention to the alternative computer-based method: the image. Computers are particularly good at storing and manipulating images, although the memory capabilities of the machines need to be quite large. The use of images does not compensate for the lack of explanatory mechanisms. While an image might provide a fantastic tool for manipulating and presenting data, it does not convey data. The display of a pin that has a particular set of features does not offer an identification of these features. It does not call the viewer's attention to the presence of features in an explicit way nor explain their importance. The viewer must undertake the task of abstracting from the displayed information the significant features. The ability to walk away and identify a pin needs some natural language descriptions of the pins to provide the necessary mechanisms. But natural language descriptions are notoriously variable in quality and form as different researchers use a great variety of terms and no standard nomenclature. Indeed it is quite often the case that a description of material culture given in one volume is different from that given in another. One author provides detailed descriptions of artefacts while another forces you to rely on the images which are incorporated in the text to see the categories of the material. I wish to propose a way out of this imprecision. It is quite simply a standard artefact description language. Such a language used in conjunction with the methods of expert systems would provide: (1) a tool to overcome the lacking rigor in the description of artefacts; (2) a technique for disseminating information. In the long run it will be much simpler to distribute information by diskette than to distribute it by book. The requirements for the definition of information imposed by the computer are much more

constrictive than those required by a book. It also makes knowledge testable. It has long been a major complaint among archaeologists that information in their field of study is not easily tested. Expert systems provide the facilities to both convey and test information. The final point of the thesis is to explain how this is done and by using this case study to demonstrate the efficacy of this approach. In so doing I will demonstrate the validity of the groups defined in chapter 5. Since the aim here is not to devolve this chapter into the technical aspects of the problem I shall approach this issue in the following manner. The sub-section below will explain what an expert system is, how it works, and how I went about defining this one. In Appendix 2 there is an output of the prototype of the **Anglo-Saxon Pin Identification Assistant** system, and some basic details of the computer software required to develop the system. Running this system on an IBM PC I have preformed several identification sessions, recorded them and printed them out. These sessions can be seen at the end of the appendix. They are the full output of the identification of a pin using this computer program. As such they represent the interaction between the user and the **Anglo-Saxon Pin Identification Assistant**.

This is not a learning system and I make no claims to propose it as such, as it is not able to increase its knowledge about unknown types. This is not an attempt to make a contribution to the field of artificial intelligence, but rather to make a contribution archaeological epistemology. The operational theory here is quite simple. It is that the rigorous definition required by computer programs makes sense in non-computer archaeology. Such definitions combined with the critical thinking in an archaeological sense (i.e. use of ethnographic comparison, historical data, anthropological information, avoiding ethnocentrism, critical analysis of the archaeological text) gives archaeology the credentials of a science. Although it does not cost it the honour of being an art. Scientists have found the fine barrier between science and literature; one need only consider Hawking to see how this is best done. Jean-Claude Gardin has lobbied long and hard for us to see this. He can hardly be wrong. But to reach the stage where archaeology can be literature it must first be

science; that is it must first reach the rigours of description and interpretation which provide repeatability and testability to its information.

Expert systems are computer programs that use a search strategy (usually referred to as an inference engine) and a `domain specific knowledge base' (a collection of structured concepts and information) to solve problems within their domain of expertise. A narrow definition would indicate that they aim to replicate the levels of performance of an expert attempting to complete the same task. The arrangement of the knowledge base as an entity separate but not entirely independent of the inference engine and end-user interface mirrors the similar construction of databases. Expert system shells and toolsets offer more functionality than just an inference engine. Hereafter they will be referred to as Knowledge Based Management Systems - KBMSs. Like databases which manage data, KBMSs perform the same tasks but for knowledge. The difficulty is that unlike Database Management System (DBMSs) which adhere to standard conceptual paradigms, KBMSs do not. Moreover, where there are development paradigms in the world of DBMSs there are none in the KBMS environment which are adequate. Gardin, in France, and Doran, in England, have for more than two decades sung the praises of expert systems. They have developed domain-specific-stand-alone (non-integrated) applications. One of the best known applications is SOLCEM, Jim Doran's system for examining the evidence from a small cemetery excavation and producing a comprehensive interpretation (1977:442-451). This system, which the author lamented had `too little actual knowledge of cemeteries' (ibid. 444), did demonstrate that expert systems were practical and could offer numerous benefits to archaeologists. Yet, at the same time it clearly indicated that expert system development was a complex process, if the final goal was to deliver a powerful robust system. Likewise Gardin, the leading proponent of the logicist approach to the organization, investigation and presentation of archaeological knowledge (e.g. Gardin 1980; Gallay 1989) has developed similar systems. He has further argued that the rigorous process of mapping archaeological

knowledge developed by the logicists provides a useful method in the struggle to design expert system representations (Gardin 1987; Gallay 1989).

We must remember that there are others who have cautioned us about the dangers of using expert systems. Some of the criticisms raised by Baker (1986a; 1986b; 1988) and Huggett (1985) are indeed worth bearing in mind. But as Strutt (1987) argued, these should be seen as guiding flashers or warning lights and not as stop signals. In this he is certainly correct. We can only assume that this is how Huggett and Baker (1985) intended their comments. Even, Jim Doran has some worries. But, at least one of his concerns is likely to be justifiably real. He alluded to the danger that expert systems might become the new hammer which archaeologists, like children, use to pound away on anything and everything in sight (1988: 240). This could be a problem, but it is unlikely to be. At his most pessimistic he is still optimistic: `...I am convinced that artificial intelligence concepts can and will make major contributions to the achievement of archaeological goals' (1988: 240). In this he his certainly correct.

The work of Gardin and Doran has acquired a following, albeit small. Lagrange and Renaud (1984; 1985), Francfort (1987), Guenoche and Hesnard (1983) and Vitali and Lagrange (1988) all have described systems for addressing archaeological problems. These range from systems to support the identification of amphora (Guenoche & Hesnard 1983) to the simulation of iconographical analysis of Seldjuk sculpture (Lagrange & Renaud 1984). These examples are by and large French, but in England some systems have been built (see, for instance, Patel & Strutt 1988). The focus of more recent research has been in the areas of generalised archaeological systems.

There will no doubt be some archaeologists who will consider the decision to focus the definition of archaeological knowledge in the expert system at the level of classification to be too elementary. Archaeologists, such as Gardin, Lagrange, and Francfort believe that in the hierarchy of archaeological activity the level which should be consigned to an expert system is the theory at the top. Fundamentally this is an interesting idea, but there are

practical reasons that make this at present impossible. While the fundamental goal of archaeology must be the interpretation, presentation and dissemination of archaeological information, this is a reflection of a great deal of the ground work with the material culture. The fashions and fads of high-level interpretation have a much greater propensity to change than those on the level of artefact identification, description and interpretation. Also high-level interpretation is predicated on prevailing social concerns. Classification is a basic archaeological activity. It is easy to criticize it, but, as I quickly discovered, not so easy to do. To remove classification from the tool-set of the archaeologist would be to remove the laboratory from the scientist and only leave them with theory and interpretation. The hard slog of classification is one of the foundations of archaeology and it will know doubt remain so. The method of classification provides a vehicle for capturing and conveying this information. The use of expert systems provides a mechanism to improve the communication between archaeologists. It also improves the passage of information from the classifiers to the theory makers and the social reconstructor. The aim of these methods is to take what is otherwise difficult to use information and present it in a usable form.

Indeed systems for assisting in classification have been mistakenly attacked. Baker referred to them as `trifling examples of the breed' (1986: 16) and more recently Patel & Strutt lamented `the few systems that do exist are mostly confined to simple classificatory tasks' (1988:2). Criticisms like these lack a solid foundation. Classification is at times simple and at other times complex. Identification of artefacts and ecofacts is of paramount importance in archaeology. This activity underlies the completion of many other tasks. At all times it is time consuming and can only be done by an expert. The critics have chosen the wrong measure of what is successful and valuable. It is a proven fact in commercial sectors that having delivered a system which automates a time consuming task it is itself valuable. The same is true of a mundane task. The case for expert systems has not been crippled by systems that fail to perform well, but by overly ambitious development efforts which have failed to deliver applications that perform at all. What continues to astonish me

is that the greatest critics of classification systems have continued to fail to deliver expert systems of any kind that work. Classification systems are deliverable and their use can enhance the presentation of typological knowledge.

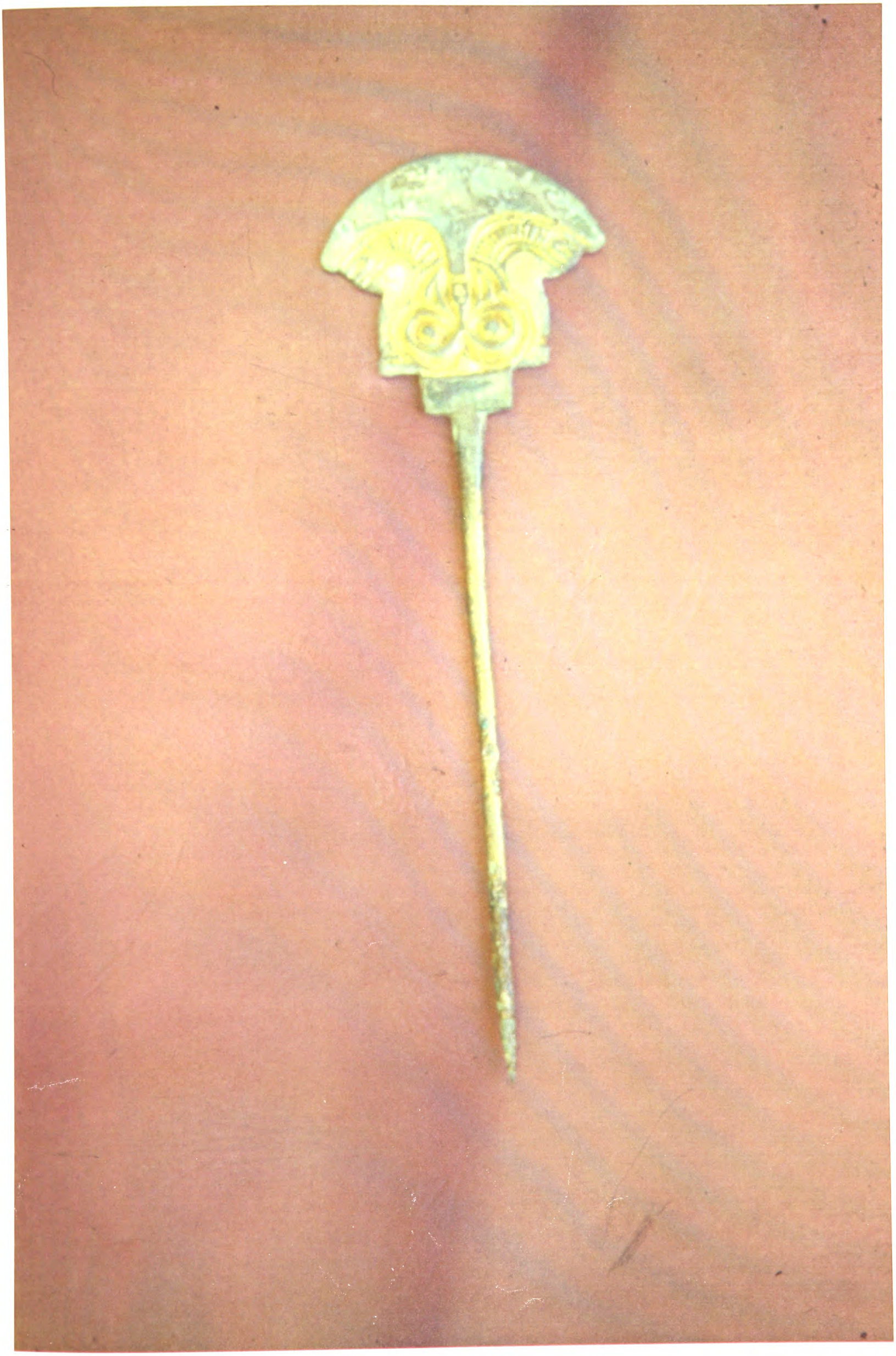
In the end I can note a final use for the expert system it is that of a training vehicle. To understand the prevailing views on saucer brooches is no easy task, but if each interpreter of saucer brooches had provided an expert system it would have been very easy to test each theory against the prevailing material and understand the differences between them. In so doing the archaeologist makes clear his/her prevailing biases and understanding of the material. The aim of the expert system is not to remove creativity and originality of interpretation but to provide a vehicle for making information more accessible. This returns to the point I made at the beginning of the chapter: this thesis is about pins, but in the end it is about the ideas we hold about pins and how we convey them. Before I undertook this study the details about pins were contained in hundreds of articles the titles of which populate the bibliography of this thesis (and probably in still more that do not) and in the recovered material culture itself which is distributed across numerous museums and archaeological units. Now much of the information about Anglo–Saxon pins is contained within the pages of this study. As such it can be argued that it is cumbersome to use because you must read the document and have it to hand. A solution to this is to provide the means of using the information in a software program. While at present it would not be sufficient for us to supply our knowledge only as a computer program, such a presentation makes a useful supplement to a very conventional presentation. In this case I have included a prototype of an **Anglo–Saxon Pin Identification Assistant** (Appendix 2). The sensibility of remoulding the old to meet new needs is not a modern idea. Was it not Gregory the Great who advised his missionary Augustine not to tear down the heathen temples he found in England but to convert them to the work of the Church? So if we are to make use of new methods we must see them as a natural outgrowth of what went before and not as a rejection of the past.

# Bibliography,

# Catalogue

# &

# Expert System



Colour Plate IV

# Bibliography


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# APPENDIX 1

# A HANDLIST OF PINS FROM ANGLO-SAXON CONTEXTS

In the course of completing study I have developed a computer-based database of Anglo-Saxon pins. The material for this appendix has been selected from this database.

***Organic-headed type (I)***

Group: I; Site: Winchester (Brook Street), Hants; Museum or Unit: Historic Resource Centre, Accession or Small Find Number: 7188 (1429); Head Form: organic-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 23, Context: *; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 42 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: *Final phase I, Reference: Biddle pers comm; Biddle 1990: 555[item 1429]; Date: mid-7th - 8th.

***Glass-headed type (II)***

Group: II; Site: Winchester (Cathedral Green), Hants; Museum or Unit: Winchester Historic Resource Centre, Accession or Small Find Number: 2901; Head Form: glass head, green, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Stratigraphic evidence suggesting pre-1093, Reference: Biddle pers comm; Date: 11th c.

Group: II; Site: Chessell Down, IOW; Museum or Unit: BM M&LA, Accession or Small Find Number: 67,7-29,134; Head Form: glass head, green (mushroom), Collar Form: none, Shaft Section at Level 1: round; Grave Number: 34; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 30 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hillier 1856: 63; Arnold 1982: 24-5 & fig 8; White 1988; Probably Roman.

Group: II; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,706; Head Form: glass head, light green, Collar Form: none, Shaft Form: undetermined, Shaft Section at Level 1: undetermined, Shaft Section at Level 2: undetermined; Grave Number: 157; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: constructed; Length: 44 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: beads, silver slip-knot rings, purse mount, and pottery bottle; Reference: Evison 1987: 250-1 & fig 61.157.3. (at neck); Possibly Anglo-Saxon.

Group: II; Site: Flaxengate, Lincs; Museum or Unit: Lincolnshire Archaeological Trust, Accession or Small Find Number: Fe73 Ae197; Head Form: glass head, green (biconical), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm, Head Diameter/Width: 8

mm; Head Decoration: none, Shaft Decoration: none; Reference: Mann pers comm; Date: 1160–80 c; Probably from a disturbed Roman context.

Group: II; Site: Flixborough, Humb; Museum or Unit: Humberside Archaeological Unit, Accession or Small Find Number: 5123; Head Form: spherical green-glass head, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3758; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: constructed; Head Decoration: none, Shaft Decoration: none; Notes: Green-glass head fixed to iron shaft, Reference: Whitwell & Leahy pers comm.

Group: II; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 4801 1436; Head Form: glass bead, Shaft Form: tapering shaft, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: cast; Length: 35+23 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: Frankish blackware, Reference: Wade & Hatton pers comm; Date: post-700.

### *Type 'Muids' (III)*

Group: III; Site: Gilton Ash, Kent; Museum or Unit: The Royal Museum, Canterbury, Accession or Small Find Number: RM2714; Head Form: biconical, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised & filed, gilt; Length: 134 mm, Head Diameter/Width: 20 mm, Shaft Diameter at Position 1: 5 mm, Shaft Diameter at Position 2: 5 mm; Head Decoration: foliate ornament, Decoration Application Method: incised, Shaft Decoration: foliate ornament, Decoration Application Method: incised; Reference: Smith 1852: 164 & Pl 37.3; Van Es 1967: fig 3, Bööhme 1986; Date: first half of 5th century.

### *Faceted-heads with shafts longer than 90 mm type (IV)*

Group: IV, Sub-group: i; Site: Bifrons, Kent; Museum or Unit: Maidstone Museum, Accession or Small Find Number: KAS 619; Head Form: facet-headed knob, Collar Form: multiple moulded, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 15; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 132 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 2.25 mm, Shaft Diameter at Position 3: 2.0 mm; Head Decoration: dot, Shaft Decoration: none; Notes or Associated Finds: 35 beads, 3 iron rings, knife, 2 cruciform brooches etc, Reference: Godfrey-Faussett 1880: 305.

Group: IV, Sub-group: i; Site: Bifrons, Kent; Museum or Unit: Maidstone Museum, Accession or Small Find Number: KAS 618; Head Form: facet-headed knob, Collar Form: multiple moulded, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 5; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 150 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 2.25 mm, Shaft Diameter at Position 3: 2.0 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: button brooches, girdle hangers and knife, Reference: Godfrey-Faussett 1880: 303 & fig.

Group: IV, Sub-group: i; Site: Bifrons, Kent; Museum or Unit: Maidstone Museum, Accession or Small Find Number: KAS--Game Keeper; Head Form: facet-headed knob, Collar Form: multiple moulded, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: chance; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 132

mm, Head Diameter/Width: 4x4 mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 3: 2.0 mm; Head Decoration: none, Shaft Decoration: none.

Group: IV, Sub-group: i; Site: Blacknall Field, Pewsey, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 57; Head Form: cuboid facet-headed, Collar Form: multiple collar*, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 57; Degree of Completeness: point broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 125 mm; Head Decoration: cross lines, Decoration Application Method: incised, Shaft Decoration: none; Notes: *made from 8 incised rings, Reference: Annable pers comm.

Group: IV, Sub-group: i; Site: Chatham Lines, Kent; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: Douglas Col; Head Form: cuboid facet-headed, Collar Form: ring & facet collars, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: barrow; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 146 mm, Head Diameter/Width: 3x4 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 3.5 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: iron knife, amber beads, buckle and container; Reference: Douglas 1793: 74 & Pl XVIII [14].

Group: IV, Sub-group: i; Site: Droxford, Wilts; Museum or Unit: BM M&LA, Accession or Small Find Number: 1902,7-22,35; Head Form: facet-head, Collar Form: 5 ridges in collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 113 mm, Head Diameter/Width: 3x3 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none; Notes: This pin almost matches the criteria of sub-group ii, Reference: Aldsworth 1978: fig 31.35.

Group: IV, Sub-group: i; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1135 '70; Head Form: facet-headed, Collar Form: multiple collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 122 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm; Head Decoration: none, Shaft Decoration: none.

Group: IV, Sub-group: i; Site: Finglesham, Kent; Accession or Small Find Number: with excavator; Head Form: facet-headed, Collar Form: barrel & ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 182; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 140 mm, Head Diameter/Width: 5x3 mm, Head Thickness: x3 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 2.25 mm; Head Decoration: none, Shaft Decoration: none; Notes: The shaft of the pin appears slotted into the pin-head. The pin was associated with a Type LI pin and a necklace. Reference: Hawkes pers comm.

Group: IV, Sub-group: i; Site: Howletts, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1936,5-11,21; Head Form: facet-headed, Collar Form: ridged ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 91+53 mm; Head Decoration: none, Shaft Decoration: none.

Group: IV, Sub-group: i; Site: Marlowe I, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 958; Head Form: facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 455; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 125 mm, Head Diameter/Width: 4x6 mm, Head Thickness: x4 mm; Head Decoration: dot ornament, Decoration Application Method: punched, Shaft Decoration: none; Reference: Garrard pers comm.

Group: IV, Sub-group: i; Site: Sarre, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 93,6-1,223; Head Form: faceted, Collar Form: 27 mm of multiple, Shaft Form: tapering, Shaft Section at

Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): evident; Length: 133 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: stepped collars, Decoration Application Method: incised; Notes: Collar zone composed of barrel and stepped mouldings.

Group: IV, Sub-group: ii; Site: Bekesbourne, Kent; Museum or Unit: The Royal Museum, Canterbury, Accession or Small Find Number: 7531; Head Form: elongated facet-headed, Collar Form: multiple collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 16; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 129 mm, Head Diameter/Width: 4x5 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none; Notes: Collar consists of multiple incised lines, Associated Finds Included: Two pins, amber beads, two cruciform brooches, & annular brooch.

Group: IV, Sub-group: ii; Site: Guildown (Guilford), Surrey; Head Form: elongated facet-headed, Collar Form: five bands, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 206; Type of Material: copper alloy, Main Manufacturing Process: ?*, Secondary Work (if noted): ?; Length: 90.5 mm; Head Decoration: ring, Decoration Application Method: punched on each face, Shaft Decoration: none; Associated Finds: beads, zoomorphic ring, 2 small square headed brooches, Reference: Lowther 1931: 23 & Pl XI.e. *[Known to me only from publication].

Group: IV, Sub-group: ii; Site: Highdown, Sussex; Museum or Unit: Worthing Museum, Accession or Small Find Number: 3471; Head Form: facet-headed rectangular, Collar Form: incised rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 129 mm, Head Diameter/Width: 4x7 mm, Shaft Diameter at Position 1: 2.5 mm, Shaft Diameter at Position 2: 2.5 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Notes: extremely worn head, close parallel to Mucking, Reference: Welch 1983 (vol ii): fig 116.e.

Group: IV, Sub-group: ii; Site: Mucking, Essex; Museum or Unit: Thurrock Museum (?), Accession or Small Find Number: unknown; Head Form: rectangular facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: GH154; Degree of Completeness: partial, Type of Material: iron; Length: 137 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hamerow pers comm.

Group: IV, Sub-group: ii; Site: Wakerley, Northants; Head Form: rectangular facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 78; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 124 mm, Head Width by Length: 5x10 mm, Head Thickness: x5 mm, Shaft Diameter at Position 1: 2.5 mm, Shaft Diameter at Position 2: 2.5 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Notes or Associated Finds Included: beads and wire ring. Adams measures the pin at 122 mm, Reference: Adams 1983: 65 & fig 64.3. [Have not seen.]

### *Biconical-headed with a head diameter greater than 10 mm Type (V)*

Group: V; Site: Alfriston, Sussex; Museum or Unit: Lewes; Head Form: biconical knob, Collar Form: bands below head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 29; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast & gilt; Length: 134 mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: 'X' across knob, Decoration Application Method: incised, Shaft Decoration: linear ornament, Decoration Application Method:

incised; Associated Finds Included: pair of ansate brooches, button brooch, beads and tang of knife (?), Reference: Welch 1983 (vol ii): 356 & fig 13.a; Date: late 5th/6th c.

Group: V; Site: Alton, Hants; Accession or Small Find Number:* ; Head Form: biconical-headed, Collar Form: barrel & ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 35; Degree of Completeness: complete?, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): pin may have been repointed; Length: 99 mm, Head Diameter/Width: 12 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 2: 3 mm; Head Decoration: dots, Decoration Application Method: punched, Shaft Decoration: none; Associated Finds Included: 2 gilt button brooches etc, Reference: Evison 1988: 12 & fig 32.35.4. [Publication only].

Group: V; Site: Brighthampton, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1966.50; Head Form: biconical head, Collar Form: multiple rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 18; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): perhaps repointed ?; Length: 79 mm, Head Diameter/Width: 13 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: triplets of lines, Decoration Application Method: incised, Shaft Decoration: multiple rings, Decoration Application Method: incised into shaft; Notes: The triplets of lines radiate from the top to the carination, Reference: Akerman 1860a: 85.

Group: V; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 812; Head Form: biconical, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1125/2; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised; Length: 59+29 mm, Head Diameter/Width: 12 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 3.5 mm, Shaft Diameter at Position 3: 2.5 mm; Head Decoration: linear ornament, Decoration Application Method: incised, Shaft Decoration: linear, Decoration Application Method: incised; Associated Finds Included: 2 zoomorphic saucer brooches, curved pin, beads and knife, Reference: Miles pers comm.

### *Chessell Down mushroom-headed type (VI)*

Group: VI; Site: Chessell Down, IOW; Museum or Unit: BM M&LA, Accession or Small Find Number: 67,7-29,133; Head Form: Button or mushroom headed, Collar Form: 11 incised rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 81; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 147* mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: none, Shaft Decoration: none; Notes: *two sections (104 + 43), Reference: Hillier 1856: 35 & fig 48.

### *Multiple knob-headed type (VII)*

Group: VII, Sub-group: ?; Site: Alfriston, Sussex; Museum or Unit: Lewes; Head Form: multiple knob, Collar Form: bands below head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 65; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast & gilt; Length: 178 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: across knob, Decoration Application Method: incised, Shaft Decoration: linear ornament, Decoration Application

Method: incised; Associated Finds Included: saucer brooches, beads, etc., Reference: Welch 1983 (vol ii): 368 & fig 30.b.

Group: VII, Sub-group: i; Site: Alfriston, Sussex; Museum or Unit: Lewes; Head Form: multiple knobs (biconical), Collar Form: ring mouldings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 62; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast & gilt; Length: 140 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 2.5 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Position 3: 2.5 mm; Head Decoration: 'X' across knob, Decoration Application Method: incised, Shaft Decoration: linear ornament, Decoration Application Method: incised; Associated Finds Included: pair of saucer brooches, 5 button brooches, beads, spoon, Reference: Welch 1983 (vol ii): 367 & fig 29.a.

Group: VII, Sub-group: i; Site: Highdown, Sussex; Museum or Unit: Worthing Museum, Accession or Small Find Number: 3466; Head Form: multiple knob, Collar Form: rings below head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast & gilt; Length: 178 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 2.5 mm; Head Decoration: across knob, Decoration Application Method: incised, Shaft Decoration: linear ornament, Decoration Application Method: incised; Reference: Welch 1983 (vol ii): fig 116.c.

Group: VII, Sub-group: ii; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum, Accession or Small Find Number: none; Head Form: multiple cuboid knobs, Collar Form: ring collars, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 79; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 159 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 2: 3.5 mm; Head Decoration: none, Shaft Decoration: none; Notes: polyhedral knob terminal with small similar knob below, Reference: Humphreys, et. al. 1922-3: 114 & fig I in plate XVI.

Group: VII, Sub-group: iii; Site: Barrington A, Cambs; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1909.256g; Head Form: multiple knobbed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round; Grave Number: unknown; Degree of Completeness: repointed, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised lines; Length: 64 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Notes: biconical knob 10 mm thick, faceted-knob 7.5 mm wide.

Group: VII, Sub-group: iii; Site: Blacknall Field, Pewsey, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 104; Head Form: multiple knob, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 104; Degree of Completeness: point lost, Type of Material: iron; Length: 111 mm, Head Diameter/Width: 11 mm; Head Decoration: lines & dots, Decoration Application Method: incised & punched, Shaft Decoration: none; Associated Finds Included: 2 Saucer brooches, Notes: Iron pin with a silver collar and a copper alloy head.

### *Spangle-headed type (VIII)*

Group: VIII; Site: Carlton Scroop, Lincs; Museum or Unit: ?, Accession or Small Find Number: none; Head Form: spangle-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none; Reference: *Arch Jour* 1934: 147.

Group: VIII; Site: Nassington, Northants; Museum or Unit: Peterborough Museum; Head Form: spangle-headed, faceted-knob, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 15; Degree of Completeness: complete, Type of Material:

copper alloy, Main Manufacturing Process: cast; Length: 113 mm; Head Decoration: none, Shaft Decoration: ?; Associated Finds Included: two swastika brooches & wrist clasps, Reference: Leeds & Atkinson 1944: 106.

Group: VIII, Sub-group: ?; Site: Ozingell, Kent; Museum or Unit: excavator; Head Form: ring or spangle-headed, Collar Form: (see below), Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Grave Number: 174; Degree of Completeness: 2 fragments, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65+61 mm; Head Decoration: none, Shaft Decoration: linear, Decoration Application Method: incised; Notes: double ring collar above barrel zone above double ring.

Group: VIII, Sub-group: ?; Site: West Heslerton, E.Yorks; Museum or Unit: Finds with excavator, Accession or Small Find Number: WH81 2F9; Head Form: spangle (plate above knob), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 6A; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): worked - file marks on head; Length: 54+86 mm, Head Diameter/Width: 6 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 1 mm; Head Decoration: dots, Decoration Application Method: punched, Shaft Decoration: none; Attachment: plate (6 mm x 1 mm); Notes: Flat plate with hole above a faceted knob, Reference: Powlesland pers comm.

Group: VIII, Sub-group: ?; Site: Great Wigston, Leics; Museum or Unit: location unknown; Head Form: spangle-headed, Collar Form: ring & barrel, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none apparent, Shaft Decoration: none; Attachment: superior plate; Reference: Nichols 1810: 377 & Pl LV.16; Smith 1907: fig on 235 [item 14].

Group: VIII, Sub-group: i; Site: Empingham II, Leics; Museum or Unit: Excavator retains privately-not seen*; Head Form: spangle headed - triangular, Collar Form: bulbous knob, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 85b; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): evident; Length: 128 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2.5 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Attachment: ring; Notes: Flat triangular sheet attached by ring to triangular head, Associated Finds: present. Reference: Clough, Dornier & Rutland 1975: 79-80 & fig 7d. *Although many finds from the site are in the Jewry Wall Museum, this pin and numerous of the other finds are still held by the excavator.

Group: VIII, Sub-group: i; Site: Kempston, Beds; Museum or Unit: BM M&LA, Accession or Small Find Number: 91,6-24,144; Head Form: spangle-headed, biconical, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised decoration; Length: 121 mm, Head Diameter/Width: 11 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm; Head Decoration: none, Shaft Decoration: threaded collar, Decoration Application Method: incised; Kind of Wire Ring: cast ring; Notes: triangular plate: 20 mm across, 9 mm long, 1 mm thick, three triangular spangles attached to the triangular plate.

Group: VIII, Sub-group: i; Site: Newnham Croft, Cambs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 36.363; Head Form: spangle-headed, ring terminal, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, gilt; Length: 86 mm, Head Diameter/Width: 9 mm; Head Decoration: dots on plate, Decoration Application Method: punched, Shaft Decoration: none; Attachment: spangles, Kind of Wire Ring: wire ring; Notes: 3 diamond-shaped plates attached to triangular plate, Reference: Fox 1923: 244; Lethbridge & O'Reilly 1937: 167-168 & Pl IV.5.

Group: VIII, Sub-group: ii; Site: Brough Hill, Daventry, Northants; Museum or Unit: Northampton Museum, Accession or Small Find Number: D167/1955-6; Head Form: spangle-headed, Shaft Form: tapering, Shaft

Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 167 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Attachment: superior plate, Kind of Wire Ring: lost; Notes: The pin might still bear evidence of gilding. The spangles are now lost. Head not larger than the diameter of the shaft. Reference: Smith 1902: 255; Kennett 1969.

Group: VIII, Sub-group: ii; Site: Mitcham, Surrey; Head Form: conical with ring above, Collar Form: ring and concave, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 229; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 171 mm; Head Decoration: lines, Decoration Application Method: incised, Shaft Decoration: none; Attachment: ring above head, Kind of Wire Ring: cast; Reference: Bidder & Morris 1959: 75, 110 & Pl XV.229.

Group: VIII, Sub-group: ii; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 369M; Head Form: spangle-headed - spatulate, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round; Grave Number: 369; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: cast/wrought; Length: 54 mm, Head Diameter/Width: 15 mm, Shaft Diameter at Position 1: 5 mm, Shaft Diameter at Position 2: 5 mm, Shaft Diameter at Position 3: 4 mm; Head Decoration: none, Shaft Decoration: none; Attachment: wire ring; Associated Finds: present, Reference: Green, et.al. 1987: 143, fig 427.M & 257.

Group: VIII, Sub-group: ii; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 378N; Head Form: spangle-headed - spatulate, Collar Form: incised, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 378; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: cast/wrought; Length: 177 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 4 mm, Shaft Diameter at Position 3: 4 mm; Head Decoration: none, Shaft Decoration: none; Attachment: wire ring; Associated Finds Included: 2 annular brooches and 2 pair of Hines' B7 wrist clasps, Reference: Green, et.al. 1987: 147-8 & fig 436.N.

Group: VIII, Sub-group: ii; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 86C; Head Form: spangle-headed, Collar Form: incised, Shaft Form: tapering, Shaft Section at Level 1: faceted, Shaft Section at Level 2: faceted; Grave Number: 86; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast/wrought; Length: 135 mm, Head Diameter/Width: 15 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: none, Shaft Decoration: none; Attachment: wire ring; Associated Finds: present, Reference: Green, et.al. 1987: 59 & fig 322.Ci, cii, ciii & civ.

Group: VIII, Sub-group: ii; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 148M; Head Form: spangle-headed - spatulate, Collar Form: fillet, Shaft Form: tapering, Shaft Section at Level 1: round; Grave Number: 148; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: cast/wrought; Length: 114 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 4 mm; Head Decoration: none, Shaft Decoration: none; Attachment: wire ring; Associated Finds: present, Reference: Green, et.al. 1987: 107 & fig 346.M.

Group: VIII, Sub-group: ii, Variant: b; Site: Brighthampton, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1966.48; Head Form: notched flat head, Collar Form: threaded zone, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 17; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised decoration; Length: 153 mm; Head Decoration: none, Shaft Decoration: 14 rings, Decoration Application Method: incised; Attachment: wire ring, Kind of Wire Ring: cast; Notes: ring holds 2 sub-triangular pendants, Associated Finds: present, Reference: Akerman 1860a: 85 & Pl III.1.

Group: VIII, Sub-group: iii, Variant: a; Site: Searby, Lincs; Museum or Unit: BM M&LA, Accession or Small Find Number: 93,6-18,20; Head Form: flat plate, biconical knob, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: shaft lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 24 mm; Head Decoration: none, Shaft Decoration: none; Attachment: hole in plate, Kind of Wire Ring: cast wire ring; Associated Finds Included: CA disc brooch, 2 CA annular brooches, cruciform brooch, necklace, girdle hangers. Reference: Meaney 1964: 162.

Group: VIII, Sub-group: iii, Variant: d; Site: Barrington, Cambs; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1909.298f; Head Form: faceted-knob with plate above, Collar Form: ring & barrel, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised and hole punched; Length: 130 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: none, Shaft Decoration: linear, Decoration Application Method: incised; Attachment: holed plate.

Group: VIII, Sub-group: iii, Variant: d; Site: Haslingfield, Cambs; Museum or Unit: BM M&LA, Accession or Small Find Number: 74,3-26,24; Head Form: spangle-headed, faceted knob, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 159 mm, Head Diameter/Width: 7x7 mm, Head Thickness: 10 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 3: 2.0 mm; Head Decoration: none, Shaft Decoration: none; Attachment: loop, Kind of Wire Ring: cast ring.

Group: VIII, Sub-group: iii, Variant: d; Site: Nr Brixworth, Northants; Museum or Unit: Northampton Museum, Accession or Small Find Number: D27/1955-6; Head Form: spangle facet-headed, Collar Form: multiple, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incisions; Length: 165 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 3.5 mm; Head Decoration: dot decoration, Decoration Application Method: punched, Shaft Decoration: linear decoration, Decoration Application Method: incised; Attachment: superior ring, Kind of Wire Ring: cast ring; Reference: Brown 1915 (v.3): Pl LXXX,3; Kennett 1969: 44-5 & fig 2.f.

Group: VIII, Sub-group: iii, Variant: d; Site: Saxby, Leics; Museum or Unit: Jewry Wall Museum, Accession or Small Find Number: I.IL.5.1947; Head Form: spangle-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 109 mm, Head Diameter/Width: 4x6 mm, Head Thickness: 4 mm; Head Decoration: none, Shaft Decoration: linear ornament; Attachment: superior plate; Reference: Cox 1895; Smith 1907: 234 & fig on 235.

Group: VIII, Sub-group: iii, Variant: d; Site: Wakerley, Northants; Head Form: spangle-headed, faceted-knob, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 82; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 105 mm, Head Diameter/Width: 4x6 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Associated Finds: bossed bowl and annular brooch. Notes: Adams suggests the pin was tubular (?), but I have not been able to confirm this, Reference: Adams 1983: 69 & fig 69.2.

Group: VIII, Sub-group: iv; Site: Leagrave, Beds; Museum or Unit: BM M&LA, Accession or Small Find Number: 1906,2-13,7; Head Form: spangle-headed, Collar Form: 6 mm biconical knob, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): Registered as 1906,2-13,6; Length: 176 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 3 mm; Head Decoration: none, Shaft Decoration: lines on shaft, Decoration Application Method: incised; Attachment: plate above, Kind of Wire Ring: cast; Notes: 4 mm between biconical knobs and 3 mm below, Reference: Read 1906: 59-63 & fig; Smith 1923: 75 & fig 87.

Group: VIII, Sub-group: v; Site: Hunstanton, Norfolk; Museum or Unit: Norfolk Castle Museum, Accession or Small Find Number: 2.950; Head Form: square flat head, Collar Form: none, Shaft Section at Level 1: rectangular 38 mm, Shaft Section at Level 2: round below; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised; Length: 142 mm, Head Diameter/Width: 6x7 mm, Head Thickness: 7 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: none.

### *Kempston type (IX)*

Group: IX; Site: Kempston, Beds; Museum or Unit: BM M&LA, Accession or Small Find Number: 91,6-24,143; Head Form: dunce-cap head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 137 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 3.1 mm, Shaft Diameter at Position 2: 2.8 mm, Shaft Diameter at Position 3: 2.5 mm; Head Decoration: none, Shaft Decoration: 15 lines, Decoration Application Method: incised; Notes: 2 mm at top; 4 mm at bottom of dunce-cap; 5 mm knob; 6 mm knob, Reference: Fitch 1863-4: 291 & Pl V, fig 2.

### *Oar-headed type (X)*

Group: X; Site: Droxford, Wilts; Head Form: oar-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 13; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 133 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Aldsworth 1978: 117-118, 168 & fig 20.3.

Group: X; Site: Kingsworthy, Hants; Head Form: oar-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 10; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: worked, Secondary Work (if noted): rolled & hammered; Length: 145 mm, Head Diameter/Width: 9 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Hawkes pers comm.

### *Morning Thorpe holed-rod type (XI)*

Group: XI; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 108B; Head Form: holed-rod type, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 108; Degree of Completeness: fragmentary, Type of Material: iron, Main Manufacturing Process: wrought; Length: 135* mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 56 amber beads, 2 annular brooches, pair of each B7 & B13a, Notes: *total length of pieces. Reference: Green, et.al. 1987: 65 & fig 332.A/B.

Group: XI; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 387G; Head Form: holed-rod type, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 387; Degree of Completeness: head

broken, Type of Material: iron, Main Manufacturing Process: wrought; Length: 128 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Green, et.al. 1987: 151 & fig 332.G.

### *Curled-headed type (XII)*

Group: XII; Site: Bergh Apton, Northants; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1011 BEA 11F; Head Form: curled-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 11; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Head Decoration: none, Shaft Decoration: none; Reference: Green & Rogerson 1978: 14 & fig 72.

Group: XII; Site: Great Chesterford, Essex; Museum or Unit: BM M&LA, Accession or Small Find Number: 1964,7-2,403; Head Form: possible disc or curl-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round; Grave Number: 127; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 63 mm, Head Diameter/Width: 13 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 disc brooches, animal head silver ring, iron ring, Notes: Examination of an X-ray will probably show to have a curl-head.

Group: XII, Sub-group: ?, Variant: ?; Site: Great Chesterford, Essex; Museum or Unit: BM M&LA, Accession or Small Find Number: 1964,7-2,234; Head Form: curled-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 62; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 68 mm, Head Diameter/Width: 12 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 small square-headed brooches, bronze ring, knife, Notes: X-ray required for identification of the sub-group and variant.

Group: XII, Sub-group: ?, Variant: ?; Site: Great Chesterford, Essex; Museum or Unit: BM M&LA, Accession or Small Find Number: 1964,7-2,78; Head Form: possible disc or curl-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round; Grave Number: 18; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 102 mm, Head Diameter/Width: 16 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 disc brooches, beads, wrist clasps, buckle, spindle etc, Notes: Examination of an X-ray will probably show to have a curl-head.

Group: XII, Sub-group: ?, Variant: ?; Site: London (no provenance); Museum or Unit: BM M&LA, Accession or Small Find Number: OA 4862; Head Form: curled-headed, Collar Form: barrel collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 100 mm; Head Decoration: none, Shaft Decoration: none.

Group: XII, Sub-group: ?, Variant: ?; Site: Great Chesterford, Essex; Museum or Unit: BM M&LA, Accession or Small Find Number: 1964,7-2,414; Head Form: flat-head, but form unknown, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round; Grave Number: 132; Degree of Completeness: incomplete, Type of Material: bone, Main Manufacturing Process: carved; Length: 91 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: copper alloy disc brooch.

Group: XII, Sub-group: i; Site: Bekesbourne, Kent; Museum or Unit: The Royal Museum, Canterbury, Accession or Small Find Number: 7595; Head Form: curl-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 2; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 100* mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: buckle, iron dagger, spearhead, strip of iron; Date: mid-6th c.

Group: XII, Sub-group: i; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 414A; Head Form: curl-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 414; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 83 mm, Head Diameter/Width: 15 mm, Shaft Diameter at Position 1: 5 mm, Shaft Diameter at Position 2: 4 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: partial buckle, and a small iron strip, Reference: Green, et.al. 1987: 159 & 456.A.

Group: XII, Sub-group: i; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 409B; Head Form: curl-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 409; Degree of Completeness: broken, Type of Material: iron, Main Manufacturing Process: wrought; Length: 103* mm, Head Diameter/Width: 15 mm, Shaft Diameter at Position 1: 5 mm, Shaft Diameter at Position 2: 4 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: Swanton H3 spearhead, iron buckle, Reference: Green, et.al. 1987: 158 & 454.B.

Group: XII, Sub-group: ii; Site: Barrington B, Cambs; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 2.16152; Head Form: curled-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 81; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 49 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: beads, buckle, small long brooch.

Group: XII, Sub-group: ii, Variant: a; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,507; Head Form: curled-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 96b; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: cast; Length: 85 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: spearhead, knife & sword, Reference: Evison 1987: 239 & fig 46.96b.8.

Group: XII, Sub-group: ii, Variant: a; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,500; Head Form: curled-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 96a; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: cast; Length: 107 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: spearhead, knife, sword, Reference: Evison 1987: 238 & fig 45.96a.2.

Group: XII, Sub-group: ii, Variant: a; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: OA 1163A'70; Head Form: curled-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 95 mm, Head Diameter/Width: 12 mm; Head Decoration: none, Shaft Decoration: none; Reference: see illustration in White 1988: fig 53.4.

Group: XII, Sub-group: ii, Variant: a; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: OA 1163 '70; Head Form: curled-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 69 mm, Head Diameter/Width: 14 mm; Head Decoration: none, Shaft Decoration: none; Reference: see illustration in White 1988: fig 53.3.

Group: XII, Sub-group: ii, Variant: a; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 249D; Head Form: curl-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 249; Degree of Completeness: fragmentary, Type of Material: iron, Main Manufacturing Process: wrought; Length: 113 mm, Head Diameter/Width: 16 mm, Shaft Diameter at Position 1: 5 mm, Shaft Diameter at Position 2: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: pot, beads, annular brooch, knife, buckle, & wrist clasps, Reference: Green, et.al. 1987: 103 & 377.Di.

Group: XII, Sub-group: ii, Variant: a; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 398C; Head Form: curl-headed, Collar Form: none, Shaft Form: swelling, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 398; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 77 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 5 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: an E3 spearhead, iron knife, and iron buckle, Reference: Green, et.al. 1987: 155 & fig 451.C.

Group: XII, Sub-group: ii, Variant: a; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 140C; Head Form: curl-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 140; Degree of Completeness: 2 fragments, Type of Material: iron, Main Manufacturing Process: wrought; Length: 101 mm, Head Diameter/Width: 14 mm, Shaft Diameter at Position 1: 5 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: annular brooches, knife, & two pots, Reference: Green, et.al. 1987: 74-5 & fig 343.B,C,D.

Group: XII, Sub-group: ii, Variant: b; Site: Bifrons, Kent; Museum or Unit: Maidstone Museum, Accession or Small Find Number: ?; Head Form: curled-headed - flat section, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 6; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 99 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Godfrey-Faussett 1876: 303 & facing page.

Group: XII, Sub-group: ii, Variant: b; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,312; Head Form: curled-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 50; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 142 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: spearhead, knife, buckle, Reference: Evison 1987: 230 & fig 28.50.3.

Group: XII, Sub-group: ii, Variant: b; Site: Nassington, Northants; Museum or Unit: Peterborough Museum; Head Form: curled-headed - flat section, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 22; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 99 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 4 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: cup, knife, Reference: Leeds & Atkinson 1944: 107 & Pl XXX.22.

### *Morning Thorpe spherical-headed type (XIII)*

Group: XIII; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 221C; Head Form: spherical-headed, Collar Form: moulded ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 221; Degree of Completeness: fragments, Type of Material: iron, Main Manufacturing Process: wrought; Length: 56 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 4 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Green, et.al. 1987: 94 & fig 369.C.

Group: XIII; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 18C; Head Form: spherical-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 18; Degree of Completeness: 2 fragments, Type of Material: iron, Main Manufacturing Process: wrought; Length: 50+27 mm, Shaft Diameter at Position 1: 4.5 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: two B7 wrist-clasps, girdle-hangers, 2 annular brooches, Reference: Green, et.al. 1987: 38-39 & fig 299.C.

### *Flat-ring-headed, fillet collar type (XIV)*

Group: XIV; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum; Head Form: flat disc-headed, Collar Form: pointed collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 81; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 70 mm, Head Diameter/Width: 5 mm, Head Thickness: 1 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Associated finds. Similar to Collingbourne Ducis. below chin, Reference: Humphreys et. al. 1922-23: 144.

Group: XIV; Site: Broadway Hill, Broadway, Heref & Worcs; Head Form: flat-ring, Collar Form: rectangular collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 120 mm; Head Decoration: lines, Decoration Application Method: incised, Shaft Decoration: none; Reference: Cook 1958: 70 & fig 9.12. [Publication only.]

Group: XIV; Site: Collingbourne Ducis, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: CD 20; Head Form: curved outline, flat section, Collar Form: pointed collar*, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: round; Grave Number: 20; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 89 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 gilt saucer brooches. Notes: *flat sectioned fillet collar, Reference: Gingel 1976: 85, fig 11 & 19a.

Group: XIV; Site: Highdown, Sussex; Museum or Unit: Worthing Museum, Accession or Small Find Number: 3474; Head Form: flat discoid end, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast & gilt; Length: 129 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 2.5 mm; Head Decoration: across flat plate, Decoration Application Method: incised, Shaft Decoration: none; Reference: Welch 1983 (vol ii): fig 116.d.

### *Flat-sheet expanded headed type (XV)*

Group: XV; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum; Head Form: flat curved end, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 52; Type of Material: copper alloy, Main Manufacturing Process: cast/forged, Secondary Work (if noted): file marks, head hammered; Length: 96 mm; Head Decoration: none, Shaft Decoration: none; Attachment: hole in head; Associated Finds: present, Reference: Humphreys et. al. 1922-23: 113.

Group: XV; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 563; Head Form: curved spatulate, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1072; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: wrought, Secondary Work (if noted): hole punched through; Length: 100 mm, Head Diameter/Width: 6 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 2.25 mm, Shaft Diameter at Position 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Attachment: hole in head, Kind of Wire Ring: cast ring; Associated Finds Included: 2 disc brooches, knife, iron fragments, Reference: Miles pers comm.

Group: XV; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 790; Head Form: curved outline spatulate, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: first 30 square, Shaft Section at Level 2: round; Grave Number: 1125/1; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought, Secondary Work (if noted): hole punched through; Length: 111 mm, Head Diameter/Width: 7 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 3: 1.5 mm; Head Decoration: lines & nicks, Decoration Application Method: incised, Shaft Decoration: nicks, Decoration Application Method: incised; Associated Finds Included: 2 saucer brooches, beads, buckle etc, Reference: Miles pers comm.

Group: XV; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 188; Head Form: flat-sheet spatulate headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: round; Grave Number: 19; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 95 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 2.5 mm; Head Decoration: none, Shaft Decoration: none; Attachment: punched hole, Kind of Wire Ring: beaten ring; Associated Finds Included: 2 saucer brooches, bucket, beads etc; pin across left brooch, Reference: Miles pers comm.

Group: XV; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 855; Head Form: flat-spatulate sheet head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round?, Shaft Section at Level 2: round?; Grave Number: 1159; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 73 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Miles pers comm.

Group: XV; Site: Great Chesterford, Essex; Museum or Unit: BM M&LA, Accession or Small Find Number: 1964,7-2,338; Head Form: flat-sheet expanded, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 112; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 100 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: collection of iron fragments.

Group: XV; Site: Great Chesterford, Essex; Museum or Unit: BM M&LA, Accession or Small Find Number: 1964,7-2,111; Head Form: flat-sheet expanded head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 21; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 92 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: pair of small long brooches, collection of iron fragments.

Group: XV; Site: Kempston, Beds; Museum or Unit: BM M&LA, Accession or Small Find Number: 91,6-24,159; Head Form: undetermined; Grave Number: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: rolled wire; Length: 62 mm; Head Decoration: none, Shaft Decoration: none.

Group: XV; Site: Kingsworthy, Hants; Accession or Small Find Number: 243; Head Form: spatulate expanded head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 58; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: worked; Length: 95 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2.2 mm; Head Decoration: none, Shaft Decoration: none; Attachment: hole in head, Kind of Wire Ring: slip-knot; Associated Finds: present, Reference: Hawkes pers comm.

Group: XV; Site: Linton Heath, Cambs; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 28.1556-59; Head Form: Spatulate-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 33; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 117 mm, Head Diameter/Width: 5 mm,

Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 disc brooches, 26 glass & amber beads, wrist clasp, garnet, set fitting, knife. Reference: Meaney 1964: 67–8.

Group: XV; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3–10,313; Head Form: flat sheet expanded headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 212; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 60 mm; Head Decoration: none, Shaft Decoration: none; Reference: Akerman 1860b.

Group: XV; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3–10,23; Head Form: flat–sheet expanded head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 140; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 104 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: knife, wire ring, Reference: Akerman 1860.

Group: XV; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3–10,218; Head Form: flat sheet expanded headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 80; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 110 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: Applied saucer brooches (2), knife, scale–pans, Reference: Akerman 1860b.

Group: XV; Site: Sarre, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 93,6–1,222; Head Form: loop end, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Secondary Work (if noted): evident; Length: 70 mm; Head Decoration: none, Shaft Decoration: none.

Group: XV, Sub–group: i; Site: Abingdon, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: ?; Head Form: sub–triangular flat sheet, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 36; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 86 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: none; Associated Finds: Associated finds, Reference: Leeds & Harden 1936: 38 & Pl X.36.

Group: XV, Sub–group: i; Site: Abingdon, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: ?; Head Form: sub–triangular flat sheet, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 60; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 93 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twist over ring; Associated Finds Included: iron ring, Reference: Leeds & Harden 1936: 43 & Pl XII.60.

Group: XV, Sub–group: i; Site: Alveston, Warks; Museum or Unit: New Place Museum, Accession or Small Find Number: W229; Head Form: Spatulate–headed with hole, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 91; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 35+42 mm; Head Decoration: none, Shaft Decoration: none; Notes: The head is only partial.

Group: XV, Sub–group: i; Site: Filkins, Oxon; Museum or Unit: Merseyside County Museum, Accession or Small Find Number: M7725; Head Form: sub–triangular head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 5; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 99 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted over wire; Reference: Akerman 1857b: 142.

Group: XV, Sub-group: i; Site: Filkins, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1909.497e; Head Form: sub-triangular head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 87 mm; Head Decoration: none, Shaft Decoration: none.

Group: XV, Sub-group: i; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3-10,294; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 111; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 98 mm; Head Decoration: none, Shaft Decoration: none; Reference: Akerman 1860b.

Group: XV, Sub-group: i; Site: Wally Corner, Berinsfield, Oxon; Museum or Unit: Oxford Archaeological Unit; Head Form: spatulate pierced head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 5; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 94 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 disc brooches, 12 amber beads, knife, sharpening steel,.

Group: XV, Sub-group: i, Variant: a; Site: Abingdon, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: ?; Head Form: sub-triangular head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 66; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 115 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Notes: clear seam runs down length of the shaft, Reference: Leeds & Harden 1936.

Group: XV, Sub-group: i, Variant: a; Site: Abingdon, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: ?; Head Form: sub-triangular head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 113; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 103 mm, Head Diameter/Width: 7 mm; Head Decoration: corrugated edges, Decoration Application Method: nicks & incisions, Shaft Decoration: none; Notes: hung with two bangles; Associated Finds: present, Reference: Harden & Leeds 1936: 53 & Pl XVII.13.

Group: XV, Sub-group: i, Variant: a; Site: Bassett Down, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: S19; Head Form: sub-triangular head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 115 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted over wire.

Group: XV, Sub-group: i, Variant: a; Site: Bassett Down, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: S18; Head Form: sub-triangular head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 105 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted over wire; Reference: Goddard 1896: 106 & fig 9.

Group: XV, Sub-group: i, Variant: a; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum, Accession or Small Find Number: none; Head Form: spatulate-head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 63; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 70 mm, Head Diameter/Width: 6 mm, Head Thickness: 1 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 disc brooches, 1 amber bead, toilet implements, Reference: Humphreys, et. al. 1922-3: 113.

Group: XV, Sub-group: i, Variant: a; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum, Accession or Small Find Number: ?; Head Form: flat sub-triangular head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 191; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 30 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Attachment: hole in head; Reference: Humphreys et. al. 1923-4: 288.

Group: XV, Sub-group: i, Variant: a; Site: Blacknall Field (Pewsey), Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 53; Head Form: sub-triangular with hole, Collar Form: twisted zone, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 53; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 98 mm, Head Diameter/Width: 13 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: iron collar, iron ring, beads (glass, paste & amber), Reference: Annable pers comm.

Group: XV, Sub-group: i, Variant: a; Site: Marston St Lawrence, Northants; Museum or Unit: Northampton Museum, Accession or Small Find Number: D170/1955-6; Head Form: sub-triangular head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 111 mm, Head Diameter/Width: 7 mm; Head Decoration: horizontal dec, Decoration Application Method: incised, Shaft Decoration: none, Decoration Application Method: none.

Group: XV, Sub-group: i, Variant: a; Site: Marston St Lawrence, Northants; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1953.73; Head Form: sub-triangular head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 90 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Dryden 1849; 1882.

Group: XV, Sub-group: i, Variant: a; Site: Minster Lovell, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1953.598; Head Form: sub-triangular head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 90 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Notes: from priory.

Group: XV, Sub-group: i, Variant: a; Site: Portway Down (Andover), Hants; Head Form: flat-sheet spatulate headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 52; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 80 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 3: 2.25 mm; Head Decoration: none, Shaft Decoration: nicks, Decoration Application Method: punched; Reference: Cook & Dacre 1985: fig 64.52.3. [Publication only.]

Group: XV, Sub-group: i, Variant: a; Site: Wakerley, Northants; Head Form: flat-sheet expanded head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 30; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 107 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 2.5 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Reference: Adams 1983: 33 & fig 32.3. [Publication only.]

Group: XV, Sub-group: i, Variant: b; Site: Abingdon, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: Loan, 54.9; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 61; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 140 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Shaft Decoration: edged with nicks, Decoration Application Method: punched; Attachment: wire ring, Kind of Wire Ring: slip-knot; Notes or Associated Finds: Triangular spangle on ring. Extensive associated finds, Reference: Leeds & Harden 1936: 43 & Pl xiii.

Group: XV, Sub-group: i, Variant: b; Site: Abingdon (Berks), Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: none; Head Form: trefoil-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 53; Degree of Completeness: complete, Type of Material: copper alloy; Length: 106 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: disc brooches, rings, finger ring, 56 amber beads, etc, Reference: Leeds & Harden 1936: 41 & Pl XI.53.

Group: XV, Sub-group: i, Variant: c; Site: Abingdon, Berks; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: ?; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 119; Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 108 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted end; Reference: Leeds & Harden 1936: 54-55 & Pl XVII.119.

Group: XV, Sub-group: i, Variant: c; Site: Abingdon, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: ?; Head Form: curved-headed flat sheet, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 9; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 91 mm; Head Decoration: none, Shaft Decoration: none; Reference: Leeds & Harden 1936: 32 & Pl VII.9.

Group: XV, Sub-group: i, Variant: c; Site: Blacknall Field (Pewsey), Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 85; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 85; Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 103 mm; Head Decoration: none, Shaft Decoration: 3 lines, Decoration Application Method: on below head; Associated Finds Included: beads, brooches. Notes: 'X' incised below hole with lines, Reference: Annable pers comm.

Group: XV, Sub-group: i, Variant: c; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3-10,192; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 68; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 89 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2.1 mm, Shaft Diameter at Position 2: 2.1 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: disc brooches, iron ring, beads, knife; Notes: seam visible on shaft of the pin, Reference: Akerman 1860b: 343.

Group: XV, Sub-group: i, Variant: c; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3-10,126; Head Form: spatulate - curved end - disc, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 33; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 118 mm, Head Diameter/Width: 11 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 3.0 mm, Shaft Diameter at Position 3: 2.0 mm; Head Decoration: none, Shaft Decoration: linear decoration, Decoration Application Method: incised; Associated Finds Included: beads, coins, small buckle, disc brooches, Reference: Akerman 1860b: 340.

Group: XV, Sub-group: i, Variant: c; Site: Newnham, Northants; Museum or Unit: Northampton Museum, Accession or Small Find Number: D160/1955-6; Head Form: curved end, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 132 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 5 mm, Shaft Diameter at Position 2: 3 mm; Head Decoration: none, Shaft Decoration: nicks on edges, Decoration Application Method: punched; Notes: possible patches of gilding.

Group: XV, Sub-group: i, Variant: c; Site: Portway Down (Andover), Hants; Head Form: flat-sheet spatulate headed, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 1; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 86 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: linear

ornament, Decoration Application Method: incised; Reference: Cook & Dacre 1985: 23–24 & fig 41.3. [Publication only].

Group: XV, Sub–group: i, Variant: c; Site: Wally Corner, Berinsfield, Oxon; Museum or Unit: Oxford Archaeological Unit; Head Form: spatulate–headed, Collar Form: none; Grave Number: 91; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: cast/folded; Length: 102 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: slip–knot; Associated Finds Included: 2 small long brooches, amber beads, knife, Reference: Miles pers comm.

Group: XV, Sub–group: i, Variant: d; Site: Blacknall Field (Pewsey), Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 44; Head Form: flat diamond head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 44; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 85 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: iron knife, pair of button brooches, Reference: Annable pers comm.

Group: XV, Sub–group: i, Variant: d; Site: Kemble, Wilts; Museum or Unit: Merseyside County Museum, Accession or Small Find Number: M7741; Head Form: sub–triangular head with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 3; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 148 mm, Head Diameter/Width: 7 mm; Head Decoration: corrugated edges, Decoration Application Method: nicks & incisions, Shaft Decoration: none; Notes: hung with two bangles, Reference: Akerman 1857a: 114.

Group: XV, Sub–group: i, Variant: d; Site: Kempston, Beds; Museum or Unit: BM M&LA, Accession or Small Find Number: 91,6–24,145; Head Form: diamond head with hole, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: ?; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 99 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: possibly made from rod, cast seam on reverse not fold??, Reference: Fitch 1863–4. (grave assignment not possible).

Group: XV, Sub–group: i, Variant: d; Site: Market Overton, Rutland; Museum or Unit: Oakham County Museum, Accession or Small Find Number: 0549; Head Form: flat diamond–head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 129 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Shaft Decoration: none; Notes: The break in the pin makes the rolled character evident.

Group: XV, Sub–group: i?; Site: Blacknall Field (Pewsey), Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 78; Head Form: sub–triangular with hole, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 78; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded ?; Length: 100 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: disc brooches and beads, Reference: Annable pers comm.

Group: XV, Sub–group: ii; Site: Abingdon (Berks), Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: ?; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 85; Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 90 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Leeds & Harden 1936.

Group: XV, Sub–group: ii; Site: Barrington B, Cambs; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 2.16156b; Head Form: flattened oval–shaped head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 15; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought;

Length: 102 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: wire ring, 2 necklaces, Reference: Foster 1880: 17.

Group: XV, Sub-group: ii; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum, Accession or Small Find Number: none; Head Form: spatulate-headed (curved), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 93 mm; Head Decoration: none, Shaft Decoration: none; Notes: Cannot be assigned to a grave, Reference: Humphreys, et. al. 1922-3; 1923-4.

Group: XV, Sub-group: ii; Site: Chessell Down, Hants; Museum or Unit: BM M&LA, Accession or Small Find Number: 67,7-29,132; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: point lost, Type of Material: copper alloy; Length: 67 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hillier 1856: 35 & fig 54.

Group: XV, Sub-group: ii; Site: East Shefford, Berks; Museum or Unit: BM M&LA, Accession or Small Find Number: 1893,7-16,104; Head Form: spatulate holed, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 54 mm, Head Diameter/Width: 6 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none.

Group: XV, Sub-group: ii; Site: Howletts, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1918,7-8,45; Head Form: spatulate head (oval section), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 120 mm, Head Diameter/Width: 12 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: buckle, tag,.

Group: XV, Sub-group: ii; Site: Kempston, Berks; Museum or Unit: BM M&LA, Accession or Small Find Number: 91,6-24,152; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 70 mm, Head Diameter/Width: 5 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2.25 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted end; Notes: Shaft 1.75 mm by 2.25 mm.

Group: XV, Sub-group: ii; Site: Kempston, Beds; Museum or Unit: BM M&LA, Accession or Small Find Number: 91,6-24,150; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: head broken, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 75 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2.2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: wrought from rod.

Group: XV, Sub-group: ii; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 62,6-12,38; Head Form: curved outline, flat, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 150; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 98 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Attachment: hole punched; Associated Finds Included: amber beads, disc brooches, scoop, ivory bracelet, Reference: Akerman 1861: 140.

Group: XV, Sub-group: ii; Site: Netheravon, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: DM94; Head Form: flat-sheet expanded head, Collar Form: fillet collar, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 60 mm, Head Diameter/Width: 4 mm; Head Decoration: criss-crossed, Decoration Application Method: incised, Shaft Decoration: none; Reference: *Wiltshire Archaeological Magazine*, 43 (1939): 400.

Group: XV, Sub-group: ii; Site: West Heslerton, E.Yorks; Museum or Unit: Finds with excavator, Accession or Small Find Number: HP2CB78B0; Head Form: flat sub-triangular, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 9301; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): worked; Length: 148 mm, Head Diameter/Width: 9 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 4 mm; Head Decoration: dots, Decoration Application Method: punched, Shaft Decoration: none; Reference: Powlesland pers comm.

Group: XV, Sub-group: ii, Variant: a; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 199; Head Form: sub-triangular spatulate, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 18; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought, Secondary Work (if noted): hole punched through; Length: 105 mm, Head Diameter/Width: 9 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 3: 1.5 mm; Head Decoration: lines across, Decoration Application Method: incised, Shaft Decoration: none; Associated Finds Included: 2 saucer brooches, bead, buckle etc; point across body, Reference: Miles pers comm.

Group: XV, Sub-group: ii, Variant: a; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 293; Head Form: spatulate, triangular, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 78; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought, Secondary Work (if noted): hole punched through; Length: 120 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: nicks, Decoration Application Method: punched; Kind of Wire Ring: cast ring; Associated Finds Included: pair of disc brooches etc, Reference: Miles pers comm.

Group: XV, Sub-group: ii, Variant: c; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum; Head Form: flat-plate (ringed end), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 138; Type of Material: copper alloy, Main Manufacturing Process: cast/wrought; Length: 101 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: nicks below head, Decoration Application Method: incised; Reference: Humphreys et. al. 1923-24: 238.

Group: XV, Sub-group: ii, Variant: c; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 880; Head Form: curved outline spatulate, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: round; Grave Number: 1168; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought, Secondary Work (if noted): hole punched through; Length: 125 mm, Head Diameter/Width: 7 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 saucer brooches, beads, buckle etc, Reference: Miles pers comm.

Group: XV, Sub-group: ii, Variant: c; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 451; Head Form: spatulate, curved outline, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1006(3); Type of Material: copper alloy, Main Manufacturing Process: rolled, Secondary Work (if noted): hole punched through; Length: 111 mm, Head Diameter/Width: 6 mm, Head Thickness: 1 mm; Head Decoration: linear decoration, Decoration Application Method: incised, Shaft Decoration: none; Associated Finds Included: pair of disc brooches etc, Reference: Miles pers comm.

Group: XV, Sub-group: ii, Variant: c; Site: Kempston, Beds; Museum or Unit: BM M&LA, Accession or Small Find Number: 91,6-24,151; Head Form: spatulate head -- curved, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 47

mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: linear dec (worn), Decoration Application Method: incised.

Group: XV, Sub-group: ii, Variant: d; Site: Blewburton, Berks; Museum or Unit: Reading Museum, Accession or Small Find Number: lost; Head Form: flat spatulate, diamond, Collar Form: none; Grave Number: (V) 17; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought ?; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: knife, Reference: Collins 1953: 52-53.

Group: XV, Sub-group: ii, Variant: d; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 337; Head Form: diamond spatulate, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 79; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought, Secondary Work (if noted): hole punched through; Length: 103 mm, Head Diameter/Width: 7 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 saucer brooches, bead, buckle etc; Notes: point across body, Reference: Miles pers comm.

Group: XV, Sub-group: ii, Variant: d; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3-10,248; Head Form: flat diamond head, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 98; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 49 mm, Head Diameter/Width: 5 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: beads & tag, Reference: Akerman 1860b: 346.

Group: XV, Sub-group: ii, Variant: e; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum; Head Form: flat rectangular head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 9; Type of Material: copper alloy, Main Manufacturing Process: cast/wrought, Secondary Work (if noted): file marks; Length: 109 mm; Head Decoration: none, Shaft Decoration: none; Attachment: hole in head; Reference: Humphreys et. al. 1922-23: 111.

Group: XV, Sub-group: p; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 650; Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1086; Type of Material: bone, Main Manufacturing Process: carved; Length: 80 mm; Head Decoration: none, Shaft Decoration: none; Reference: Miles pers comm.

### *Short spatulated expanded headed type (XVI)*

Group: XVI; Site: Alveston, Warks; Museum or Unit: New Place Museum, Accession or Small Find Number: none; Head Form: spatulate-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: unknown; Grave Number: 65; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 59 mm; Head Decoration: none, Shaft Decoration: none; Reference: Museum mss notes.

Group: XVI; Site: Alveston, Warks; Museum or Unit: New Place Museum, Accession or Small Find Number: none; Head Form: spatulate-headed (curved), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 22; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast/forged; Length: 116 mm; Head Decoration: none, Shaft Decoration: none; Attachment: hole in head; Reference: Museum mss notes.

Group: XVI, Sub-group: i; Site: Ruskington, Lincs; Museum or Unit: Lincoln City and County Museum, Accession or Small Find Number: 1942.45; Head Form: short-spatulate-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of

Material: copper alloy, Main Manufacturing Process: cast; Length: 72 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Reference: Kendrick 1946: 69 & Pl X.8.

Group: XVI, Sub-group: i; Site: Snell's Corner, Horndean, Hants; Museum or Unit: Southsea Castle Museum,, Accession or Small Find Number: 1947: 66/56; Head Form: spatulate, Collar Form: none, Shaft Form: slightly swelled, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Main Manufacturing Process: cast, Secondary Work (if noted): incised ornament; Length: 54 mm, Head Diameter/Width: 6 mm; Head Decoration: linear decoration, Decoration Application Method: incised, Shaft Decoration: none; Associated Finds Included: finger ring, metal rings, knife, Reference: Knocker 1958: 135 & fig 10.5.

Group: XVI, Sub-group: ii; Site: Cassington, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1942.200; Head Form: spatulate, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 97 mm, Head Diameter/Width: 9 mm, Head Thickness: 1 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 cast Saucer brooches, silver finger ring, amber beads, Reference: Leeds & Riley 1942: 67 & fig 16e; Date: 2nd 1/2 6thc.

Group: XVI, Sub-group: ii; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,283; Head Form: spatulate head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 42, Context: 413; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 75 mm, Head Diameter/Width: 8 mm, Head Thickness: 1 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: beads, knife, buckle, Reference: Evison 1987: 228-9 & fig 25.42.2.

Group: XVI, Sub-group: ii; Site: Kingsworthy, Hants; Accession or Small Find Number: 181; Head Form: spatulate expanded head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 39; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 74 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2.1 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Position 3: 2.1 mm; Head Decoration: linear decoration, Decoration Application Method: incised, Shaft Decoration: none; Attachment: hole in head; Reference: Hawkes pers comm.

Group: XVI, Sub-group: iv; Site: Blewburton, Berks; Museum or Unit: Reading Museum, Accession or Small Find Number: no accession no; Head Form: diamond spatulate head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 16; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 8.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Collins 1948.

### *Hook-headed type (XVII)*

Group: XVII; Site: Abingdon, Berks; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: Loan 54,8; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 59; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 95 ? mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 disc brooches, beads, Roman coins, iron ring & loop etc, Notes: 74 mm long, Reference: Leeds & Harden 1936: 42 & Pl XII(59).

Group: XVII; Site: Alton, Hants; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 12; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 99 mm; Head Decoration: none, Shaft

Decoration: none; Associated Finds Included: 2 seven scroll-central-bossed saucer brooches, beads, etc, Reference: Evison 1988: 74 & fig 26.12.7. [Publication only].

Group: XVII; Site: Bekesbourne, Kent; Museum or Unit: The Royal Museum (Canterbury), Accession or Small Find Number: 7600; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 3; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 89 mm; Head Decoration: none, Shaft Decoration: none.

Group: XVII; Site: Blacknall Field, Pewsey, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 95; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 95; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: cast; Length: 79 mm; Head Decoration: none, Shaft Decoration: none; Reference: Annable pers comm.

Group: XVII; Site: Blacknall Field, Pewsey, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 18; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 18; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 74 mm; Head Decoration: none, Shaft Decoration: none; Reference: Annable pers comm.

Group: XVII; Site: Blacknall Field, Pewsey, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 60; Head Form: flat, curved end, Collar Form: flat carinated ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 60; Degree of Completeness: 3 fragments, Type of Material: iron, Main Manufacturing Process: cast; Length: 90 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: beads, Reference: Annable pers comm.

Group: XVII; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85; Head Form: hook-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round?, Shaft Section at Level 2: round?; Grave Number: 1035; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 90 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Miles pers comm.

Group: XVII; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 811; Head Form: hook-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round?, Shaft Section at Level 2: round?; Grave Number: 1129; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 51+46 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Miles pers comm.

Group: XVII; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 805; Head Form: hook-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round?, Shaft Section at Level 2: round?; Grave Number: 1128; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 85 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Miles pers comm.

Group: XVII; Site: Frilford, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1920.261; Head Form: hook-over, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 11; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast/wrought; Length: 87 mm; Head Decoration: none, Shaft Decoration: none.

Group: XVII; Site: Kellythopre Farm, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 758.1980; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 28 (C38); Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 125 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: iron ring, small buckle, knife, Reference: Mortimer 1905: Pl CII fig 814.

Group: XVII; Site: Kingsworthy, Hants; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 63; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Head Decoration: none, Shaft Decoration: none; Reference: Hawkes pers comm.

Group: XVII; Site: Kingsworthy, Hants; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Grave Number: 9; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 48 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hawkes pers comm.

Group: XVII; Site: Kingsworthy, Hants; Accession or Small Find Number: 32; Head Form: hook-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 3; Degree of Completeness: partial, Type of Material: iron, Main Manufacturing Process: wrought; Length: 110* mm, Head Diameter/Width: 14 mm; Head Decoration: none, Shaft Decoration: none; Notes: *21 + 29 + 61 mm, Reference: Hawkes pers comm.

Group: XVII; Site: Kingsworthy, Hants; Accession or Small Find Number: 352; Head Form: hook-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 91; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 23+25 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hawkes pers comm.

Group: XVII; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 62,6-13,70; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 164; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 70 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: small long brooches with a splayed foot, bead, Reference: Akerman 1861: 141.

Group: XVII; Site: Portway Down, Andover, Hants; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 25; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 86 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 4 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: none, Shaft Decoration: none; Reference: Cook & Dacre 1985: fig 49.4 & 29 - 30. [Publication only.]

Group: XVII; Site: Portway Down, Andover, Hants; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 38; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 92 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 3 mm; Head Decoration: none, Shaft Decoration: none; Reference: Cook & Dacre 1985: 33 & fig 56.7. [Publication Only].

Group: XVII; Site: Staxton, E Yorks; Museum or Unit: Hull Museum, Accession or Small Find Number: 1569.42; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: II; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 26 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: wrist clasps, buckles, annular brooch, Reference: Sheppard 1938b: 10.

Group: XVII; Site: Sutton Courtenay, Berks; Ashmolean Museum*; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Head Decoration: none, Shaft Decoration: none; Reference: Leeds 1922-3: Pl XXVII.N & 182. *[Included based on publication only].

Group: XVII; Site: Wallingford, Berks; Ashmolean Museum; Head Form: hook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: , Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: crystal bead, pair of brooches, Reference: Leeds 1938: 97.

## *Loop-headed type (XVIII)*

Group: XVIII; Site: Appledown, nr East Marden, W.Sus; Head Form: loop-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 86; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 113 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Down & Welch 1990: 45–46, 98–99 & fig 2.31[86.1]. [Publication Only].

Group: XVIII; Site: Blacknall Field, Pewsey, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 102; Head Form: loop-headed--rectangular sect, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 102; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 102 mm; Head Decoration: none, Shaft Decoration: none; Reference: Annable pers comm.

Group: XVIII; Site: Brighthampton, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1966.38; Collar Form: none; Grave Number: 13b; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast/worked; Length: 71 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: small-long brooch & amber beads, Reference: Akerman 1857b: 395; Date: Early/mid-6th.

Group: XVIII; Site: Brighthampton, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1966.85; Head Form: loop-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 39; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 90 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: knife, Reference: Akerman 1860a: 88.

Group: XVIII; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 365; Head Form: loop-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round?, Shaft Section at Level 2: round?; Grave Number: 1000; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 64 mm, Head Diameter/Width: 11 mm, Shaft Diameter at Position 1: 5 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Miles pers comm.

Group: XVIII; Site: Kempston, Beds; Museum or Unit: BM M&LA, Accession or Small Find Number: 91,6-24,148; Head Form: loop-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 36+44 mm, Shaft Diameter at Position 1: 2.3 mm; Head Decoration: none, Shaft Decoration: none.

Group: XVIII; Site: Kempston, Beds; Museum or Unit: BM M&LA, Accession or Small Find Number: 91,6-24,147; Head Form: loop-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 103 mm, Shaft Diameter at Position 1: 2.2 mm; Head Decoration: none, Shaft Decoration: none.

Group: XVIII; Site: Kingsworthy, Hants; Accession or Small Find Number: 84; Head Form: loop-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 12; Degree of Completeness: partial, Type of Material: iron, Main Manufacturing Process: wrought; Length: 56 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Hawkes pers comm.

Group: XVIII; Site: Kingsworthy, Hants; Accession or Small Find Number: 167; Head Form: loop-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 33; Degree of Completeness: partial, Type of Material: iron, Main Manufacturing Process: wrought; Length: 78 mm, Head Diameter/Width: 11 mm, Shaft Diameter at Position 1: 2.+ mm, Shaft Diameter at Position 2: 2.+ mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Hawkes pers comm.

Group: XVIII; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3-10,278; Head Form: loop-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 110; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 77 mm, Shaft Diameter at Position 1: 2.25 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: tweezers, beads, iron knife, 2 bronze disc brooches, etc, Reference: Akerman 1860b: 347.

Group: XVIII; Site: Petersfinger, Wilts; Museum or Unit: Salisbury and South Wiltshire Museum, Accession or Small Find Number: 29/103; Head Form: loop-headed (square section*), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 29; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought, Secondary Work (if noted): *not clear in photograph; Length: 45 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 disc brooches, beads (amber & glass), finger ring, buckle, Reference: Leeds & Shortt 1953: 24 & Pl VIII, fig XXIX.103.

Group: XVIII; Site: Sleaford, Lincs; Museum or Unit: BM M&LA, Accession or Small Find Number: 83,4-1,347; Head Form: loop-headed, Collar Form: barrel & double ring, Shaft Form: tapering, Shaft Section at Level 1: round; Grave Number: 163; Degree of Completeness: incomplete, Type of Material: copper alloy; Length: 64 mm; Head Decoration: none, Shaft Decoration: none; Reference: Thomas 1887: 399.

Group: XVIII; Site: Sleaford, Lincs; Museum or Unit: BM M&LA, Accession or Small Find Number: 83,4-1,400; Head Form: loop-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 191; Degree of Completeness: incomplete, Type of Material: copper alloy; Length: 66 mm; Head Decoration: none, Shaft Decoration: none; Notes: This grave also included a 72 mm long rod, Reference: Thomas 1887.

Group: XVIII; Site: Wallingford, Berks; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: AM 1938.1216; Head Form: loop-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 11; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: forged; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: small-long brooches, amber & dark blue beads & tubular beads, Reference: Leeds 1938: 97 & Pl III.

Group: XVIII; Site: Winchester (Brook Street), Hants; Museum or Unit: Historic Resource Centre, Accession or Small Find Number: 229 (1436); Head Form: loop-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: TrIII 88; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 51 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Biddle pers comm; Biddle 1990: 556-7[item 1436]; Date: 15th-16th c.

### *Crook-headed type (XIX)*

Group: XIX; Site: Barrington, Cambs; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1909.298i; Head Form: crook-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at

Level 1: square, Shaft Section at Level 2: square; Grave Number: unknown; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 67 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none, Decoration Application Method: incised.

Group: XIX; Site: Blacknall Field, Pewsey, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BP SK 30; Head Form: crook-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 30; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 80 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Annable pers comm.

Group: XIX; Site: Butler's Field, Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85; Head Form: crook-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1104; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 96 mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Miles pers comm.

Group: XIX; Site: Dartford, Kent; Head Form: crook-headed, Shaft Form: tapering, Shaft Section at Level 1: ?, Shaft Section at Level 2: ?; Grave Number: 8; Degree of Completeness: fragmentary, Type of Material: iron, Main Manufacturing Process: wrought; Length: 80 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 disc brooches, coin, knife, Reference: Batchelor 1990: 46-50 & fig 6.4. [Publication only.]

Group: XIX; Site: Harnham Hill, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 54,6-15,8; Head Form: crook-headed-rectangular sect, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 106 mm, Head Diameter/Width: 2.75 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Akerman 1853: Pl XXXV.5.

Group: XIX; Site: Portway Down, Andover, Hants; Head Form: crook-headed, Shaft Form: tapering; Grave Number: 48; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 70 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2.5 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 2.5 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Cook & Dacre 1985: 79 & fig 61.6. [Publication only].

Group: XIX; Site: Shalbourne, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: DB 1494.5; Head Form: crook-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: square, Shaft Section at Level 2: square; Context: Metal detector find; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 44 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Robinson pers comm.

Group: XIX, Sub-group: ?; Site: Blacknall Field, Pewsey, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: BK SK 93; Head Form: crook-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: ?, Shaft Section at Level 2: square; Grave Number: 93; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 80 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: present, Reference: Annable pers comm.

### *Sleaford type (XX)*

Group: XX; Site: Sleaford, Lincs; Museum or Unit: BM M&LA, Accession or Small Find Number: 83,4-1,1347; Head Form: spatulate spade-like head, Collar Form: stepped, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 95; Degree of Completeness: complete, Type of Material: copper alloy, tinned on the upper surface and gilt on the lower zone of the head, Main Manufacturing Process: cast, Secondary Work (if noted): gilt, finished, decorated; Length: 153 mm, Head Diameter/Width: 47 mm, Head Thickness: 1.5 mm, Shaft Diameter at Position 1: 5 mm, Shaft Diameter at Position 2: 2.25 mm; Head Decoration: zoomorphic, Decoration Application Method: incised & gilt, Shaft Decoration: none; Associated Finds: present, Notes: head richly decorated with zoomorphic ornament - symmetrical, Reference: Thomas 1887: 394 & Pl XXIV.fig 1.

### *Forged-headed Disc-headed Type (XXI)*

Group: XXI; Site: Great Chesterford, Essex; Museum or Unit: BM M&LA, Accession or Small Find Number: 1964,7-2,437; Head Form: disc-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round; Grave Number: 157; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: wrought; Length: 44 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Shaft Decoration: none.

Group: XXI; Site: Morning Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 1120 MRN 369J; Head Form: disc head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 369; Degree of Completeness: 3 fragments, Type of Material: iron, Main Manufacturing Process: cast/wrought; Length: 117* mm, Head Diameter/Width: 11 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 4 mm, Shaft Diameter at Position 3: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: B7 wrist clasps, annular brooch, scutiform pendant, etc, Notes: *(28 + 51 + 38) Reference: Green, et.al. 1987: 143 & fig 427.J.

Group: XXI; Site: Wakerley, Northants; Head Form: disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 53; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: cast/forged; Length: 130 mm, Head Diameter/Width: 14 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Associated Finds: present, Notes: Adams measures at 126, Reference: Adams 1983: 51.

### *Barrel Cylinder-headed type (XXII)*

Group: XXII; Site: Howletts, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1936,5-11,125; Head Form: barrel knobbed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 35; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 159 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 3.2 mm, Shaft Diameter at Position 3: 2.0 mm; Head Decoration: linear ornament, Decoration Application Method: incised, Shaft Decoration: none; Notes or Associated Finds: annular brooch (BM M&LA, 1936,5-11,124) now lost; h. 9 mm l.

### *Hourglass-headed type (XXIII)*

Group: XXIII; Site: Wallingford, Berks; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: AM 1938.1227(?); Head Form: hourglass-headed, Collar Form: ring shaft mouldings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 15; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 110 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Position 3: 2.25 mm; Head Decoration: none, Shaft Decoration: shaft mouldings, Decoration Application Method: incised; Associated Finds Included: Annular brooch, applied saucer brooches, beads, bronze pin, Reference: Leeds 1938: 98 & Pl VII.

### *Stowting knob-headed type (XXIV)*

Group: XXIV; Site: Stowting, Kent; Museum or Unit: Maidstone Museum, Accession or Small Find Number: none; Head Form: ball above concave moulding, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 9 (5); Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 109 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brent 1867: 411-2.

### *Harnham Hill type (XXV)*

Group: XXV; Site: Caistor-by-Norwich, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 77-939; Head Form: curved outline plate, Collar Form: rectangular collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 16; Degree of Completeness: incomplete, Type of Material: copper alloy; Length: 168 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: iron wire ring; Associated Finds Included: copper alloy annular brooches; Notes: linear ornament on collar, Reference: Myres & Green 1973: 224-5 & fig 62.Gr16.G.

Group: XXV; Site: Cassington, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: ?; Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 3; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised and enamelled; Head Decoration: pelta-scroll, Decoration Application Method: incised, Shaft Decoration: none; Associated Finds Included: saucer brooches, Reference: Leeds & Riley 1942: 66, 70, & fig 16 (b,c,d); Date: 7th century.

Group: XXV; Site: Harnham Hill, Wilts; Museum or Unit: BM M&LA, Accession or Small Find Number: 53,6-14,71; Head Form: spatulate zone curved outline, Collar Form: rectangular collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 42; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: worked; Length: 74 mm, Head Diameter/Width: 6 mm; Head Decoration: 'X' above ring, Decoration Application Method: incised, Shaft Decoration: criss-cross, Decoration Application Method: incised; Reference: Akerman 1853: 263 & Pl XIII.1.

Group: XXV; Site: Newnham, Northants; Museum or Unit: Northampton Museum, Accession or Small Find Number: D155/1955-6; Head Form: curved terminal -, Collar Form: rectangular collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 6

Group: XXV; Site: Ruskington, Lincs; Museum or Unit: Lincoln City and County Museum; Head Form: curved outline plate, Collar Form: rectangular collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy; Length: 125 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: slip knot ring; Notes: linear ornament on collar.

### *Faversham bird-headed type (XXXII)*

Group: XXXII; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1130'70; Head Form: bird-plate headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): garnet set and gilt; Length: 133 mm; Head Decoration: garnet set, Decoration Application Method: applied, Shaft Decoration: none; Reference: Smith 1923.

### *Holywell Row type (XXXIII)*

Group: XXXIII; Site: Holywell Row, Suffolk; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 2.7121.d; Head Form: Flat-disc above mouldings, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Grave Number: 37; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 3 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: flat-disc above two double ring collars separated by conical, Associated Finds: present, Reference: Lethbridge 1931: 37 & fig 9.3.

### *Plated knob-headed type (XXXIV)*

Group: XXXIV; Site: Bifrons, Kent; Museum or Unit: Maidstone Museum, Accession or Small Find Number: KAS 376; Head Form: triangular plate above knob, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 89; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 73 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Attachment: triangular plate, Kind of Wire Ring: cast ring, Pair Survival: KAS 377; Associated Finds Included: two bronze brooches (unidentified); Notes: 5.5 mm at the top plate edge, Reference: Godfrey-Faussett 1880: 556.

Group: XXXIV; Site: Bifrons, Kent; Museum or Unit: Maidstone Museum, Accession or Small Find Number: KAS 377; Head Form: triangular plate above knob, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 89; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 75 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Attachment: triangular plate, Kind of Wire Ring: cast ring, Pair Survival: KAS 376; Associated Finds Included: two bronze brooches (unidentified); Notes: 6.5 mm at top plate edge, Reference: Godfrey-Faussett 1880: 556.

*Knob-above-eyelet type (XXXV)*

Group: XXXV; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum, Accession or Small Find Number: none; Head Form: eyelet below a stub, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: *; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 113 mm; Head Decoration: none, Shaft Decoration: none; Notes: knob above an elliptical eyelet. *Cannot be assigned, Reference: Humphreys, et. al. 1922-3; 1923-4.

Group: XXXV; Site: Fairford, Glos; Museum or Unit: BM M&LA, Accession or Small Find Number: 1929,7-15A; Head Form: eyelet below stub, Collar Form: incised rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 112 mm, Head Diameter/Width: 5 mm; Head Decoration: 4 lines above, Decoration Application Method: incised, Shaft Decoration: none; Notes or Associated Finds Included: Saucer brooches.

Group: XXXV, Sub-group: i; Site: Dover, Kent; Museum or Unit: BM M&LA; Head Form: knob or stub above an eyelet, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 20; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 5* mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 square-headed brooches, buckle, bracteate, beads & beaker, Notes: *across eyelet, Reference: Evison 1987: 220-1 & fig 12.20.3.

Group: XXXV, Sub-group: ii; Site: Fairford, Glos; Museum or Unit: BM M&LA, Accession or Small Find Number: 1929,7-15,4; Head Form: knob above an eyelet, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 112 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Attachment: loop, Kind of Wire Ring: twisted wire; Notes: 1 mm diameter wire forming 21 mm diameter ring.

Group: XXXV, Sub-group: ii; Site: Mildenhall, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: S.31; Head Form: knob-above an eyelet, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 128 mm, Head Diameter/Width: 3* mm, Shaft Diameter at Position 1: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: glass and amber beads, 2 gilt saucer brooches, Notes: *5 mm across the eyelet, Reference: Anon Notes 1911-12: Pl facing page 611.

Group: XXXV, Sub-group: ii; Site: Poulton Down, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: DM74; Head Form: eyelet below knob or stub, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: well; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 96 mm; Head Decoration: none, Shaft Decoration: none; Reference: Meyrick 1950: 221.

Group: XXXV, Sub-group: ii; Site: Standlake, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1921.1113; Head Form: knob above an eyelet, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 92 mm; Head Decoration: notched edges, Decoration Application Method: punched, Shaft Decoration: none; Notes: possible traces of gilding on terminal, Reference: Manning Collection.

Group: XXXV, Sub-group: iii; Site: Kingsworthy, Hants; Accession or Small Find Number: 88; Head Form: flat-knob above eyelet, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft

Section at Level 2: round; Grave Number: 2; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: 3* mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: dot decoration, Decoration Application Method: punched, Shaft Decoration: line, Decoration Application Method: incised 19 mm from tip; Notes: No finds, *(across the eyelet). Reference: Hawkes pers comm.

Group: XXXV, Sub-group: iv; Site: Wheatley, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1883.251; Head Form: disc-headed above an eyelet, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 14; Degree of Completeness: head broken, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): punched; Length: 130 mm, Head Diameter/Width: 15* mm; Head Decoration: dots & wavy lines, Decoration Application Method: punched & incised, Shaft Decoration: linear ornament, Decoration Application Method: incised; Attachment: through eyelet, Kind of Wire Ring: slip-knot; Associated Finds Included: 2 saucer brooches, glass, amber, & crystal beads, knife etc, Notes: *(measurement across disc), Reference: Leeds 1916-7: 51-52 & fig 4.

### *Bifrons bird-headed type (XXXVI)*

Group: XXXVI; Site: Bifrons, Kent; Museum or Unit: Maidstone Museum, Accession or Small Find Number: KAS 612; Head Form: faceted-knob with relief bird, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 85; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 75 mm, Head Diameter/Width: 12 mm, Shaft Diameter at Position 1: 1.75 mm; Head Decoration: head of bird, Decoration Application Method: cast, Shaft Decoration: none; Reference: Godfrey-Faussett 1880: 555-6; Aberg 1926: 145 & 277.

### *Moulded bird-headed type (XXXVII)*

Group: XXXVII; Site: Wangford Warren, Suffolk; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: A.R. 1904.249; Head Form: bird head above faceted knob, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Main Manufacturing Process: cast, Notation About Construction: head silver, shaft CA; Length: 163 mm, Head Diameter/Width: 32 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: ring-&-dot eye, Decoration Application Method: punched, Shaft Decoration: none; Notes: Bird perched on a faceted knob.

Group: XXXVII; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.333; Head Form: bird-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: head, Type of Material: copper alloy - gilt, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 24 mm; Head Decoration: none, Shaft Decoration: none; Reference: Peers & Radford 1943: 55 & Pl XXVIII.a.

### *Thistle-headed type (XXXVIII)*

Group: XXXVIII; Site: Bawsey (nr King's Lynn), Norfolk; Museum or Unit: King's Lynn Museum, Accession or Small Find Number: KL119.985.5; Head Form: flattened thistle-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of

Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 74 mm; Head Decoration: incised curls, Decoration Application Method: incised, Shaft Decoration: none; Reference: King's Lynn Museum Catalogue; Date: middle Saxon ?.

Group: XXXVIII; Site: Castle Bytham, Lincs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 47.2634; Head Form: thistle-headed pin, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Length: 42 mm, Shaft Diameter at Position 1: 2.0 mm; Head Decoration: none, Decoration Application Method: none, Shaft Decoration: none, Decoration Application Method: none; Reference: *Arch Jour* X[1853]: 81.

Group: XXXVIII; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,720; Head Form: thistle-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 160, Context: 626; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 33 mm; Head Decoration: none, Decoration Application Method: none, Shaft Decoration: none, Decoration Application Method: none; Associated Finds Included: glass beads, silver pendant, ivory ring, glass bowl, Reference: Evison 1987: 251 & fig 62.160.1.

### *Flat Plate Animal headed type (XXXIX)*

Group: XXXIX; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1131'70A; Head Form: Faversham flat-plate, Shaft Form: unknown, Shaft Section at Level 1: round; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): niello; Length: 23+82 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2.5 mm; Head Decoration: linear decoration, Decoration Application Method: incised, Shaft Decoration: linear decoration, Decoration Application Method: incised; Notes: Embellished with niello. An animal-headed pin, Reference: Smith 1923: 43 & fig 41.

### *Lyre-headed type (XL)*

Group: XL; Site: Shakenoak, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1971.737; Head Form: flat-plate with curved edges, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt(?); Length: 63 mm, Head Diameter/Width: 2 mm, Shaft Diameter at Position 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brodribb, et al 1972: fig 31.155.

### *Dover bird-headed type (XLI)*

Group: XLI; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,157; Head Form: 'flat head in shape of bird', Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 30, Context: 368; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): punched decoration; Length: 84 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none;

Associated Finds Included: Bone comb, silver-gilt disc brooch and pendant, beads, etc, Reference: Evison 1987: 224-5 & fig 18.30.3.

### *Monkwearmouth Rivet-like type (XLII)**

This pins have been excluded from the discussion of the types in Chapter 5. Please see footnote 8 in Chapter 1.

Group: XLII; Site: Monkwearmouth; Museum or Unit: at Durham, Accession or Small Find Number: MK 67 DR; Head Form: rivet-like bun-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: shaft broken, Type of Material: copper alloy, Main Manufacturing Process: undetermined; Length: 7 + 6 mm, Head Diameter/Width: 2 mm, Shaft Diameter at Position 1: < 1 mm, Shaft Diameter at Position 2: < 1 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: associated with a human skeleton, Reference: Cramp pers comm.

Group: XLII; Site: Monkwearmouth; Museum or Unit: at Durham, Accession or Small Find Number: MK 67 HK; Head Form: rivet-like bun-head, Collar Form: none, Shaft Form: undetermined, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: head lost, Type of Material: copper alloy, Main Manufacturing Process: undetermined; Length: 9 + 9 mm, Head Diameter/Width: 2 mm, Shaft Diameter at Position 1: < 1 mm, Shaft Diameter at Position 2: < 1 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: quite possibly copper wire, Reference: Cramp pers comm.

Group: XLII; Site: Monkwearmouth; Museum or Unit: at Durham, Accession or Small Find Number: MK 67 GR; Head Form: rivet-like bun-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Main Manufacturing Process: undetermined; Length: 13 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 1 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: human bone frags, pale window glass, Reference: Cramp pers comm.

Group: XLII; Site: Monkwearmouth; Museum or Unit: at Durham, Accession or Small Find Number: MK 67 J4; Shaft Form: fragment of shaft, Shaft Section at Level 2: round; Degree of Completeness: head lost, Main Manufacturing Process: undetermined; Length: 9 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 1 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: human bone frags, pale green window glass, 2 Saxon nails, Reference: Cramp pers comm.

Group: XLII; Site: Monkwearmouth; Museum or Unit: at Durham, Accession or Small Find Number: MK 67 J0; Head Form: rivet-like bun-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: shaft broken, Type of Material: copper alloy, Main Manufacturing Process: undetermined; Length: 9 + 4 mm, Head Diameter/Width: 2 mm, Shaft Diameter at Position 1: < 1 mm, Shaft Diameter at Position 2: < 1 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: associated with a human skeleton, Reference: Cramp pers comm.

### *Kingston disc-headed type (L)*

Group: L; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,---; Head Form: disc-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 78; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 33 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: wire ring, Reference: Evison 1987: 236 & fig 39.78.1.

Group: L, Sub-group: i, Variant: ?, Sub-Variant: ?; Site: Market Sq, Swindon, Wilts; Museum or Unit: Swindon Museum, Accession or Small Find Number: Sw75.A25.16; Head Form: disc-headed, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: A25--x8; Degree of Completeness: shaft broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 15 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 whetstone frags, loom weights, bone disc-headed pins, pot, Reference: Canham & Phillips: Museum mss copy of finds report; Date: 7th c (?).

Group: L, Sub-group: i, Variant: a, Sub-Variant: 1; Site: Little Wilbraham, Cambs; Museum or Unit: University Museum, Cambs, Accession or Small Find Number: 1631B; Head Form: disc, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 89 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none.

Group: L, Sub-group: i, Variant: a, Sub-Variant: 1; Site: Sarre, Kent; Museum or Unit: Maidstone Museum; Head Form: disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 3 mm, Head Thickness: 2 mm; Head Decoration: none, Shaft Decoration: none.

Group: L, Sub-group: i, Variant: a, Sub-Variant: 1; Site: West Stow, Suffolk; Head Form: disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 4 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: West 1985: fig 246.4. [Publication only].

Group: L, Sub-group: i, Variant: a, Sub-Variant: 1; Site: West Stow, Suffolk; Museum or Unit: Moyse's Hall, Accession or Small Find Number: WS 58; Head Form: disc-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: WD/3; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: West 1985: 246.3.

Group: L, Sub-group: i, Variant: a, Sub-Variant: 2; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,760; Head Form: disc-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: F; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: 4 lines, Decoration Application Method: incised; Associated Finds Included: silver disc brooch, bezel ring, beads, lock, knife, Reference: Evison 1987: 215 & fig 4.F.2.

Group: L, Sub-group: i, Variant: a, Sub-Variant: 2; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,609; Head Form: disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 132, Context: 526; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.75 mm, Shaft Diameter at Position 2: 1.75 mm, Shaft Diameter at Position 3: 1.75 mm; Head Decoration: none, Shaft Decoration: 21 mm 2 lines, Decoration Application Method: incised; Associated Finds Included: 13 beads, iron knife, girdle hangers, Reference: Evison 1987: 245 & 54.132.1.

Group: L, Sub-group: i, Variant: b; Site: Not Identified, Lincs; Museum or Unit: Scunthorpe Museum, Accession or Small Find Number: Loan; Head Form: disc-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: Chance; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 34 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Reference: Leahy pers comm.

Group: L, Sub-group: i, Variant: c; Site: Bampton, Oxon; Museum or Unit: Pitt-Rivers Museum; Head Form: disc-headed, Shaft Form: swelled, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Grave Number: yes; Type of Material: copper alloy; Length: 50 mm, Head Diameter/Width: 6 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: None identified, possible the pin was associated with burial, Reference: Ellis 1891: 156; Blair 1990: 6 & fig 7.a, Ross, forthcoming (specialist report prepared for Blair's planned publication).

Group: L, Sub-group: i, Variant: e, Sub-Variant: 1; Site: Marlowe I, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 1064; Head Form: disc-headed, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 483; Degree of Completeness: complete, Type of Material: bone, Main Manufacturing Process: carved; Length: 36 mm, Head Diameter/Width: 3 mm, Head Thickness: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm; Date: 650-700.

Group: L, Sub-group: i, Variant: e, Sub-Variant: 2; Site: Sarre, Kent; Museum or Unit: Maidstone Museum; Head Form: disc-headed, Collar Form: none, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: squared; Grave Number: 103; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 3 mm, Head Thickness: 3 mm; Head Decoration: none, Shaft Decoration: 3 lines above hip, Decoration Application Method: incised; Associated Finds Included: sword, umbo, earthen vessel of blackware, Reference: Brent 1864: 175.

Group: L, Sub-group: ii, Variant: ?, Sub-Variant: ?; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,176; Head Form: disc-headed, Collar Form: moulded ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 33; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: forged; Length: 60 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: spearhead, knife, iron buckle, Reference: Evison 1987: 225-5 & fig 20.33.4.

Group: L, Sub-group: ii, Variant: a, Sub-Variant: 1; Site: Colchester (Culver St), Essex; Museum or Unit: Colchester Archaeological Trust, Accession or Small Find Number: SF 1.81.93; Head Form: disc-headed, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F14; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 39 mm, Head Diameter/Width: 3 mm, Head Thickness: 1.8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Crummy 1988: 6 & fig 2.1.

Group: L, Sub-group: ii, Variant: a, Sub-Variant: 1; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,47; Head Form: disc-headed, Collar Form: multiple ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 10, Context: 63; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 39 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Associated Finds Included: iron spearhead, iron knife, Reference: Evison 1987: 217 & fig 8.10.1.

Group: L, Sub-group: ii, Variant: a, Sub-Variant: 1; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1135'70; Head Form: disc-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Notes: Ring made by incision of two lines into the shaft.

Group: L, Sub-group: ii, Variant: a, Sub-Variant: 2; Site: Sarre, Kent; Museum or Unit: Maidstone Museum; Head Form: disc-headed, Collar Form: slight double ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 75; Degree of Completeness: complete, Type of

Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm; Head Decoration: none, Shaft Decoration: paired lines, Decoration Application Method: incised 21 mm from tip; Associated Finds Included: ?2 amethysts, 2 buckles, discoid pin (see fig) broken knife?, Notes: This pin might be from grave 75 Reference: Brent 1864: 170).

Group: L, Sub-group: ii, Variant: b, Sub-Variant: 2; Site: West Stow, Suffolk; Accession or Small Find Number: 333; Head Form: disc-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: SFB3; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 44 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: lines, Decoration Application Method: incised; Reference: West 1985: 16 & fig 36.1.

Group: L, Sub-group: ii, Variant: e, Sub-Variant: 1; Site: Sibertswold, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6450; Head Form: disc-headed, Collar Form: ring, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 24; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 36 mm, Head Diameter/Width: 3.5 mm, Head Thickness: 1 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Associated Finds Included: fittings for a box (hasp and hinges), iron knife, Reference: Faussett 1856: 106 & pl 12[fig 22].

Group: L, Sub-group: ii, Variant: e, Sub-Variant: 2; Site: Marlowe I, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 783; Head Form: disc, Collar Form: incised ring collar, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Context: pit 193; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 3.5 mm, Head Thickness: 1 mm; Head Decoration: none, Shaft Decoration: linear, Decoration Application Method: incised; Notes or Associated Finds: period 8, pit, Reference: Garrard pers comm.

Group: L, Sub-group: iii; Site: Sibertswold, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6504; Head Form: disc-headed (crude), Collar Form: crude collar zone, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 138; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 44 mm, Head Diameter/Width: 4 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: lines, Decoration Application Method: incised; Reference: Faussett 1856: 123-4 & illustration on 123.

Group: L, Sub-group: iii, Variant: ?, Sub-Variant: ?; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 411; Head Form: disc-headed, Collar Form: double ring collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 89; Degree of Completeness: partial shaft, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 22 mm, Head Diameter/Width: 3.5 mm, Head Thickness: 2 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Notes or Associated Finds: Same layer produced two spiral-headed pins, Reference: Garrard pers comm; Date: VI(2) - VI(3).

Group: L, Sub-group: iii, Variant: ?, Sub-Variant: ?; Site: Sarre, Kent; Museum or Unit: Maidstone Museum; Head Form: disc-headed, Collar Form: threaded, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Grave Number: 154-155 ?; Degree of Completeness: partial, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 23 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Notes or Associated Finds: possible beads, but disturbed graves, Reference: Brent 1864: 179.

Group: L, Sub-group: iii, Variant: a; Site: Coddenham, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: 2361; Head Form: disc-headed, Collar Form: double ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: MD find; Degree of

Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 46 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Newman pers comm.

Group: L, Sub-group: iii, Variant: a; Site: Lakenheath, Cambs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 97.45; Head Form: disc-headed, Collar Form: double ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Decoration Application Method: none, Shaft Decoration: linear ornament, Decoration Application Method: incised.

Group: L, Sub-group: iii, Variant: a, Sub-Variant: 1; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,714; Head Form: disc, Collar Form: double ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 158, Context: 621; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 1 mm; Head Decoration: none, Shaft Decoration: none, Decoration Application Method: incised; Associated Finds Included: Two bronze buckles and knife, Reference: Evison 1987: 251 & fig 62.158.3.

Group: L, Sub-group: iv, Variant: a, Sub-Variant: 1; Site: Colchester (Culver St), Essex; Museum or Unit: Colchester Archaeological Trust, Accession or Small Find Number: SF 1.81.3529; Head Form: disc-headed, Collar Form: triple rings, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: G1131; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 41 mm, Head Diameter/Width: 4 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Crummy 1988: 6 & fig 2.2.

Group: L, Sub-group: iv, Variant: a, Sub-Variant: 2; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 531; Head Form: disc-headed, Collar Form: multiple rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 422; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 5 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Reference: Garrard pers comm.

Group: L, Sub-group: iv, Variant: a, Sub-Variant: 2; Site: Kingston, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6089; Head Form: disc-headed, Collar Form: multiple mouldings, Shaft Form: tapering lined, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 6; Degree of Completeness: point lost, Type of Material: silver, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 3 mm, Head Thickness: 1 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Associated Finds Included: beads, crystal, knotted rings of silver, amethysts, Reference: Faussett 1856: 43 & illustration in text.

Group: L, Sub-group: iv, Variant: a, Sub-Variant: 2; Site: Ozingell, Kent; Museum or Unit: excavator; Head Form: disc, Collar Form: triple ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Grave Number: 28; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 33 mm, Head Diameter/Width: 3 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: lost mm, Shaft Diameter at Position 3: lost mm; Head Decoration: none, Shaft Decoration: linear, Decoration Application Method: incised; Reference: see figure 5.22.1, material provided by Grainger.

Group: L, Sub-group: iv, Variant: a, Sub-Variant: 2; Site: West Stow, Suffolk; Head Form: disc-headed, Collar Form: multiple collars, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process:

cast; Length: 32 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: multiple rings, Decoration Application Method: incised lines; Reference: West 1985: fig 266.7.

Group: L, Sub-group: iv, Variant: d; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 542; Head Form: disc-headed, Collar Form: triple ring collar, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Context: 141; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised decoration; Length: 38 mm, Head Diameter/Width: 5 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: bead mouldings, Decoration Application Method: incised lines; Notes or Associated Finds: No associated finds, hip begins 8 mm from the tip (rings), Reference: Garrard pers comm; Date: ?1050-1100.

Group: L, Sub-group: iv, Variant: e; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 54; Head Form: disc, Collar Form: triple ring, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: Frere Tr; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised; Length: 43 mm, Head Diameter/Width: 3 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: linear, Decoration Application Method: incised.

### *Pierced disc-headed type (LI)*

Group: LI; Site: Burwell, Cambs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 2.16186(A); Head Form: pierced sub-discoid head, Collar Form: double ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 61; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 5 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Associated Finds Included: iron buckle, iron knife, small loop, Reference: Lethbridge 1931: 59 & fig 29.2.

Group: LI; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 266; Head Form: pierced sub-discoid head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 144; Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 4 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: slip-knot ring; Associated Finds Included: comb, chatelaine, clip under skull; pin on top of skull, Reference: Miles pers comm.

Group: LI; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 395; Head Form: pierced disc-headed, Collar Form: incised spiral, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1011; Type of Material: copper alloy, Main Manufacturing Process: wrought, Secondary Work (if noted): hole punched through; Length: 59 mm, Head Diameter/Width: 5 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: dots around hole, Decoration Application Method: punched, Shaft Decoration: none; Associated Finds: present, Notes: Under chin, perforated end point downwards, Reference: Miles pers comm; Date: late 6th-7th c.

Group: LI; Site: Cassington, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1940.184 (?); Head Form: pierced-disc-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at

Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Leeds & Riley 1942.

Group: LI; Site: Colchester, Essex; Museum or Unit: Colchester Archaeological Trust, Accession or Small Find Number: SF1.81 542(c); Head Form: pierced-disc-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: L12; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52.5 mm, Head Diameter/Width: 5 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: 2 lines, Decoration Application Method: incised; Attachment: wire ring, Kind of Wire Ring: slip-knot; Associated Finds: pottery, Reference: Crummy 1988: 6 & fig 2; Date: 6th/7th c.

Group: LI; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,285; Head Form: pierced disc-headed, Collar Form: double moulded ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 44; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 6 mm; Head Decoration: 3 dots, Decoration Application Method: punched, Shaft Decoration: 2 lines, Decoration Application Method: incised 22 mm from tip; Associated Finds Included: Iron keys, iron rivet & knife, Reference: Evison 1987: 229 & fig 26.44.1.

Group: LI; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,673; Head Form: pierced disc-headed, Collar Form: double moulded ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 147; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Attachment: wire ring, Kind of Wire Ring: slip-knot; Associated Finds Included: Iron pin (untypable), knife and other iron fragments, Reference: Evison 1987: 249 & fig 59.147.1.

Group: LI; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,520; Head Form: pierced disc-headed, Collar Form: double moulded ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 101; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Attachment: wire ring, Kind of Wire Ring: slip-knot; Notes: Evison measurement = 61 mm, Reference: Evison 1987: 240 & fig 48.101.1.

Group: LI; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1135 D'70; Head Form: pierced-disc-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: head only, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 18 mm, Head Diameter/Width: 11 mm; Head Decoration: none, Shaft Decoration: none; Attachment: iron ring; NOTES: *It is questionable whether this pin belongs to this group.

Group: LI; Site: Finglesham, Kent; Head Form: pierced disc-headed, Collar Form: incised ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Grave Number: 84; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 6 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hawkes pers comm.

Group: LI; Site: Finglesham, Kent; Head Form: pierced disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 164; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm, Head Diameter/Width: 6 mm, Head Thickness: 1.5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hawkes pers comm.

Group: LI; Site: Finglesham, Kent; Head Form: pierced disc-headed, Collar Form: multiple rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 182; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 75 mm, Head Diameter/Width: 6 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 2.25 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: slip-knot ring; Associated Finds Included: Pin (Type IV.i), necklace, Reference: Hawkes pers comm.

Group: LI; Site: Finglesham, Kent; Head Form: pierced disc-headed, Collar Form: incised rings, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 202; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 54 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hawkes pers comm.

Group: LI; Site: Finglesham, Kent; Head Form: pierced disc-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 16; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hawkes pers comm.

Group: LI; Site: Holywell Row, Suffolk; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 2.7143; Head Form: pierced disc-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 70; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 3 mm, Head Thickness: 1 mm; Head Decoration: none, Shaft Decoration: none; Attachment: hole in head, Kind of Wire Ring: slip-knot ring; Notes: Lethbridge thought mid-7th for grave & pin, Associated Finds Included: chatelaine, purse mount, bead; Reference: Lethbridge 1931: 34 & fig 18A.2.; Date: late 6th - 7th.

Group: LI; Site: Kingston, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6348; Head Form: pierced disc-headed, Collar Form: double moulded, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 161; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 6 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 1.5 mm; Head Decoration: none, Shaft Decoration: 2 lines, Decoration Application Method: incised 19 mm from tip; Notes: mouldings on the shaft have bulbous character, Associated Finds: present, Reference: Faussett 1856: 71.

Group: LI; Site: Melbourn, Cambs; Museum or Unit: University Museum (Cambs), Accession or Small Find Number: 2.53.201; Head Form: pierced-disc-headed, Collar Form: incised rings, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 26; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wilson 1956: 37.

Group: LI; Site: Melbourn, Cambs; Museum or Unit: University Museum (Cambs), Accession or Small Find Number: 53.185; Head Form: pierced-disc-headed, Collar Form: incised rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 7; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: single edge knife, two box fillings or tags, Reference: Wilson 1956: 32 & Pl IV.O.

Group: LI; Site: Shudy Camps, Cambs; Museum or Unit: University Museum, Cambridge; Head Form: pierced disc-headed, Collar Form: none, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 71; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2

mm, Shaft Diameter at Position 2: 3.5 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none ; Kind of Wire Ring: slip-knot ring; Reference: Lethbridge 1936: fig 4.a.1.

Group: LI; Site: Sibertswold, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6461; Head Form: pierced disc-headed, Collar Form: triple moulded, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 39; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 66 mm, Head Diameter/Width: 8 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Position 3: 1.5 mm; Head Decoration: none, Shaft Decoration: 2 lines, Decoration Application Method: incised 17 mm above tip; Attachment: wire ring, Kind of Wire Ring: twisted end; Reference: Faussett 1856: 109 & pl 12[fig 21].

Group: LI; Site: Standlake Down, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1921.1114; Head Form: pierced disc-headed, Collar Form: none, Shaft Form: swelled, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm; Head Decoration: none, Shaft Decoration: none.

Group: LI; Site: Stanton Harcourt, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1940.186; Head Form: pierced disc-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 2; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2.25 mm; Head Decoration: none, Shaft Decoration: none; Attachment: wire ring, Kind of Wire Ring: twisted end; Associated Finds Included: bead, knife; Notes: pin on right shoulder, Reference: Harden & Treweeks 1945: 34-5 & fig 10.2.

Group: LI; Site: West Stow, Suffolk; Head Form: pierced disc-headed, Collar Form: incised rings, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 24 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2.5 mm, Shaft Diameter at Position 2: 2.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: West 1985: fig 266.5.

Group: LI; Site: West Stow, Suffolk; Head Form: pierced disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: West 1985: fig 266.6.

### *Superior looped-disc-headed type (LII)*

Group: LII; Site: Caistor-by-Norwich, Norfolk; Museum or Unit: Castle Museum, Norwich, Accession or Small Find Number: CbyNASC; Head Form: superior-looped-disc, Collar Form: incised rings, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 31; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm, Head Diameter/Width: 7 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 3 mm; Head Decoration: none, Shaft Decoration: none; Attachment: ring above disc, Kind of Wire Ring: slip knot; Notes: at mouth. Loop is set perpendicular to discoid head, Reference: Myres & Green 1973: 228-9 & fig 62 g.31.C.

Group: LII; Site: Kingston, Kent; Museum or Unit: Merseyside Museum Service, Accession or Small Find Number: M6236; Head Form: superior-looped-disc, Collar Form: 4 incised rings, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 183; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width:

5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: incised rings, Decoration Application Method: 7 mm from tip; Attachment: ring above disc, Kind of Wire Ring: slip knot; Notes: superior loop has a pyramidal shape, Reference: Faussett 1856: 75 & Pl 12[fig 17].

Group: LII; Site: Melbourn, Cambs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 253.201; Head Form: superior-looped-disc, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 26; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.25 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Decoration Application Method: none, Shaft Decoration: none; Attachment: ring above disc, Kind of Wire Ring: slip knot; Associated Finds Included: small CA loop, buckle; Notes: pin under chin, Reference: Wilson 1956: 37.

### *Superior looped-elliptical-headed type (LIII)*

Group: LIII; Site: Burwell, Cambs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 26.257; Head Form: superior-looped-elliptical, Collar Form: thread-like collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 6; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: 3.5 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Lethbridge 1931: fig 22.7.

Group: LIII; Site: Stanton Harcourt, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1940.187; Head Form: superior-looped-elliptical, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 12; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 4 mm, Head Thickness: 2 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Attachment: wire loop, Kind of Wire Ring: slip-knot ring; Notes: 'on right ribs, near top of breast bone', Reference: Harden & Treweeks 1945: 36, fig 10, Pl VIII.D; Date: late 6th/7th c.

### *Applied disc-headed type (LIV)*

Group: LIV; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,689; Head Form: applied disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 155; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): attachment of wire and garnet; Length: 71 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: bossed, Shaft Decoration: none; Associated Finds Included: beads, knife, iron key, iron bar, bronze loop, Reference: Evison 1987: 250 & fig 60.155.1.

Group: LIV; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1129'70; Head Form: flat-plate headed*, Shaft Form: tapering, Shaft Section at Level 1: flat-sectioned, Shaft Section at Level 2: flat; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Length: 199 mm, Head Diameter/Width: 1 mm; Head Decoration: half circles, Decoration Application Method: punched, Shaft Decoration: none; Notes: *The flat plate might have formed the based for an applied disc-headed type. Reference: Smith 1923: fig 40.

Group: LIV; Site: Hawnby, Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: 82,3-23,32 (37?); Head Form: flattened head with hole, Collar Form: double ring collar, Shaft Form: tapering, Shaft Section at Level 1: flat, Shaft Section at Level 2: round; Grave Number: barrow; Degree of Completeness: broken head, Type of Material: silver, Main Manufacturing Process: cast; Length: 70 mm, Head Diameter/Width: 11 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: bronze bowl, buckles, penannular brooch, knife, Notes: Shaft is flat an splaying below head. Reference: Smith 1912: 96.

Group: LIV; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 568; Head Form: applied disc, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T2 10383; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): applied disc; Length: 56 mm, Head Diameter/Width: 8 mm; Head Decoration: decorated disc, Decoration Application Method: press or punch decorated, Shaft Decoration: none; Pair Survival: SOU 169 634; Reference: Brisbane pers comm.

Group: LIV; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 634; Head Form: applied disc, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T2 10383; Degree of Completeness: tip broken, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): applied disc; Length: 53 mm, Head Diameter/Width: 9 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: decorated disc, Decoration Application Method: press or punch decorated, Shaft Decoration: none; Pair Survival: SOU 169 568; Reference: Brisbane pers comm.

### *Amethyst-bead-headed type (LV)*

Group: LV; Site: Cirencester, Glos; Museum or Unit: British Museum, Sloane Collection, Accession or Small Find Number: 523; Head Form: Amethyst-bead-headed, Collar Form: knob, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?, Context: ?; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): shaft with amethyst bead; Length: 90 mm; Head Decoration: none, Shaft Decoration: none; Reference: Jessup 1950: Pl 1.2; Brown 1976: 24 & fig 3.1.7.

### *Castle Dyke wedge-headed type (LVI)*

Group: LVI; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1899; Head Form: wedge-headed, Collar Form: no collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 36 mm, Head Diameter/Width: 2.5 mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 1.2 mm, Shaft Diameter at Position 2: 1.2 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LVI; Site: Castle Dyke, Humbs; Museum or Unit: Humberside Archaeological Unit; Head Form: wedge-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 17; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): head might have been hammered; Length: 44 mm, Head Diameter/Width: 4 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 1.8 mm, Shaft Diameter

at Position 2: 2 mm, Shaft Diameter at Postion 3: 1.8 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: knife, key fragment, pottery sherd, Reference: Whitwell pers comm.

Group: LVI; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,---; Head Form: wedge-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 138; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 32 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.25 mm; Head Decoration: none, Shaft Decoration: 2 lines, Decoration Application Method: incised; Associated Finds Included: iron pin, needle, S-shaped hooks, knife, iron 'keys', Reference: Evison 1987: 247-8 & fig 57.138.2.

Group: LVI; Site: Sibertswold, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6391; Head Form: wedge head, Collar Form: thread collar, Shaft Form: hip, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Grave Number: 13; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: linear decoration, Decoration Application Method: incised; Reference: Faussett 1856: 105.

### *Sibertswold bird-headed type (LVII)*

Group: LVII; Site: Sibertswold, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6451; Head Form: bird-head terminals, Collar Form: double ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 18; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 7 mm; Head Decoration: linear ornament, Decoration Application Method: incised, Shaft Decoration: none; Notes: Ring head (for a garnet ?), flat plate above. Associated Finds: present, Reference: Faussett 1856: 105-6 & pl 12[fig 19]; Wright 1855: fig on 14.

### *Cross-headed type (LVIII)*

Group: LVIII, Sub-group: i; Site: Breach Down, Kent; Museum or Unit: BM M&LA; Head Form: maltese-type cross-headed, Collar Form: none, Shaft Section at Level 1: rectangular, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 107 mm, Head Diameter/Width: 17 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: ring-and-dot, Decoration Application Method: punched; Reference: Bartlett 1845: 316-317; Wright 1845; Akerman 1855; Smith 1908.

Group: LVIII, Sub-group: ii; Site: West Heslerton, E.Yorks; Museum or Unit: Finds with excavator, Accession or Small Find Number: HP1A31CS; Head Form: cruciform-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1A31; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): worked; Length: 179 mm; Head Decoration: dots, Decoration Application Method: punched, Shaft Decoration: none; Associated Finds Included: Beads, knife, latch lifter, brush tube. Notes: Dots edge one face, Dots form cross on second face. Reference: Powlesland pers comm.

### *Composite-Cruciform type (LIX)*

Group: LIX; Site: Wigber Low, Derby; Museum or Unit: BM M&LA, Accession or Small Find Number: 73,6-2,97; Head Form: composite cruciform, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: barrow; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite; Length: 61 mm, Head Diameter/Width: 14.8 mm; Head Decoration: filigree & garnet decoration, Decoration Application Method: composite construction, Shaft Decoration: none; Pair Identifer: BM M&LA acc no, 73,6-2,96; Reference: Ager (in Collis) 1983: 73 - 76 & fig 40; Date: 7th century.

Group: LIX; Site: Wigber Low, Derby; Museum or Unit: BM M&LA, Accession or Small Find Number: 73,6-2,96; Head Form: composite-cruciform, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: barrow; Degree of Completeness: shaft broken, Type of Material: silver, Main Manufacturing Process: composite; Length: 23.8 mm, Head Diameter/Width: 15.3 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: filigree & garnet, Decoration Application Method: solder, Shaft Decoration: none; Pair Identifer: BM M&LA 73,6-2,97; Reference: Ager (in Collis) 1983: 73 -76 & fig 40; Date: 7th century.

### *Wingham type (LX)*

Group: LX; Site: Wingham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 79,5-24,35; Head Form: spatulate-plate headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): garnet set and gilt; Length: 86 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 2.25 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: garnet set, Decoration Application Method: applied, Shaft Decoration: none; Reference: Conyngham 1844b: 550-1; Akerman 1855: Pl XL.3; Wright 1845.

### *Garnet set disc-headed type (LXI)*

Group: LXI; Site: Faversham, Kent; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1909.152e; Head Form: setting pasted to disc-head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 40 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Could coral be pasted on? This pin either belongs with the, Reference: applied disc-headed group (LIV) or is a variant of group LXI.

Group: LXI, Sub-group: ?, Variant: ?, Sub-Variant: ?; Site: Uncleby, Yorks; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: 207.347; Head Form: ring-head, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 31; Degree of Completeness: tip lost, Type of Material: silver, Main Manufacturing Process: cast/compose, Secondary Work (if noted): ring head ?held garnet?; Length: 40 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: annular brooch - two confronted bird heads, beads, pendant.

Group: LXI, Sub-group: i, Variant: a; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 84,12-21,13; Head Form: garnet set disc, Collar Form: 3 lines incised, Shaft Form:

tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: point lost, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): garnet set, beaded wire; Length: 69 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: garnet, Decoration Application Method: set, Shaft Decoration: lines on shaft, Decoration Application Method: incised; Notes: glass backed by gold foil.

Group: LXI, Sub-group: i, Variant: a; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1131 '70; Head Form: convex garnet set faces, Collar Form: 3 lines incised, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): gilt and garnet set; Length: 38 mm, Head Diameter/Width: 5 mm; Head Decoration: garnet, filigree, Decoration Application Method: applied, Shaft Decoration: lines at collar, Decoration Application Method: incised; Notes or Associated Finds: unknown.

Group: LXI, Sub-group: i, Variant: a; Site: Finglesham, Kent; Head Form: garnet disc-type, Collar Form: double ring collar, Shaft Form: swollen hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 20; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: composite; Length: 38 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Notes: gold-foil backed garnet set head, Reference: Hawkes pers comm.

Group: LXI, Sub-group: i, Variant: a; Site: Finglesham, Kent; Head Form: garnet-set disc-head, Collar Form: double ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 57; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: composite; Length: 44 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Notes: gold-foil backed garnet set head, Reference: Hawkes pers comm.

Group: LXI, Sub-group: i, Variant: a; Site: Melbourn, Cambs; Museum or Unit: University Museum (Cambs), Accession or Small Find Number: 2.53.187; Head Form: circular head for garnet, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 9; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite; Length: 40 mm, Head Diameter/Width: 4 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: bucket, beads; Notes: pin under head, Reference: Wilson 1956: 32.

Group: LXI, Sub-group: i, Variant: a; Site: Mucking, Essex; Museum or Unit: Thurrock Museum (?), Accession or Small Find Number: unknown; Head Form: garnet-set disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: GH42; Degree of Completeness: partial, Type of Material: iron; Length: ? mm; Head Decoration: none, Shaft Decoration: none; Reference: Hamerow, 1987: 25 & fig 3.2.i & Table 3.1.

Group: LXI, Sub-group: i, Variant: a; Site: Sibertswold, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6553c; Head Form: garnet disc-type, Collar Form: double ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 172(?); Degree of Completeness: complete, Type of Material: gold, Main Manufacturing Process: composite; Length: 36 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Notes: gold-foil backed garnet set head, Reference: Faussett 1856; Manuscript Diary iv: 48 fig 3, folio 25.

Group: LXI, Sub-group: i, Variant: b; Site: Chartham, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6734; Head Form: convex garnet set faces, Collar Form: 3 lines incised, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 44; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): garnet set in gold; Length: 43 mm, Head Diameter/Width: 5 mm; Head Decoration: garnet, filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: gold hollow cylinder inserted to hold garnets, Reference: Faussett 1856: 173-4 & Pl 12[fig 18].

Group: LXI, Sub-group: i, Variant: b; Site: Faversham, Kent; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1909.164a; Head Form: garnet set disc, Collar Form: 3 lines incised; Grave Number: ?; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: composite, Secondary Work (if noted): garnet set, beaded wire; Length: 29 mm; Head Decoration: garnet, Decoration Application Method: set, Shaft Decoration: lines on shaft, Decoration Application Method: incised; Associated Finds: unknown.

Group: LXI, Sub-group: i, Variant: b; Site: Lady Wootton's Green, Cant, Kent; Museum or Unit: unknown, the pin may now be lost; Head Form: garnet-set disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: residual; Degree of Completeness: incomplete, Type of Material: gold, Main Manufacturing Process: composite, Secondary Work (if noted): garnets, filigree; Length: 39 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.5 mm; Head Decoration: composite, Decoration Application Method: applied, Shaft Decoration: none, Decoration Application Method: none; Notes or Associated Finds: See note 19 in Chapter 4, Reference: Frere, et.al. 1987: 183 & Pl XXVII.F,G,H.

Group: LXI, Sub-group: i, Variant: b; Site: Seamer, N Yorks; Museum or Unit: BM M&LA; Head Form: garnet set disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: barrow; Degree of Completeness: complete, Type of Material: gold, Main Manufacturing Process: composite; Length: 42* mm; Head Decoration: garnet & beaded, Decoration Application Method: applied, Shaft Decoration: none; Pair Survival: pair survives; Associated Finds Included: pendants, beads, plate, strap-ends, bezel rings etc, Reference: Wright 1865: 331 & Pl 18.2.

Group: LXI, Sub-group: i, Variant: b; Site: Seamer, N Yorks; Museum or Unit: BM M&LA (?); Head Form: garnet set disc-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: barrow; Degree of Completeness: complete, Type of Material: gold, Main Manufacturing Process: composite; Length: 42* mm; Head Decoration: garnet & beaded, Decoration Application Method: applied, Shaft Decoration: none; Pair Survival: pair survives; Associated Finds Included: pendants, beads, plate, strap-ends, bezel rings etc, Reference: Wright 1865: 331 & Pl 18.2.

Group: LXI, Sub-group: i, Variant: b; Site: Sibertswold, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6539; Head Form: convex garnet set faces, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Grave Number: 180; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): garnet set in gold; Length: 44 mm, Head Diameter/Width: 6 mm; Head Decoration: garnet, filigree, Decoration Application Method: applied, Shaft Decoration: none; Associated Finds Included: silver wire ring, beads, combs, lock for wooden box, Reference: Faussett 1856: 133-4 & pl 12[fig 20].

Group: LXI, Sub-group: ii, Variant: a; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,729; Head Form: convex garnet set faces, Collar Form: incised ring collar, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 161; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): garnet set; Length: 50 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm; Head Decoration: garnet, Decoration Application Method: applied, Shaft Decoration: none; Associated Finds Included: glass bead, knife, human headed pin (LXV), Reference: Evison 1987: 251-2 & fig 63.161.1.

Group: LXI, Sub-group: ii, Variant: b; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,621; Head Form: garnet set globular, Collar Form: 3 lines, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Grave Number: 134, Context: 837; Degree of Completeness: point lost, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): garnet set, beaded wire; Length: 31 mm, Head Diameter/Width: 3 mm; Head Decoration: garnet, Decoration Application Method: set, Shaft Decoration: lines on shaft, Decoration Application Method: incised;

Associated Finds Included: gold pendant, 8 glass beads, flat oval garnets & pendant, Reference: Evison 1987: 245 & fig 55.134.5.

### *Wicken Bonhunt triangular-plate-headed type (LXII)*

Group: LXII; Site: Wicken Bonhunt, Essex; Accession or Small Find Number: 240; Head Form: flat triangular head, Collar Form: bulbous knob, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised decoration; Length: 86 mm, Head Diameter/Width: 21 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: knot work & dots, Decoration Application Method: engraved & punched, Shaft Decoration: none; Reference: Wade pers comm.

### *Evesham type (LXIII)*

Group: LXIII; Site: Evesham, (Heref & Worcs); Museum or Unit: BM M&LA, Accession or Small Find Number: 64,12-20,1; Head Form: linked-suite, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?grave?; Degree of Completeness: incomplete, Type of Material: gold, Main Manufacturing Process: composite, Secondary Work (if noted): filigree, garnet, gold strip; Length: 45 mm, Shaft Diameter at Position 1: .8 mm, Shaft Diameter at Position 2: .8 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: Complex triplet. The central disc is readily paralleled in 7th century material, Reference: Franks 1864; Smith 1901b:229 & fig 2; Brown 1915.

### *Linked type (LXIV)*

Group: LXIV, Sub-group: i; Site: Chamberlians Barn, Beds; Museum or Unit: Luton Museum, Accession or Small Find Number: 14/57; Head Form: garnet set disc, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 55; Degree of Completeness: point broken, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): garnet disc-headed; Length: 54 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: beaded filigree, Decoration Application Method: applied, Shaft Decoration: none; Kind of Chain: folded links, Pair Survival: 2840; Reference: Hyslop 1963: 185 & fig 16.

Group: LXIV, Sub-group: i, Variant: a; Site: Roundway Down, Wilts; Museum or Unit: Devizes Museum, Accession or Small Find Number: S6f; Head Form: garnet set disc, Collar Form: incised lines, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: barrow; Degree of Completeness: point broken, Type of Material: gold, Main Manufacturing Process: composite, Secondary Work (if noted): garnet disc-headed; Length: 43 mm; Head Decoration: beaded filigree, Decoration Application Method: applied, Shaft Decoration: none; Attachment: loop, Kind of Chain: folded links, Pair Survival: still linked; Associated Finds Included: drop pendants, wooden bucket, bronze mountings, Reference: Akerman 1855; Cunnington 1896: 116-7; Meaney & Hawkes 1970.

Group: LXIV, Sub-group: i, Variant: b; Site: Cow Lowe, Derby; Museum or Unit: Sheffield Museum, Accession or Small Find Number: J.93.703; Head Form: garnet set disc, Shaft Form: tapering, Shaft Section

at Level 1: round, Shaft Section at Level 2: round; Grave Number: barrow; Degree of Completeness: complete, Type of Material: gold, Main Manufacturing Process: composite, Secondary Work (if noted): garnet disc-headed; Length: 50 mm, Head Diameter/Width: 6 mm; Head Decoration: beaded filigree, Decoration Application Method: applied, Shaft Decoration: none; Kind of Chain: folded links 88 mm, Pair Survival: identical pair; Associated Finds Included: large blue glass bead, green glass bowl, box fittings, comb, Reference: Bateman 1848: 91-94 (fig in text); Ozanne 1962-3: 28 & fig 11.

Group: LXIV, Sub-group: i, Variant: c; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 226; Head Form: linked pin - garnet set, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 50; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): silver beaded rim, gold foil; Length: 59 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: garnet set, Decoration Application Method: constructed, Shaft Decoration: none; Attachment: ring catches, Kind of Wire Ring: superior ring, Kind of Chain: folded, Pair Survival: LBF85 227; Associated Finds Included: glass vessels, woolcomb, Reference: Miles pers comm.

Group: LXIV, Sub-group: i, Variant: c; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 227; Head Form: linked pin - garnet set, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 50; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): silver beaded rim, gold foil; Length: 59 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: garnet set, Decoration Application Method: constructed, Shaft Decoration: none; Attachment: ring catches, Kind of Wire Ring: superior ring, Kind of Chain: folded, Pair Survival: LBF85 226; Associated Finds Included: silver rings, cowrie, heckle comb, etc, Reference: Miles pers comm.

Group: LXIV, Sub-group: i, Variant: d; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum; Head Form: linked disc-garnet set, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 96; Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): garnet; Head Decoration: none, Shaft Decoration: none; Kind of Chain: 'S' chain, 95 mm, Pair Survival: identical pair; Reference: Humphreys et. al. 1922-23: 115 & fig 7b.

Group: LXIV, Sub-group: i, Variant: d; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 698; Head Form: linked pin - garnet set, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1092; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: composite; Length: 36 mm, Head Diameter/Width: 5.5 mm; Head Decoration: garnet set, Decoration Application Method: constructed, Shaft Decoration: none; Attachment: ring catches, Kind of Wire Ring: superior ring, Kind of Chain: folded; Notes: Preliminary report indicates 36 mm; Associated Finds: present, Reference: Miles pers comm.

Group: LXIV, Sub-group: i, Variant: d; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 699; Head Form: linked pin - garnet set, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1092; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite; Length: 40 mm, Head Diameter/Width: 5.5 mm; Head Decoration: garnet set, Decoration Application Method: constructed, Shaft Decoration: none; Attachment: ring catches, Kind of Wire Ring: superior ring, Kind of Chain: 'S' type chain; Associated Finds: present, Reference: Miles pers comm.

Group: LXIV, Sub-group: i, Variant: d; Site: Chamberlain's Barn, Beds; Museum or Unit: Luton Museum, Accession or Small Find Number: 14/57; Head Form: garnet set disc head--2 sides, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 39; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite; Length: 58 mm; Head Decoration: filigree/garnets, Decoration Application Method: applied, Shaft Decoration: none; Kind of Chain: folded link

chain, Pair Survival: pair now lost; Associated Finds Included: wire and bead necklace etc, Reference: Hyslop 1963: 181, 198 & fig 13; Date: 7th century.

Group: LXIV, Sub-group: i, Variant: d; Site: Chamberlians Barn, Beds; Museum or Unit: Luton Museum, Accession or Small Find Number: 14/57; Head Form: garnet set disc, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 55; Degree of Completeness: point broken, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): garnet disc-headed; Length: 54 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: beaded filigree, Decoration Application Method: applied, Shaft Decoration: none; Kind of Chain: folded links, Pair Survival: 2839; Reference: Hyslop 1963: 185 & fig 16.55.

Group: LXIV, Sub-group: i, Variant: d, Sub-Variant: 2; Site: Faversham, Kent; Museum or Unit: Salisbury Museum, Accession or Small Find Number: 3D 2A 13; Head Form: garnet set disc, Collar Form: 3 lines incised, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: composite, Secondary Work (if noted): garnet set; Length: 54 mm, Head Diameter/Width: 5.5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: garnet, Decoration Application Method: set, Shaft Decoration: lines on shaft, Decoration Application Method: incised; Attachment: ring above head; Notes: loop above head,.

Group: LXIV, Sub-group: i, Variant: d, Sub-Variant: 2; Site: West Stow, Suffolk; Museum or Unit: Moyse's Hall, Accession or Small Find Number: WS 1000; Head Form: garnet set disc, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: SBF40; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: composite, Secondary Work (if noted): garnet set; Length: 67 mm, Head Diameter/Width: 8 mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 2+ mm, Shaft Diameter at Position 2: 2+ mm; Head Decoration: garnet, Decoration Application Method: set, Shaft Decoration: none; Attachment: loop above disc; Notes: West proposed it was among the latest material in SFB40, Reference: West 1985: 35 & fig 138.1.

Group: LXIV, Sub-group: i, Variant: e; Site: Kemble, Glos; Museum or Unit: Oxford Archaeological Unit; Head Form: linked pin with garnet, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: composite; Length: 53 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.5 mm; Head Decoration: garnet set face, Decoration Application Method: applied, Shaft Decoration: none; Reference: Wilkinson 1988: 200, figs 12.1 & 13.1.

Group: LXIV, Sub-group: i, Variant: e; Site: Ozingell, Kent; Head Form: linked pin with garnet, Collar Form: moulded collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 79; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: composite; Length: 55 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: garnet set face, Decoration Application Method: applied, Shaft Decoration: none; Note: Garnet is now lost, Associated Finds: ?, Reference: Grainger pers comm.

Group: LXIV, Sub-group: i, Variant: e; Site: Winnall, Hants; Museum or Unit: Winchester Museum, Accession or Small Find Number: 1416.20; Head Form: linked pin, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 10; Degree of Completeness: complete, Main Manufacturing Process: composite; Length: 52 mm; Head Decoration: none, Shaft Decoration: none; Attachment: loop; Notes or Associated Finds: loop behind discoid face plate with setting for garnet, Reference: Associated finds. Meaney & Hawkes 1970: 11-12 & fig 9.10.1.

Group: LXIV, Sub-group: ii; Site: Breach Down, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 79,5-24,93; Head Form: holed plate head, Collar Form: double ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete,

Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: slip-knot ring, Kind of Chain: 'S' chain, Pair Survival: 2844,.

Group: LXIV, Sub-group: ii; Site: Breach Down, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 79,5-24,93; Head Form: holed plate head, Collar Form: double ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: slip-knot ring, Kind of Chain: 'S' chain, Pair Survival: 2845,.

Group: LXIV, Sub-group: ii; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 001 5502Cu; Head Form: moulded head with flat spatulate plate with hole, Collar Form: 5 mouldings, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: IAS 5502 0022; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Length: 77 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2.5 mm, Shaft Diameter at Position 2: 2.25 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Multiple moulded rings below eyelet above a barrel moulding (4 mm in diameter) and 4 moulded rings, a slip knot wire ring passes through the hole in the pin head, the wire of the ring has a 1.75 mm diameter, patches on the shaft of the pin might be gilding; Reference: Hatton & Wade pers comm.

Group: LXIV, Sub-group: ii; Site: Maiden Lane, London; Museum or Unit: Museum of London, Accession or Small Find Number: MAI'86 SF42; Head Form: linked pin, Collar Form: flat pointed collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 225; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm, Head Diameter/Width: 5 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Pair Survival: MAI'86 SF55; Reference: Blackmore pers comm; Date: pot before 750.

Group: LXIV, Sub-group: ii, Variant: ?, Sub-Variant: ?; Site: Flixborough, Humb; Museum or Unit: Humberside Archaeological Unit, Accession or Small Find Number: 4157; Head Form: disc-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3891; Degree of Completeness: one survives, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): t; Length: 68 mm, Head Diameter/Width: 15 mm, Head Thickness: .8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: tear decoration, Decoration Application Method: incised, Shaft Decoration: none; Notes: Disc on this pin is larger than normal linked pins, Reference: Leahy pers comm.

Group: LXIV, Sub-group: ii, Variant: a; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 328; Head Form: linked pin, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: c4524; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 61 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: slip-knot ring; Notes: flat discoid plate above bulbous knob, Reference: Brisbane pers comm.

Group: LXIV, Sub-group: ii, Variant: a; Site: Winnall, Winchester, Hants; Museum or Unit: Winchester Museum; Head Form: round knob with plate above, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 8; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 54 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: slip-knot ring, Kind of Chain: folded chain, Pair Survival: pair linked to it; Associated Finds Included: penannular brooches, knife, Reference: Meaney & Hawkes 1970: 11, 36-37 & fig 9.8.1.

Group: LXIV, Sub-group: ii, Variant: a; Site: Winnall, Winchester, Hants; Museum or Unit: Winchester Museum, Accession or Small Find Number: 1416.11; Head Form: linked, bulbous knob below*, Collar Form: *flat plate, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 7; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 41 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: slip-knot ring, Kind of Chain: 'S' chain, Pair Survival: yes; Associated Finds Included: beads, bronze rings, bronze strip; Reference: Meaney & Hawkes 1970: 11 & fig 9.7.1.

Group: LXIV, Sub-group: ii, Variant: b; Site: Castle Dyke, Humbs; Museum or Unit: Humberside Archaeological Unit; Head Form: flat-headed for link, Collar Form: pointed flat-section, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 15; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2.1 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted end ring, Kind of Chain: 'S' links; Notes: 'right of the lower right ribs'; Associated Finds: shoe fittings, Reference: Whitwell pers comm.

Group: LXIV, Sub-group: ii, Variant: b; Site: Castle Dyke, Humbs; Museum or Unit: Humberside Archaeological Unit; Head Form: flat-headed for link, Collar Form: pointed flat-section, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 46; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Shaft Diameter at Position 1: 1.5+ mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted end ring, Kind of Chain: 'S' links (80 mm), Pair Survival: pair attached; Associated Finds Included: thread picker, Reference: Whitwell pers comm.

Group: LXIV, Sub-group: ii, Variant: b; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1134 '70; Head Form: linked pin (boar's head), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point broken, Type of Material: silver, Main Manufacturing Process: cast; Length: 46 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Attachment: loop under chin, Kind of Chain: folded links,

Group: LXIV, Sub-group: ii, Variant: b; Site: Flixborough, Humb; Museum or Unit: Humberside Archaeological Unit, Accession or Small Find Number: 3675; Head Form: flattened head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3610; Degree of Completeness: one survives, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 4 mm, Head Thickness: .5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Kind of Chain: 'S' chain, 77 mm; Reference: Leahy pers comm.

Group: LXIV, Sub-group: ii, Variant: b; Site: Flixborough, Humb; Museum or Unit: Humberside Archaeological Unit, Accession or Small Find Number: 5213; Head Form: flattened head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 5193; Degree of Completeness: one survives, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): hammered head; Length: 57 mm, Head Diameter/Width: 4 mm, Head Thickness: .5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Kind of Chain: 'S' chain, 95 mm, Pair Survival: identical pair; Reference: Leahy pers comm.

Group: LXIV, Sub-group: ii, Variant: b; Site: Flixborough, Humb; Museum or Unit: Humberside Archaeological Unit, Accession or Small Find Number: 1815; Head Form: flattened head, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 1450; Degree of Completeness: one survives, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 56 mm, Head Diameter/Width: 3 mm, Head Thickness: .5 mm, Shaft Diameter at Position 1: 1.5 mm,

Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Kind of Chain: folded chain, 40; Reference: Leahy pers comm.

Group: LXIV, Sub-group: ii, Variant: b; Site: Flixborough, Humb; Museum or Unit: Humberside Archaeological Unit, Accession or Small Find Number: 5750; Head Form: flattened head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 5139; Degree of Completeness: one survives, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing head; Length: 63 mm, Head Diameter/Width: 3 mm, Head Thickness: .5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Kind of Chain: 'S' chain, 80 mm; Reference: Leahy pers comm.

Group: LXIV, Sub-group: ii, Variant: b; Site: Flixborough, Humb; Museum or Unit: Humberside Archaeological Unit, Accession or Small Find Number: 3454; Head Form: flattened head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3417; Degree of Completeness: one survives, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): hammered head; Length: 57 mm, Head Diameter/Width: 4 mm, Head Thickness: .5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Kind of Chain: 'S' chain, surviving in 4 sections, Pair Survival: identical pair; Reference: Leahy pers comm.

Group: LXIV, Sub-group: ii, Variant: b; Site: Flixborough, Humb; Museum or Unit: Humberside Archaeological Unit, Accession or Small Find Number: 6076; Head Form: flattened head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 6080; Degree of Completeness: one survives, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): t; Length: 54 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Kind of Chain: folded chain, 85; Reference: Leahy pers comm.

Group: LXIV, Sub-group: ii, Variant: b; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 63,11-18,10; Head Form: ring-headed pin, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 7; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 31 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 1 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted end ring, Kind of Chain: 17 folded links, Pair Survival: pair now lost; Associated Finds Included: buckle, tag, possible knife, Reference: Akerman 1862:135.

Group: LXIV, Sub-group: ii, Variant: b; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 63,11-18,4; Head Form: linked - disc head, Collar Form: pointed, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Grave Number: 3; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): head hammered out; Length: 41 mm, Head Diameter/Width: 3.5 mm, Shaft Diameter at Position 1: 1.3 mm, Shaft Diameter at Position 2: 1.3 mm, Shaft Diameter at Postion 3: 1.3 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted end ring, Kind of Chain: 17 folded links, Pair Survival: BM M&LA 63,11-18,5; Associated Finds Included: 3 beads, 2 slip knot rings. (BM records an associated pin.), Reference: Akerman 1862: 134.

Group: LXIV, Sub-group: ii, Variant: b; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 63,11-18,5; Head Form: linked - disc head, Collar Form: pointed, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Grave Number: 3; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): head hammered out; Length: 41 mm, Head Diameter/Width: 3.5 mm, Shaft Diameter at Position 1: 1.3 mm, Shaft Diameter at Position 2: 1.3 mm, Shaft Diameter at Postion 3: 1.3 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted end ring, Kind of Chain: 17 folded links, Pair Survival:

BM M&LA 63,11-18,4; Associated Finds Included: 3 beads, 2 slip knot rings. (BM records an associated pin.), Reference: Akerman 1862: 134.

Group: LXIV, Sub-group: ii, Variant: b; Site: Maiden Lane, London; Museum or Unit: Museum of London, Accession or Small Find Number: MAI'86 SF55; Head Form: flat-headed, Collar Form: flat pointed collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 225; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 4 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Pair Survival: MAI'86 SF42; Associated Finds: associated with pottery dating before 750, Reference: Blackmore pers comm.

Group: LXIV, Sub-group: ii, Variant: b; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 266; Head Form: flat plate linked pin, Collar Form: pointed flat collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C4309; Degree of Completeness: one broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 4 mm, Head Thickness: 1 mm; Head Decoration: none, Shaft Decoration: none; Kind of Chain: 32 folded links, Pair Survival: fragment of pair--11 mm; Reference: Brisbane pers comm.

Group: LXIV, Sub-group: ii, Variant: d; Site: Breach Down, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 79,5-24,93; Head Form: linked - ring head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Kind of Chain: S-linked chain; Reference: Wright 1845: 207 & Pl 3.13.

Group: LXIV, Sub-group: ii, Variant: d; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,658; Head Form: linked-pin, eyelet, Collar Form: double ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 142; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: girdle hanger, and knife, Reference: Evison 1987: 248 & fig 58.142.1.

Group: LXIV, Sub-group: ii, Variant: d; Site: Lympne, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 56,7-1,5035; Head Form: ring-headed pin, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 37 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: twisted end ring, Kind of Chain: 2 folded links, Pair Survival: pair now lost; Notes: ring through head has a 9 mm diameter.

Group: LXIV, Sub-group: ii, Variant: d; Site: Sittingbourne, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1883,12-13,587; Head Form: eyelet-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: fragment, Type of Material: silver, Main Manufacturing Process: cast; Length: 11 mm; Head Decoration: none, Shaft Decoration: none; Attachment: loop, Pair Identifer: 2899; Associated Finds Included: 3 buckles, bucket handle, silver ring, beads, Reference: Payne 1893: 109.

Group: LXIV, Sub-group: ii, Variant: d; Site: Sittingbourne, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1883,12-13,586; Head Form: linked pin - needle headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1.25 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.25 mm; Head Decoration: none, Shaft Decoration: none; Attachment: loop, Pair Identifer: 2899; Associated Finds Included: 3 buckles, bucket handle, silver ring, beads, Reference: Payne 1893: 109.

Group: LXIV, Sub-group: ii, Variant: d; Site: Stand Low (Newton Grange), Derby; Museum or Unit: unknown; Head Form: linked – ring head, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Shaft Diameter at Position 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: 2 knives, glass beads, biconical bead, 2 rings, box fittings, Reference: Wright 1847: 57–8 & fig.

### *Spiral-headed type (LXVI)*

Group: LXVI; Site: Althorpe Grove, Battersea; Museum or Unit: Museum of London, Accession or Small Find Number: F102; Head Form: spiral-headed; Degree of Completeness: complete, Type of Material: copper alloy; Head Decoration: none, Shaft Decoration: none; Reference: Clarke, 21 Feb 1985.

Group: LXVI; Site: Hendon, Middx; Museum or Unit: Known to the author only from the publication; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering ?, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 61 mm; Head Decoration: none, Shaft Decoration: none; Reference: Sammes 1986: 10 & fig.

Group: LXVI; Site: Kingscote, Glos; Museum or Unit: Gloucester Museum, Reference: Watkins pers comm.

Group: LXVI; Site: Shakenoak, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: ?; Head Form: spiral-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm; Head Decoration: none, Shaft Decoration: none; Notes: One spiral now lost, Reference: Brodribb, et.al. 1972: fig 31.156.

Group: LXVI; Site: Unprovenanced Find, Kent; Museum or Unit: The Royal Museum and Art Gallery, Accession or Small Find Number: Brent 2302; Head Form: spiral-headed (Strip Metal), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 69 mm, Head Diameter/Width: 17 mm, Head Thickness: 4 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVI, Sub-group: ?, Variant: ?; Site: Hartlepool, Clev; Museum or Unit: Known from publication only; Head Form: spiral-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none; Reference: Daniels 1988: 182–3 & fig 33.8.

Group: LXVI, Sub-group: ?, Variant: ?; Site: Shakenoak, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1971.720; Head Form: spiral-headed (split ?), Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none; Reference: Brodribb, et.al. 1972: fig.

Group: LXVI, Sub-group: ?, Variant: ?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 2418; Head Form: spiral-headed (undetermined), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm; Head Decoration: none, Shaft Decoration: none; Notes: Spirals are incomplete, Reference: Brisbane pers comm.

Group: LXVI, Sub-group: ?, Variant: ?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1408; Head Form: spiral-headed (undetermined), Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 28 mm; Head Decoration: none, Shaft Decoration: none; Notes: Spirals are incomplete, Reference: Brisbane pers comm.

Group: LXVI, Sub-group: i; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 82 5203Cu; Head Form: spiral-headed (split-cast, with a D-shaped moulding form), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete (one spiral broken with another complete, tip lost), Context: IAS 5203 0103, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): split; Length: 45 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Thickness: 2 mm; Terminal Diameter: 1.0 mm, Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXVI, Sub-group: i; Site: York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: 207.3.47; Head Form: sub-spherical knob, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 40 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: Terminal knob has a depression in main faces.

Group: LXVI, Sub-group: i, Variant: ?; Site: Winklebury Hill, Wilts; Museum or Unit: Salisbury Museum, Accession or Small Find Number: 3E24; Head Form: spiral-headed (split wire), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: II; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): split end; Length: 56 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 1 mm, Shaft Diameter at Postion 3: .5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Pitt-Rivers 1888: CL.30.

Group: LXVI, Sub-group: i, Variant: a; Site: Felixstowe, Suffolk; Museum or Unit: BM M&LA, Accession or Small Find Number: 56,6-27,76; Head Form: spiral-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 6.65 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Shaft Decoration: none; Notes: The wire in the curls is flat-sectioned. Maybe split first.

Group: LXVI, Sub-group: i, Variant: a; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: spiral-headed (split), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Context: IAS 5701 0049, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): split flat section; Length: 41 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXVI, Sub-group: i, Variant: a; Site: Kingsworthy, Hants; Accession or Small Find Number: 258; Head Form: spiral-headed (split), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 62; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 7 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 1.6 mm, Shaft Diameter at Position 2: 1.6 mm; Head Decoration: none, Shaft Decoration: none; Pair Survival: one of pair; Reference: Ross, forthcoming f.

Group: LXVI, Sub-group: i, Variant: a; Site: Kingsworthy, Hants; Accession or Small Find Number: 259; Head Form: spiral-headed (split), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 62; Degree of Completeness: complete, Type of Material: copper alloy, Main

Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 8 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 1.8 mm, Shaft Diameter at Position 2: 1.8 mm; Head Decoration: none, Shaft Decoration: none; Pair Survival: one of pair; Reference: Ross, forthcoming f.

Group: LXVI, Sub-group: i, Variant: a; Site: Wicken Bonhunt, Essex; Head Form: spiral-headed - split, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: The wire was split, flattened and curled, Reference: Bradley & Hooper 1974: 50-1 & fig 8.2.

Group: LXVI, Sub-group: i, Variant: b; Site: Bourton-on-the-Water, Glos; Museum or Unit: City Museum & Art Gallery, Gloucester, Accession or Small Find Number: GLRCM 104.1962; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: spilt wire; Length: ? mm; Head Decoration: none, Shaft Decoration: none; Reference: O'Neil 1960-1: 167-8 & fig 1.

Group: LXVI, Sub-group: i, Variant: b; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 8890; Head Form: spiral-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 26171; Degree of Completeness: head broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm; Head Decoration: none, Shaft Decoration: none; Notes: Phase 4b of the site, Reference: Tweddle pers comm. (Data from Unit records, pin unavailable); Date: 930/5-975.

Group: LXVI, Sub-group: i, Variant: b; Site: Driffield, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 753.1980; Head Form: spiral-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 7 mm; Head Decoration: lines below head, Decoration Application Method: incised, Shaft Decoration: none; Notes: One spiral lost and broken, D-shaped sectioned terminals, Reference: Cunliffe 1976: fig 136.47.

Group: LXVI, Sub-group: i, Variant: b; Site: Girton, Cambs; Museum or Unit: University Museum (Cambridge); Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): split end; Length: 51 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: lines at collar, Decoration Application Method: incised; Reference: Hollingworth & O'Reilly 1925: 10 & Pl IV.Ib.

Group: LXVI, Sub-group: i, Variant: b; Site: Portchester, Hants; Museum or Unit: Southsea Castle Museum, Accession or Small Find Number: lost; Head Form: spiral-headed (D-split wire), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm; Head Decoration: none, Shaft Decoration: none; Reference: Cunliffe 1976: fig 136.46.

Group: LXVI, Sub-group: i, Variant: b; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 171; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm; Head Decoration: none, Shaft Decoration: none; Notes: One spiral lost, split strip spirals, Reference: Brisbane pers comm.

Group: LXVI, Sub-group: i, Variant: b; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1648; Head Form: spiral-headed (split-cast), Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 6254; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast-strip;

Length: 31 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVI, Sub-group: i, Variant: b; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 914; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm; Head Decoration: none, Shaft Decoration: none; Notes: one spiral lost. Parsons suggests 55 mm, Reference: Brisbane pers comm.

Group: LXVI, Sub-group: i, Variant: b; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 520; Head Form: spiral-headed (cast-split), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: c4932; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 76 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Notes: 'D'sectioned, Reference: Brisbane pers comm.

Group: LXVI, Sub-group: ii; Site: Caerwent, Mons; Museum or Unit: Newport Museum and Art Gallery, Accession or Small Find Number: 84-161; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: ?, Shaft Section at Level 2: ?; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: wrought?; Length: ? mm; Head Decoration: none, Shaft Decoration: none; Reference: Fox 1946: 108 & fig 12.

Group: LXVI, Sub-group: ii, Variant: a; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 406; Head Form: spiral-headed, Collar Form: none, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 89; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm; Date: VI(2) - VI(3).

Group: LXVI, Sub-group: ii, Variant: a; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: CBR SF423; Head Form: spiral-headed, Collar Form: none, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 89; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: 'Cultural layer VI(2) - VI(3)', Reference: Garrard pers comm.

Group: LXVI, Sub-group: ii, Variant: a; Site: Carlisle; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast/worked; Length: ? mm; Head Decoration: none, Shaft Decoration: none; Reference: Dickinson in McCarthy 1990: 181 & fig 165.4.

Group: LXVI, Sub-group: ii, Variant: a; Site: Coppergate, York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: 1977.7 1600; Head Form: spiral-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 54 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVI, Sub-group: ii, Variant: a; Site: Eccles, Kent; Head Form: spiral-headed (round), Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 12; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 71 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Pair Survival: one of pair; Reference: Detsicas & Hawkes 1973: 283-285 & fig 4.12.2.

Group: LXVI, Sub-group: ii, Variant: a; Site: Eccles, Kent; Head Form: spiral-headed (round), Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 12; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 72 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none; Pair Survival: one of pair; Reference: Detsicas & Hawkes 1973: 283-285 & fig 4.12.1.

Group: LXVI, Sub-group: ii, Variant: a; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 5357; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3468; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Head Decoration: none, Shaft Decoration: none; Reference: Tweddle pers comm.

Group: LXVI, Sub-group: ii, Variant: a; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 6988; Head Form: spiral-headed (cast), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2420; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: York Archaeological Trust pers comm.

Group: LXVI, Sub-group: ii, Variant: a; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Context: IAS 5701 0222, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 51 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: 2 lines on shaft, Decoration Application Method: incised.

Group: LXVI, Sub-group: ii, Variant: a; Site: Lakenheath, Cambs; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 216262(a); Head Form: spiral-head, Collar Form: double ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVI, Sub-group: ii, Variant: a; Site: Shakenoak, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1971.720; Head Form: spiral-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm; Head Decoration: none, Shaft Decoration: none; Notes: Round sectioned terminals, Reference: Brodribb, et.al. 1972: fig 31.158.

Group: LXVI, Sub-group: ii, Variant: a; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1644; Head Form: spiral-headed (cast), Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Shaft Decoration: linear ornament, Decoration Application Method: incised; Notes: Terminals round in section, Reference: Brisbane pers comm.

Group: LXVI, Sub-group: ii, Variant: a; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 177 685; Head Form: spiral-headed (cast), Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 30 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Notes: Round in section, Reference: Brisbane pers comm.

Group: LXVI, Sub-group: ii, Variant: a; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 177 652; Head Form: spiral-headed (cast), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T1 c799; Degree

of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Notes: Round in section, Reference: Brisbane pers comm.

Group: LXVI, Sub-group: ii, Variant: b; Site: Bidford-on-Avon, Warks; Museum or Unit: New Place Museum, Accession or Small Find Number: none; Head Form: spiral-headed, Collar Form: triangular plate, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: +; Degree of Completeness: broken, Type of Material: silver, Main Manufacturing Process: cast; Length: 70* mm; Head Decoration: none, Shaft Decoration: none; Notes: *length: 11 mm + 30 mm + 29 mm. +Unassigned to a grave, Reference: Humphreys, et. al. 1922-3: fig 7a.

Group: LXVI, Sub-group: ii, Variant: b; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: BRD 018 2298; Head Form: spiral-headed, Collar Form: flat triangular plat, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: silver, Main Manufacturing Process: cast; Length: 69 mm; Head Decoration: none, Shaft Decoration: 3 lines below collar-plate, these lines for a double ring collar, Decoration Application Method: incised; Notes: curls are round in section, Reference: Carr, limited communication.

Group: LXVI, Sub-group: ii, Variant: b; Site: Ellingham, Norfolk; Museum or Unit: BM M&LA, Accession or Small Find Number: 1921,10-19,1; Head Form: spiral-headed, Collar Form: flat triangular plat, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 73 mm, Head Diameter/Width: 15 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: curls are round in section. (Two fragments 28 mm + 44 mm.).

Group: LXVI, Sub-group: iii; Site: Comberton, Cambs; Museum or Unit: University Museum (Cambridge); Head Form: spiral-headed (rolled), Shaft Form: tapering, Shaft Section at Level 1: semi-round, Shaft Section at Level 2: semi-round; Context: ?; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 105 mm, Head Diameter/Width: 17 mm, Shaft Diameter at Position 1: 3 mm; Head Decoration: none, Shaft Decoration: none; Reference: Walker 1910: 239 & fig 2 & 3.

Group: LXVI, Sub-group: iii; Site: King's Lynn, Norfolk; Museum or Unit: King's Lynn Museum, Accession or Small Find Number: KL 196.978; Head Form: spiral-headed (rolled strip), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: chance; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 54 mm, Head Diameter/Width: 8.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: King's Lynn Museum Catalogue.

Group: LXVI, Sub-group: iii; Site: Market Hill, Cambridge, Cambs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 30.1589; Head Form: spiral-headed, Collar Form: double ring (?), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 79 mm, Head Diameter/Width: 12 mm; Head Decoration: none, Shaft Decoration: none; Notes: Terminals are flat strips.

Group: LXVI, Sub-group: iii; Site: Sewer Lane [Hull], Humbs; Museum or Unit: Hull Museum; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: ? mm; Head Decoration: none, Shaft Decoration: none; Reference: Armstrong 1977: 67 & fig 28.114.

Group: LXVI, Sub-group: iii; Site: St Albans, Herts; Museum or Unit: Held by excavator (not viewed); Head Form: spiral-headed, Shaft Form: tapering, Shaft Section at Level 1: semi-round, Shaft Section at Level 2:

semi-round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: ? mm; Head Decoration: none, Shaft Decoration: none; Reference: Biddle & Kjølbye-Biddle 1984; Selkirk 1986.

Group: LXVI, Sub-group: iii; Site: West Stow, Suffolk; Museum or Unit: BM M&LA, Accession or Small Find Number: 1921,12-7,2; Head Form: spiral-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: 51 mm, Head Diameter/Width: 12 mm; Head Decoration: none, Shaft Decoration: none; Notes: Strip of metal split at end, rolled and trimmed, Reference: West 1985: fig 266.4.

Group: LXVI, Sub-group: iii, Variant: b; Site: Castlemartin, Pembs; Museum or Unit: National Museum of Wales, Accession or Small Find Number: 29.449/1; Head Form: spiral-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: rolled; Length: ? mm; Head Decoration: none, Shaft Decoration: none; Reference: Mathias 1927: 192 & fig 4.

### *Globular zoomorphic-headed type (LXVII)*

Group: LXVII; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2000; Head Form: globular zoomorphic-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): present; Length: 53 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.8 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 1.8 mm; Head Decoration: duck, Decoration Application Method: worked, Shaft Decoration: none; Reference: Carr 1985: 13.5.

Group: LXVII; Site: Waltham Abbey, Essex; Museum or Unit: Epping Forest District Museum; Head Form: zoomorphic-headed, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F307; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast & gilt; Length: 39 mm, Head Diameter/Width: 7 mm; Head Decoration: decorated, Shaft Decoration: none; Notes: 'grotesque pig-like head, large gaping mouth, tiny snout...', Reference: Huggins 1976: 115 & fig 41; Date: 9th/10th c.

Group: LXVII; Site: Wicken Bonhunt, Essex; Accession or Small Find Number: 471; Head Form: globular zoomorphic-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised decoration; Length: 49 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: pig or duck face, Decoration Application Method: engraved, Shaft Decoration: none; Reference: Wade pers comm.

### *Biconical-headed type (LXVIII)*

Group: LXVIII; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 2 7402Cu; Head Form: biconical-headed, Collar Form: raised ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Context: IAS 7402 0175, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 71 mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXVIII; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.153; Head Form: ? biconical-headed ?, Collar Form: multiple ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 34 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII; Site: Wicken Bonhunt, Essex; Accession or Small Find Number: 438; Head Form: biconical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.75 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade pers comm.

Group: LXVIII; Site: Wicken Bonhunt, Essex; Accession or Small Find Number: 44; Head Form: biconical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade pers comm.

Group: LXVIII, Sub-group: i; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 872; Head Form: small biconical, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 1543; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 40 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.2 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXVIII, Sub-group: i; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 727; Head Form: biconical, Shaft Form: swelled, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 1108; Type of Material: copper alloy; Length: 41 mm, Head Diameter/Width: 1 mm; Head Decoration: none, Associated Finds: present, Reference: Miles pers comm.

Group: LXVIII, Sub-group: i; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,447; Head Form: biconical-headed pin, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 83; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: glass bead, knife, iron frags, Reference: Evison 1987: 236 & fig 39.83.1.

Group: LXVIII, Sub-group: i; Site: Eccles, Kent; Head Form: biconical-headed, Collar Form: pointed collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: L2; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: rings below, Decoration Application Method: incised; Pair Survival: one of pair; Reference: Detsicas pers comm.

Group: LXVIII, Sub-group: i; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: biconical, Collar Form: double ring (diameter of the collar zone is less than that of the shaft), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 0229; Degree of Completeness: point lost, Context: IAS 5502 0230, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 32 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: less than 1.5 mm, Shaft Diameter at Position 2: less than 1.5 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: middle Saxon pottery, Reference: Wade & Hatton pers comm.

Group: LXVIII, Sub-group: i; Site: Sibertswold, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6553b; Head Form: biconical-headed, Collar Form: double ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 31; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 37 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: 2 lines on hip, Decoration Application Method: incised; Reference: Faussett 1856: 108.

Group: LXVIII, Sub-group: ii; Site: Marlowe IIB, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Unit, Accession or Small Find Number: 1311; Head Form: medial-banded-biconical, Collar Form: ring collar, Shaft Form: no information; Context: 104; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm.--Have not seen.

Group: LXVIII, Sub-group: ii, Variant: a; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Unit, Accession or Small Find Number: 362; Head Form: medial-banded-biconical, Collar Form: ring collar, Shaft Form: no information; Context: 101; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Notes: from pit VIII-IX, suggested date 1200-1450, Reference: Garrard pers comm.--Have not seen.

Group: LXVIII, Sub-group: ii, Variant: a; Site: Linacre Gardens (Cathedral Precinct), Kent; Museum or Unit: Canterbury Archaeological Unit, Accession or Small Find Number: 1514; Head Form: medial-banded-biconical, Collar Form: ring collar, Shaft Form: no information; Context: 398; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Notes: layer 14th - 15th century, Reference: Garrard pers comm.--Have not seen.

Group: LXVIII, Sub-group: ii, Variant: a; Site: Marlowe II (Canterbury), Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 1311; Head Form: biconical-headed, Collar Form: ring collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 104; Degree of Completeness: shaft broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Notes: Period 10 pit--could date [1100-1400]--pin must be residual, Reference: Garrard pers comm.

Group: LXVIII, Sub-group: ii, Variant: a; Site: Six Dials, Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: 21; Head Form: flat-top medial-banded-biconical, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C8468; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: .2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 161; Head Form: biconical, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3388; Head Form: sharply carinated biconical, Collar Form: none, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: hammered; Length: 60 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 145.1980.5; Head Form: biconical, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 10 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.218; Head Form: biconical-headed, Shaft Form: ?, Shaft Section at Level 1: round, Shaft Section at Level 2: ?; Degree of Completeness: shaft lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 26 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2314; Head Form: sharp carinated biconical, Collar Form: casting, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): finishing; Length: 45 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 2.25 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr, Suffolk Archaeological Unit.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 20 003; Head Form: biconical, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F124AA; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 25+15 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 24 018; Head Form: biconical, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 32 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2310; Head Form: biconical, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 17 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 0803; Head Form: biconical, Collar Form: ring collar; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 37 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2315; Head Form: sharply carinated biconical, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Fishergate (York); Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 5843; Head Form: medial-banded biconical, Collar Form: raised ring (3 mm), Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2:

unknown; Context: 4905; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing marks visible; Length: 42 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: York Archaeological Trust pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 600; Head Form: biconical-headed pin, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: c5237; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 30+16 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2309; Head Form: biconical, Collar Form: ring, Shaft Form: swollen shaft, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none; Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 574; Head Form: biconical-headed pin, Collar Form: cast ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: c5249; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: West Stow, Suffolk; Museum or Unit: Moyse's Hall, Accession or Small Find Number: WS 555; Head Form: biconical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 85 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: West 1985: fig 246.2.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 23 002; Head Form: biconical, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 66 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Shorts Gardens, London; Museum or Unit: Museum of London, Accession or Small Find Number: SGA'89 SF123; Head Form: biconical, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 722; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: 6 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 555; Head Form: biconical, Collar Form: ring (inset), Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 3.A?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 68; Head Form:

biconical-headed pin, Collar Form: carinated collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: c. 3569; Degree of Completeness: 3 fragments, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 37 mm; Head Decoration: none, Shaft Decoration: none; Notes: 3 fragments (14 + 8 + 15), Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 3.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2075; Head Form: biconical, Collar Form: carinated collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 7 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 3.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 26 393; Head Form: biconical, Collar Form: carinated, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: 2 medial lines, Decoration Application Method: incised; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 5.A; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 62,6-13,121; Head Form: biconical-headed, Collar Form: ring collars, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: urn OO; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 78 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: 6.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.212; Head Form: biconical, Collar Form: multiple collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 74 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2082; Head Form: biconical, Collar Form: casting collar, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2268; Head Form: biconical, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 11 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5192; Head Form: sharply carinated biconical, Collar Form: ?, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 8 mm, Head Diameter/Width: 7.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Colne, Calstone Churchyard; Head Form: biconical, Collar Form: incised ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 59 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 26 144; Head Form: biconical, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F1019; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: possible wrythen ornament, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 157; Head Form: biconical, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 46 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Decoration Application Method: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: b; Site: 5701, Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: medial-banded-biconical, Shaft Form: ?, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: incomplete, Context: IAS 5701 0113, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 44 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hatton & Wade pers comm.

Group: LXVIII, Sub-group: ii, Variant: b; Site: Six Dials (Southampton), Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 26 765; Head Form: medial-banded-biconical, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round; Context: F5022; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 33 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 1.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1605; Head Form: medial-banded biconical, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Context: 11634; Degree of Completeness: partial, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 12 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.219; Head Form: medial-banded biconical head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm, Head Diameter/Width: 7 mm; Head Decoration: line ornament, Decoration Application Method: incised, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 2.?; Site: Barking Abbey, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 887; Head Form: medial-banded-biconical, Collar Form: moulded collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: shaft broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 2.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 136.1980.4; Head Form: medial-banded biconical, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree

of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 33 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 2.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1973; Head Form: medial-banded biconical, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 12382; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 33 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 2.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.222; Head Form: medial-banded biconical head, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 2.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.221; Head Form: medial-banded biconical head, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 21 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 2.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.223; Head Form: medial-banded biconical head, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 40 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 2.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.224; Head Form: medial-banded biconical head, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Four lines on shaft 15 mm from point, square below.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 2.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2313; Head Form: medial-banded biconical, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 81 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 2.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 15 007; Head Form: flattened biconical, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing incised; Length: 57 mm, Head Diameter/Width: 8 mm; Head Decoration: 2 line band, Decoration Application Method: incised, Shaft Decoration: incised; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 4.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5151; Head Form: medial banded biconical, Collar Form: double ring collar; Degree of Completeness: 3 fragments, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm; Head Decoration: none, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 4.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 45 4601Cu; Head Form: medial-banded-biconical, Collar Form: cushion collar, Shaft Form: tapering, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: complete-very tip lost, Context: IAS 4601 0531; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 61 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 1 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Note: this pin was definitely turned while being faceted as each facet runs the length of the pin, Reference: Hatton & Wade pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: 4.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 99; Head Form: medial-banded biconical, Collar Form: cushion collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C4290; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3585; Head Form: medial banded biconical, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: head only, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 36 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4988; Head Form: medial banded biconical; Degree of Completeness: head only, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4943; Head Form: medial banded biconical; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm; Head Decoration: flat ring-and-dot, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: b, Sub-Variant: ?.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2312; Head Form: medial banded biconical, Collar Form: casting, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: 3 fragments, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 72 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: c; Site: Fishergate (York); Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 7854; Head Form: flat-topped biconical-headed; Context: 5727; Degree of Completeness: partial, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing evident; Head Decoration: none, Shaft Decoration: none; Reference: Tweddle pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: 1.?; Site: 24, Southampton, Hants; Museum or Unit: Southampton Archaeological Trust, Accession or Small Find Number: SOU 24 830; Head Form: flat-top-biconical, Shaft Form: ?, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F7007; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing marks visible; Length: 54 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: 2.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3391; Head Form: flat-top carinated biconical, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 56 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2295; Head Form: flat topped biconical, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Decoration Application Method: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2306; Head Form: flat-top biconical, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none. Carr pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: 2.B; Site: Thetford, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 448; Head Form: flat-top biconical head, Collar Form: slight ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: surface; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm, Head Diameter/Width: 7 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes or Associated Finds: cross on top of head.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 2376; Head Form: flat-top biconical head, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 56 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: 2.D; Site: Fishergate (York); Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4177; Head Form: flat-topped biconical-headed, Collar Form: ring collar (3 mm), Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Context: 3287; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing evident; Length: 60 mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Tweddle pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: 2.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 2102; Head Form: flat-top biconical head, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C5261; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: 3?.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 36 95; Head Form: flat-top biconical-headed, Collar Form: carinated ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: F.7; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 23 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: ?; Site: Sedgeford, Norfolk; Museum or Unit: Castle Museum, Norwich, Accession or Small Find Number: 138.953; Head Form: flat-top biconical, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 44 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast, Shaft Decoration: none; Notes or Associated Finds: glass in dots, Reference: Wade pers comm.

Group: LXVIII, Sub-group: ii, Variant: c, Sub-Variant: ?.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 35 5; Head Form: flat-topped biconical, Collar Form: casting collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm; Head Decoration: wrythen, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: d; Site: Fishergate (York); Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 3964; Head Form: flat-top, banded biconical, Collar Form: raised ring (3 mm), Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 7072; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing marks visible; Length: 78 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Tweddle pers comm.

Group: LXVIII, Sub-group: ii, Variant: d; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.220; Head Form: flat-top med-banded biconical, Collar Form: casting collar, Shaft Form: ?, Shaft Section at Level 1: round, Shaft Section at Level 2: ?; Degree of Completeness: shaft lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 37 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: ii, Variant: d, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 21; Head Form: flat-top biconical-headed*, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Notes: *this pin also has a smoothed medial band, Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: ii, Variant: d, Sub-Variant: ?.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4949; Head Form: Flat-top medial banded, Collar Form: casting, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 13 mm; Head Decoration: none, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXVIII, Sub-group: iii; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.227; Head Form: biconical-headed, Shaft Form: tapering, Shaft Section at Level 1: square, Shaft Section at Level 2: square; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 70 mm, Head Diameter/Width: 9 mm; Head Decoration: line ornament, Decoration Application Method: incised, Shaft Decoration: none; Notes: Vertical line ornament above carination, horizontal below.

Group: LXVIII, Sub-group: iii, Variant: a, Sub-Variant: .2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 2390; Head Form: biconical, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast;

Length: 33 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: iii, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 423 5203Cu; Head Form: biconical, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete with the point being lost, Context: IAS 5203 0507; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 12+48 mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: horizontal lines, Decoration Application Method: incised, Shaft Decoration: none, Note: (residual Roman pin ?), the biconical head has a groove incised below the point of carination on the upper zone, just above the point of carination parallel lines were cut horizontally into the head of the pin.

Group: LXVIII, Sub-group: iii, Variant: a, Sub-Variant: 1.A; Site: National Gallery, London; Museum or Unit: Museum of London, Accession or Small Find Number: NAG'87 SF18; Head Form: biconical, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 34; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 8 mm, Head Thickness: 8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXVIII, Sub-group: iii, Variant: b, Sub-Variant: 1.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 145.1980.2; Head Form: medial-banded biconical head, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 15 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: iii, Variant: b, Sub-Variant: 2.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 359 4801Cu; Head Form: medial-banded biconical, Collar Form: moulded ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Context: IAS 4801 2108; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.25 mm, Shaft Diameter at Position 3: 1.25 mm; Head Decoration: none, Shaft Decoration: none; Note: file marks evident on the medial band, Reference: Wade & Hatton pers comm.

Group: LXVIII, Sub-group: iii, Variant: b, Sub-Variant: 2.A; Site: Ixworth, Suffolk; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 1901.255; Head Form: medial-banded biconical, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 77 mm, Head Diameter/Width: 10 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: 6 lines at 59 mm, Decoration Application Method: incised.

Group: LXVIII, Sub-group: iii, Variant: b, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 26 300; Head Form: medial-banded biconical, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXVIII, Sub-group: iii, Variant: b, Sub-Variant: 2.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.225; Head Form: medial-banded biconical head, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 80 mm, Head Diameter/Width: 10 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXVIII, Sub-group: iii, Variant: b, Sub-Variant: ?.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 138.1980.6; Head Form: medial-banded biconical head, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 24 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none.

### *Inverted-pear-headed type (LXIX)*

Group: LXIX, Sub-group: i, Variant: a, Sub-Variant: 2.B; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 142; Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 35; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm; Date: 13th Century.

Group: LXIX, Sub-group: i, Variant: a, Sub-Variant: 2.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.211; Head Form: hot-air balloon, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: i, Variant: a, Sub-Variant: 4.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3267 (?); Head Form: hot-air-balloon, Collar Form: double ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filed; Length: 56 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: i, Variant: a, Sub-Variant: 5.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 196 5203Cu; Head Form: hot-air-balloon, Collar Form: incised lines form three ring collars, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Context: IAS 5203 0308; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXIX, Sub-group: i, Variant: a, Sub-Variant: 5.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 11 001; Head Form: hot-air-balloon headed, Collar Form: incised ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 51 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: i, Variant: b, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 616; Head Form: flat-top hot-air-balloon, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 46 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: ?; Head Form: hot-air-balloon/biconical, Collar Form: fine ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): hammer marks on the head; Length: 55+4 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: linear ornament; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1530; Head Form: hot-air-balloon headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 2974; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt (?); Length: 38 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXIX, Sub-group: ii, Variant: a; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4975; Head Form: hot-air-balloon, Collar Form: carinated ring, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr, limited communication.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1501; Head Form: ball-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2916; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): leaded bronze; Length: 62 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 1.7 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 1.7 mm; Head Decoration: none, Shaft Decoration: 2 lines, Decoration Application Method: incised; Reference: MacGowan pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 145.1980.3; Head Form: hot-air-balloon, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 13 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 6; Head Form: hot-air-balloon, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 8421(T1); Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 29 mm, Head Diameter/Width: 7 mm; Head Decoration: wrythen, Decoration Application Method: cast, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 64 4801Cu; Head Form: squashed hot-air-balloon, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete but damaged, Context: IAS 4801 0627; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 54 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.25 mm; Head Decoration: Wrythen, Decoration Application Method: cast & chased, Shaft Decoration: none; Note: head appears to sit on the top of the shaft, Reference: Wade & Hatton pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3422(?); Head Form: hot-air-balloon-headed, Collar

Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 70 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 363 5203Cu; Head Form: hot-air-balloon, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Context: IAS 5203 0707; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 68 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 1.75 mm, Shaft Diameter at Position 2: 1.75 mm, Shaft Diameter at Postion 3: 1.75 mm; Head Decoration: none, Shaft Decoration: none; Note: head is badly corroded, Reference: Wade & Hatton pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.183; Head Form: hot-air-balloon, Collar Form: none noticeable, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 217; Head Form: flat-topped hot-air-balloon, Collar Form: no collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 1644; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4943; Head Form: hot-air-balloon, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 5279; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: broken shaft, Secondary Work (if noted): filing; Length: 66 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2+ mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Associated Finds: 8th-9th century, Reference: York Archaeological Trust pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 72; Head Form: hot-air-balloon, Collar Form: casting collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: ?; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): punched; Length: 73 mm; Head Decoration: ring-and-dot, Decoration Application Method: possibly punched, Shaft Decoration: none; Notes: Parsons suggested that this was spherical-headed, but it is not. Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 5 001; Head Form: hot-air-balloon headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 57 mm, Head Diameter/Width: 5 mm, Head Thickness: 5 mm; Head Decoration: wrythen, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 5 006; Head Form: hot-air-balloon headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process:

cast, Secondary Work (if noted): none; Length: 48 mm, Head Diameter/Width: 6 mm; Head Decoration: wrythen, Decoration Application Method: incised, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3278 (?); Head Form: hot-air-balloon-headed, Collar Form: ring collar, Shaft Form: swollen hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 69 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3226 (?); Head Form: hot-air-balloon-headed, Collar Form: scale or thread, Shaft Form: swollen hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 80 mm, Head Diameter/Width: 7.5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm; Head Decoration: none, Shaft Decoration: 3 lines at collar, Decoration Application Method: incised; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Shorts Gardens, London; Museum or Unit: Museum of London, Accession or Small Find Number: SGA'89 SF237; Head Form: biconical, Collar Form: ring, Shaft Form: no evidence, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 1061; Degree of Completeness: partial, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 26 mm, Head Diameter/Width: 7 mm, Head Thickness: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 36 95; Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 23 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 2140; Head Form: hot-air-balloon headed, Collar Form: ring, Shaft Form: ?, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 12378; Degree of Completeness: 3 fragments, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 50 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1125; Head Form: hot-air-balloon-headed, Collar Form: ring collar, Shaft Form: tapering-lines, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2086(?); Head Form: flat-top hot-air-balloon, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incision; Length: 85 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast, Shaft Decoration: none, Decoration Application Method: incised; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Shorts Gardens, London; Museum or Unit: Museum of London, Accession or Small Find Number: SGA'89 SF98; Head Form: hot-air-balloon headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 629; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 6 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-and-dot, Decoration Application Method: punch, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Wingfield St, Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 43 4601Cu; Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost and head badly corroded, Context: IAS 4601 0034; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.25 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Thetford and imported pottery, Reference: Hatton & Wade pers comm; Date: early 10th c.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: hot-air-balloon headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: 3 fragments, Context: IAS 4801 0499; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 61 mm, Head Diameter/Width: 5x5 mm; Head Decoration: none, Shaft Decoration: ring lines, Decoration Application Method: incised; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 2499; Head Form: hot-air-balloon headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 65 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 606; Head Form: hot-air-balloon-headed, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 84d; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2004(?); Head Form: hot-air-balloon, Collar Form: incised ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: finely faceted; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incision; Length: 70 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3204 (?); Head Form: hot-air-balloon-headed, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filed; Length: 34 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: ring ornament, Decoration Application Method: possibly in mould, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 9040; Head Form: hot-air-balloon-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3697; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 61 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.8 mm, Shaft Diameter at Position 2: 1.8 mm, Shaft Diameter at Postion 3: 1.8 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Phase 3/4/5 of the site, Reference: Tweddle pers comm; Date: Later than 850.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Faversham, Kent; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1909.152e; Head Form: hot-air-balloon, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: ?; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 6174; Head Form: hot-air-balloon, Collar Form: ring collar (3 mm), Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 4849; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 47 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: details not available, Reference: York Arch Trust pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Marlowe III Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 1127; Head Form: hot-air-balloon, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: U.S; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Marlowe IV (Canterbury), Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 795; Head Form: hot-air-balloon, Collar Form: concave collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 246; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 67 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm; Head Decoration: none, Decoration Application Method: cast, Shaft Decoration: none; Notes or Associated Finds: 850 - 1050 is date suggested for the context, Reference: Garrard pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 562; Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C311(T2); Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 4 mm; Head Decoration: wrythen, Decoration Application Method: cast, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 63 4302Cu; Head Form: hot-air-balloon, Collar Form: double moulded ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 246; Degree of Completeness: tip lost, Context: IAS 4302 0034; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 32 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 1 mm; Head Decoration: none, Decoration Application Method: cast, Shaft Decoration: none; Reference: Hatton & Wade pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 153 4801Cu; Head Form: hot-air-balloon headed,

Collar Form: incised lines creating the appearance of a ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round (?possibly faceted below this point); Degree of Completeness: complete, Context: IAS 4801 0973; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised lines for collar; Length: 54 mm, Head Diameter/Width: 5x5 mm, Shaft Diameter at Position 1: 1.95 mm, Shaft Diameter at Position 2: 2.10 mm, Shaft Diameter at Postion 3: 1.95 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 24 014; Head Form: hot-air-balloon headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F7023; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 5 mm; Head Decoration: wrythen, Decoration Application Method: incised or cast, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 24 003; Head Form: hot-air-balloon headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F7022; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 53 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3390 (?); Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filed; Length: 65 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2294 (?); Head Form: hot-air-balloon-headed, Collar Form: ring collar, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filed; Length: 44 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2308 (?); Head Form: hot-air-balloon-headed, Collar Form: double ring collar, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filed; Length: 63 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1; Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 8419(T1); Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm, Head Diameter/Width: 6 mm; Head Decoration: wrythen, Decoration Application Method: cast, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 213; Head Form: hot-air-balloon headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 68 mm, Head Diameter/Width: 8 mm, Head

Thickness: 8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: wrythen, Decoration Application Method: incised, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4848(?); Head Form: hot-air-balloon, Collar Form: incised ring collar, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: finely faceted; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm, Head Diameter/Width: 4 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast--raised, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3172 (?); Head Form: hot-air-balloon-headed, Collar Form: double scale collar, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: ?cast?, Secondary Work (if noted): hammered; Length: 37 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 493; Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 70; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 3.5 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 221; Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 78; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm; Date: 650-850 AD.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 3.?; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 834; Head Form: hot-air-balloon, Collar Form: carinated collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 59; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 3.A?; Site: Peabody Buildings, London; Museum or Unit: Museum of London, Accession or Small Find Number: PEA'87 SF77; Head Form: hot-air-balloon, Collar Form: carinated ring, Shaft Form: no evidence, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 062; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 56 mm, Head Diameter/Width: 6 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 3.A?; Site: Shorts Gardens, London; Museum or Unit: Museum of London, Accession or Small Find Number: SGA'89 SF71; Head Form: hot-air-balloon, Collar Form: carinated ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 527; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 41 mm, Head Diameter/Width: 7 mm, Head Thickness: 7 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 3.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: ?; Head Form: hot-air-balloon, Collar Form: carinated collar, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incision; Length: 87 mm, Head Diameter/Width: 8 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr limited communication.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 3.D; Site: Shorts Gardens, London; Museum or Unit: Museum of London, Accession or Small Find Number: SGA'89 SF37; Head Form: hot-air-balloon, Collar Form: carinated ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 376; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): fine faceting; Length: 61 mm, Head Diameter/Width: 5.5 mm, Head Thickness: 5.5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.25 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: 4.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 672; Head Form: hot-air-balloon headed, Collar Form: cushion, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: unstratified; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 57 mm, Head Diameter/Width: 5x6 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2304 (?); Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 20 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast--raised, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3203 (?); Head Form: hot-air-balloon-headed, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 10 mm, Head Diameter/Width: 6.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4252 (?); Head Form: hot-air-balloon-headed, Collar Form: crude ring collar, Shaft Form: swollen/hipped, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 80 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3321 (?); Head Form: hot-air-balloon, Collar Form: damaged collar, Shaft Form: swollen shaft, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filed; Length: 36+15 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: 629; Head Form: hot-air-balloon, Collar Form: ring collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C636(T2); Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing

Process: cast; Length: 55 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 1.9 mm; Head Decoration: wrythen, Decoration Application Method: cast, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2005(?); Head Form: hot-air-balloon, Shaft Form: undetermined, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 60 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2074(?); Head Form: hot-air-balloon, Collar Form: raised ring collar, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Head Decoration: ring-and-dot, Decoration Application Method: cast--raised, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2006(?); Head Form: hot-air-balloon, Shaft Form: undetermined, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 44 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Felixstowe, Suffolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 682.76-94.E; Head Form: hot-air-balloon, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: ?; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 8 038; Head Form: hot-air-balloon headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 14 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 8 19; Head Form: hot-air-balloon headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 27 mm, Head Diameter/Width: 5 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXIX, Sub-group: ii, Variant: b; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 2669; Head Form: flat-topped, hot-air-balloon, Collar Form: ring (3 mm), Shaft Form: tapering, Shaft Section at Level 1: faceted-round, Shaft Section at Level 2: faceted-round; Context: 4448; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 51 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Details not available, Reference: York Archaeological Trust pers comm.

Group: LXIX, Sub-group: ii, Variant: b; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 5672; Head Form: flat-topped, hot-air-balloon, Collar Form: ring (3 mm), Shaft Form: tapering, Shaft Section at Level 1: faceted-round; Context: 5312; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: broken shaft, Secondary Work (if noted): filing; Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Details not available, Reference: York Archaeological Trust pers comm.

Group: LXIX, Sub-group: ii, Variant: b; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 8106; Head Form: flat-topped, hot-air-balloon, Collar Form: ring (3 mm), Shaft Form: tapering, Shaft Section at Level 1: faceted-round; Context: 1075; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: broken shaft, Secondary Work (if noted): filing; Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Details not available, Reference: York Archaeological Trust pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 945 (?); Head Form: flat-top hot-air-balloon, Collar Form: casting collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: squared; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incision; Length: 85 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: wrythen ornament, Shaft Decoration: at 27 mm 2 lines, Decoration Application Method: incised; Reference: Carr limited communication.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 1.B; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4215; Head Form: flat-topped, hot-air-balloon, Shaft Form: swollen, Shaft Section at Level 1: faceted round, Shaft Section at Level 2: faceted round; Context: 3327; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: broken shaft, Secondary Work (if noted): filing; Length: 60 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes or Associated Finds: Details not available, Reference: York Archaeological Trust pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 1.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.210; Head Form: flat-top hot-air balloon, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 51 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 7290; Head Form: flat-topped, hot-air-balloon, Collar Form: ring; Context: 1075; Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Details not available, Reference: York Archaeological Trust pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.A; Site: Shorts Gardens, London; Museum or Unit: Museum of London, Accession or Small Find Number: SGA'89 SF183; Head Form: flat top hot-air-balloon, Collar Form: carinated ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 850; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 6 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: 2 lines 1 m apart incised into shaft 22 mm from the tip, Reference: Blackmore pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1832; Head Form: flat-topped hot-air-balloon, Collar Form: raised ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3738; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.25 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 14148; Head Form: flat-top hot-air-balloon, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 36532; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 61 mm, Head Diameter/Width: 6x7 mm, Shaft Diameter at Position 1: 2.0 mm, Shaft Diameter at Position 2: 2.0 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Phase 3 of the site, Reference: Tweddle pers comm; Date: 850-900.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Coppergate, York, N.Yorks; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 10113; Head Form: hot-air-balloon, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 26937; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 6x7 mm, Shaft Diameter at Position 1: 2.0 mm, Shaft Diameter at Position 2: 2.0 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Phase 3 of the site, Reference: Tweddle pers comm; Date: 850-900.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.214; Head Form: flat-top hot-air balloon, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Notes: The pin appears to be repointed.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.C; Site: Barking (?Barking Abbey?), Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1432; Head Form: flat-topped hot-air-balloon, Collar Form: raised ring collar, Shaft Form: hipped (sharp), Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2812; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.25 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4925; Head Form: flattened hot-air-balloon, Collar Form: band ring, Shaft Form: carinated hipping, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr, limited communication.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4174 (?); Head Form: flat-top hot-air-balloon, Collar Form: ring collar, Shaft Form: hipped shaft, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filed; Length: 85 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast or punched, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.C; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 771; Head Form: hot-air-balloon

headed, Collar Form: double ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 87; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.75 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-&-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Garrard pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 2.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.203; Head Form: flat-topped hot-air-balloon, Collar Form: ring collar, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 3.C; Site: Shorts Gardens, London; Museum or Unit: Museum of London, Accession or Small Find Number: SGA'89 SF284; Head Form: flat top hot-air-balloon, Collar Form: carinated ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 1143; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 72 mm, Head Diameter/Width: 7 mm, Head Thickness: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Line on point of maximum carination, Reference: Blackmore pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: 3.D; Site: Marlowe Theatre, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 824; Head Form: hot-air-balloon, Collar Form: carinated collar, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 293; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: 1100-1400, residual (?), Reference: Garrard pers comm.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: ?.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.215; Head Form: flat-top hot-air balloon, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 22 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: ii, Variant: b, Sub-Variant: ?.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.213; Head Form: flat-top hot-air balloon, Collar Form: casting(?), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXIX, Sub-group: ii, Variant: c; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2879; Head Form: carinated hot-air-balloon, Collar Form: ring collar, Shaft Form: unknown, Shaft Section at Level 1: faceted-round, Shaft Section at Level 2: unknown; Context: 0001; Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filed; Length: 26 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none. Reference: Carr pers comm.

Group: LXIX, Sub-group: iii, Variant: a, Sub-Variant: 2.B; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 4 5203Cu; Head Form: hot-air-balloon, Collar Form: fine collar of moulded type, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Context: IAS 5203 0599; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): glass in ring-and-dot; Length: 86 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXIX, Sub-group: iii, Variant: a, Sub-Variant: ?.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 177 629; Head Form: hot-air-balloon headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C636 T2; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 55 mm, Head Diameter/Width: 7 mm; Head Decoration: wrythen, Decoration Application Method: cast (?), Shaft Decoration: none; Notes or Associated Finds: Poorly cast as the head partially collapsed during casting, Reference: Brisbane pers comm.

### *Ball/spherical-headed type (LXX)*

Group: LXX; Site: Barrington B, Cambs; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 34.855A; Head Form: ball-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: recovered with cast copper alloy ring.

Group: LXX; Site: Cathedral Green Winchester, Hants; Museum or Unit: Winchester Historic Resource Centre, Accession or Small Find Number: 1387; Head Form: spherical-headed, Collar Form: none; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none; Reference: Biddle pers comm.

Group: LXX; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,---; Head Form: spherical-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 107; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 24 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: wire ring, Reference: Evison 1987: 240-1 & fig 48.107.5a.

Group: LXX; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,35; Head Form: globular-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 6; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: forged; Length: 43 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: glass bell beaker, cowrie shell, spindle whorl, keys, Reference: Evison 1987: 217 & fig 7.6.9.

Group: LXX; Site: Milk Street, London; Museum or Unit: Museum of London, Accession or Small Find Number: 290; Head Form: spherical-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Context: 1092; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast?; Length: 9 mm; Head Decoration: none, Shaft Decoration: none; Notes: From pit, Reference: Clarke pers comm; Date: late 11th/12th.

Group: LXX: Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.179; Head Form: spherical-headed--mushroom, Collar Form: line at collar, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: i; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1050; Head Form: spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2536; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 41 mm, Head Diameter/Width: 3.2 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 2 mm, Shaft

Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: i; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 410 3104; Head Form: spherical-headed, Collar Form: 2 collars (incised), Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Context: IAS 3104 0478; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXX, Sub-group: i; Site: Shudy Camps, Cambs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 36.844; Head Form: spherical-headed, Collar Form: 2 collar ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 95; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm, Head Diameter/Width: 2 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 1 mm; Head Decoration: linear ornament, Decoration Application Method: incised, Shaft Decoration: none; Reference: Lethbridge 1936: fig 4.b.

Group: LXX, Sub-group: i, Variant: ?, Sub-Variant: ?; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1678; Head Form: spherical-headed, Collar Form: not noted, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 2911; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: c.2 mm, Shaft Diameter at Position 2: c.2 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: i, Variant: ?, Sub-Variant: ?; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 564; Head Form: spherical-headed, Collar Form: none noted, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 84c; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 36 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1.1 mm, Shaft Diameter at Position 2: 1.1 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: i, Variant: a; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.168; Head Form: spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 1.A; Site: Bevis' Grave, Ports Down, Hants; Museum or Unit: Southsea Castle Museum, Accession or Small Find Number: none; Head Form: spherical-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 44; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Escutcheon, knife, and iron ring, Reference: Rudkin pers comm (20th January 1986); Date: 7th century.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 363 4801Cu; Head Form: spherical-headed, Shaft Form: entire shaft appears to swell but tapering, Collar: 4 lines incised below head to form the collars, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 46 mm, Head Diameter/Width: 2.75 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Decoration Application Method: scored; Reference: Wade & Hatton pers comm.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 1.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.184; Head Form: spherical-headed, Collar Form: none, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 46 mm, Head Diameter/Width: 3.5 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 1.B; Site: Polhill, Kent; Head Form: spherical-headed, Collar Form: none, Shaft Form: swelled, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Grave Number: 38; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 2 mm; Head Decoration: none, Shaft Decoration: lines, Decoration Application Method: incised; Reference: Hawkes 1973: fig 54, item 509[p.205] & 191. [Publication only].

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 1.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.181; Head Form: spherical-headed, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 1.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.174; Head Form: spherical-headed, Collar Form: none, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 2 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 1.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.182; Head Form: spherical-headed, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 1.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.170; Head Form: spherical-headed, Collar Form: none, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 1.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.180; Head Form: spherical-headed, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 2 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 2.?.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3348; Head Form: spherical-headed, Collar Form: smoothed ring, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: 2 fragments, Type of Material: silver, Main Manufacturing Process: cast; Length: 16+22 mm, Head Diameter/Width: 3.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: 3.B; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 978; Head Form: spherical-headed, Collar Form: carinated collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2057; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing

Process: cast; Length: 50 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.75 mm, Shaft Diameter at Position 2: 1.75 mm, Shaft Diameter at Postion 3: 1.75 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: ?.?; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 1 4801Ag; Head Form: spherical headed, Collar Form: incised lines form ring collars, Shaft Form: unrecorded; Degree of Completeness: complete, Context: IAS 4801 2799; Type of Material: silver - gilt, Main Manufacturing Process: cast; Length: 68 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Position 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Note: gilding survives in patches on the head of the pin and on the upper portions of the shaft as far down as the collar zone, Reference: Wade & Hatton pers comm.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: ?.?; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: spherical headed, Collar Form: none, Shaft Form: unknown; Degree of Completeness: complete, Context: IAS 5801 0028; Type of Material: silver, Main Manufacturing Process: cast; Length: 22 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXX, Sub-group: i, Variant: a, Sub-Variant: ?.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.173; Head Form: spherical-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: i, Variant: b, Sub-Variant: ?.?; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1764; Head Form: spherical-headed, Collar Form: carinated collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): gilt head only; Length: 20+17 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: ii; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1748; Head Form: spherical bun-headed, Collar Form: stepped collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3688; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): gilt head only; Length: 61 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.2 mm; Head Decoration: linear & dot, Decoration Application Method: incised & punched, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: ii; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1464; Head Form: spherical headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast; Length: 61 mm, Head Diameter/Width: 7 mm; Head Decoration: raised dots, Decoration Application Method: cast, Shaft Decoration: none; Notes or Associated Finds: Raised pimples give pin a pineapple appearance, Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: ?, Sub-Variant: ?; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 977; Head Form: spherical-headed, Collar Form: none noted, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 2074; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 28 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: c.2 mm, Shaft Diameter at Position 2: c.2 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: ii, Variant: ?, Sub-Variant: ?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.164; Head Form: spherical-head--mushroom?, Collar Form: none, Shaft Form: swollen with line, Shaft Section at Level 1: round, Shaft Section at Level 2: round/unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: ?, Sub-Variant: ?.?; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1699; Head Form: flat topped spherical-headed, Collar Form: carinated collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): gilt head only; Length: 17+6 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.1 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: ii, Variant: a; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 496; Head Form: spherical-headed, Collar Form: ring; Context: 447; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 5 mm; Head Decoration: ring & dot, Decoration Application Method: punched or cast, Shaft Decoration: lines below head, Decoration Application Method: incised; Notes or Associated Finds: Saxon context according to Canterbury Archaeological Trust, Reference: Garrard pers comm.

Group: LXX, Sub-group: ii, Variant: a; Site: South Ferriby, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 863.44; Head Form: spherical-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 23 mm, Head Diameter/Width: 7 mm; Head Decoration: wrythen, Decoration Application Method: cast, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: .1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 162; Head Form: spherical-headed, Collar Form: casting, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 6 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: The ring-and-dot decoration is set above and below midpoint, Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: .1.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 167; Head Form: spherical-headed, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 61 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 14411; Head Form: spherical-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 30841; Degree of Completeness: partial, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 7 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Phase 3 of the site, Reference: Tweddle pers comm; Date: 850-900.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS154 4601Cu; Head Form: spherical-headed although it might be arged that it has a 'hot-air-balloon head', Shaft Form: tapering ?, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Context: IAS 4601 0844; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt head; Length:

33 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: wrythen, Shaft Decoration: none; Notes or Associated Finds: Probably gilt to enhance the large number of fine details, of special note is the patch of gilding about 2 mm below the collar, Reference: Wade & Hatton pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Peabody Buildings, London; Museum or Unit: Museum of London, Accession or Small Find Number: PEA'87 SF258; Head Form: cuboid, Collar Form: head collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 185; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 32+23 mm, Head Diameter/Width: 5 mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: linear ornament, Decoration Application Method: incised, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Waltham Abbey, Essex; Museum or Unit: Epping Forest District Museum; Head Form: spherical-headed, Collar Form: none, Shaft Form: hipped - shoulder, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F338; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast & gilt; Length: 51 mm, Head Diameter/Width: 5 mm; Head Decoration: decorated, Decoration Application Method: incised, Shaft Decoration: none; Notes or Associated Finds: Clay floor of viking hall. Wrythen decoration on head, Reference: Huggins 1976: 115 & fig 41.1; Date: 9th/10th c.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.185; Head Form: spherical-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round; Degree of Completeness: shaft partial, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 36 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.160; Head Form: spherical-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 23 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.165; Head Form: spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2266; Head Form: spherical-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 13 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Barham, Suffolk; Museum or Unit: Ipwsich Archaeological Unit, Accession or Small Find Number: 131; Head Form: spherical-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: detector; Degree of Completeness: point damaged, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm; Head Decoration: none, Shaft Decoration: none; Reference: Newman pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 10558; Head Form: spherical-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 30132;

Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Phase 4a of the site, Reference: Tweddle pers comm; Date: 900–930/5.

Group: LXX, Sub–group: ii, Variant: a, Sub–Variant: 1.A; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 11843; Head Form: spherical–headed (squashed), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 31643; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1.8 mm, Shaft Diameter at Position 2: 1.8 mm, Shaft Diameter at Postion 3: 1.8 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Phase 3 of the site, Reference: Tweddle pers comm; Date: 850–900.

Group: LXX, Sub–group: ii, Variant: a, Sub–Variant: 1.A; Site: Grimston "Bell", Norfolk; Museum or Unit: King's Lynn Museum, Accession or Small Find Number: A846.3; Head Form: spherical–headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: C; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): head – silver; Length: 71 mm, Head Diameter/Width: 6 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Flat ring from annular brooch, girdle hanger, knife, Reference: Manuscript notes in King's Lynn Museum; Date: 6th/early 7th c.

Group: LXX, Sub–group: ii, Variant: a, Sub–Variant: 1.A; Site: Harling, Norfolk; Museum or Unit: BM M&LA, Accession or Small Find Number: 227; Head Form: spherical–headed; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub–group: ii, Variant: a, Sub–Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 19 4601Cu; Head Form: spherical–headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete and badly corroded, Context: IAS 4601 0636; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 55 mm, Head Diameter/Width: 8 mm, No shaft measurements taken because of corrosion; Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXX, Sub–group: ii, Variant: a, Sub–Variant: 1.A; Site: Shakenoak, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1971.429; Head Form: spherical–headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: iron, Main Manufacturing Process: cast; Length: 55 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brodribb, et.al. 1972: fig.

Group: LXX, Sub–group: ii, Variant: a, Sub–Variant: 1.A; Site: Shakenoak, Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1971.313; Head Form: spherical–headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brodribb, et.al. 1972: fig.

Group: LXX, Sub–group: ii, Variant: a, Sub–Variant: 1.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.158; Head Form: spherical–headed, Collar Form: none, Shaft Form: tapering shaft, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub–group: ii, Variant: a, Sub–Variant: 1.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.157; Head Form: spherical–headed, Collar Form: none, Shaft

Form: tapering shaft, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 51 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Wicken Bonhunt, Essex; Accession or Small Find Number: 8; Head Form: spherical-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Bevis' Grave, Ports Down, Hants; Museum or Unit: Southsea Castle Museum, Accession or Small Find Number: unaccessioned; Head Form: spherical-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 44; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: iron knife, iron ring, escutcheon, Reference: Rudkin pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2292; Head Form: spherical-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 84 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: spherical-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Context: IAS 5502 0057; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 93 mm, Head Diameter/Width: 7 mm; Head Decoration: wrythen, Decoration Application Method: incised, Shaft Decoration: 2 lines below, Decoration Application Method: incised; Reference: Wade & Hatton pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.A?; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 291 4801Cu; Head Form: spherical headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: 4 fragments, Context: IAS 4801 1583; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: t. 33 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3398; Head Form: spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 56 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Lechlade, Glos; Museum or Unit: Oxford Arch Unit & Corinium Museum, Accession or Small Find Number: LBF85 37; Head Form: spherical-headed, Collar Form: none, Shaft Form: swelled, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 107; Degree of Completeness: fragment, Type of Material: copper alloy; Length: 31 mm, Head Diameter/Width: 2 mm, Shaft Diameter at Position 1: 1 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: buckle, knife, iron and copper alloy fragments, Reference: Miles pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 15 287; Head Form: spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at

Level 2: round; Context: F49; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 51 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 2998; Head Form: conical spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T1c10774; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 5 mm; Head Decoration: wrythen, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 26 666; Head Form: spherical-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F3030; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.169; Head Form: spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: missing point, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Jevington, Sussex; Head Form: spherical-headed, Shaft Form: swollen, Shaft Section at Level 1: round; Grave Number: 6; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: two iron fragments, Reference: Welch 1983 (vol ii): 344. Holden, et.al. 1969: 128 fig 2 & 3.5. [Publication only].

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 157; Head Form: spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 442; Head Form: spherical-headed (crude), Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: unstrat; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 54 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 11; Head Form: spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: unstrat; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm, Head Diameter/Width: 5 mm, Head Thickness: 5 mm; Head Decoration: wrythen, Decoration Application Method: incised, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 982; Head Form: spherical-headed (crude), Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F2057; Degree of Completeness: tip lost, Type of Material: copper alloy,

Main Manufacturing Process: cast; Length: 63 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 330; Head Form: spherical-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 56 mm; Head Decoration: wrythen, Shaft Decoration: 2 lines, Decoration Application Method: incised 23 mm from tip; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.156; Head Form: spherical-headed, Collar Form: none, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.163; Head Form: spherical-headed, Collar Form: none, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 30 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.C; Site: Sarre, Kent; Museum or Unit: Maidstone Museum; Head Form: spherical-headed, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 174; Degree of Completeness: complete, Type of Material: ivory, Main Manufacturing Process: carved; Length: 40 mm; Head Decoration: dot, Decoration Application Method: punch, Shaft Decoration: none; Associated Finds Included: 2 bone combs, iron fragments, Reference: Brent 1866: 184.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 24 24; Head Form: spherical-headed, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 1093; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 56 mm, Head Diameter/Width: 7 mm, Head Thickness: 7 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.D; Site: Marlowe III, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 932; Head Form: spherical-headed, Collar Form: none, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Context: 362; Degree of Completeness: very tip lost, Type of Material: silver, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 4 mm; Head Decoration: wrythen, Decoration Application Method: cast, Shaft Decoration: none; Notes: 4III-6; rubble spread in palaestra, Reference: Garrard pers comm; Date: 7th century.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1698; Head Form: spherical-headed, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T3 11961; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 66 mm, Head Diameter/Width: 5 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 1.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1503; Head Form: spherical-headed, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round;

Context: 8766; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 51 mm, Head Diameter/Width: 4 mm, Head Thickness: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2; Site: Harling, Norfolk; Museum or Unit: BM M&LA, Accession or Small Find Number: 304; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unrecorded, Shaft Section at Level 1: unrecorded, Shaft Section at Level 2: unrecorded; Degree of Completeness: partial, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 39 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 48; Head Form: spherical-headed, Collar Form: carinated collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 37 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.7 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4985; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 26 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2066; Head Form: spherical-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 10 mm, Head Diameter/Width: 8 mm; Head Decoration: spiral-decorated, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4935; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 1570; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 18 mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes or Associated Finds: Details not available, Reference: Tweddle pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Peabody Buildings, London; Museum or Unit: Museum of London, Accession or Small Find Number: PEA'87 SF305; Head Form: spherical-headed, Collar Form: head collar, Shaft Form: unknown, Shaft Section at Level 1: round; Context: 254; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 18 mm, Head Diameter/Width: 5 mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: linear ornament, Decoration Application Method: incised, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Wicken Bonhunt, Essex; Accession or Small Find Number: 467; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 22 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3173; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of

Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 26 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2080; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 44 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5195; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 34 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Barham, Suffolk; Museum or Unit: Ipwsich Archaeological Unit, Accession or Small Find Number: 31; Head Form: spherical-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: detector; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm; Head Decoration: none, Shaft Decoration: none; Reference: Newman pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Barham, Suffolk; Museum or Unit: Ipwsich Archaeological Unit, Accession or Small Find Number: A8; Head Form: spherical-headed, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: detector; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 81 mm; Head Decoration: none, Shaft Decoration: none; Reference: Newman pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Barham, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 6202 0001; Head Form: spherical-headed, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: ?, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 6mm; Head Decoration: none, Decoration Application Method: none, Shaft Decoration: none; Reference: Newman pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4451; Head Form: spherical-headed, Collar Form: ring (3 mm), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 4710; Degree of Completeness: damaged, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Tweddle pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Holdborough, Kent; Museum or Unit: Maidstone Museum; Head Form: spherical-headed, Collar Form: moulded ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 15; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52.5 mm, Head Diameter/Width: 3.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Evison 1956: 122 & fig 19 (Gr 15.2).

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Barham, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: 018 0312; Head Form: spherical-headed, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm, Head Diameter/Width: 4mm; Head Decoration: none, Decoration Application Method: none, Shaft Decoration: none; Reference: Newman pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Barham, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: 018 0506(?); Head Form: hot-air-balloon, Collar Form: double ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 41 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Decoration Application Method: none, Shaft Decoration: none; Reference: Newman pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 921; Head Form: spherical-headed, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 1768; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.75 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 1.75 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3167 (?); Head Form: spherical-headed, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filed; Length: 52 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5508; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 41 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Borders on being hot-air-balloon-headed, Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Coppergate, York, N.Yorks; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 10042; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 27623; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2.0 mm, Shaft Diameter at Position 2: 2.0 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Phase 4A of the site, Reference: Tweddle pers comm; Date: 900-930/5.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Marlowe IV Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 1082; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 355; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 39 45; Head Form: spherical headed, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.176; Head Form: spherical-headed, Collar Form: ring collar, Shaft Form: swollen(?), Shaft Section at Level 1: round, Shaft Section at Level 2: round(?); Degree of

Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 39 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Wicken Bonhunt, Essex; Accession or Small Find Number: 45; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Wade pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5182 or 5118; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: fragmentary, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 51 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3389; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2067; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm, Head Diameter/Width: 7 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4837; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: South Ferriby, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 820.42; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 160; Head Form: spherical-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm; Head Decoration: linear decoration, Decoration Application Method: incised, Shaft Decoration: none; Notes or Associated Finds: The decoration appears like a cap on the pin-head, Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 23 132; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 6 mm; Head Decoration: wrythen, Decoration Application Method: incised, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 5 003; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 7; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 44 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1466; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3002; Degree of Completeness: tip lost, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 52 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 26 398; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2020 c94; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 6 mm; Head Decoration: wrythen, Decoration Application Method: incised, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 177 567; Head Form: spherical-headed (crude), Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 47 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B.iv; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4417; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: wrythen, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.B?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: ?; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: fragments, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none; Notes: 16 + 22 + 10 + 7 + 5, Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Barking (?Barking Abbey?), Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 149; Head Form: spherical-headed, Collar Form: raised ring collar, Shaft Form: hipped (sharp), Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 63C; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5349; Head Form: spherical-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 981; Head Form: spherical-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 358; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: c.53 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 625; Head Form: spherical-headed, Collar Form: attached to head, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 219; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Shepperton Green, Middx; Museum or Unit: Museum of London; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: line, Decoration Application Method: incised; Reference: Clark 1979: 118 & fig 13.5.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 20 001; Head Form: spherical-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): incised; Length: 38 mm, Head Diameter/Width: 5 mm; Head Decoration: incised hat, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.207; Head Form: spherical-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Wye Down, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 93,6-1,190; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 69 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: Red glass bulla set in bronze and purple bead.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2311; Head Form: spherical-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 84 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 341; Head Form: spherical-headed (crude), Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 9864; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 52 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 23 128; Head Form: spherical-headed (crude), Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 59 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm; Addyman & Hill 1969: fig 26.2.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C.iv; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4928; Head Form: spherical-headed, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 80 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.C.x; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2001; Head Form: spherical-headed, Collar Form: smoothed ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: cast; Length: 77 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: faceted shaft beginning 34 mm from the tip, Reference: Carr limited communication.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 20; Head Form: spherical-headed, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 28; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 10706; Head Form: spherical-headed, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Context: 27819; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2.0 mm, Shaft Diameter at Position 2: 2.0 mm; Head Decoration: none, Shaft Decoration: none; Notes: Phase 3 of the site, Reference: Tweddle pers comm; Date: 850-900.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 628; Head Form: spherical-headed, Collar Form: ring, Shaft Form: shouldered (20 mm), Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 219; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Notes: Period 10 (1100-1400), Reference: Garrard pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 217; Head Form: spherical-headed, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 62; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 29 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Notes: From a contexts placed in period 10 of the site, Reference: Garrard pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Pavement, York, N.Yorks; Museum or Unit: Yorkshire Museum; Head Form: spherical-headed; Context: 35; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 71 mm; Head Decoration: none, Shaft Decoration: none; Notes: From 'lowest level of Trench IV'--on Lloyd's Bank site, Reference: MacGregor 1982: 92 & fig 48.448; Date: ?.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 99 25; Head Form: spherical headed, Collar Form: cushion, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C223; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 177 234; Head Form: spherical-headed, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 58 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Notes: Heavily shouldered hip (lance-like) begins 2 mm from point, Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 99 25; Head Form: spherical-headed, Collar Form: slight ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 223; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2.D.ii; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3353; Head Form: spherical-headed, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 72 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 2?.C; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 981; Head Form: spherical-headed, Collar Form: attached to head, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 358; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 3.?; Site: Barking (?Barking Abbey?), Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1895; Head Form: spherical-headed, Collar Form: carinated collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 3738; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Length: 36 mm, Head Diameter/Width: 4.5 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.9 mm; Head Decoration: none, Shaft Decoration: lines at collar; Reference: MacGowan pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 3.?; Site: Barking (?Barking Abbey?), Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1601; Head Form: spherical-headed, Collar Form: carinated collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 3316; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.75 mm, Shaft Diameter at Position 2: 1.75 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 3.B; Site: Barking (?Barking Abbey?), Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1161; Head Form: spherical-headed, Collar Form: carinated collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2382; Degree of Completeness: incomplete, Type of Material: copper alloy, Main

Manufacturing Process: cast; Length: 46 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 2.0 mm; Head Decoration: none, Shaft Decoration: none; Reference: Ken MacGowan pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 3.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2084; Head Form: spherical-headed, Collar Form: carinated, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: repointed, Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 3.B; Site: Cathedral Green Winchester, Hants; Museum or Unit: Winchester Historic Resource Centre, Accession or Small Find Number: 1190 (1434); Head Form: spherical-headed, Collar Form: carinated collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: TR 33-34; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 40 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Biddle pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 3.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 20 008; Head Form: spherical-headed, Collar Form: carinated, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 131; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 4; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.228; Head Form: spherical-headed, Collar Form: cushion, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: shaft partial, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 29 mm, Head Diameter/Width: 7 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched/engraved, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 4; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.187; Head Form: spherical-headed, Collar Form: cushion, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: shaft partial, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 20 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 4.?; Site: Felixstowe, Suffolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 682.76-94.A; Head Form: spherical-headed, Collar Form: cushion collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: ?; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 31 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 4.A; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4209; Head Form: spherical-headed, Collar Form: cushion, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 15311; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Phase 6 of the site, Reference: Tweddle pers comm; Date: Norman or later.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 4.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5193; Head Form: spherical-headed, Collar Form: cushion, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree

of Completeness: 3 fragments, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 24* mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Notes: *(15+9.5+4), Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub--Variant: 4.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5194; Head Form: spherical-headed, Collar Form: cushion, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: 2 fragments, Type of Material: silver, Main Manufacturing Process: cast; Length: 30+36 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 4.D; Site: Felixstowe, Suffolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 652.76-94; Head Form: spherical-headed, Collar Form: cushion collar, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 77 mm, Head Diameter/Width: 7 mm; Head Decoration: dot, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 4.D; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 780; Head Form: spherical-headed, Collar Form: cushion, Shaft Form: shouldered (28 mm), Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 247; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 79 mm, Head Diameter/Width: 6 mm; Head Decoration: wrythen, Decoration Application Method: cast, Shaft Decoration: none; Notes: 4III-6; rubble spread in palaestra, Reference: Garrard pers comm; Date: 7th century.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 4.D; Site: Winchester-Cathedral Green, Hants; Museum or Unit: Historic Resource Centre, Accession or Small Find Number: CG1387(1430); Head Form: spherical-headed, Collar Form: cushion collar, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 341; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 40 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Biddle pers comm; Biddle 1990: 555[item 1430]; Date: early - mid 9th.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4838; Head Form: spherical-headed, Collar Form: double ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.A; Site: West Stow, Suffolk; Head Form: spherical-headed, Collar Form: multiple rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: lines incised into the shaft just below head to form collar, Reference: West 1985: fig 246.1.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.A; Site: Wicken Bonhunt, Essex; Accession or Small Find Number: 343; Head Form: spherical-headed, Collar Form: multiple rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: lines incised into the shaft just below head to form collar, Reference: Wade pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.A; Site: Wicken Bonhunt, Essex; Accession or Small Find Number: 396; Head Form: spherical-headed, Collar Form: multiple rings, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of

Material: copper alloy, Main Manufacturing Process: cast; Length: 44 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: lines incised into the shaft just below head to form collars, Reference: Wade pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3349; Head Form: spherical-headed, Collar Form: double ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.B; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 61; Head Form: spherical-headed, Collar Form: double ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 29; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 87 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5310; Head Form: spherical-headed, Collar Form: double ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm; Head Decoration: wrythen, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5261; Head Form: spherical-headed, Collar Form: multiple rings, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 70 mm; Head Decoration: none, Shaft Decoration: none; Notes: Ring collars appear to be set one inside the other, Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.C.ii; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3392; Head Form: flat-topped spherical head, Collar Form: double ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 85 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.C.x; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2305; Head Form: spherical-headed, Collar Form: double ring, Shaft Form: hipped, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 5.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 44 002; Head Form: spherical-headed, Collar Form: double ring collar, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: faceted; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm; Head Decoration: none, Shaft Decoration: none; Reference: Addyman & Hill 1969: fig 26.3.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: 6.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3395; Head Form: spherical-headed, Collar Form: incised, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of

Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 77 mm; Head Decoration: none, Shaft Decoration: none; Notes: 4 lines incised below the head form a thread-like collar, Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.154; Head Form: spherical-headed, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): head hammered out; Length: 51 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.216; Head Form: spherical-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 9 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Felixstowe, Suffolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 682.76-94.B; Head Form: spherical-headed (lopsided), Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: ?; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 26 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Felixstowe, Suffolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 682.76-94.C; Head Form: spherical-headed, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: ?; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 36 mm; Head Decoration: wrythen, Decoration Application Method: cast & chased, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Long Wittenham, Warks; Museum or Unit: BM M&LA, Accession or Small Find Number: 63,11-18,8; Head Form: spherical-headed; Grave Number: 3; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 28 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Akerman 1860b.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 138.1980.4; Head Form: flat-top spherical head, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 37 mm, Head Diameter/Width: 7 mm; Head Decoration: ring-and-dot, Decoration Application Method: ?, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Marlowe I, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 261; Head Form: spherical-headed; Context: 153; Degree of Completeness: incomplete, Type of Material: bone, Main Manufacturing Process: carved; Length: 32 mm; Head Decoration: dot ornament, Decoration Application Method: punched, Shaft Decoration: none; Reference: Garrard pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: St George St, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 464; Head Form: spherical-headed, Collar Form: moulded collar; Context: unstrat; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: carved; Length: 62 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: Associated Saxon pottery, Reference: Frere & Stow 1983: 171 & fig 61.12; Date: 675-700.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2338; Head Form: spherical-headed, Collar Form:

none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: iron, Main Manufacturing Process: cast; Length: 33 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2337; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 15 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ?.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.177; Head Form: spherical-headed, Shaft Form: carinated, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 48 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: a, Sub-Variant: ??; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.175; Head Form: spherical-headed, Collar Form: present, Shaft Form: shouldered(?), Shaft Section at Level 1: round, Shaft Section at Level 2: round(?); Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 32 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: b; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.204; Head Form: flat-top ball-headed, Collar Form: ring collar, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 24 822; Head Form: flat-topped spherical-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 54 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none. Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 1 28; Head Form: spherical-headed, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 12+7 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: Shaft protrudes through top of head, Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2083; Head Form: flat topped spherical head, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: ?cast?, Secondary Work (if noted): hammering marks on head; Length: 34 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 2.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4353; Head Form: flat topped spherical head, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 177 567; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C315; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.209; Head Form: flat-top spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 2.C; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.217; Head Form: flat-top spherical-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 2.C.x; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 0919; Head Form: flat-topped spherical head, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: squared; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 3.B.x; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2002; Head Form: spherical-headed, Collar Form: carinated collar, Shaft Form: swollen, Shaft Section at Level 1: possible faceted, Shaft Section at Level 2: possible faceted; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: cast; Length: 67 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Notes: The pin is worn, but there is evidence of faceting on shaft, Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 3.D; Site: York, N.Yorks; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: ?; Head Form: flat-topped spherical head, Collar Form: carinated ring, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 82 mm, Head Diameter/Width: 9 mm; Head Decoration: ring-and-dot, Decoration Application Method: punch, Shaft Decoration: none; Reference: Hartley pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 3.D; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4986; Head Form: spherical-headed, Collar Form: carinated collar, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 66 mm; Head Decoration: raised rings, Decoration Application Method: cast, Shaft Decoration: none; Notes or Associated Finds: It appears more towards spear-hipping, Reference: Carr pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 4.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 145.1980.4; Head Form: flat-top spherical head, Collar Form: cushion, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 17 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: 5.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 26 624; Head Form: flat-top spherical-headed, Collar Form: double ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F5128; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 41 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1 mm; Head Decoration: none, Shaft Decoration: none. Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: ?.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 145.1980.1; Head Form: flat-top spherical head, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 19 mm, Head Diameter/Width: 8 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: ?.?; Site: Milk Street, London; Museum or Unit: Museum of London, Accession or Small Find Number: 478; Head Form: flattened spherical head, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Context: 1092; Degree of Completeness: head only, Type of Material: copper alloy, Main Manufacturing Process: cast?; Length: 9 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: From pit, Reference: Clarke pers comm; Date: late 11th/12th.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: ?.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 163; Head Form: spherical-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: ?.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1025; Head Form: flat-topped spherical-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: ? mm, Head Diameter/Width: ? mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: ii, Variant: b, Sub-Variant: ??; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.166; Head Form: flat-topped ball-headed, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 66 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: iii; Site: Skirmet, Bucks; Museum or Unit: County Museum, Accession or Small Find Number: 100.73; Head Form: flat-topped spherical head, Collar Form: raised ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 85 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: ring & dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Farley 1980: 138-9 & fig 1.a.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 1.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2303; Head Form: spherical-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 9 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 1.?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 85 14; Head Form: spherical headed, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Length: 11+30 mm, Head Diameter/Width: 8 mm; Head Decoration: crosses, Shaft Decoration: none; Notes or Associated Finds: Crosses run round the head, Reference: Brisbane pers comm.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 19 5502Cu; Head Form: spherical-headed, Collar Form: lines incised into the upper shaft of the pin, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Completeness: IAS 5502 0304; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 30+63 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2.2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: wrythen, Decoration Application Method: cast and chased, Shaft Decoration: none; Notes or Associated Finds: Context appears to be 12th century, Reference: Wade & Hatton pers comm.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2068; Head Form: spherical-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 20 mm, Head Diameter/Width: 8 mm; Head Decoration: raised ring-&-dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 420; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 68 mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.4 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-and-dot, Decoration Application Method: punch, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 2568; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 5 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 2.C; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 92 4801Cu; Head Form: spherical headed, Collar Form: upside-down conical collar, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: 2 fragments, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): none; Length: 79* mm, Head Diameter/Width: 9x8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: The pin appears stocky and has a pronounced hip below which it is faceted, *(67 + 12) Reference: Wade & Hatton pers comm.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 2.C; Site: North Elmham, Norfolk; Head Form: spherical-headed, Collar Form: carinated ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Main Manufacturing Process: complete; Length: 84 mm, Head Diameter/Width: 8 mm; Head Decoration: wrythen, Decoration Application Method: cast ?, Shaft Decoration: none; Reference: Wade-Martins 1970: 66 & fig 19.b; 1980: fig 264.40.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 2.C; Site: Shepperton Green, Middx; Museum or Unit: Museum of London; Head Form: spherical-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at

Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 72 mm, Head Diameter/Width: 8 mm; Head Decoration: wrythen decor, Decoration Application Method: cast, Shaft Decoration: none; Reference: Clark 1979: 118 & fig 13.6.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 5.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3201; Head Form: spherical-headed, Collar Form: double ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: 2 fragments, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55+28 mm, Head Diameter/Width: 9 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 5.C.x; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2293; Head Form: spherical-headed, Collar Form: double ring, Shaft Form: hipped, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 8 mm; Head Decoration: none, Shaft Decoration: none; Notes: faceted shaft below the hipping, Reference: Carr pers comm.

Group: LXX, Sub-group: iii, Variant: a, Sub-Variant: 6.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.208; Head Form: spherical-headed, Collar Form: multiple rings, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 72 mm, Head Diameter/Width: 6 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXX, Sub-group: iii, Variant: b, Sub-Variant: 1.C.x; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3512; Head Form: flat-topped spherical head, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: squared; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 75 mm, Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXX, Sub-group: iii, Variant: b, Sub-Variant: 2.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.???; Head Form: flat-top spherical-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 51 mm, Head Diameter/Width: 10 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes or Associated Finds: 'X' across top of pin.

### *Domed-cone-headed type (LXXI)*

Group: LXXI; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1008; Head Form: domed-cone-headed, Collar Form: ring collar, Shaft Form: carinated swell, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: detector; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt (?); Length: 43 mm, Head Diameter/Width: 3.5 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.75 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXXI; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 747; Head Form: domed-cone-headed, Collar Form: carinated collar, Shaft Form: shouldered hip, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: incomplete, Type

of Material: copper alloy, Main Manufacturing Process: cast; Length: 44 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXXI; Site: Barking, Essex; Museum or Unit: Passmore Edwards Museum, Accession or Small Find Number: 1571; Head Form: domed-cone-headed, Collar Form: carinated collar, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: 3139; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 30 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: MacGowan pers comm.

Group: LXXI; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 556; Head Form: domed-cone-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

### *Facet-headed, length less than 85 mm (LXXII)*

Group: LXXII; Site: Girton, Cambs; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 216257; Head Form: facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 79 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXXII; Site: Little Chesters, Derby; Head Form: flatten faceted head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Reference: Langley, 1990: 58, fig 2. [Publication only].

Group: LXXII, Sub-group: i; Site: Abingdon (Berks), Oxon; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1935.415e; Head Form: facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 82; Degree of Completeness: complete, Type of Material: copper alloy; Length: 55 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: cremation. Bone comb fragment, glass beads, potsherd, Reference: Leeds & Harden 1936: 23 & Pl III.

Group: LXXII, Sub-group: i; Site: Alton, Hants; Head Form: cuboid facet-headed, Collar Form: ring (moulded), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: C24; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm; Head Decoration: none, Shaft Decoration: none; Reference: Evison 1988: 87 & fig 41.C24.4. [Publication only].

Group: LXXII, Sub-group: i; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5006; Head Form: faceted head, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 2 mm, Shaft Diameter at Position 1: 1.9 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 1.9 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: i; Site: Cakebread Robey, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 536; Head Form: cuboid faceted-head, Collar Form: ring & barrel collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 120; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 2 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Garrard pers comm; Date: VI(1-2).

Group: LXXII, Sub-group: i; Site: Dover, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1963,11-8,519; Head Form: small faceted-head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 100, Context: 444; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 36 mm; Head Decoration: none, Shaft Decoration: none; Reference: Evison 1987: 240 & fig 48.100.1.

Group: LXXII, Sub-group: i; Site: Faversham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1135 G'70; Head Form: faceted-head, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63.5 mm, Head Diameter/Width: 3x3 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 1.75 mm, Shaft Diameter at Position 2: 2.25 mm, Shaft Diameter at Postion 3: 2.0 mm; Head Decoration: rings, Shaft Decoration: lines, Decoration Application Method: incised; Notes: Lines incised 10 mm from end.

Group: LXXII, Sub-group: i; Site: Finglesham, Kent; Head Form: facet-headed, Collar Form: multiple incised, Shaft Form: swollen hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 163; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 44 mm, Head Diameter/Width: 3 mm, Shaft Diameter at Position 1: 1+ mm; Head Decoration: none, Shaft Decoration: none; Reference: Hawkes pers comm.

Group: LXXII, Sub-group: i; Site: Kingston, Kent; Museum or Unit: Merseyside County Museums, Accession or Small Find Number: M6337; Head Form: faceted-head, Collar Form: double ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 222; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 3 mm, Head Thickness: 3 mm; Head Decoration: none, Shaft Decoration: none; Reference: Faussett 1856: 81.

Group: LXXII, Sub-group: i; Site: Lackford, Suffolk; Head Form: facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: cremation; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: ?; Length: 45 mm, Head Diameter/Width: 3x3 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds Included: miniature bone comb, Reference: Lethbridge 1951: fig 28.49.17.

Group: LXXII, Sub-group: i; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3-10,348; Head Form: crude facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: urn X; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 31 mm; Head Decoration: none, Shaft Decoration: none; Notes: facet-head is smaller than diameter of the shaft, Reference: Akerman 1860b.

Group: LXXII, Sub-group: i; Site: Melbourn, Cambs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 53.186; Head Form: elongated-faceted, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 8; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 2 mm; Head Decoration: none; Reference: Wilson 1956: 32.

Group: LXXII, Sub-group: i; Site: Shudy Camps, Cambs; Museum or Unit: University Museum, Cambridge, Accession or Small Find Number: 36.840; Head Form: facet-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 65; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 39 mm, Head Diameter/Width: 2 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 1 mm; Head Decoration: none; Reference: Lethbridge 1936: 4.c.1.

Group: LXXII, Sub-group: i, Variant: a; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1567; Head Form: cuboid faceted-head, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 24 mm, Head Diameter/Width: 3x3 mm, Head Thickness: 3 mm; Head Decoration: 'x' main facets, Decoration Application Method: incised, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: i, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: faceted-head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Context: IAS 5701 0219; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 66 mm, Head Diameter/Width: 3 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: i, Variant: a, Sub-Variant: 1.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 915; Head Form: faceted-head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T2C11283; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 3 mm, Head Thickness: 3 mm; Head Decoration: none, Shaft Decoration: none; Notes: An incision at junction of head and shaft, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: i, Variant: a, Sub-Variant: 1.B; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 1104; Head Form: cuboid facet-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 368; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 72 mm, Head Diameter/Width: 3x3 mm, Head Thickness: 3 mm; Head Decoration: none, Shaft Decoration: none; Notes: period 6IV, Reference: Garrard pers comm; Date: 650-700.

Group: LXXII, Sub-group: i, Variant: b, Sub-Variant: 1.A; Site: Long Wittenham, Oxon; Museum or Unit: BM M&LA, Accession or Small Find Number: 75,3-10,349; Head Form: elongated facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: urn Q; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: folded; Length: 60 mm; Head Decoration: none, Shaft Decoration: none; Reference: Akerman 1860b.

Group: LXXII, Sub-group: ii, Variant: ?, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2257; Head Form: cuboid, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 13 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a; Site: Bawsey (nr King's Lynn), Norfolk; Museum or Unit: King's Lynn Museum, Accession or Small Find Number: KL119.985.2; Head Form: facet-headed pin, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: MD; Degree of Completeness: head only, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: King's Lynn Museum Catalogue.

Group: LXXII, Sub-group: ii, Variant: a; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: facet-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Context: IAS 3104 0950; Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none; Reference: Wade & Hatton pers comm.

Group: LXXII, Sub-group: ii, Variant: a; Site: Jarrow, Tyne; Museum or Unit: at Durham University, Accession or Small Find Number: 73 UZ 73; Head Form: cuboid faceted head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 46 mm, Head Diameter/Width: 7x7 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: flat ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: a; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 138.1980.5; Head Form: flattened facet-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 17 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 6 mm; Head Decoration: ring-and-dot, Decoration Application Method: ?, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: a; Site: Marlowe I, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 141; Head Form: cuboid facet-headed, Collar Form: stepped collar, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 64; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 35 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm; Head Decoration: none, Shaft Decoration: none; Notes: period 9 (1400 - 1550), Reference: Garrard pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 0900; Head Form: cuboid faceted head, Collar Form: casting, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 7x7 mm, Head Thickness: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3570; Head Form: faceted head, Collar Form: casting, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: round ring-&-dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Shepperton Green, Middx; Museum or Unit: Museum of London; Head Form: facet-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: SFB10; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 40 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: line, Decoration Application Method: incised; Reference: Clark 1979: 118 & fig 13.2. [Publication only].

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3209; Head Form: cuboid head, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 28 mm, Head Diameter/Width: 4 mm, Head Thickness: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2551; Head Form: cuboid head, Collar Form: casting, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 10 mm, Head Diameter/Width: 7 mm, Head Thickness: 7 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 8815; Head Form: cuboid facet-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 26171; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: Phase 4b of the site, Reference: Tweddle pers comm; Date: 930/5-975.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Coppergate, York, N.Yorks; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 10103; Head Form: cuboid facet-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 28120; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 86 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: Phase 4b of the site, Reference: Tweddle pers comm; Date: 930/5-975.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Holton-le-Clay, Lincs; Head Form: facet-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Grave Number: 8; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 82 mm; Head Decoration: ring-and-dot, Shaft Decoration: 5 spaced lines, Decoration Application Method: incised 1/3 way down shaft; Notes: At left shoulder, Reference: Sills 1982: 40 & fig 11A; Date: 8th to 10th c. [Publication only].

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 69 4801Cu; Head Form: faceted-head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Context: IAS 4801 0690; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm, Head Diameter/Width: 3.25 mm, Head Thickness: 3.25x6 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Notes: early medieval, post-late Saxon pottery, Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: facet-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 281; Degree of Completeness: complete, Context: IAS 7402 0351; Type of Material: iron, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 6 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Postion 3: 3 mm; Head Decoration: dots on faces, Shaft Decoration: none; Notes: Associated with Ipswich Ware, Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Marlowe III, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 1710; Head Form: rectangular facet-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 144; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 3x5 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: period 6III, Reference: Garrard pers comm; Date: 550-650.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.A; Site: Winchester (Brook Street), Hants; Museum or Unit: Historic Resource Centre, Accession or Small Find Number: 7575 (1432); Head Form: facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round; Context: TrIII 88; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: cast; Length: 46* mm, Head Diameter/Width: 5x5x mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: {Biddle measures at 43 mm and notes a swelling. Is this so?}, Reference: Biddle pers comm; Biddle 1990: 555[item 1432]; Date: 10th c.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.A ?; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 48 4801Cu; Head Form: rectangular faceted-head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost & corroded, Context: IAS 4801 0304; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 56 mm, Head Diameter/Width: 3x6 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: collar made from incised linear ornament, Reference: Wade & Hatton pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2003; Head Form: cuboid faceted head, Collar Form: casting, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 80 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched - flat type ?, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5181; Head Form: cuboid faceted head, Collar Form: none, Shaft Form: swollen ?, Shaft Section at Level 1: round ?, Shaft Section at Level 2: round ?; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Diameter/Width: 8x8 mm, Head Thickness: 8 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Coppergate, York, N.Yorks; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 10175; Head Form: cuboid facet-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 27429; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 71 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: dots, Decoration Application Method: punched, Shaft Decoration: none; Notes: Phase 1/3 of the site, Reference: Tweddle pers comm; Date: 400-900.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4189; Head Form: cuboid facet-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3342; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): file marks on head; Length: 70 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: dot ornament, Decoration Application Method: drilled ? turn marks, Shaft Decoration: none; Notes: file marks run down length of pin, Reference: York Archaeological Trust pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 1469; Head Form: cuboid facet-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 435; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm; Head Decoration: none, Shaft Decoration: none; Notes: period 10 (1100 - 1400), Reference: Garrard pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 157; Head Form: rectangular faceted, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 53 mm, Head Diameter/Width: 5x9 mm, Head Thickness: 7 mm; Head Decoration: ring-and-dot, Shaft Decoration: 2 lines at swell, Decoration Application Method: incised; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 817; Head Form: cuboid facet-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T1 11008; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 61 mm, Head Diameter/Width: 4x5 mm, Head Thickness: 4.5 mm; Head Decoration: ring-&-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 8 33; Head Form: faceted-head, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F7; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 20 mm, Head Diameter/Width: 4 mm, Head Thickness: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3247; Head Form: cuboid head, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 327; Head Form: cuboid faceted-head, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T1c.9885; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 56 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 1.D; Site: Unprovenanced; Museum or Unit: Bolton Museum, Head Form: cuboid faceted head, Collar Form: none, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Flaxengate, Lincs; Museum or Unit: Lincolnshire Archaeological Trust, Accession or Small Find Number: F76 Ae64; Head Form: rectangular faceted (flat), Collar Form: ring, Shaft Form: tapering?, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 28+23 mm, Head Diameter/Width: 7 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Mann pers comm; Date: c.900-930/40.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Harling, Norfolk; Museum or Unit: BM M&LA, Accession or Small Find Number: 255; Head Form: cuboid facet-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 23 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 6 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: cuboid faceted-head, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Context: IAS 4801 2679; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 33 mm, Head Diameter/Width: 6x7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3200; Head Form: small block head, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 4 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2267; Head Form: cuboid, Collar Form: casting, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 44 mm, Head Diameter/Width: 5x5 mm; Head Decoration: ring and dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 677; Head Form: cuboid faceted, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 42 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 34 88; Head Form: faceted-head, Collar Form: ring collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm; Head Decoration: none, Shaft Decoration: none; Notes: fine lines on shaft, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 442; Head Form: cuboid facet-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 10128; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 5.5 mm, Head Thickness: x5.5x mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: St George St, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust; Head Form: facet-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Associated Finds: sherds of medieval cooking pots, Reference: Frere & Stow 1983: 167, 171 & fig 61.11; Date: 12th century.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: St Paul-in-the-Bail, Lincoln, Lincs; Museum or Unit: Lincolnshire Archaeological Trust, Accession or Small Find Number: SP75 Ae120; Head Form: rectangular faceted (flat), Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: unstrat; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 4 mm;

Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Mann pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.308; Head Form: facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 76 mm, Head Diameter/Width: 5x7 mm, Head Thickness: 7 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.311; Head Form: facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 77 mm, Head Diameter/Width: 9x7 mm, Head Thickness: 7 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: Shaft round until three incised lines, square below.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.A; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4352; Head Form: block faceted head, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 85 mm; Head Decoration: flat ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Harling, Norfolk; Museum or Unit: BM M&LA, Accession or Small Find Number: 240; Head Form: cuboid facet-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Shaft Decoration: 6 lines, Decoration Application Method: incised.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 152 4601Cu; Head Form: cuboid faceted-head, Collar Form: incised lines used to produce a ring collar (?double), Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Context: IAS 4601 0781; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 68 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1563; Head Form: rectangular facet-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1428; Head Form: cuboid faceted, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 54 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1645; Head Form: rectangular

faceted–head, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: c6254; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 5x6 mm, Head Thickness: 5 mm; Head Decoration: ring–and–dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub–group: ii, Variant: a, Sub–Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 2469; Head Form: cuboid facet–headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T3 12805; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 5.5 mm, Head Thickness: 6 mm; Head Decoration: ring–&–dot, Shaft Decoration: lines, Decoration Application Method: incised 21 mm from tip; Reference: Brisbane pers comm.

Group: LXXII, Sub–group: ii, Variant: a, Sub–Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 15 218; Head Form: cuboid facet–headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F1; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 4 mm, Head Thickness: 4 mm; Head Decoration: ring–&–dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub–group: ii, Variant: a, Sub–Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 23 004; Head Form: cuboid facet–headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 5x7x mm, Head Thickness: 5 mm; Head Decoration: ring–&–dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub–group: ii, Variant: a, Sub–Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 15 218; Head Form: cuboid facet–headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F1; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 4.5 mm; Head Decoration: ring–&–dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub–group: ii, Variant: a, Sub–Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 164; Head Form: cuboid facet–head, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 5 mm; Head Decoration: ring–and–dot, Shaft Decoration: none; Notes: 3 lines incised into the shaft 23 mm from the point, Reference: Brisbane pers comm.

Group: LXXII, Sub–group: ii, Variant: a, Sub–Variant: 2.B?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5484; Head Form: cuboid facet–headed, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm; Head Decoration: flat ring–&–dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub–group: ii, Variant: a, Sub–Variant: 2.C; Site: Marlowe Theatre Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 855; Head Form: facet–headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 456; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 73 mm, Head Diameter/Width: 6x6x mm, Head Thickness: 8 mm, Shaft Diameter at

Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: Period 10 (1100 - 1400), Reference: Garrard pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1434; Head Form: rectangular faceted-head, Collar Form: ring (casting), Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 4x4 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 24 23; Head Form: cuboid facet-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 56 mm, Head Diameter/Width: 4 mm, Head Thickness: 4 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: The collar of this pin is decorated by wrythen ornament, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 2955; Head Form: cuboid facet-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 8779; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 54 mm, Head Diameter/Width: 3x4 mm, Head Thickness: 4 mm; Head Decoration: ring-&-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 26 679; Head Form: cuboid facet-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-&-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 4 004; Head Form: faceted-head, Collar Form: slight ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 5; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4223; Head Form: small block head, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing unquestionable; Length: 72 mm, Head Diameter/Width: 5 mm, Head Thickness: 5 mm; Head Decoration: fl & raised rings, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 2.D; Site: Marlowe, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 484; Head Form: cuboid facet-headed, Shaft Form: shouldered, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Context: 532; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 67 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none; Notes: period 10 (1100-1400), Reference: Garrard pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: 5.B; Site: Ufton Nervet, Berks; Museum or Unit: Reading Museum (?); Head Form: facet-headed, Collar Form: double moulded, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 75 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Webster 1973-4: 56-7 & fig 31.13.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3586; Head Form: cuboid head, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 73 mm; Head Decoration: fl & raised rings, Decoration Application Method: cast, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3404; Head Form: cuboid head, Collar Form: line incised, Shaft Form: swollen, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 61 mm, Head Diameter/Width: 3 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2087; Head Form: cuboid faceted head, Collar Form: casting, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 17 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: ?; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1562; Head Form: cuboid facet-headed, Collar Form: casting, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 25 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Felixstowe, Suffolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: 682.76-94.D; Head Form: facet-headed, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: ?; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 29 mm; Head Decoration: dot, Decoration Application Method: punched, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: faceted-head, Shaft Form: unknown; Degree of Completeness: fragmentary, Context: IAS 5701 0190; Type of Material: copper alloy, Main Manufacturing Process: cast; Head Diameter/Width: 7 mm; Head Decoration: none, Shaft Decoration: none; Associated Finds: Ipswich pottery and some imported pottery, Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: ?.?; Site: Sutton, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: Sutton 042 37; Head Form: facet-headed, Collar Form: none; Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: none, Shaft Decoration: none. Note: only known from a drawing; Reference: Newman pers comm.

Group: LXXII, Sub-group: ii, Variant: a, Sub-Variant: ?.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.299; Head Form: cuboid facet-headed, Collar Form: thread, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of

Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 3x3 mm, Head Thickness: 2 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: b; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1286; Head Form: rectangular facet-headed, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 4x6 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 15 006; Head Form: rectangular facet-headed, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 25 mm, Head Diameter/Width: 4 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.314; Head Form: facet-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: 3 lines on shaft near broken end,.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.?; Site: Peabody Buildings, London; Museum or Unit: Museum of London, Accession or Small Find Number: PEA'87 SF96; Head Form: faceted cuboid, Shaft Form: unknown, Shaft Section at Level 1: round; Context: 67; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 15 mm, Head Diameter/Width: 4 mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2301; Head Form: rectangular, Collar Form: casting, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 34 mm, Head Diameter/Width: 6x7 mm, Head Thickness: 6 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 136 4601Cu; Head Form: rectangular faceted-head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: broken - three fragments, Context: IAS 4601 0675; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: -- mm, Head Diameter/Width: 5x8 mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: 18 mm + 21 mm + 21 mm, Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 177 4; Head Form: rectangular facet-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T2 C101; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm, Head Diameter/Width: 4x6 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: Flat type ring-and-dot with 'X' on top, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 177 719; Head Form: rectangular

facet-headed, Shaft Form: tapering, Shaft Section at Level 1: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 28 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Notes: Decoration only on four faces, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.316; Head Form: facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: Lines round shaft.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.317; Head Form: facet-headed, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.A; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.318; Head Form: facet-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 81 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.B; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 7177; Head Form: rectangular facet-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 20819; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 5x7 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: Phase 4b of the site, Reference: Tweddle pers comm; Date: 930/5-975.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.B; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 5197; Head Form: rectangular facet-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 17699; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 70+ mm, Head Diameter/Width: 4x6 mm, Head Thickness: 4 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5- mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: Phase 6 of the site, Reference: Tweddle pers comm; Date: Norman or later.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 23 001; Head Form: rectangular facet-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1258; Head Form: rectangular facet-headed, Shaft Form: swollen, Shaft Section at Level 1: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 32 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Notes: Decoration only on four faces, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.B?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.313; Head Form: facet-headed, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of

Material: copper alloy, Main Manufacturing Process: cast; Length: 51 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 1.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 66; Head Form: rectangular facet-headed, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: c3594; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 64 mm, Head Diameter/Width: 4x3 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2(?).B; Site: Marlowe IV, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 864; Head Form: rectangular facet-headed, Collar Form: ring (casting), Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Context: 354; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm, Head Diameter/Width: 5x7 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Notes: period 9 (1050 - 1100), Reference: Garrard pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.312; Head Form: facet-headed, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 43 mm, Head Diameter/Width: 5x5 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2296; Head Form: rectangular, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 27 mm, Head Diameter/Width: 5x6 mm, Head Thickness: 5 mm; Head Decoration: dot ornament, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1460; Head Form: rectangular faceted-head, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: c. 5941; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 5x6 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Shaft Decoration: linear work, Decoration Application Method: incised; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1058; Head Form: rectangular facet-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square below lines; Context: c5748; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: 5x8 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Shaft Decoration: 4 spaced lines, Decoration Application Method: scored; Notes: Four main facets are convex to hold the facets, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 31 1487; Head Form: rectangular facet-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 4x5 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 23 130; Head Form: rectangular facet-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm; Addyman & Hill 1969: fig 26.5.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3393; Head Form: rectangular faceted head, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 84 mm; Head Decoration: flat ring-&-dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2089; Head Form: rectangular, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.315; Head Form: facet-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 70 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes or Associated Finds: Square section for last 27 mm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.B?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5336; Head Form: rectangular faceted head, Collar Form: ring collar, Shaft Form: swollen ?, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 74 mm, Head Diameter/Width: 6x8 mm, Head Thickness: 6 mm; Head Decoration: flat ring-&-dot, Shaft Decoration: none; Notes: Appears to have textile clinging to the shaft, Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.C; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5173; Head Form: rectangular faceted head, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 75 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 7 mm; Head Decoration: flat ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 161; Head Form: rectangular facet-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: c3293; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 51 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.C; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1905; Head Form: rectangular facet-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: 7 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2.D; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 36 97; Head Form: rectangular facet-headed, Collar Form: ring, Shaft Form: shouldered, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: square; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 69 mm; Head Decoration: none, Shaft Decoration: none; Notes: Ring collar decorated with wrythen ornament, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2?.B; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 142 4601Cu; Head Form: rectangular faceted-head, Collar Form: collar-this was either produced by the incision of two lines creating a ring or was the remains of the trimming away or residual casting debris, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Context: IAS 4601 0936; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 67 mm, Head Diameter/Width: 4.5w x 4.5t x 5.5l mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring & dot decoration, Shaft Decoration: none; Note: there are file marks evident, the dots were probably punched onto the surface of the pin as in some cases the rings appear to go off the edge and the punch marks have a consistent diameter, Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 2?.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.319; Head Form: facet-headed, Collar Form: ring(?), Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 3.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5501; Head Form: rectangular facet-headed, Collar Form: carinated ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 66 mm, Head Diameter/Width: 4x4x mm, Head Thickness: 5 mm; Head Decoration: flat ring-&-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: 4.B; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4950; Head Form: rectangular faceted head, Collar Form: cushion collar, Shaft Form: swollen, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 49 mm; Head Decoration: flat ring-&-dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: ?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3322; Head Form: cuboid facet-headed, Collar Form: casting, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing unquestionable; Length: 84 mm; Head Decoration: flat ring & dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: ?.?; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2085; Head Form: faceted head, Collar Form: no collar, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 13 mm, Head Diameter/Width: 5x6 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: ?.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 136.1980.5; Head Form: rectangular facet-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown;

Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 20 mm; Head Decoration: dots, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: ?.?; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 913.1980.7; Head Form: rectangular facet-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 15 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: ?.B; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.300; Head Form: rectangular facet-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 52 mm, Head Diameter/Width: 4x7 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXXII, Sub-group: ii, Variant: b, Sub-Variant: ?.?; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.306; Head Form: square-headed, Collar Form: none, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 17+34 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: iii; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: facet-headed, Shaft Form: undetermined, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: broken, Context: IAS 5701 0166; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 16+39 mm, Head Diameter/Width: 7x7 mm, Head Thickness: 7 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: iii; Site: Sedgeford, Norfolk; Head Form: cuboid facet-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 93 mm, Head Diameter/Width: 7x9 mm, Head Thickness: 7 mm, Shaft Diameter at Position 1: 2.25 mm, Shaft Diameter at Position 2: 2.25+ mm; Head Decoration: ring-and-dot, Decoration Application Method: cast or punched, Shaft Decoration: none; Reference: Wade pers comm.

Group: LXXII, Sub-group: iii; Site: York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: none provided; Head Form: cuboid facet-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 108 mm, Head Diameter/Width: 7x7x mm, Head Thickness: 6 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Notes or Associated Finds: shaft was inserted into the head of the pin, Reference: Hartley pers comm.

Group: LXXII, Sub-group: iii; Site: York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: none provided; Head Form: cuboid facet-headed, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 66 mm, Head Diameter/Width: 6x6x mm, Head Thickness: 7 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Hartley pers comm. [P0586,2].

Group: LXXII, Sub-group: iii, Variant: a; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.310; Head Form: flat-topped hot-air-balloon, Collar Form: casting collar, Shaft Form: ?, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 77 mm, Head Diameter/Width: 9

mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot--4 f, Decoration Application Method: punch, Shaft Decoration: none.

Group: LXXII, Sub-group: iii, Variant: a, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 282 4801Cu; Head Form: cuboid faceted-head, Collar Form: slight collar, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete - point lost, Context: IAS 4801 1571; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 83 mm, Head Diameter/Width: 8x8 mm, Head Thickness: 8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Hatton & Wade pers comm.

Group: LXXII, Sub-group: iii, Variant: a, Sub-Variant: 2.B; Site: Marlowe IIa, Canterbury, Kent; Museum or Unit: Canterbury Archaeological Trust, Accession or Small Find Number: 471; Head Form: cuboid facet-headed, Collar Form: ring (casting ?), Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 552; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 82 mm, Head Diameter/Width: 8x8 mm, Head Thickness: 8 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: period 11 (1400 - 1550), Reference: Garrard pers comm.

Group: LXXII, Sub-group: iii, Variant: b, Sub-Variant: 1.A; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: ?; Head Form: rectangular faceted-head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Context: IAS 7404 0020; Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 80 mm, Head Diameter/Width: 7x8 mm, Head Thickness: 7 mm, Shaft Diameter at Position 1: 1 mm, Shaft Diameter at Position 2: 1 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: none, Shaft Decoration: none; Notes: Ipswich pottery, Reference: Hatton & Wade pers comm; Date: 650-850.

Group: LXXII, Sub-group: iv; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2088; Head Form: flat faceted head, Collar Form: casting, Shaft Form: swollen, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 41 mm, Head Diameter/Width: 6x7 mm, Head Thickness: 4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: iv; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 5313; Head Form: flat faceted head, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 4x6 mm, Head Thickness: 4 mm; Head Decoration: flat ring & dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: iv; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 3574; Head Form: flat faceted head, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 15 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 3 mm; Head Decoration: ring & dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: iv; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2265; Head Form: flat faceted head, Collar Form: ring, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 25 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 3 mm; Head Decoration: ring & dot, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: iv; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 2302; Head Form: flat faceted head, Collar Form: ring, Shaft Form: swollen, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 6x7 mm, Head Thickness: 4 mm; Head Decoration: dots facets, Shaft Decoration: none; Reference: Carr pers comm.

Group: LXXII, Sub-group: iv; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 913.1980.6; Head Form: flat facet-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 13 mm, Head Diameter/Width: 8 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: iv; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 136.1980.6; Head Form: flattened facet-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 14 mm, Head Diameter/Width: 10 mm, Head Thickness: 2 mm; Head Decoration: ring-and-dot, Decoration Application Method: ?, Shaft Decoration: none.

Group: LXXII, Sub-group: iv; Site: Market Weighton, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 913.1980.5; Head Form: flat facet-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 20 mm, Head Diameter/Width: 12 mm, Head Thickness: 3 mm; Head Decoration: ring-and-dot, Shaft Decoration: none.

Group: LXXII, Sub-group: iv; Site: South Ferriby, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 866.38; Head Form: flattened facet-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 10 mm, Head Thickness: 3 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast, Shaft Decoration: none.

Group: LXXII, Sub-group: iv; Site: South Ferriby, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 866.44; Head Form: flattened facet-headed, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 32 mm; Head Decoration: ring-and-dot, Decoration Application Method: cast, Shaft Decoration: none.

Group: LXXII, Sub-group: iv; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1747; Head Form: flattened-faceted head, Collar Form: ring (casting), Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 31 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: iv; Site: Unknown, Lincs; Museum or Unit: Scunthorpe Museum, Accession or Small Find Number: no accession no; Head Form: flat faceted head, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 67 mm, Head Diameter/Width: 7x7 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: lines on shaft, Decoration Application Method: incised.

Group: LXXII, Sub-group: iv; Site: Unknown, Lincs; Museum or Unit: Scunthorpe Museum, Accession or Small Find Number: no accession no; Head Form: flat faceted head, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type

of Material: copper alloy, Main Manufacturing Process: cast; Length: 24 mm, Head Diameter/Width: 7x7 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: lines on shaft, Decoration Application Method: incised.

Group: LXXII, Sub-group: iv, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 245; Head Form: flattened-faceted head, Collar Form: ring (casting), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 3 mm; Head Decoration: ring-and-dot, Shaft Decoration: double line, Decoration Application Method: incised 1/2 way down shaft; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: iv, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 180; Head Form: flatten facet-headed, Collar Form: ring (casting), Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 71 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: 3 lines 31 mm from tip below which section is square, [Lines and square section not in drawing]. Reference: Brisbane, pers comm.

Group: LXXII, Sub-group: iv, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 24 819; Head Form: flattened-faceted head, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F1093; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 37 mm, Head Diameter/Width: 7x7 mm, Head Thickness: 3 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched*, Shaft Decoration: none; Notes: Marks of the turning of the punch can be seen in rings, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: iv, Sub-Variant: 2.A; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 24 002; Head Form: flattened-faceted head, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: very tip lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 57 mm, Head Diameter/Width: 5x5 mm, Head Thickness: 3 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: iv, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 184 86; Head Form: flat-faceted head, Collar Form: ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 235; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 40+13 mm, Head Diameter/Width: 3x4 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: iv, Sub-Variant: 2.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 184 124; Head Form: Squashed dome head (HAB), Collar Form: double ring collar, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: F. 161; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 45 mm, Head Diameter/Width: 5 mm; Head Decoration: none, Shaft Decoration: none; Notes: The Deanery, St Mary's, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: iv, Variant: -a-, Sub-Variant: 2.B; Site: Shorts Gardens, London; Museum or Unit: Museum of London, Accession or Small Find Number: SGA'89 SF6; Head Form: flat faceted head, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 51; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: 5 mm, Head Thickness: 3 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.8 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXXII, Sub-group: iv, Variant: -a-, Sub-Variant: 3.?; Site: Peabody Buildings, London; Museum or Unit: Museum of London, Accession or Small Find Number: PEA'87 SF130; Head Form: flat faceted, Collar Form: carinated ring, Shaft Form: no evidence, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 092; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 50 mm, Head Diameter/Width: 8 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: ring-and-dot, Decoration Application Method: punch, Shaft Decoration: none; Notes: Three rings on faces and one ring above, Reference: Blackmore pers comm.

Group: LXXII, Sub-group: iv, Variant: -a-, Sub-Variant: 3.?; Site: Shorts Gardens, London; Museum or Unit: Museum of London, Accession or Small Find Number: SGA'89 SF21; Head Form: flat faceted, Collar Form: carinated ring, Shaft Form: no evidence, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 238; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 59 mm, Head Diameter/Width: 8 mm, Head Thickness: e mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Blackmore pers comm.

Group: LXXII, Sub-group: iv, Variant: a, Sub-Variant: .2; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 165; Head Form: flattened faceted head, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 86 mm, Head Diameter/Width: 7x11 mm, Head Thickness: 5 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: iv, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 4 002; Head Form: faceted-head, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 10; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 5 mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: ring-&-dot, Decoration Application Method: punched, Shaft Decoration: none; Notes: Decoration appears on four main faces, Reference: Brisbane pers comm.

Group: LXXII, Sub-group: iv, Variant: a, Sub-Variant: 1.B; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 169 1163; Head Form: facet-headed, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: T1 8409; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 58 mm, Head Diameter/Width: 4 mm, Head Thickness: 4 mm; Head Decoration: ring-&-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXII, Sub-group: iv, Variant: a, Sub-Variant: 2; Site: York, N.Yorks; Museum or Unit: Yorkshire Museum; Head Form: flatten facet-headed, Collar Form: casting collar, Shaft Form: swelling, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 76 mm, Head Diameter/Width: 8 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Hartley pers comm.

Group: LXXII, Sub-group: iv, Variant: c.3; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 24 13; Head Form: flattened facet-headed, Collar Form: ring, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2159; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 60 mm, Head Diameter/Width: 6x6x mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot,

Decoration Application Method: punched, Shaft Decoration: 3 lines, Decoration Application Method: incised; Reference: Brisbane pers comm.

Group: LXXX, Sub-group: iv, Variant: b; Site: Ipswich, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 307 4801Cu; Head Form: flatten-faceted, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square, last 23 mm; Context: IAS 4801 1654; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 75 mm, Head Diameter/Width: 11 mm, Head Thickness: 3 mm; Head Decoration: four flat ring-&-dots on the two main faces and a single ring-&-dot on the side faces, Shaft Decoration: a series of lines were incised into the shaft (26 mm - 23 mm) above the point and below these the shaft has a square section; Reference: Hatton & Wade pers comm.

### *Flat zoomorphic-headed type (LXXIII)*

Group: LXXIII, Sub-group: i; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: no number given; Head Form: flat zoomorphic head, Collar Form: unknown, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: head only, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 25 mm, Head Diameter/Width: 22 mm; Head Decoration: zoomorphic, Decoration Application Method: cast & graved, Shaft Decoration: none; Notes: two serpents enclosing a rabbit, Reference: Carr, limited communication.

Group: LXXIII, Sub-group: i; Site: Flixborough, Humb; Museum or Unit: Humberside Archaeological Unit, Accession or Small Find Number: 4136; Head Form: flat zoomorphic head, Shaft Form: swollen shaft, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3107; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Length: 71 mm, Head Thickness: 1.5 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: zoomorphic decor, Decoration Application Method: incised & gilt, Shaft Decoration: none; Notes: Animals face away from each other, Reference: Whitwell & Leahy pers comm.

Group: LXXIII, Sub-group: i; Site: York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: SMA 54T5; Head Form: flat zoomorphic decorated, Shaft Form: unknown, Shaft Section at Level 1: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 45 mm, Head Diameter/Width: 19 mm; Head Decoration: animal, Decoration Application Method: cast & chased, Shaft Decoration: none; Notes: Two animals with crossed tongues and touching noses, Reference: Hartley pers comm.

Group: LXXIII, Sub-group: ii; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: no number given; Head Form: flat zoomorphic head, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: shaft partial, Main Manufacturing Process: cast; Length: 29 mm, Head Diameter/Width: 11 mm; Head Decoration: ribbon, Decoration Application Method: cast & graved, Shaft Decoration: none; Notes: Open-work intertwined ribbon-like decoration, Reference: Carr, limited communication.

### *Witham disc-headed type (LXXIV)*

Group: LXXIV, Sub-group: ?; Site: Hauxton Mill, Cambs; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 2149.65; Head Form: disc-headed, Collar Form: ?, Shaft Form: ?, Shaft

Section at Level 1: ?, Shaft Section at Level 2: ?; Degree of Completeness: fragment; Length: ? mm; Head Decoration: decorated, Shaft Decoration: none; Notes or Associated Finds: Possibly not from a pin, Reference: Fox 1923; Smith 1925: 245 & fig 18; Lethbridge 1931; Cramp 1964.

Group: LXXIV, Sub-group: ?; Site: Ixworth, Suffolk; Museum or Unit: BM M&LA, Accession or Small Find Number: 1927,12-12,23; Head Form: disc, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: partial, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Head Decoration: quadruped animals, Decoration Application Method: cast or engraved, Shaft Decoration: none known; Notes: Disc only survives. Probably not a pin, but a brooch, Reference: Smith 1911; Smith 1925; Wilson 1964; Bruce-Mitford 1956.

Group: LXXIV, Sub-group: ?, Variant: ?; Site: Cambridge, Cambs; Museum or Unit: University Museum (Cambridge); Head Form: disc-headed, Collar Form: ?, Shaft Form: ?, Shaft Section at Level 1: ?, Shaft Section at Level 2: ?; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: ? mm; Head Decoration: decorated, Shaft Decoration: none; Reference: Fox 1923: 297 & Pl XXXIV(6); Smith 1925 245 & fig 18; Cramp 1964.

Group: LXXIV, Sub-group: ?, Variant: ?; Site: Ixworth, Suffolk; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1909.448; Head Form: disc, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: partial, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Head Decoration: none, Shaft Decoration: none known; Notes: Small portion survives, and it is doubtful this is a pinhead, Reference: Hinton 1974: 24[item 18].

Group: LXXIV, Sub-group: ?, Variant: ?; Site: Lakenheath, Cambs; Museum or Unit: ?, Accession or Small Find Number: ?; Head Form: disc-headed, Collar Form: ?, Shaft Form: ?, Shaft Section at Level 1: ?, Shaft Section at Level 2: ?; Degree of Completeness: ?, Type of Material: ?, Main Manufacturing Process: ?; Length: ? mm; Head Decoration: decorated, Shaft Decoration: ?; Reference: Cramp 1964: 91.

Group: LXXIV, Sub-group: ?, Variant: ?; Site: London; Museum or Unit: BM M&LA, Accession or Small Find Number: 1934,11-5,4; Head Form: disc, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: complete, Type of Material: bone, Main Manufacturing Process: carved; Length: 66 mm, Head Diameter/Width: 19 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Shaft Decoration: none; Notes: Five notches cut from the edge of the head, Reference: Jessup 1950: Pl 1.3.

Group: LXXIV, Sub-group: ?, Variant: ?; Site: York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: 1975/6 D757; Head Form: portion of a disc head; Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 15 mm, Head Diameter/Width: 21 mm; Head Decoration: interlace, Decoration Application Method: cast and chased, Shaft Decoration: none; Reference: Hartley per comm.

Group: LXXIV, Sub-group: ?, Variant: ?, Sub-Variant: ?; Site: York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: 718.48; Head Form: oval; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 29 mm, Head Diameter/Width: 16 mm; Head Decoration: interlace, Decoration Application Method: incised, Shaft Decoration: none.

Group: LXXIV, Sub-group: i, Variant: a; Site: Barham, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: IAS 018 389; Head Form: disc-headed, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: shaft partial, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 38 mm, Head Diameter/Width: 24 mm; Head Decoration: interlace, Decoration Application Method: cast, Shaft Decoration: none; Notes or Associated Finds: Equal arm cross with interlace in quadrants, Reference: Newman pers comm. (Purchased by the BM M&LA.).

Group: LXXIV, Sub-group: i, Variant: a; Site: Birdoswald, Cumb; Museum or Unit: Tullie House Museum, Accession or Small Find Number: 40-1965; Head Form: disc, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Length: 74 mm, Head Diameter/Width: 24 mm; Head Decoration: pointed interlace, Decoration Application Method: cast, Shaft Decoration: none; Notes: Contra Cramp this pin has been repaired following damage, Reference: Cramp 1964: 89 - 93.

Group: LXXIV, Sub-group: i, Variant: a; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: no number given; Head Form: disc-head, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Degree of Completeness: tip lost, Main Manufacturing Process: cast; Head Decoration: animal ornament, Decoration Application Method: cast & graved, Shaft Decoration: none; Notes: Zoomorphic interlace, Reference: Carr, limited communication.

Group: LXXIV, Sub-group: i, Variant: a; Site: Kegworth, Leics; Museum or Unit: Jewry Wall Museum (Leicester), Accession or Small Find Number: II.IL.1956; Head Form: disc-headed, Collar Form: stepped, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 72 mm, Head Diameter/Width: 27 mm, Head Thickness: 1.2 mm, Shaft Diameter at Position 1: 2.5 mm; Head Decoration: knot-work decor, Shaft Decoration: none; Attachment: diamond plate; Notes: On right side in an elongated diamond plate with interlace, Reference: Cramp 1964: 90-93 & Pl II & Wilson 1964: Pl III.a.

Group: LXXIV, Sub-group: i, Variant: a; Site: Roos, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 1500.42; Head Form: discoid-head, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: none; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 28 mm; Head Decoration: trefoil interlace, Decoration Application Method: cast, Shaft Decoration: none; Attachment: holes in head; Notes: decorated on one face, with a central cross creating 4 zones, expanded arm cross, Reference: Clark 1942: Plate facing 333.

Group: LXXIV, Sub-group: i, Variant: a; Site: South Ferriby, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 1502.42; Head Form: discoid-head (partial), Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: none; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 15 mm, Head Diameter/Width: 14 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Notes: decorated on one face only.

Group: LXXIV, Sub-group: i, Variant: a; Site: South Ferriby, Humbs; Museum or Unit: Hull Museum, Accession or Small Find Number: 1501.42; Head Form: discoid-head, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: none; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Diameter/Width: 24 mm; Head Decoration: trefoil interlace, Decoration Application Method: cast, Shaft Decoration: none; Attachment: holes in head; Notes: decorated on one face, with a central cross creating 4 zones, Reference: Clark 1942: Plate facing 333.

Group: LXXIV, Sub-group: i, Variant: c; Site: Meols Beach, Mersey; Museum or Unit: Grosvenor Museum (Chester) ?; Head Form: disc, Collar Form: none; Degree of Completeness: fragment, Type of Material: silver, Main Manufacturing Process: cast; Head Diameter/Width: 30 mm; Head Decoration: interlace, Decoration Application Method: cast or engraved, Shaft Decoration: none evident; Notes: chip-carved linear ornament and embellished with central set, Reference: Clark 1942: 335; Bu'Lock 1961: 9-10, fig 3 & Pl 2.

Group: LXXIV, Sub-group: i, Variant: d; Site: Hitchin, Herts; Museum or Unit: Letchworth, Accession or Small Find Number: 1575.1975; Head Form: disc-headed, Collar Form: stepped, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Main

Manufacturing Process: cast, Secondary Work (if noted): chipped & applied decoration; Length: 74 mm, Head Diameter/Width: 21 mm; Head Decoration: interlace, bosses, Decoration Application Method: cast & applied, Shaft Decoration: none, Decoration Application Method: none; Attachment: superior loop; Notes: Collared bead settings. Loop perpendicular to plane of disc, Reference: Wilson 1964: 58, 105 & Pl II(a); Evans 1892: 257.

Group: LXXIV, Sub-group: i, Variant: d; Site: Wymeswold, Leics; Museum or Unit: Leicestershire Museums Service, Accession or Small Find Number: 104.1987; Head Form: disc, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: MD; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: cast, Secondary Work (if noted): chased, gilt, bosses fixed; Head Diameter/Width: 25 ? mm, Shaft Diameter at Position 1: 2.5 mm; Head Decoration: interlace, Shaft Decoration: none; Notes: Site produced 2 ***Sceattas*** (one ***sceat*** appears 720), Reference: Peter Liddle pers comm; Date: 8th century.

Group: LXXIV, Sub-group: ii; Site: Flixborough, Humb; Museum or Unit: Scunthorpe Museum, Accession or Small Find Number: FXAA,3; Head Form: disc-headed, Shaft Form: none; Context: MD; Degree of Completeness: disc, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Head Diameter/Width: 30 mm; Head Decoration: interlace decor, Decoration Application Method: cast or engraved, Shaft Decoration: none; Reference: Whitwell & Leahy pers comm.

Group: LXXIV, Sub-group: ii; Site: Pontefract, W.Yorks; Head Form: disc, Collar Form: unknown, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Head Diameter/Width: 39 mm; Head Decoration: knot-work, Decoration Application Method: 'chip-carved', Shaft Decoration: none evident; Notes: chip-carved knot-work designs, Reference: Bailey 1971: 405-406 & Pl II. [Publication only].

Group: LXXIV, Sub-group: ii; Site: Site 'X', Yorks; Head Form: disc, Collar Form: unknown, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Context: MD; Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Head Diameter/Width: 30 mm; Head Decoration: knot-work, Decoration Application Method: 'chip-carved', Shaft Decoration: none evident; Notes: Chip-carved knot-work designs with raised boss at crossing, Reference: Haldenby 1990: 53 & fig 1.2.

Group: LXXIV, Sub-group: ii; Site: Site 'X', Yorks; Head Form: disc, Collar Form: unknown, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Context: MD; Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Head Diameter/Width: 35 mm; Head Decoration: variable, Decoration Application Method: 'chip-carved', Shaft Decoration: none evident; Notes: Chip-carved ornament (knot-work, zoomorphic & vegetation), Reference: Haldenby 1990: 51 & fig 1.1.

Group: LXXIV, Sub-group: ii; Site: Witham, Lincs; Museum or Unit: BM M&LA, Accession or Small Find Number: 58,11-16,4; Head Form: disc-head, Shaft Form: hipped, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: chance; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): gilt; Head Decoration: variable, Shaft Decoration: none; Notes: Discs and pins made separately & slotted together, Reference: Smith 1923: 98 & Pl IX; Wilson 1964; Wilson 1984.

Group: LXXIV, Sub-group: ii, Variant: b; Site: Thetford, Norfolk; Museum or Unit: Norfolk Castle Museum, Accession or Small Find Number: 12.950; Head Form: disc, Shaft Form: unknown; Degree of Completeness: disc only, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): bosses; Length: ? mm, Head Diameter/Width: 33 mm; Head Decoration: interlace, Shaft Decoration: none; Notes: Cross divides disc into four quadrants. Different decorative zones, Reference: e pattern in each quadrant. Central and arm terminal bosses.

Group: LXXIV, Sub-group: ii, Variant: d; Site: Mavourne Farm, Bolnhurst, Beds; Head Form: disc-head; Context: chance; Degree of Completeness: disc only, Type of Material: copper alloy, Main Manufacturing Process: cast; Head Diameter/Width: 39 mm; Head Decoration: variable, Notes: Disc decorated with zoomorphic and ribbon ornament, Reference: Smallridge 1969: 13.

Group: LXXIV, Sub-group: iii; Site: Losear Wood, Derby; Museum or Unit: Sheffield Museum, Accession or Small Find Number: 1985.669; Head Form: disc, Collar Form: stepped, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: Metal Detector; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): gilt; Length: 122 mm, Head Diameter/Width: 34 mm; Head Decoration: 4 entwined spiral, Decoration Application Method: cast, Shaft Decoration: none; Notes: Whether this pin belongs to our group i, Reference: s an open question.

### *Upside-Down Conical/Trapezoid-headed type (LXXV)*

Group: LXXV, Sub-group: i; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 9742; Head Form: trapezoid-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 25759; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 63 mm, Shaft Diameter at Position 1: -2 mm, Shaft Diameter at Position 2: -2 mm, Shaft Diameter at Postion 3: -2 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched ?, Shaft Decoration: none; Reference: Tweddle pers comm.

Group: LXXV, Sub-group: i; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 6789; Head Form: trapezoid-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 6950; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: * mm, Head Thickness: * mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: *This pin expands from 5.5 mm wide at shaft to 8.2 mm at top, Reference: Tweddle pers comm; Date: late 10th-11th.

Group: LXXV, Sub-group: i; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 23 006; Head Form: long trapezoidal, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 20 mm; Head Decoration: none, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXV, Sub-group: ii; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4573; Head Form: Upside-Down Conical head, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2156; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: * mm, Head Thickness: * mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: none, Shaft Decoration: none; Notes: *This pin expands to 5 mm at top, Reference: York Archaeological Trust.

### *Racquet-headed or Lollipop-headed type (LXXVI)*

Group: LXXVI; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 32 159; Head Form: flat diamond-shaped head, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness:

incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 62 mm, Head Diameter/Width: 9 mm, Head Thickness: 9 mm; Head Decoration: dot & ring, Decoration Application Method: rings are incised, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXVI, Sub-group: i; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.328; Head Form: racquet-headed, Shaft Form: tapering, Shaft Section at Level 1: elliptical, Shaft Section at Level 2: elliptical; Degree of Completeness: broken, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): head hammered flat; Length: 23+47 mm, Head Diameter/Width: 18 mm; Head Decoration: ring-and-dot(7-1), Shaft Decoration: none.

Group: LXXVI, Sub-group: i; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.329; Head Form: racquet-headed, Shaft Form: ?, Shaft Section at Level 1: round, Shaft Section at Level 2: ?; Degree of Completeness: fragment, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): head hammered flat; Length: 15 mm, Head Diameter/Width: 12 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none.

Group: LXXVI, Sub-group: i; Site: Whitby, E Yorks; Museum or Unit: BM M&LA, Accession or Small Find Number: W.301; Head Form: cuboid-facet-headed, Shaft Form: carinated hip, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 65 mm, Head Diameter/Width: 7 mm, Head Thickness: 5 mm; Head Decoration: none, Shaft Decoration: none.

Group: LXXVI, Sub-group: i; Site: York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: H2001; Head Form: flattened flat-topped sphere, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: NA; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): hammered flat & filed; Length: 79 mm, Head Diameter/Width: 13 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 2 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: nicks at head; Notes or Associated Finds: Pin probably made from a flat-topped spherical-headed pin.

Group: LXXVI, Sub-group: i; Site: York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: H1102; Head Form: flattened spherical-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: NA; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): punched; Length: 67 mm, Head Diameter/Width: 11 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: rings, Decoration Application Method: punched, Shaft Decoration: none; Notes: Head made from a spherical headed pin hammered flat.

Group: LXXVI, Sub-group: ii; Site: Southampton, Hants; Museum or Unit: Southampton Archaeological Unit, Accession or Small Find Number: SOU 30 73; Head Form: diamond racquet head, Collar Form: none, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: C3540; Degree of Completeness: point lost, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 55 mm, Head Diameter/Width: 12 mm, Head Thickness: 10 mm; Head Decoration: flat ring-&-dot, Shaft Decoration: none; Reference: Brisbane pers comm.

Group: LXXVI, Sub-group: ii; Site: York; Museum or Unit: Yorkshire Museum, Accession or Small Find Number: H2000; Head Form: flattened flat biconical, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: NA; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): hammered; Length: 82 mm, Head Diameter/Width: 14 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 2 mm, Shaft Diameter at Postion 3: 1 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Notes: At top edge 11 mm wide, 14 mm at widest point. Pin probably made from a biconical-headed pin hammered flat.

### *Loaf-headed type (LXXVII)*

Group: LXXVII; Site: Dacre, Cumbria; Museum or Unit: Lancaster University Archaeological Unit; Head Form: Loaf-headed, Collar Form: none, Shaft Form: swelled, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3354; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 59 mm, Head Diameter/Width: 3 mm, Head Thickness: 2.5 mm, Shaft Diameter at Position 1: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: R Newman pers comm.

Group: LXXVII; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4415; Head Form: Loaf-headed, Collar Form: none, Shaft Form: swelled, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3354; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 45 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 2.1 mm, Shaft Diameter at Postion 3: 2 mm; Head Decoration: dots, Decoration Application Method: punched, Shaft Decoration: none, Decoration Application Method: NA; Reference: York Archaeological Trust pers comm.

### *Globular-headed type (LXXIX)*

Group: LXXIX; Site: Brandon, Suffolk; Museum or Unit: Suffolk Archaeological Unit, Accession or Small Find Number: 4502; Head Form: globular (?), Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: fabricated; Length: 60 mm; Head Decoration: unknown, Shaft Decoration: none; Notes: portion of the central cylinder of a globular-headed pin, Reference: is fixed to the top of this silver shaft.

Group: LXXIX; Site: London; Museum or Unit: Museum of London, Accession or Small Find Number: 83.344/1; Head Form: globular headed, Collar Form: none; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: cast?, Secondary Work (if noted): gilt; Length: 54 mm; Head Decoration: filigree decor, Decoration Application Method: applied, Shaft Decoration: none; Notes: Thames nr London Bridge, Reference: Clarke pers comm.

Group: LXXIX; Site: London/Cambridge ?, ?; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 1915.81; Head Form: globular, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: fabricated; Length: 64 mm, Head Diameter/Width: 12 mm; Head Decoration: circles, Decoration Application Method: punched, Shaft Decoration: none; Notes: 3 zones, two of circles and one with cross-hatched ornament.

Group: LXXIX, Sub-group: ?, Variant: ?; Site: Lakenheath, Suffolk; Museum or Unit: Moyse's Hall (Bury St Edmunds), Accession or Small Find Number: 1984.112/18; Head Form: globular, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: constructed; Length: 28 mm, Head Diameter/Width: 11 mm; Head Decoration: none, Shaft Decoration: none; Reference: Owles pers comm.

Group: LXXIX, Sub-group: i; Site: St Catherine's Thorpe, Norfolk; Museum or Unit: Norwich Castle Museum, Accession or Small Find Number: none when studied; Head Form: globular (hollow spherical), Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Context: stray;

Degree of Completeness: head only, Main Manufacturing Process: constructed; Head Decoration: filigree 'S', Decoration Application Method: applied, Shaft Decoration: unknown; Notes: Backward 'S' filigree spirals terminate in tubular projections.

Group: LXXIX, Sub-group: i; Site: Sutton, Suffolk; Museum or Unit: Ipswich Archaeological Unit; Head Form: globular-headed, Collar Form: ?, Shaft Form: ?, Shaft Section at Level 1: ?, Shaft Section at Level 2: ?; Degree of Completeness: head only, Type of Material: silver, Main Manufacturing Process: constructed; Head Diameter/Width: 11 mm, Head Thickness: 15* mm; Head Decoration: filigree spirals, Decoration Application Method: applied, Shaft Decoration: none; Notes: Filigree spirals that begin from a tubular projection, Reference: Newman pers comm.

Group: LXXIX, Sub-group: i; Site: Wicken Bonhunt, Essex; Museum or Unit: Not Seen; Head Form: globular, Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: constructed, Secondary Work (if noted): Mercury gilded hollow head; Head Decoration: filigree spirals, Decoration Application Method: applied, Shaft Decoration: none; Notes: Filigree spirals that begin from a tubular projection, Reference: Musty, Wade & Rogerson 1973: 287; Date: context 11th c.

Group: LXXIX, Sub-group: ii; Site: Botolph St, London; Museum or Unit: Museum of London, Accession or Small Find Number: 104; Head Form: globular, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: constructed, Secondary Work (if noted): gilt; Length: ? mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: 3 rope circles surrounding trefoils with central granule; Date: 9th/10th c.

Group: LXXIX, Sub-group: ii; Site: Bredfield, Suffolk; Museum or Unit: Moyse's Hall (Bury St Edmunds), Accession or Small Find Number: MH 1983.19; Head Form: globular, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: constructed, Secondary Work (if noted): gilt; Length: 65 mm, Head Diameter/Width: 9 mm, Shaft Diameter at Position 1: 1.5 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Attachment: loop under head; Notes: 3 beaded circles separated by granule in each hemisphere, Reference: Martin, et.al. 1984: 321 & fig 79. [loop not in illustration]; Date: 9th/10th c.

Group: LXXIX, Sub-group: ii; Site: Cottingham, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1981,7-8,1; Head Form: globular-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): gilt; Head Diameter/Width: 11 mm, Head Thickness: 10 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: Head decorated with granules, Reference: Robinson 1981.

Group: LXXIX, Sub-group: ii; Site: Gilton Sandpit, Ash, Kent; Museum or Unit: Ashmolean Museum, Accession or Small Find Number: 1942.216; Head Form: globular, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: chance; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: constructed, Secondary Work (if noted): gilt; Length: 73 mm, Head Diameter/Width: 10 mm; Head Decoration: filigree dec, Decoration Application Method: applied, Shaft Decoration: none; Attachment: loop below head; Notes: 3 circles surrounding a trefoil of circles, Reference: Hinton 1974: no. 9.

Group: LXXIX, Sub-group: ii; Site: Great Castor, Peterborough; Museum or Unit: University Museum (Cambridge), Accession or Small Find Number: 74.352; Head Form: globular, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: fabricated, Secondary Work (if noted): gilt; Length: 81 mm, Head Diameter/Width: 14 mm; Head Decoration: circles, Decoration Application Method: applied

beaded filigree, Shaft Decoration: none; Notes: Chance find of D. Wyman-Abbot, Reference: Beaded wire about carination,trefoil circle motifs above & below.

Group: LXXIX, Sub-group: ii; Site: Heigham St, London; Museum or Unit: Museum of London, Accession or Small Find Number: 301; Head Form: globular, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: constructed, Secondary Work (if noted): gilt; Length: 68 mm, Head Diameter/Width: 13 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: 3 rope circles surrounding trefoils with central granule; Date: 9th/10th c.

Group: LXXIX, Sub-group: ii; Site: King St, London; Museum or Unit: Museum of London, Accession or Small Find Number: 112; Head Form: globular, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: constructed, Secondary Work (if noted): gilt; Head Diameter/Width: 13.5 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: 3 rope circles surrounding trefoils with central granule; Date: 9th/10th c.

Group: LXXIX, Sub-group: ii; Site: Marlborough, Wilts; Museum or Unit: Lost; Head Form: globular, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: drawing, Type of Material: silver, Main Manufacturing Process: constructed, Secondary Work (if noted): gilt; Length: 73 mm, Head Diameter/Width: 12 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: divided into two zones each with circles of silver wire, Reference: Robinson 1981: 56-60.

Group: LXXIX, Sub-group: ii; Site: Martlesham, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: not accessioned; Head Form: globular, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Context: MD; Degree of Completeness: pinhead only, Type of Material: silver, Main Manufacturing Process: constructed, Secondary Work (if noted): gilt; Head Diameter/Width: 7 mm, Head Thickness: 8 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: 3 large circles each enclose 3 small circles in trefoil. Decoration in each hemisphere is identical; braided band at mid-point of head; Date: 9th/10th c.

Group: LXXIX, Sub-group: ii; Site: Tichnall, Derby; Museum or Unit: Derby Museum, Accession or Small Find Number: 1986-L409 (loan); Head Form: globular, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: round, Shaft Section at Level 2: unknown; Context: stray; Degree of Completeness: incomplete, Type of Material: silver, Main Manufacturing Process: constructed, Secondary Work (if noted): filigree, granulation; Length: 30 mm, Head Diameter/Width: 12 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Attachment: loop under head; Notes: Loop soldered at junction of head and shaft, Reference: Langley, 1990: 56-58, fig 1 & Pl 1.

Group: LXXIX, Sub-group: iii; Site: London; Museum or Unit: BM M&LA, Accession or Small Find Number: 1960,7-4,1; Head Form: globular-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): gilt; Length: 78 mm, Head Diameter/Width: 12 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: filigree band around medial point, Reference: Robinson 1981: fig 2.

Group: LXXIX, Sub-group: iv; Site: Goathurst, Kent; Museum or Unit: BM M&LA, Accession or Small Find Number: 1955.8-20.1; Head Form: globular-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite, Secondary Work (if noted): gilt; Length: 70 mm, Head Diameter/Width: 10 mm, Shaft Diameter at Position 1: 1.5 mm, Shaft Diameter at Position 2: 1.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: Shaft is copper alloy, Reference: Robinson 1981: fig 3.

Group: LXXIX, Sub-group: iv; Site: Sawdon, N.Yorks; Head Form: globular head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite; Length: 67* mm, Head Diameter/Width: 13 mm; Head Decoration: granules attached, Decoration Application Method: applied, Shaft Decoration: none; Kind of Wire Ring: ring below head; Notes: Globular head with flat-raised circles edged by fine tooling, *Waterman says 70 mm. Reference: Waterman 1948: 180-3 & Pl XXVIIa.

Group: LXXIX, Sub-group: iv, Variant: a; Site: Fens (Milton ?), Cambs; Accession or Small Find Number: Milton DN 76; Head Form: globular head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: silver, Main Manufacturing Process: composite; Length: 74* mm, Head Diameter/Width: 10 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes or Associated Finds: Globular head with flat circles edged by filigree. *Listed as 84, but 74?. Reference: Taylor 1985: 35-7[item 204] & fig 15.204.

Group: LXXIX, Sub-group: iv(?); Site: Lakenheath, Suffolk; Museum or Unit: Moyse's Hall (Bury St Edmunds), Accession or Small Find Number: 1984.76; Head Form: globular, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: stray; Degree of Completeness: complete, Main Manufacturing Process: constructed; Length: 83 mm, Head Diameter/Width: 14 mm; Head Decoration: filigree, Decoration Application Method: applied, Shaft Decoration: none; Notes: Head hollow, Reference: Owles pers comm.

Group: LXXIX, Sub-group: v; Site: Sibton, Suffolk; Museum or Unit: Ipswich Archaeological Unit, Accession or Small Find Number: Finds identified and returned to finder; Head Form: globular head, Collar Form: none, Shaft Form: unknown, Shaft Section at Level 1: unknown, Shaft Section at Level 2: unknown; Context: MD; Degree of Completeness: pinhead only, Type of Material: copper alloy, Main Manufacturing Process: constructed, Secondary Work (if noted): Mercury gilded hollow head; Head Decoration: filigree spirals, Decoration Application Method: applied, Notes: Filigree decoration and cross shaped cells for settings, Reference: Newman, Ipswich Archaeological Unit.

### *Ely lozenge-headed type (LXXX)*

Group: LXXX, Sub-group: i; Site: Ely, Cambs; Museum or Unit: Society of Antiquiries London*, Accession or Small Find Number: *not examined; Head Form: lozenge-headed, Collar Form: ring, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: ?, Main Manufacturing Process: cast; Length: ? mm; Head Decoration: ribbon decoration, Shaft Decoration: none; Reference: St Albans 1905: 3[item 10]; Armstrong 1922-23: Pl XIII.4[11].

Group: LXXX, Sub-group: i; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 2169; Head Form: lozenge, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: unstrat; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 77 mm, Head Diameter/Width: 9 mm, Head Thickness: 2 mm, Shaft Diameter at Position 1: 3 mm; Head Decoration: none, Shaft Decoration: none; Reference: York Archaeological Trust pers comm.

Group: LXXX, Sub-group: ii; Site: Coppergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 6294; Head Form: lozenge, finial, Collar Form: flat pointed, Shaft Form: tapering, Shaft Section at Level 1: finely faceted, Shaft Section at Level 2: finely faceted; Context: 20178; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing and boring; Length: 53 mm, Head Diameter/Width: 12 mm, Head Thickness: 1 mm, Shaft

Diameter at Position 1: 3.5 mm; Head Decoration: none, Shaft Decoration: none; Notes: Recovered from a context phased to 5cr, Reference: York Archaeological Trust pers comm.

Group: LXXX, Sub-group: ii; Site: York (?); Museum or Unit: Yorkshire Museum, Accession or Small Find Number: 1975(48) 911; Head Form: lozenge, finials, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing; Length: 67 mm, Head Diameter/Width: 8 mm, Shaft Diameter at Position 1: 2 mm, Shaft Diameter at Position 2: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Reference: E. Hartley pers comm.

Group: LXXX, Sub-group: iv, Variant: a; Site: Lurk Lane, Beverley, Humbs; Museum or Unit: Humberside Archaeological Unit; Head Form: lozenge, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing and boring; Length: 96 mm, Head Diameter/Width: 8 mm, Head Thickness: 1 mm; Head Decoration: none, Shaft Decoration: none; Notes or Associated Finds: hole cut through centre of the pin head, Reference: Goodall in Armstrong, et.al. 1991: fig 115.632.

Group: LXXX, Sub-group: iv, Variant: b; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 6346; Head Form: lozenge, finial, Collar Form: flat pointed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 6135; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): filing and boring; Head Diameter/Width: 10 mm, Head Thickness: 1 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 2.5 mm, Shaft Diameter at Postion 3: 1.5 mm; Head Decoration: none, Shaft Decoration: none; Notes: hole cut through centre of the pin head, Reference: York Archaeological Trust pers comm.

### *Watch-winder type (LXXXI)*

Group: LXXXI; Site: Fishergate, York; Museum or Unit: York Archaeological Trust, Accession or Small Find Number: 4663; Head Form: watch-winder head, Shaft Form: swollen, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 3377; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 47 mm, Head Diameter/Width: 4 mm, Shaft Diameter at Position 1: 2 mm; Head Decoration: none, Shaft Decoration: none; Reference: Tweddle pers comm.

### *Swing-ringed type (LXXXIII)*

Group: LXXXIII, Sub-group: ii; Site: Jarrow, (Tyne & Wear); Museum or Unit: at Durham, Accession or Small Find Number: JA 78 1Q; Head Form: rectangular head, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2826; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): punched; Length: 107 mm, Head Diameter/Width: 6 mm, Head Thickness: 3 x 5 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Postion 3: 3 mm; Head Decoration: dot ornament, Decoration Application Method: punched, Shaft Decoration: none; Attachment: holes in side, Kind of Wire Ring: now lost ring; Notes or Associated Finds: pottery.

Group: LXXXIII, Sub-group: ii; Site: Jarrow, (Tyne & Wear); Museum or Unit: at Durham, Accession or Small Find Number: KJ 67 FG2.3; Head Form: rectangular head, Collar Form: none, Shaft Form: tapering,

Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 393; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): punched; Length: 116 mm, Head Diameter/Width: 7 mm, Head Thickness: 3 x 5 mm; Head Decoration: dot ornament, Decoration Application Method: punched, Shaft Decoration: none; Attachment: holes in side, Kind of Wire Ring: now lost ring; Notes or Associated Finds: pottery.

Group: LXXXIII, Sub-group: i; Site: Meols, Mersey; Head Form: spiral-(spring) ringed, Collar Form: ?, Shaft Form: ?, Shaft Section at Level 1: ?, Shaft Section at Level 2: ?; Degree of Completeness: ring only, Type of Material: copper alloy, Main Manufacturing Process: cast ?; Head Decoration: ?, Shaft Decoration: ?; Kind of Wire Ring: spiral (spring); Notes: spiral-ring from pin. 26 mm ring has transverse grooves, Reference: Bu'Lock 1961: 5.a.

Group: LXXXIII, Sub-group: ii; Site: Jarrow (Tyne & Wear); Museum or Unit: In care of excavator, Accession or Small Find Number: JA 78 IQ 1; Head Form: Ringed-crutch-headed*, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 2826; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): punched; Length: 116 mm, Head Diameter/Width: 3x6x mm, Head Thickness: 5 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Postion 3: 3 mm; Head Decoration: ring & dot, Decoration Application Method: punched, Shaft Decoration: none; Pair Survival: *ring lost; Notes: ring & dot decoration on main faces, depressions on edges, Reference: Cramp pers comm; Ross forthcoming d; Date: 10th - 12th c.

Group: LXXXIII, Sub-group: ii; Site: Jarrow, (Tyne & Wear); Museum or Unit: In care of excavator, Accession or Small Find Number: JA 67 KJ FG2:3; Head Form: Ringed-crutch-headed*, Collar Form: none, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Context: 393; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): punched; Length: 116 mm, Head Diameter/Width: 3x7x mm, Head Thickness: 5 mm; Head Decoration: ring & dot, Decoration Application Method: punched, Shaft Decoration: none; Pair Survival: *ring lost; Notes: ring & dot decoration on main faces, depressions on edges, Reference: Cramp pers comm; Ross forthcoming d; Date: 12th c.+.

Group: LXXXIII, Sub-group: ii; Site: St Augustine's Abbey, Kent; Head Form: Ringed-crutch-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Type of Material: copper alloy, Main Manufacturing Process: cast, Secondary Work (if noted): punched; Length: 95 mm, Head Diameter/Width: 3x7x mm, Head Thickness: 4 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3 mm; Head Decoration: ring & dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Radford 1940: 506. [Publication only].

Group: LXXXIII, Sub-group: iii; Site: Broadgate, Lincs; Museum or Unit: Lincolnshire Archaeological Trust, Accession or Small Find Number: BE73 Ae164; Head Form: swing-ring - polyhedral, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 93 mm, Head Diameter/Width: 5 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 3 mm, Shaft Diameter at Postion 3: 3 mm; Head Decoration: dots on main face, Decoration Application Method: punched, Shaft Decoration: none; Attachment: through head, Kind of Wire Ring: strip-type ring; Associated Finds: pottery, Reference: Jones in Jones (ed) 1982: 104; Date: 11th century.

Group: LXXXIII, Sub-group: iii; Site: Flaxengate, Lincs; Museum or Unit: Lincolnshire Archaeological Trust, Accession or Small Find Number: Fe73 Ae290; Head Form: swing ring - polyhedral knob, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: incomplete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 95 mm, Head Diameter/Width: 6x6 mm, Head Thickness: 4 mm; Head Decoration: ring-and-dot, Decoration Application Method: punched, Shaft Decoration: none; Reference: Mann pers comm; Date: c.1080/90-1100.

Group: LXXXIII, Sub-group: iii, Variant: a; Site: Crook Street, Chester; Head Form: polyhedral-headed, Collar Form: none, Shaft Form: flattened, Shaft Section at Level 1: round, Shaft Section at Level 2: round; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 154 mm, Head Diameter/Width: 6x6x mm, Head Thickness: 6 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 2: 3.5 mm, Shaft Diameter at Postion 3: 3.5 mm; Head Decoration: ?, Decoration Application Method: incised, Shaft Decoration: lines, Decoration Application Method: incised; Kind of Wire Ring: *; Notes: *13 diameter round sectioned ring with lines incised, Reference: Thacker 1987: fig 42.2. [Publication only].

Group: LXXXIII, Sub-group: iii, Variant: b; Site: York, N.Yorks; Museum or Unit: Yorkshire Museum; Head Form: polyhedral-headed, Collar Form: none, Shaft Form: flattened, Shaft Section at Level 1: round, Shaft Section at Level 2: rectangular; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 154 mm, Head Diameter/Width: 7x7x mm, Head Thickness: 7 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 4 mm, Shaft Diameter at Postion 3: 4 mm; Head Decoration: dots, Decoration Application Method: punched, Shaft Decoration: lines, Decoration Application Method: incised; Kind of Wire Ring: *; Notes: *16 diameter round sectioned ring with lines incised, Reference: Waterman 1959: 78 & fig 11.13.

Group: LXXXIII, Sub-group: iii, Variant: b; Site: York, N.Yorks; Museum or Unit: Yorkshire Museum; Head Form: polyhedral-headed, Collar Form: none, Shaft Form: flattened, Shaft Section at Level 1: round, Shaft Section at Level 2: rectangular; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 135 mm, Head Diameter/Width: 7x8x mm, Head Thickness: 7 mm, Shaft Diameter at Position 1: 3.5 mm, Shaft Diameter at Position 2: 4 mm, Shaft Diameter at Postion 3: 4 mm; Head Decoration: ?, Decoration Application Method: incised, Shaft Decoration: lines, Decoration Application Method: incised; Kind of Wire Ring: *; Notes: *13 diameter round sectioned ring with lines incised, Reference: Waterman 1959: 78 & fig 11.14.

Group: LXXXIII, Sub-group: iv; Site: Crank St, Leicester, Leics; Museum or Unit: Jewry Wall Museum, Accession or Small Find Number: 116'1962/680; Head Form: baluster-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Context: stray; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 139 mm, Head Diameter/Width: 4x11 mm, Head Thickness: x4 mm, Shaft Diameter at Position 1: 4 mm, Shaft Diameter at Position 2: 4 mm, Shaft Diameter at Postion 3: 3 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: carinated ring*; Notes: *Ring is about 16 mm in diameter, Reference: Clough, Dornier & Rutland 1975: fig 15a (right).

Group: LXXXIII, Sub-group: iv; Site: Deanery Fields, Chester; Head Form: swing-ringed, baluster-headed, Collar Form: none, Shaft Section at Level 1: round, Shaft Section at Level 2: flat rectangular; Length: ? mm, Head Diameter/Width: ? mm, Shaft Diameter at Position 1: ? mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: plain-ring; Reference: Newstead & Droop 1936: 37 & Pl XIX.8.

Group: LXXXIII, Sub-group: v; Site: Jewry Wall, Leicester, Leics; Museum or Unit: Jewry Wall Museum, Accession or Small Find Number: JW 89.14; Head Form: swing-ringed, loop-headed, Shaft Form: tapering, Shaft Section at Level 1: round, Shaft Section at Level 2: square; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: cast; Length: 102 mm, Head Diameter/Width: 7 mm, Head Thickness: 1.22 mm, Shaft Diameter at Position 1: 3 mm, Shaft Diameter at Position 2: 3.5 mm, Shaft Diameter at Postion 3: 3 mm; Head Decoration: none, Shaft Decoration: none; Kind of Wire Ring: carinated ring*; Notes: *Ring is 22 mm in diameter, Reference: Clough, Dornier & Rutland 1975: fig 15a (left).

Group: LXXXIII, Sub-group: vi; Site: Meols, Mersey; Head Form: swing-ring, loop-headed, Shaft Section at Level 1: round, Shaft Section at Level 2: flattened; Degree of Completeness: complete, Type of Material: copper alloy, Main Manufacturing Process: wrought; Length: 125 mm, Head Diameter/Width: 8 mm, Head Thickness: 1.25 mm; Head Decoration: lines, Decoration Application Method: incised, Shaft Decoration: none evident; Kind of Wire Ring: flat ring*; Notes: Flat ring has transverse grooving and a diameter of 37 mm, Reference: Bu'Lock 1961: 5.1; Thacker 1987: fig 42.3. [Publication only].

# Appendix 2

# Prototype of The Anglo-Saxon Pin Identification Assistant

```
constants:
 banner: "************************************************************".
 success: "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!".
 hold: "Enter 'c' followed by return to continue".
cls: "^[[2J".
yel: "^[[33m".
white: "^[[37m".
blue: "^[[36m".
red: "^[[31m".
green: "^[[32m".
bold: "^[[1m".
rev: "^[[7m".
blk: "^[[5m".
usc: "^[[4m".
gobot: "^[[18;1H".
gocen: "^[[12;6H".
gomid: "^[[8;1H".
bacb: "^[[44m".
bwh: "^[[47m".
lline:
"
".

uline:
"
".
off: "^[[0m".
%

text:

{name:
" ", " ",
"                    *****   **   *    *              ",
"                    *   *   **   * *  *              ",
"                    ******  **   *  * *               ",
"                    *       **   *   *              ",
"                    *       **   *   *              ",
" ", " ",
"              Pin Identification and Data Collection Assistant",
" ",
"      This Expert System is designed to assist in the identification of",
"      and the collection of data about Anglo-Saxon Pins.",
" "}

{certification:
    " ", " ", " ", " ", banner, " ",
    "This Knowledge Base (KB) is a prototype for a full implementation",
```

```
"of a production pin identification expert system.  Such a system will",
"make it possible for archaeologists recovering pins to identify them ",
"quickly and efficiently, locate parallels, and determine whether the",
"pin is hitherto unknown.  If the latter is the case they will be able to",
"update the knowledge base to contain the new information.",
" ", banner,
" ", " ", " ", " ", " "}

{purpose:
    " ", " ", " ", " ", banner, " ",
    "This KB is based upon the examination of pins recovered from",
"'Anglo-Saxon Contexts'. The work was carried out as part of post-",
"graduate work at the Institute of Archaeology, Oxford.",
" ", banner,
" ", " ", " ", " "}

{KB Author:
    "Seamus Ross, Christ Church, Oxford."}

%
attributes:
\Control Attributes

Menu: sgl (
Identify a Pin Only
{explain: "Select this option if you wish to use the system",
"to identify the type of a particular pin"},
Identify a Pin And Collect Data
{explain: "Use the system to identify the type of a pin",
"and to collect the details about the pin for the database"},
Load Earlier Case Data
{explain: "Select a pin about which data has been collected for",
"identification but which the system could not identify. This ",
"function is intended to support the testing of new formal rules"},
Collect Data Only,
Quit)
{question: off,cls,gomid,uline, "Please select one of the following options:"}.

Purpose: truth
{question: off, cls,gomid,uline,
"Do you wish to have the purpose of the Knowledge Base",
"displayed?"}.
Certification: sgl (yes, no)
{question: off, cls,gomid,uline,
"Would you like to see the certification of the Knowledge Base?"}.

Reference: sgl (yes, no)
{question: off,cls,gomid,uline,
"Shall I list a few general references?"}.

Type Known Menu: sgl (
    show comments
        {question: "View Comments about this TYPE of pin."},
    show parallels
        {question: "Show Parallels."},
    show confusion
        {question:
      "Justify the Identification."},
\    show dating
\        {question: "Suggestion of date."},
    show nothing
        {question: "Return to main menu"})
{question: off,cls,gomid,uline,
"Which of the following would you like to see:"}.
```

```
Subtype Known Menu: sgl (
    show subtype comments
        {question: "Comments about this SUBTYPE of pin."},
    show subtype parallels
        {question: "Show Parallels"},
    show subtype confusion
        {question:
      "Justify the Identification."},
\    show subtype dating
\        {question: "Suggestion of date."},
    show subtype nothing
        {question: "Return to main menu"})
{question: off,cls,gomid,uline,
"Which of the following would you like to see:"}.

Variant Known Menu: sgl (
    show variant comments
        {question: "View Comments about this VARIANT of pin."},
    show variant parallels
        {question: "Show Parallels."},
    show variant confusion
        {question:
      "Justify the Identification."},
\    show variant dating
\        {question: "Suggestion of date."},
    show variant nothing
        {question: "Return to main menu"})
{question: off,cls,gomid,uline,
"Which of the following would you like to see:"}.

Justify Pin Identification: sgl
    (yes,
    no)
{question: off,cls,gomid,uline,
"Select yes if you would like to see the rule or rules",
"which fired successfully to identify this pin"}.

CDO: sgl (
        first,
        second
        ).

subtype1: sgl (
          available,
          unavailable).
subtype2: sgl (
          yes,
          no)
{question: "Do you wish to identify the subtype to which this pin belongs"}.
variant1: sgl (
          available,
          unavailable).

variant2: sgl (
          yes,
          no)
{question: "Do you wish to identify the variant to which this pin belongs"}.

Data Display: sgl (
            show parallels,
            show comments).

menu choosen: sgl
    (one, two, three).
```

```
Option Update: sgl (
              yes,
              no)
{question: "Do you wish to Update the artifact database to include",
        "this previously unknown type"}.

ident_rate: sgl
     (probable,
     maybe,
     improbable).

Organic Messa: sgl
     (provide,
     do_not_provide).

sphermessa: sgl
     (Display,
     no_display).

\Input Attributes
Degree Of Completeness: sgl (
       complete,
       more than seventy five percent complete,
       more than fifty percent complete,
       less than fifty percent complete)
{question: off,cls,gomid,uline,
"How complete is this pin?", lline}.

DOC: str. \completeness string attribute.

Missing Elements: mlt (
       head,
       entire shaft,
       much Of the lower portion Of the shaft,
       tip,
       attachment,
       other)
{question:
off,cls,gomid,uline,
  "What elements are missing from this pin", lline}.

ME: str. \Missing elements string attribute.

Headless Data: sgl
     (yes,
     no)
{question: off,cls,gomid,uline,
"Head lost but probably Organic or Glass", lline}.

Material: sgl (
       skeletal {question: "Bone, Horn, or Antler    "},
       metal{question: "Metal                        "})
{question: off,cls,gomid,uline,
"Which type of material is the pin made from? (e)", lline}.

\Details of find

findlocation: sgl
     (yes,
      no)
{question: off,cls,gomid,uline,
"Is the location of the find known?", lline}.

Site: str
{question: off,cls,gomid,uline,
```

"Please enter the name of the site from which the pin",
"came.", lline}.

Site Location: str
{question: off,cls,gomid,uline,
"Enter the location of the site [format: city; county].", lline}.

National Grid Reference: str
{question:off,cls,gomid,uline,
"Enter the National Grid Reference of the site", lline}.

Museum: str
{question:off,cls,gomid,uline,
"Please enter the name of the museum or",
"archaeological unit presently holding the pin.", lline}.
Accession: str
{question: off,cls,gomid,uline,
"Please enter the accession number.", lline}.

Site Layer: str
{question: off,cls,gomid,uline,
"Please enter the layer number", lline}.

Grave: sgl
    (yes,
    no)
{question: off,cls,gomid,uline,
"Did the pin come from a grave?", lline}.

Grave Identifier: str [default: "not applicable"]
{question: off,cls,gomid,uline,
"What is the identifier of the grave?", lline}.

Age: str [default:"not applicable"]
{question: off,cls,gomid,uline,
"How old was the individual at death?", lline}.

Sex: str [default: "not applicable"]
{question: off,cls,gomid,uline,
"What sex was the individual?", lline}.

Position: str [default: "not applicable"]
{question: off,cls,gomid,uline,
"Where was the pin in the grave?", lline}.

Grave Details: str
{question:
off,cls,gomid,uline,
"Please give details of the context of the find of the pin.", lline}.
Other Finds: sgl
    (yes,
    no)
{question: off,cls,gomid,uline,
"Were their any associated finds?", lline}.

Spangles: sgl (present, present now lost, never present)
{question: "Were Spangles present"}.

Associated Finds: str
{question: off,cls,gomid,uline,
"List the finds associated with the pin", lline}.

GD: str. \Grave details data string

Set Character: sgl (

```
        single pin,
        part Of a set)
{question: off,cls,gomid,uline,
"Is this pin part of a set of pin?", lline}.

Pair Survival: sgl (
        partner extant,
        partner not extant)
{question: off,cls,gomid,uline,
"Since this pin is part of a set does its partner survive", lline}.

Surviving Pair Identifier: str
{question:
off,cls,gomid,uline,
"What is the Object Identifier Number of the Pair of this Pin?", lline}.

Metal Type: sgl (
        copper alloy
                {question: "Copper Alloy      "},
        iron
                {question: "Iron              "},
        silver
                {question: "Silver            "},
        gold
                {question: "Gold              "})
{question: off,cls,gomid,uline,
"What type of metal is the pin made from? (e)", lline}

{explain:
"If analytic work has been carried out on the material please",
"obtain the answer to this question by reference to this information."}.

Metal Treatment: mlt (
      gilt,
      silvered,
      tinned,
      enameled,
      none)
{question: off,cls,gomid,uline,
"What type of treat did the metal receive?", lline}.

Compositional Data Availability: sgl
      (available,
      not available)
{question:
off,cls,gomid,uline,
"Is there compositional data available for the pin?", lline}.
Compositional Data: str
{question:
off,cls,gomid,uline,
"Enter details of the composition of the pin.", lline}.

Compositional Data Source: str
{question:
off,cls,gomid,uline,
"What is the source of the compositional data.", lline}.
Composite Structure Status: sgl
      (yes,
      no)
{question:
off,cls,gomid,uline,
"Is this pin composed of a number of different materials", lline}.

Composite Elements: mlt (
        beaded wire,
```

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        garnets,
        glass,
        glass bead,
        chain,
        gold foil,
        amethyst)
{question:
off,cls,gomid,uline,
"Which of the following items were used to make this pin", lline}.

Metal Manufacturing Process: mlt (
        cast,
        composite,
        forged {question: "forged or hammered"},
        folded Or rolled,
        strip drawn,
        unascertained {question: "undetermined"},
        undeterminable)
{question:
off,cls,gomid,uline,
"Examining the pin which process involved in manufacturing",
    "the pin (the primary process only)?", lline}.

Secondary Working Evidence: mlt (
            file marks,
            hammer marks,
            punch marks,
            engraving,
            filigree work,
            nota {question: "none of the above"})
{question:
off,cls,gomid,uline,
"Is there evidence of secondary working on the pin",
     " (this might be of a post casting nature)?", lline}.
Secondary Working Evidence String: str
{question:
off,cls,gomid,uline,
"What type of post-casting modification is evident on this pin", lline}.

Strip Drawn Evidence: sgl (
        fine linear draw mark present,
        fine linear draw mark absent,
        evidence not recorded)
{question: off,cls,gomid,uline,
"What evidence for strip drawing can be seen?", lline}.

Hammer Mark Location: mlt (
          head,
          collar,
          shaft)
{question: off,cls,gomid,uline,
"Where are the hammer marks located?", lline}.

HML: str. \Hammer mark location string attribute
Organic Material: sgl
     (bone,
     horn,
     antler,
     ivory,
     wood)
{question:
off,cls,gomid,uline,
"What material is the pin made from? ", lline}.

Organic Manufacturing Process: sgl (
```

```
        carved,
        lathe turned,
        unascertained,
        undeterminable)
{question:
off,cls,gomid,uline,
"Examining the pin which process involved in manufacturing",
    "the pin (the primary process only)?", lline}.

\Measurement attributes

Measurements: sgl (taken, not taken)
{question: off,cls,gomid,uline,
"Where measurements on the shaft taken?", lline}.

Head Diameter: fixed(2)
[constraint: Head Diameter gt 0 and Head Diameter lt 40]
{question:
off,cls,gomid,uline,
 "What is the maximum girth of the head?  [in mm.]", lline}.

Head Thickness: fixed(2)
       [constraint: Head Thickness gt 0 and Head Thickness lt 20]
{question:
off,cls,gomid,uline,
"What is the thickness of the head? [in mm.]", lline}.

Shaft Diameter1: fixed(2)
      [constraint: Shaft Diameter1 gt 0 and Shaft Diameter1 lt 10]
{question:
off,cls,gomid,uline,
"Please enter the diameter of the shaft at a point about halfway",
"between the bottom of the head and point 2/3's of the way along",
"the shaft. [in mm.]", lline}.

Shaft Diameter2: fixed(2)
      [constraint: Shaft Diameter2 gt 0 and Shaft Diameter2 lt 10]
{question:
off,cls,gomid,uline,
"Please give the diameter of the shaft at the point 2/3's of the",
"way along the shaft. [in mm.]", lline}.

Shaft Diameter3: fixed(2)
      [constraint: Shaft Diameter3 gt 0 and Shaft Diameter3 lt 10]
{question:
off,cls,gomid,uline,
"Please give the diameter of the shaft at the point about",
"halfway between hip point and the point of the pin. [in mm.]"}.

Disc Diameter: int [constraint: Disc Diameter gt 0 and Disc Diameter lt
40]
{question:
off,cls,gomid,uline,
"Please give the diameter of the disc head of the pin. [in mm.]"}.
Length: fixed(2)
       [constraint: Length gt 5 and Length lt 200]
{question: off,cls,gomid,uline,
"What is the length of the pin to the surviving end [in mm.]?"}.
\Decoration attributes
Decoration: sgl (
       present,
       absent)
{question: off,cls,gomid,uline,
"Is decoration present?"}.
```

```
Decoration Location: sgl (
        head,
        collar,
        shaft)
{question: off,cls,gomid,uline,
"Where is the decoration located"}.

Ring And Dot Type: sgl (
          raised rings,
          flat rings,
          ringless)
{question: off,cls,gomid,uline,
"What type of ring-and-dot ornament is present?"}.

Head Decoration Application Method: mlt (
          cast,
          punched,
          engraved,
          applied,
          no decoration present)
{question: off,cls,gomid,uline,
"How was the decoration applied to the head of the pin?"}.
Punched Head Decoration Type: mlt (
          ring,
          partial ring,
          dot,
          ring And dot {question: "Ring-and-Dot"},
          other,
          unevident {question: "Not Evident"},
          none {question: "Undecorated"},
          portion lacking
                    {question: "Head of Pin No longer present"})
{question:
off,cls,gomid,uline,
"What kind of Decoration is punched onto the pin head? "}.

Cast Decoration Type: mlt (
          animal ornament,
          interlace,
          ring,
          dot,
          ring And dot {question: "Ring-and-Dot"},
          spirals,
          wrythen,
          other,
          unevident {question: "Not Evident"},
          none {question: "Undecorated"},
          portion lacking
                    {question: "Head of Pin No longer present"})
{question:
off,cls,gomid,uline,
"Which term or terms describes the Cast Decoration?"}.

Engraved Head Decoration Type: mlt (
          ring,
          partial ring,
          dot,
          ring And dot {question: "Ring-and-Dot"},
          wrythen,
          spirals,
          animal ornament,
          plant Or vine ornament,
          interlace,
          other,
          unevident {question: "Not Evident"},
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```
        none {question: "Undecorated"},
        portion lacking
                {question: "Head of Pin No longer present"})
{question: off,cls,gomid,uline,
"What kind or kind of decoration is engraved?"}.

Applied Head Decoration Type: mlt (
        spirals,
        filigree,
        garnet set {question: "Garnet or Glass Set"},
        other,
        unevident {question: "Not Evident"},
        none {question: "Undecorated"},
        portion lacking
                {question: "Head of Pin No longer present"})
{question: off,cls,gomid,uline,
"What type of decoration is applied to the pinhead"}.
Head Decoration Type: mlt (
        ring,
        dot,
        ring And dot {question: "Ring-and-Dot"},
        wrythen,
        spirals,
        filigree,
        animal ornament,
        plant Or vine ornament,
        interlace,
        garnet set {question: "Garnet or Glass Set"},
        other,
        unevident {question: "Not Evident"},
        none {question: "Undecorated"},
        portion lacking
                {question: "Head of Pin No longer present"})
{question: off,cls,gomid,uline,
"Is the head of the pin decorated"}.
Filigree Type: sgl (
     backwards S filigree,
     trefoil filigree,
     foliate filigree)
{question:
off,cls,gomid,uline,
"What type of filigree is present on the head of the pin?"}.

Filigree Medial Band: sgl (
     present,
     absent)
{question:
off,cls,gomid,uline,
"Is a filigree medial band present?"}.

Granule Ornament: sgl (
     present,
     absent)
{question:
off,cls,gomid,uline,
"Is Granule Ornament present?"}.
Raised Discs: sgl (
     present,
     absent)
{question:
off,cls,gomid,uline,
"Are Raised Discs present?"}.

HDT: str. \ Head Decoration Type String.
```

```
Shaft Decoration Application Method: mlt (
        cast,
        punched,
        engraved)
{question: off,cls,gomid,uline,
"How was the decoration applied to the shaft of the pin?"}.
Collar Decoration Type: sgl (
        dot,
        ring,
        ring dot {question: "raised ring and dot"},
        wrythen,
        spirals,
        interlace,
        garnets,
        portion lacking,
        none,
        not evident)
 {question: off,cls,gomid,uline,
 "Is the Collar of the pin decorated?"}.

 Shaft Decoration: sgl (
         present,
         absent)
 {question:
 off,cls,gomid,uline,
  "Does the shaft have any lines on it or other decoration?"}.

 Shaft Decoration Type: mlt (
         linear,
         triangles,
         plant ornament,
         other)
{question:
off,cls,gomid,uline,
"Please enter the type of shaft decoration present on this pin."}.

Shaft Decoration Line Configuration: sgl (
        Single line below collar
        {question: "Single Line Incised below",
            "Collar"},
        Double line below collar
        {question: " Two Lines Incised below",
            "Collar"},
        Single line incised on medial point
        {question:
        "Single Line on",
            "medial point of shaft swelling"},
        Single line two thirds Of the way down the shaft
         {question: "Single Line two-third's of the way along",
            "the shaft"},
        Double line
        {question: "Double line two-third's of the way along",
            "the shaft"},
        Multi Line Bevel
        {question:"Multiple lines which create the ",
            "impression of 'scale bevels'"},
        None)
{question: off,cls,gomid,uline,
"Which best describes the shaft decoration"}.

\Structural Attributes

Head Type: sgl
     (knobbed
      {question: "Knob head (e)"}
```

```
      {explain:
            "Head of pin is a knobbed end on the shaft"},
      flat plate
      {question: "Flat plate head (e)"}
      {explain:
            "Head of pin consists of a flat plate. The shape is not",
            "not significant at this stage"},
      swivel ringed
      {question: "Ring passes through head (e)"}
      {explain:
      "A ring which swivels through a hole either in",
      "a knobbed head or a flat plate head"},
      swing ringed
      {question: "Ring attached to head swings back and forth"},
      other
      {question:
"Select this option if the head is another form, say moulded"}
      )
{question:
off,cls,gomid,uline,
"What type of head does this pin have?"}.

Basic Knobbed Head Form: sgl (
            faceted,
            disc,
            cruciform,
            hot air balloon like,
            conical,
            biconical,
            mushroom cap,
            globular,
            spherical,
            hourglass,
            watch_winder,
            bramble,
            barrel,
            baluster,
\           knob_above_eyelet,
            upside_down trapezoid Or cone,
            domed_cone,
            not applicable {question: " "}
            )
{question:
off,cls,
 "Which term best describes the primary geometric shape of the",
    "head?"}.

Facet Form: sgl
      (cuboid,
       rectangular,
       flattened
      )
{question:
off,cls,gomid,uline,
 "Which of these terms best describes the base pin_head before facetting?"}.

Flat Plate Head Form: sgl (
      bird_headed {question: "Flat bird headed terminal"},
      cruciform,
      diamond,
      disc,
      elliptical lozenge,
      lyre,
      oar_shaped,
      thistle,
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```
      spatulate plate,
      spade_like plate,
      triangular,
      wedge)
{question:
off,cls,gomid,uline,
"Which term best describes the primary geometric shape of the",
    "Flat Plate Head?",uline}.

Basic Other Head Form: sgl (
      single curled terminal,
      double curled,
      bent wire,
      knob_above_eyelet {question: "Knob above eyelet"}
      )
{question:
off,cls,gomid,uline,
"Which term best describes the primary geometric shape of the",
    "head?"}.
Disc Form: sgl
      (pierced disc,
      attachment above disc undecorated disc,
      attachment above disc decorated disc,
      attachment behind disc,
      attachment at side Of disc
      )
{question:
off,cls,gomid,uline,
"Which term best describes the form of the disc?"}.

Bent Wire Form: sgl
      (hook_end {Question: "The wire appears HOOKED OVER at one end"},
      loop_end {Question: "The wire appears LOOPED OVER at one end"},
      crook_end
    {Question: "The wire resembles a SHEPHERDS CROOK at one end"},
      other {Question: "None of the Above"})
{question:
off,cls,gomid,uline,
"Which term best describes the form of the bent wire head-end?"}.

Zoomorphic Head: sgl
      (present,
      absent)
{question:
off,cls,gomid,uline,
"Does the pin have a zoomorphic head"}.

Zoomorphic Head Form: sgl
      (bird_head,
       pig_head,
       duck_head,
       other
      )
{question:
off,cls,gomid,uline,
"What type of Zoomorphic Head does this pin have?"}.
Secondary Knob: sgl
     (present,
     absent)
{question:
off,cls,gomid,uline,
"Does the pin have a secondary knob?"}.

Second Knob Form: sgl
     (biconical,
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      faceted cuboid)
{question:
off,cls,gomid,uline,
"Please select the term which best describes the form of the",
"lower knob."}.

Curves Away: sgl
      (yes,
      no
      )
{question:
off,cls,gomid,uline,
"Does the head curve away before the curled terminal begins?"}.
Swing Ring Knob Type: sgl (
      crutch knob,
      faceted knob,
      baluster knob,
      looped terminal
      )
{question:
off,cls,gomid,uline,
"What type of terminal is the ring on this pin suspended from?"}.

Finials: sgl
      (present,
       absent)
{question:
off,cls,gomid,uline,
"Are their finials on the edges of the pin-head?"}.

Pierced: sgl
      (yes,
       no)
{question:
off,cls,gomid,uline,
"Is the head pierced?"}.

Inlays: sgl
      (present,
       absent)
{question:
off,cls,gomid,uline,
"Is the head inlayed?"}.
Open_Work: sgl
      (yes,
       no)
{question:
off,cls,gomid,uline,
"Does the pin have an open-work head?"}.
Single Or Double Curl: sgl (
         double spiral
            {question: "Double Spiral terminals"},
         single spiral
            {question: "Single Curled terminals"})
{question:
off,cls,gomid,uline,
"Does or did the pin have a double or single spiral terminal(s)?"}.

Spiral Direction: sgl (
          inward,
          outward)
{question: off,cls,gomid,uline,
"In which direction do the spirals turn"}.

Double Spiral Form: sgl (
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      split with flat section,
      split with D_section,
      round sectioned with triangular plate below,
      round sectioned
      )
{question:
off,cls,gomid,uline,
"What type of curled terminals does this pin have?"}.

Additional Head Refinement Data: sgl (
          cuboid faceted,
          flattened faceted,
          rectangular elongated,
          None)
{question:
off,cls,gomid,uline,
"Which term refines the basic geometric form"}.

Attachment Device: sgl (
          present,
          absent)
{question:
off,cls,gomid,uline,
"Does the pin have an attachment mechanism, such as a hole or loop?"}
{explain:
"An attachment mechanism might be a hole in the head of the pin or",
"a loop on the pin that made it possible to fix the pin either to",
"another pin or two the wearer's clothing."}.

Supra Head Structure: sgl (
          none,
          attachment plate)
{question:
off,cls,gomid,uline,
"Above the head knob does the pin have a flat plate?"}.

Wire Ring Type: sgl (
          missing,
          not applicable,
          slip knot {question: "cast or rolled slip knot wire ring"},
          cast {question: "cast ring with touching ends"},
           spiraled)
{question:
off,cls,gomid,uline,
"How was the wire ring that passes through the head made?"}.

Top Of Head Form: sgl (
          plain loop above,
          flat top,
          pyramidal loop,
          perpendicular loop  {question: "Perpendicular Loop (e)"}
      {explain:  "The loop stands perpendicular to the plane of the head"},
          None {question: "none of the above"})
{question:
off,cls,gomid,uline,
"Which term best describes the Superior Zone of the pin"}.

Side Of Head Form: sgl (
          carinated,
          markedly carinated,
          flat medial band,
          cable banded,
          None {question: "none of the above"})
{question:
off,cls,gomid,uline,
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"Which term best describes the side of the pin head"}.
Chain: sgl (
        sideways Ss type links
 {question: "Sideways S type links (e)"},
        folded links {question: "Folded Links (e)"},
        double ended loops
 {question: "Links of single strands with the",
"wire folded back to form loops on each end of the link. (e)"},
         strips
         {question: "Decorated flat strips"},
        Not Extant {question:
"Evidence for chain type no longer survives"},
       Not Applicable
{question: "Select if pins did not have a chain"})
{question:
off,cls,gomid,uline,
"What type of links does the chain have?"}.

Collar Type: sgl (
      single ring,
      double ring,
      multiple rings {question: "more than two rings"},
      ring_and_barrel mouldings
           {question: "ring and barrel mouldings"},
      threaded {question: "Thread like (e)"}
{explain:
"The collar is made up of incised lines which resemble the",
"threads of a screw"},
         faceted knob,
         spherical bulbous knob,
         casting {question: "Casting Remains Collar (e)"}
{explain:
"The process of casting the pin left behind a crude",
"casting collar"},
         Flat sectioned reverse step collar,
         fillet collar,
         mouldings_and_biconical zone,
         no_collars {question: "No Collars"},
         Notx Present {question: "not present"},
         Notx Extant  {question: "not present"})
{question: off,cls,gomid,uline,
"Please describe the collar of the pin"}.

Shaft Section Position One: sgl (
         round
     {question: "Round (e)"}
{explain:
"Select this option if the pin has a round sectioned shaft"},
         finely faceted
     {question: "Finely faceted round (e)"}
{explain:
"The shaft appears to be round, but on closer examination",
"it proves to be very finely faceted.  This fine facetting probably indicates",
"that the pin was cast in a square mould and was finished by filling",
"subsequent to casting.  You will probably have to look under a 10x",
"lense to see the facetting. In some examples the file marks are readily",
"observed."},
         elliptical,
         Notx Extant {question: "area no longer extant"})
{question:
off,cls,gomid,uline,
"Please describe the shaft between the collar and",
 "the two-third's marker"}.

Shaft Section Position Two: sgl (
```

```
        round {question: "Round (e)"}
{explain: "Select this option if the shaft has a round section"},
        square {question: "Square (e)"}
{explain: "Select this option if the shaft has a square section"},
        faceted {question: "Faceted"},
        finely faceted
{question: "Finely faceted round (e)"}
{explain: "The shaft appears to be round, but on closer",
"examination it proves to be finely faceted. This fine faceting",
"indicates that the pin was cast in a square mould and was finished by",
"filling subsequent to casting.  You will probably have to look under a 10x",
"lense to see the facetting."},
        area xnot present {question: "area no longer extant"})
{question:
off,cls,gomid,uline,
"Please describe the shaft below the two-third's marker"}.

Shaft Form: sgl (
    plain tapering {question: "Plain Tapering (e)"}
{explain: "Select this option if the shaft tapers from below the head",
"to the tip of the pin"},
    single line
     {question: "Single line 2/3's of the way down the shaft (e)"}
{explain:
 "Select this option if the shaft is tapering but has a double line",
"running around the shaft between halfway and seventy-five percent of the",
"way along its length"},
    double line
     {question: "Double line 2/3's of the way along (e)"}
{explain:
"Select this option if the shaft is tapering but has a double line",
"running around the shaft between halfway and seventy-five percent of the",
"way along its length"},
    swelling shaft,
    gradual confined zone swelling,
    sharply carinated zone swelling,
    catch hipping at tip,
    shouldered hipping,
    sufficient length Notx present,
    None {question: "None of the above"})
{question: off,cls,gomid,uline,
"Which term best describes the shaft's form"}.

Attachment Process: sgl (
    None
      {question: "None"},
    superior loop
      {question: "Superior Loop"},
    loop behind head
      {question: "Loop behind head"},
    loop below the head
      {question: "Loop below head"},
    loop on head side
      {question: "Loop on the side of the head"},
    hole In right side Of head
      {question: "Hole in right side of head"},
    hole In left side Of head
      {question: "Hole in left side of head"})
{question:
off,cls,gomid,uline,
"If there is evidence that the pin was attached or linked",
"in some way could you chose the term which best describes this?"}.
\dating attributes

\These attributes are used to collect and hold information about dating
```

```
\evidence.

Dating Evidence: sgl (
     available,
     supposition possible,
     no data)
{question: off,cls,gomid,uline,
"Is dating evidence available?"}.

Dating Type: mlt (
     associated finds,
     contextual date,
     comparative dating)
{question:
off,cls,gomid,uline,
"Which of the following types of dating evidence is available?"}.

Associated Finds Date: str
{question: off,cls,gomid,uline,
"List the primary associated finds."}.
Contextual Date: str
{question: off,cls,gomid,uline,
"List the evidence for the date of the context"}.

Comparative Date: str
{question: off,cls,gomid,uline,
"Please provide a comparative date"}.

Probable Date: str
{question: off,cls,gomid,uline,
"Indicate a probable date for this pin"}.
\Associations
\These attributes hold information about the finds associated with
\the pin.

Non Ceramic Associated Finds: str
{question: off,cls,gomid,uline,
"Enter Information about Associated Non-Ceramic Finds"}.

Associated Pottery: str
{question: off,cls,gomid,uline,
"Enter Information about the Associated Pottery"}.
Contextual Data: str
{question: off,cls,gomid,uline,
"Enter Information about Contextual Data"}.
\Reference attributes:
Citation: str
{question: off,cls,gomid,uline,
"List any citations"}.

Photo Reference: str
{question: off,cls,gomid,uline,
"List the photographic reference number of this pin."}.
Drawing Reference: str
{question: off,cls,gomid,uline,
"List the drawing reference number of this pin"}.

Slide Reference: str
{question: off,cls,gomid,uline,
"Enter the slide reference number of this pin"}.

\Inferred Attributes

Type: sgl
(
```

Organic Or Fixed
{comments: "None"}
{parallels: " "}
{confusion: "It is possible to confuse these pins with pins that",
"have lost their head."}
{dating: "This pin dates to the middle Saxon period."},
Type Muids III,
Facet_headed with Shafts greater than_90_mm IV,
Biconical_headed pins with shafts over_100_mm V,
Chessell Down mushroom_headed type VI
{comments: " "}
{parallels: ""}
{confusion: " "}
{dating: " "},
Multiple_knob_headed type VII,
Spangle_headed type VIII,
Kempston type IX,
Oar_headed type X,
Morning Thorpe holed_rod type XI,
Curled_headed type XII,
Morning Thorpe Spherical_headed type XIII,
Flat_ring_headed fillet collar Type XIV,
Flat_sheet expanded headed type XV,
Short spatulated expanded headed type XVI,
Hook_headed type XVII,
Loop_headed type XVIX,
Crook_headed type XVIX,
Sleaford type XX,
Forged_headed type XXI,
Barrel cylinder_headed type XXII,
Hourglass_headed type XXIII,
Faversham bird_headed type XXXII,
Holywell Row type XXXIII,
Plated knob_headed type XXXIV,
Knob_above_eyelet_headed type XXXV,
Bifrons bird_headed type XXXVI,
Moulded bird_headed type XXXVII,
Thistle_headed type XXXVIII,
Flat Plate Animal headed type XXXIX,
Lyre_headed type XL,
Dover bird_headed type XLI,
Muffin_headed type XLIX,
Kingston disc_headed type L,
Pierced disc_headed type LI,
Superior looped_disc_headed type LII,
Superior looped_elliptical_headed type LIII,
Applied disc_headed type LIV,
Amethyst_bead_headed type LV,
Castle Dyke wedge_headed type LVI,
Sibertswold bird_headed type LVII,
Cross_headed type LVIII,
Composite_Cruciform type LIX,
Wingham type LX,
Garnet set disc_headed type LXI,
Wicken Bonhunt triangular_plate_headed type LXII,
Evesham type LXIII,
Linked type LXIV,
Anthropomorphic_headed bird_terminated type LXV,
Spiral_headed type LXVI,
Globular zoomorphic_headed type LXVII,
Biconical_headed type LXVIII,
Inverted_pear_headed type LXIX,
Ball Or Spherical_headed type LXX,
Domed_cone_headed type LXXI,
Facet_headed_shorter_than_85_mm type LXXII,

Flat zoomorphic_headed type LXXIII,
Witham disc_headed type LXXIV,
Conical Or Trapezoid_headed type LXXV,
Racquet_headed Or Lollipop_headed type LXXVI,
Loaf_headed type LXXVII,
Flixborough animal_headed type LXXVIII,
Globular_headed type LXXIX,
Ely spatulate lozenge-headed type LXXX,
Watch_winder type LXXXI,
Bramble_headed type LXXXII,
Swing_ringed type LXXXIII
).

Subtype: sgl
(Facet_headed with Shafts greater than_90_mm IV i,
Facet_headed with Shafts greater than_90_mm IV ii,
Double biconical_headed subtype VII i
    {subtype comments: "None"}
    {subtype parallels: " "}
    {subtype confusion: " "}
    {subtype dating: " "},
Double faceted_cuboid_headed subtype VII ii,
Biconical_headed subtype VII iii,
Spangle_headed type VIII i,
Spangle_headed type VIII ii,
Spangle_headed type VIII iii,
Spangle_headed type VIII iv,
Spangle_headed type VIII v,
Flat_sheet expanded headed subtype XV i,
Flat_sheet expanded headed subtype XV ii,
Short spatulated expanded headed subtype XVI i,
Short spatulated expanded headed subtype XVI ii,
Curled_headed subtype XII i,
Curled_headed subtype XII ii,
Garnet set disc_headed subtype LXI i,
Garnet set disc_headed subtype LXI ii,
Spiral_headed subtype LXVI i,
Spiral_headed subtype LXVI ii,
Spiral_headed subtype LXVI iii,
Small_biconical_headed subtype LXVIII i,
Medium_biconical_headed subtype LXVIII ii,
Large_biconical_headed subtype LXVIII iii,
Composite Linked subtype LXIV i,
Cast Linked subtype LXIV ii,
Small_Inverted_pear_headed subtype LXIX i,
Medium_Inverted_pear_headed subtype LXIX ii,
Large_Inverted_pear_headed subtype LXIX iii,
Shudy Camps Facet_headed subtype LXXII i,
Hamwic Facet_headed subtype LXXII ii,
Coppergate Facet_headed subtype LXXII iii,
Hamwic Flattened_Facet_headed subtype LXXII iv,
Witham disc_headed subtype LXXIV i,
Witham disc_headed subtype LXXIV ii,
Flat_spherical racquet_headed subtype LXXVI i,
Flat_biconical racquet_headed subtype LXXVI ii,
Flat_inverted_pear_racquet_headed subtype LXXVI iii,
Raised Setting globular_headed subtype LXXIX i,
Martelsham globular_headed subtype LXXIX ii,
London globular_headed subtype LXXIX iii,
Goathurst Common globular_headed subtype LXXIX iv,
Sibton globular_headed subtype LXXIX v,
Ely spatulate lozenge-headed with angular terminals subtype LXXX i,
Ely spatulate lozenge-headed with finials on the angles subtype LXXX ii,

Ely spatulate lozenge-headed decorated by inlays subtype LXXX iii,
Ely spatulate lozenge-headed with pierced heads subtype LXXX iv,
Ely spatulate lozenge-headed with an open_work head subtype LXXX v,
Spiral_ringed subtype,
Ringed_crutch_headed subtype,
Polyhedral_headed subtype,
Loop_headed_plain_ringed subtype,
Baluster_headed subtype
).
Variant: sgl
(Garnet set disc_headed variant LXI i a,
Garnet set disc_headed variant LXI i b,
Spiral_headed variant LXVI i a,
Spiral_headed variant LXVI i b,
Spiral_headed variant LXVI ii a,
Spiral_headed variant LXVI ii b
).
%

externals:

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%
rules:
\Base Data Rule
base data rule_1:
     if Degree Of Completeness = complete
     then ident_rate = probable.
     endif.
base data rule_2:
     if Degree Of Completeness = more than seventy five percent complete
     and Missing Elements = tip ¦ attachment
     then ident_rate = probable.
     endif.
base data rule_3:
     if Degree Of Completeness = more than seventy five percent complete
     and Missing Elements = head
     then ident_rate = improbable.
     endif.
base data rule_4:
     if Degree Of Completeness = more than fifty percent complete
     and Missing Elements = much Of the lower portion Of the shaft
     then ident_rate = maybe.
     endif.
```

```
base data rule_5:
     if Degree Of Completeness = more than fifty percent complete
     and Missing Elements = head
     then ident_rate = improbable.
     endif.

base data rule_6:
     if Degree Of Completeness = less than fifty percent complete
     and Missing Elements # head
     and Missing Elements = entire shaft ¦ much Of the lower portion Of the shaft
¦ tip ¦ attachment
     then ident_rate = maybe.
     endif.

organic exclusion rule:
     if Material = skeletal
     and Organic Material = bone ¦ horn ¦ antler ¦ ivory
     and Organic Manufacturing Process = carved ¦ lathe turned
     then Organic Messa = provide.
     endif.
\Type Rules

facet_headed pins with shafts greater than_90_mm rule_1:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy
     and Metal Manufacturing Process = cast
     and Head Type = knobbed
     and Basic Knobbed Head Form = faceted
     and Facet Form = cuboid ¦ rectangular
     and Secondary Knob = absent
     and Collar Type = ring_and_barrel mouldings ¦ multiple rings ¦ no_collars
     and Shaft Form = plain tapering
     and Length gt 80
     then Type = Facet_headed with Shafts greater than_90_mm IV.
          subtype1 = available.
     endif.

biconical_headed pins with shafts over_100_mm rule_1:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy
     and Metal Treatment = gilt ¦ none
     and Metal Manufacturing Process = cast
     and Head Type = knobbed
     and Basic Knobbed Head Form = biconical
     and Secondary Knob = absent
     and Collar Type = multiple rings ¦ no_collars ¦ ring_and_barrel mouldings
     and Shaft Form = plain tapering
     and Length gt 80
     and Head Diameter ge 10
     then Type = Biconical_headed pins with shafts over_100_mm  V.
          subtype1 = unavailable.
     endif.

Chessell Down mushroom_headed rule_1:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy
     and Metal Manufacturing Process = cast
     and Head Type = knobbed
     and Basic Knobbed Head Form = mushroom cap
     and Length gt 90
     and Shaft Form = plain tapering
     and Collar Type = multiple rings
     then Type = Chessell Down mushroom_headed type VI.
        subtype1 = unavailable.
     endif.
```

```
Multiple_knob_headed Type rule_1:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy ¦ silver
     and Metal Treatment = gilt ¦ none
     and Metal Manufacturing Process = cast
     and Head Type = knobbed
     and Basic Knobbed Head Form = biconical ¦ faceted
     and Secondary Knob = present
     then Type = Multiple_knob_headed type VII.
          subtype1 = available.
     endif.

Kempston type IX rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy
     and Metal Manufacturing Process = cast
     and Head Type = knobbed
     and Basic Knobbed Head Form = conical
     and Shaft Form = plain tapering
     and Length gt 100
     then Type = Kempston type IX.
          subtype1 = unavailable.
     endif.


Oar_headed type X rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy ¦ iron
     and Metal Manufacturing Process = forged ¦ folded Or rolled
     and Head Type = flat plate
     and Flat Plate Head Form = oar_shaped
     and Shaft Form = plain tapering
     and Length gt 100
     then Type = Oar_headed type X.
          subtype1 = unavailable.
     endif.
Morning Thorpe holed_rod type XI rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy ¦ iron
     and Metal Manufacturing Process = forged
     and Head Type = flat plate
     and Flat Plate Head Form # oar_shaped
     and Shaft Form = plain tapering
     and Attachment Device = absent
     then Type = Morning Thorpe holed_rod type XI.
          subtype1 = unavailable.
     endif.

Curled_headed type XII rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy ¦ iron
     and Metal Manufacturing Process = cast ¦ forged
     and Head Type = other
     and Basic Other Head Form = single curled terminal
     then Type = Curled_headed type XII.
       subtype1 = available.
     endif.
Morning Thorpe Spherical_headed type XIII rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy ¦ iron
     and Metal Manufacturing Process = cast ¦ forged
     and Head Type = knobbed
     and Basic Knobbed Head Form = spherical
     and Secondary Knob = absent
     and Collar Type = single ring
```

```
    and Shaft Form = plain tapering
    then Type = Morning Thorpe Spherical_headed type XIII.
        subtype1 = unavailable.
    endif.
Flat_ring_headed rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ iron
    and Metal Manufacturing Process = cast ¦ forged
    and Head Type = flat plate
    and Collar Type = fillet collar
    and Shaft Form = plain tapering
    then Type = Flat_ring_headed fillet collar Type XIV.
        subtype1 = unavailable.   \Only Temporary
    endif.
Flat_sheet expanded headed type XV rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Manufacturing Process = folded Or rolled ¦ forged
    and Head Type = swivel ringed ¦ flat plate
    and Flat Plate Head Form # oar_shaped
    then Type = Flat_sheet expanded headed type XV.
        subtype1 = unavailable.  \Only Temporary
    endif.

Short spatulated expanded headed type XVI rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Manufacturing Process = cast
    and Head Type = flat plate
    and Flat Plate Head Form = spatulate plate ¦ disc
    and Attachment Device = present
    then Type = Short spatulated expanded headed type XVI.
        subtype1 = available.
    endif.

Hook_headed type XVII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = iron ¦ copper alloy
    and Metal Manufacturing Process = cast ¦ forged
    and Head Type = other
    and Basic Other Head Form = bent wire
    and Bent Wire Form = hook_end
    then Type = Hook_headed type XVII.
        subtype1 = unavailable.
    endif.
Loop_headed type XVIX rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = iron ¦ copper alloy
    and Metal Manufacturing Process = cast ¦ forged
    and Head Type = other
    and Basic Other Head Form = bent wire
    and Bent Wire Form = loop_end
    then Type = Loop_headed type XVIX.
        subtype1 = unavailable.
    endif.
Crook_headed type XVIX rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = iron ¦ copper alloy
    and Metal Manufacturing Process = cast ¦ forged
    and Head Type = other
    and Basic Other Head Form = bent wire
    and Bent Wire Form = crook_end
    then Type = Crook_headed type XVIX.
        subtype1 = unavailable.
    endif.
```

```
Sleaford type XX rule:
     if ident_rate = probable ¦ maybe
     and Metal Type =  copper alloy
     and Metal Treatment = gilt ¦ none
     and Metal Manufacturing Process = cast
     and Head Type = flat plate
     and Flat Plate Head Form = spade_like plate
     and Head Decoration Application Method = cast ¦ engraved
     and Shaft Form = plain tapering
     then Type = Sleaford type XX.
          subtype1 = unavailable.
     endif.

Forged_headed type XXI rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = iron
     and Metal Manufacturing Process = forged
     and Head Type = flat plate
     and Flat Plate Head Form = disc
     then Type = Forged_headed type XXI.
          subtype1 = unavailable.
     endif.


Barrel cylinder_headed type XXII rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy
     and Metal Manufacturing Process = cast
     and Head Type = knobbed
     and Basic Knobbed Head Form = barrel
     and Collar Type = no_collars
     and Shaft Form = plain tapering
     and Length gt 125
     then Type = Barrel cylinder_headed type XXII.
          subtype1 = unavailable.
     endif.
Hourglass_headed type XXIII rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy
     and Metal Manufacturing Process = cast
     and Head Type = knobbed
     and Basic Knobbed Head Form = hourglass
     and Collar Type = multiple rings
     then Type = Hourglass_headed type XXIII.
          subtype1 = unavailable.
     endif.
Faversham bird_headed type XXXII rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = silver
     and Metal Treatment = gilt ¦ none
     and Metal Manufacturing Process = composite
     and Head Type = flat plate
     and Flat Plate Head Form = bird_headed
     and Collar Type = no_collars
     and Shaft Form = plain tapering
     then Type = Faversham bird_headed type XXXII.
          subtype1 = unavailable.  \Only Temporary - Continental Parallel Data
     endif.

Holywell Row type XXXIII rule:
     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy
     and Metal Manufacturing Process = cast
     and Head Type = flat plate
     and Flat Plate Head Form = disc
```

```
      and Attachment Device = present
      and Disc Form = pierced disc
      and Collar Type = mouldings_and_biconical zone
      then Type = Holywell Row type XXXIII.
          subtype1 = unavailable.
      endif.

Plated knob_headed type XXXIV rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy
      and Metal Manufacturing Process = cast
      and Head Type = knobbed
      and Basic Knobbed Head Form = spherical
      and Supra Head Structure = attachment plate
      and Shaft Form = plain tapering
      then Type = Plated knob_headed type XXXIV.
          subtype1 = unavailable.
      endif.

Knob_above_eyelet_headed type XXXV rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ silver
      and Metal Treatment = gilt ¦ none
      and Metal Manufacturing Process = cast ¦ forged
      and Head Type = other
      and Basic Other Head Form = knob_above_eyelet
      and Shaft Form = plain tapering
      then Type = Knob_above_eyelet_headed type XXXV.
          subtype1 = unavailable.   \Only Temporary
      endif.

Bifrons bird_headed type XXXVI rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ silver
      and Metal Manufacturing Process = cast
      and Head Type = flat plate
      and Flat Plate Head Form = bird_headed
      and Collar Type = faceted knob
      and Shaft Form = plain tapering
      and Length lt 80
      and Head Decoration Application Method = cast ¦ engraved
      and Cast Decoration Type = animal ornament
      then Type = Bifrons bird_headed type XXXVI.
          subtype1 = unavailable.
      endif.
Moulded bird_headed type XXXVII rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy
      and Metal Manufacturing Process = cast
      and Head Type = other
      and Zoomorphic Head = present
      and Zoomorphic Head Form = bird_head
      and Shaft Form = plain tapering
      then Type = Moulded bird_headed type XXXVII.
      subtype1 = unavailable.
      endif.


Thistle_headed type XXXVIII rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy
      and Metal Manufacturing Process = cast
      and Head Type = flat plate
      and Flat Plate Head Form = thistle
      and Collar Type = no_collars
```

```
      and Shaft Form = plain tapering
      then Type = Thistle_headed type XXXVIII.
      subtype1 = unavailable.
      endif.

Flat Plate Animal headed type XXXIX rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ silver
      and Metal Treatment = gilt ¦ none
      and Metal Manufacturing Process = cast
      and Head Type = flat plate
      and Flat Plate Head Form # disc
      and Zoomorphic Head = present
      and Zoomorphic Head Form = other
      and Shaft Section Position One = round
      then Type = Flat Plate Animal headed type XXXIX.
          subtype1 = unavailable.
      endif.

Lyre_headed type XL rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy
      and Metal Manufacturing Process = cast
      and Head Type = flat plate
      and Flat Plate Head Form = lyre
      then Type = Lyre_headed type XL.
          subtype1 = unavailable.
      endif.

Dover bird_headed type XLI rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ silver
      and Metal Manufacturing Process = cast
      and Head Type = flat plate
      and Zoomorphic Head = present
      and Zoomorphic Head Form = bird_head
      and Head Decoration Application Method = punched
      and Punched Head Decoration Type = ring ¦ partial ring
      and Collar Type = no_collars
      and Shaft Form = plain tapering
      and Length lt 80
      then Type = Dover bird_headed type XLI.
          subtype1 = unavailable.
      endif.


 Kingston disc_headed type L rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ silver
      and Metal Manufacturing Process = cast
      and Head Type = flat plate
      and Flat Plate Head Form = disc
      and Disc Diameter lt 7
      and Attachment Device = absent
      and Head Decoration Application Method = no decoration present
      and Shaft Section Position One = round
      and Length lt 70
      then Type = Kingston disc_headed type L.
          subtype1 = unavailable.
\Only Temporary Use Shaft and Collar forms for subtypes
      endif.


Pierced disc_headed type LI rule:
      if ident_rate = probable ¦ maybe
```

```
    and Metal Type = copper alloy ¦ silver
    and Metal Manufacturing Process = cast
    and Head Type = flat plate ¦ swivel ringed
    and Flat Plate Head Form = disc
    and Disc Diameter lt 8
    and Disc Form = pierced disc
    and Wire Ring Type = missing ¦ slip knot
    and Shaft Section Position One =round
    and Length lt 70
    then Type = Pierced disc_headed type LI.
        subtype1 = unavailable.  \Only Temporary
    endif.

Superior looped_disc_headed type LII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Manufacturing Process = cast
    and Head Type = flat plate ¦ swivel ringed
    and Flat Plate Head Form = disc
    and Disc Form = attachment above disc undecorated disc
    and Top Of Head Form = plain loop above ¦ pyramidal loop
    and Wire Ring Type = missing ¦ slip knot
    and Disc Diameter lt 9
    and Length lt 70
    then Type = Superior looped_disc_headed type LII.
        subtype1 = unavailable.
    endif.
Superior looped_elliptical_headed type LIII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Manufacturing Process = cast
    and Head Type = swivel ringed
    and Flat Plate Head Form = elliptical lozenge
    and Attachment Device = present
    and Top Of Head Form = perpendicular loop
    and Wire Ring Type = missing ¦ slip knot
    and Length lt 70
    then Type = Superior looped_elliptical_headed type LIII.
    subtype1 = unavailable.
    endif.

Applied disc_headed type LIV rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Manufacturing Process = cast ¦ composite
    and Head Type = flat plate
    and Flat Plate Head Form = disc
    and Head Decoration Application Method = applied
    and Applied Head Decoration Type = other
    and Disc Diameter lt 10
    and Disc Diameter gt 7
    and Shaft Section Position One = round
    then Type = Applied disc_headed type LIV.
    subtype1 = unavailable.    \Only Temporary
    endif.

Amethyst_bead_headed type LV rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Treatment = gilt ¦ none
    and Metal Manufacturing Process = composite
    and Head Type = knobbed
    and Basic Knobbed Head Form # disc ¦ spherical
    and Composite Elements = amethyst
    then Type = Amethyst_bead_headed type LV.
```

```
        subtype1 = unavailable.
    endif.
Castle Dyke wedge_headed type LVI rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Manufacturing Process = forged
    and Head Type = flat plate
    and Flat Plate Head Form = wedge
    and Collar Type = no_collars
    and Length lt 70
    and Shaft Form = plain tapering
    then Type = Castle Dyke wedge_headed type LVI.
        subtype1 = unavailable.
    endif.

Sibertswold bird_headed type LVII rule:
    if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy ¦ silver
    and Metal Manufacturing Process = cast
    and Head Type = flat plate
    and Zoomorphic Head = present
    and Zoomorphic Head Form = bird_head
    and Collar Type # faceted knob
    and Head Decoration Application Method = cast
    and Cast Decoration Type = animal ornament
    then Type = Sibertswold bird_headed type LVII.
        subtype1 = unavailable.
    endif.
Cross_headed type LVIII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Treatment = gilt ¦ none
    and Metal Manufacturing Process = cast ¦ forged
    and Head Type = flat plate
     and Flat Plate Head Form = cruciform
    then Type = Cross_headed type LVIII.
    subtype1 = unavailable.      \Only Temporarily
    endif.

Composite_Cruciform type LIX rule:
    if ident_rate = probable ¦ maybe
     and Metal Type = silver ¦ gold
    and Metal Treatment = gilt ¦ none
    and Metal Manufacturing Process = composite
    and Head Type = flat plate
    and Flat Plate Head Form = cruciform
    and Composite Elements = beaded wire ¦ garnets ¦ glass ¦ gold foil
    then Type = Composite_Cruciform type LIX.
        subtype1 = unavailable.
    endif.
Wingham type LX rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = gold ¦ silver
    and Metal Treatment = gilt ¦ none
    and Metal Manufacturing Process = composite
    and Head Type = flat plate
    and Flat Plate Head Form = spade_like plate ¦ spatulate plate
    and Composite Elements = beaded wire ¦ garnets ¦ gold foil
    and Shaft Form = plain tapering
    then Type = Wingham type LX.
        subtype1 = unavailable.
    endif.

Garnet set disc_headed type LXI rule:
    if ident_rate = probable ¦ maybe
```

```
    and Metal Type = copper alloy ¦ silver ¦ gold
    and Metal Treatment = gilt ¦ none
    and Metal Manufacturing Process = composite
     and (Head Type = knobbed
        and Basic Knobbed Head Form = spherical)
    or  (Head Type = flat plate
        and Flat Plate Head Form = disc)
    and Head Decoration Application Method = applied
    and Composite Elements = beaded wire ¦ garnets ¦ glass ¦ gold foil
    and Attachment Device = absent
    and Shaft Section Position One = round
    then Type = Garnet set disc_headed type LXI.
        subtype1 = available.
    endif.
Wicken Bonhunt triangular_plate_headed type LXII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Treatment = gilt ¦ none
    and Metal Manufacturing Process = cast
    and Head Type = flat plate
    and Flat Plate Head Form = triangular
    and Collar Type = spherical bulbous knob
\    and Shaft Form = swelling shaft
    and Length ge 80
    then Type = Wicken Bonhunt triangular_plate_headed type LXII.
    subtype1 = unavailable.
    endif.
Evesham type LXIII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = gold
    and Metal Manufacturing Process = composite
    and Head Type # knobbed
    and Attachment Device = present
    and Chain = strips
    then Type = Evesham type LXIII.
        subtype1 = unavailable.
    endif.
Linked type LXIV rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = gold ¦ silver ¦ copper alloy
    and Metal Treatment = gilt
    and Metal Manufacturing Process = cast ¦ composite
    and Head Type = knobbed ¦ flat plate
    and Attachment Device = present
    and Set Character = part Of a set
    and Pair Survival = partner extant ¦ partner not extant
    and Chain = sideways Ss type links ¦ folded links ¦ Not Extant
    then Type = Linked type LXIV.
    subtype1 = available.
    endif.
Spiral_headed type LXVI rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Head Type = other
    and Basic Other Head Form = double curled
    and Spiral Direction = inward
    then Type = Spiral_headed type LXVI.
        subtype1 = available.
    endif.
Globular zoomorphic_headed type LXVII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Manufacturing Process = cast
    and Head Type = knobbed
    and Basic Knobbed Head Form = spherical ¦ globular
```

```
      and Zoomorphic Head = present
      and Zoomorphic Head Form = pig_head ¦ duck_head ¦ other
      and Shaft Section Position One = round
      and Length lt 70
      then Type = Globular zoomorphic_headed type LXVII.
      subtype1 = unavailable.
      endif.
Biconical_headed type LXVIII rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ iron ¦ silver
      and Metal Manufacturing Process = cast
      and Head Type = knobbed
      and Basic Knobbed Head Form = biconical
      and Length lt 80
      then Type = Biconical_headed type LXVIII.
       subtype1 = available.
      endif.
Inverted_pear_headed type LXIX rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ silver
      and Metal Manufacturing Process = cast ¦ forged
      and Head Type = knobbed
      and Basic Knobbed Head Form = hot air balloon like
      and Length lt 85
      then Type = Inverted_pear_headed type LXIX.
      subtype1 = available.
      endif.
Ball Or Spherical_headed type LXX rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ silver
      and Metal Manufacturing Process = cast
      and Head Type = knobbed
      and Basic Knobbed Head Form = spherical
      and Zoomorphic Head = absent
      and Length lt 85
      then Type = Ball Or Spherical_headed type LXX.
      subtype1 = available.
      endif.
Domed_cone_headed type LXXI rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ silver
      and Metal Manufacturing Process = cast
      and Head Type = knobbed
      and Basic Knobbed Head Form = domed_cone
      and Shaft Section Position One = round
      and Length lt 85
      then Type = Domed_cone_headed type LXXI.
          subtype1 = unavailable.
      endif.

Facet_headed_shorter_than_85_mm type LXXII rule:
      if ident_rate = probable ¦ maybe
      and Metal Type = copper alloy ¦ silver
      and Metal Treatment = gilt ¦ none
      and Metal Manufacturing Process = cast
      and Head Type = knobbed
      and Basic Knobbed Head Form = faceted
      and Facet Form = cuboid ¦ rectangular ¦ flattened
      and Shaft Section Position One = round
      and Length lt 85
      then Type = Facet_headed_shorter_than_85_mm type LXXII.
      subtype1 = available.
      endif.
Flat zoomorphic_headed type LXXIII rule:
      if ident_rate = probable ¦ maybe
```

```
    and Metal Type = copper alloy ¦ silver
    and Metal Treatment = gilt ¦ none
    and Metal Manufacturing Process = cast
    and Head Type = flat plate
    and Head Decoration Application Method = cast ¦ engraved
    and Zoomorphic Head = present
    and (Cast Decoration Type = interlace ¦ animal ornament
    or Engraved Head Decoration Type = interlace ¦ animal ornament)
    then Type = Flat zoomorphic_headed type LXXIII.
        subtype1 = unavailable.  \Only Temporary
    endif.
Witham disc_headed type LXXIV rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Treatment = gilt ¦ none
    and Metal Manufacturing Process = cast ¦ composite
    and Head Type = flat plate
    and Flat Plate Head Form = disc
    and Disc Diameter gt 15
    and Head Decoration Application Method = cast ¦ engraved
    then Type = Witham disc_headed type LXXIV.
    subtype1 = unavailable.      \Only Temporary
    endif.
Upside Down Conical Or Trapezoid_headed type LXXV rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Manufacturing Process = cast
    and Head Type = knobbed
    and Basic Knobbed Head Form =  upside_down trapezoid Or cone
    and Length lt 100
    then Type = Conical Or Trapezoid_headed type LXXV.
        subtype1 = unavailable.  \Only Temporary
    endif.
Racquet_headed Or Lollipop_headed type LXXVI rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Manufacturing Process = cast & forged
    and Head Type = flat plate
    and Shaft Form = plain tapering ¦ swelling shaft ¦ shouldered hipping
    then Type = Racquet_headed Or Lollipop_headed type LXXVI.
        subtype1 = unavailable.  \Only Temporary
    endif.

Loaf_headed type LXXVII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Manufacturing Process = cast
    and Head Type = knobbed
    and Basic Knobbed Head Form = baluster
    and Shaft Form = plain tapering ¦ swelling shaft ¦ shouldered hipping
    then Type = Loaf_headed type LXXVII.
        subtype1 = unavailable.  \Only Temporary
    endif.
Flixborough animal_headed type LXXVIII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Manufacturing Process = cast
    and Head Type = knobbed
    and Basic Knobbed Head Form # hot air balloon like
    and Zoomorphic Head = present
    and Zoomorphic Head Form # bird_head ¦ pig_head ¦ duck_head
    and Shaft Section Position One = round
    and Shaft Section Position Two = round
    and Shaft Form = plain tapering
    then Type = Flixborough animal_headed type LXXVIII.
```

```
        subtype1 = unavailable. \Only Temporary
    endif.
Globular_headed type LXXIX rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Treatment = gilt ¦ none
    and Head Type = knobbed
    and Basic Knobbed Head Form = globular
    and Head Decoration Type = filigree ¦ spirals ¦ other
    and Head Decoration Application Method = applied ¦ cast ¦ punched
    and Shaft Form = plain tapering
    then Type = Globular_headed type LXXIX.
    subtype1 = available.
    endif.
Ely spatulate lozenge-headed type LXXX rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Treatment = gilt ¦ none
    and Head Type = flat plate
    and Flat Plate Head Form = diamond
    then Type = Ely spatulate lozenge-headed type LXXX.
        subtype1 = available.
    endif.
Watch_winder type LXXXI rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Manufacturing Process = cast
    and Head Type = knobbed
    and Basic Knobbed Head Form = watch_winder
    and Collar Type = no_collars
    then Type = Watch_winder type LXXXI.
        subtype1 = unavailable. \Only Temporary
    endif.

Bramble_headed type LXXXII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy
    and Metal Manufacturing Process = cast
    and Head Type = knobbed
    and Basic Knobbed Head Form = bramble
    then Type = Bramble_headed type LXXXII.
        subtype1 = unavailable.
    endif.
Swing_ringed type LXXXIII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ silver
    and Metal Manufacturing Process = cast ¦ forged
    and Head Type = swing ringed
    then Type = Swing_ringed type LXXXIII.
    subtype1 = available.
    endif.

organic pin rule_1:
    if Degree Of Completeness # complete
    and Missing Elements = head
    and Metal Type = copper alloy
    and Headless Data = yes
    then Type = Organic Or Fixed.
        subtype1 = unavailable.
    endif.

Spangle_headed type VIII rule:
    if ident_rate = probable ¦ maybe
    and Metal Type = copper alloy ¦ iron
    and Metal Manufacturing Process = cast ¦ forged
```

```
      and Head Type = knobbed ¦ flat plate ¦ swivel ringed
      and Attachment Device = present
      and Length gt 85
      and Basic Knobbed Head Form # disc ¦ cruciform
¦ hot air balloon like ¦ conical ¦ hourglass ¦ watch_winder ¦ bramble ¦ barrel ¦
baluster ¦
upside_down trapezoid Or cone ¦ domed_cone ¦ globular
      and Spangles = present ¦ present now lost
      and Shaft Form = plain tapering
      then Type = Spangle_headed type VIII.
           subtype1 = unavailable.
\Only Temporarily.
      endif.


\Subtype Rules
facet_headed pins with shafts greater than_90_mm Subtype rule_1:
      if subtype2 = yes
      and Type = Facet_headed with Shafts greater than_90_mm IV
      and Facet Form = cuboid
     then Subtype = Facet_headed with Shafts greater than_90_mm IV i.
     variant1 = unavailable.
     endif.

facet_headed pins with shafts greater than_90_mm Subtype rule_2:
      if subtype2 = yes
      and Type = Facet_headed with Shafts greater than_90_mm IV
      and Facet Form = rectangular
     then Subtype = Facet_headed with Shafts greater than_90_mm IV ii.
     variant1 = unavailable.
     endif.

Multiple_knob_headed subtype rule_1:
      if subtype2 = yes
      and Type = Multiple_knob_headed type VII
      and Basic Knobbed Head Form = biconical
      and Second Knob Form = biconical
      then Subtype = Double biconical_headed subtype VII i.
        variant1 = unavailable.
      endif.

Multiple_knob_headed subtype rule_2:
      if subtype2 = yes
      and Type = Multiple_knob_headed type VII
      and Basic Knobbed Head Form = faceted
      and Facet Form = cuboid
      and Second Knob Form = faceted cuboid
      then Subtype = Double faceted_cuboid_headed subtype VII ii.
        variant1 = unavailable.
      endif.
Multiple_knob_headed subtype rule_3:
      if subtype2 = yes
      and Type = Multiple_knob_headed type VII
      and Basic Knobbed Head Form = biconical
      and Second Knob Form = faceted cuboid
      then Subtype = Biconical_headed subtype VII iii.
        variant1 = unavailable.
      endif.
\Spangle_headed subtype VIII i
\Spangle_headed subtype VIII ii
\Spangle_headed subtype VIII iii
\Spangle_headed subtype VIII iv
\Spangle_headed subtype VIII v
Curled_headed subtype XII rule_1:
      if subtype2 = yes
```

```
      and Type = Curled_headed type XII
      and Curves Away = no
      then Subtype = Curled_headed subtype XII i.
        variant1 = unavailable.
      endif.
Curled_headed subtype XII rule_2:
      if subtype2 = yes
      and Type = Curled_headed type XII
      and Curves Away = yes
      then Subtype = Curled_headed subtype XII ii.
        variant1 = unavailable.
      endif.
Flat_sheet expanded headed subtype XV rule_1:
      if subtype2 = yes
      and Type = Flat_sheet expanded headed type XV
      and Metal Manufacturing Process = folded Or rolled
      then Subtype = Flat_sheet expanded headed subtype XV i.
        variant1 = unavailable.
      endif.

Flat_sheet expanded headed subtype XV rule_2:
      if subtype2 = yes
      and Type = Flat_sheet expanded headed type XV
      and Metal Manufacturing Process = forged
      then Subtype = Flat_sheet expanded headed subtype XV ii.
        variant1 = unavailable.
      endif.

Short spatulated expanded headed subtype XVI rule_1:
      if subtype2 = yes
      and Type = Short spatulated expanded headed type XVI
      and Flat Plate Head Form = disc
      then Subtype = Short spatulated expanded headed subtype XVI i.
      variant1 = unavailable.
      endif.

Short spatulated expanded headed subtype XVI rule_2:
      if subtype2 = yes
      and Type = Short spatulated expanded headed type XVI
      and Flat Plate Head Form = spatulate plate
      then Subtype = Short spatulated expanded headed subtype XVI ii.
          variant1 = unavailable.
      endif.

Garnet set disc_headed Subtype LXI rule_1:
      if subtype2 = yes
      and Type = Garnet set disc_headed type LXI
      and Head Type = flat plate
      and  Flat Plate Head Form = disc
      then Subtype = Garnet set disc_headed subtype LXI i.
          variant1 = available.
      endif.
Garnet set disc_headed Subtype LXI rule_2:
      if subtype2 = yes
      and Type = Garnet set disc_headed type LXI
      and Head Type = knobbed
      and Basic Knobbed Head Form = spherical
      then Subtype = Garnet set disc_headed subtype LXI ii.
          variant1 = unavailable.
      endif.

Linked subtype LXIV rule_1:
      if subtype2 = yes
      and Type = Linked type LXIV
      and Metal Manufacturing Process = composite
```

```
      and Composite Elements = beaded wire ¦ garnets ¦ glass ¦ gold foil
      then Subtype = Composite Linked subtype LXIV i.
        variant1 = unavailable.
      endif.

Linked subtype LXIV rule_2:
      if subtype2 = yes
      and Type = Linked type LXIV
      and Metal Manufacturing Process = cast
      then Subtype = Cast Linked subtype LXIV ii.
        variant1 = unavailable.
      endif.
Spiral_headed subtype LXVI rule_1:
      if subtype2 = yes
      and Type = Spiral_headed type LXVI
      and Double Spiral Form = split with flat section ¦ split with D_section
      then Subtype = Spiral_headed subtype LXVI i.
          variant1 = available.
      endif.
Spiral_headed subtype LXVI rule_2:
      if subtype2 = yes
      and Type = Spiral_headed type LXVI
      and Metal Manufacturing Process = cast
      and Double Spiral Form = round sectioned ¦ round sectioned with triangular
plate below
      then Subtype = Spiral_headed subtype LXVI ii.
          variant1 = available.
      endif.
Spiral_headed subtype LXVI rule_3:
      if subtype2 = yes
      and Type = Spiral_headed type LXVI
      and Metal Manufacturing Process = folded Or rolled
      then Subtype = Spiral_headed subtype LXVI iii.
          variant1 = available.
      endif.
Biconical_headed subtype LXVIII rule_1:
      if subtype2 = yes
      and Type = Biconical_headed type LXVIII
      and Head Diameter le 4
      then Subtype = Small_biconical_headed subtype LXVIII i.
        variant1 = unavailable.
      endif.

Biconical_headed subtype LXVIII rule_2:
      if subtype2 = yes
      and Type = Biconical_headed type LXVIII
      and Head Diameter gt 4
      and Head Diameter lt 7
      then Subtype = Medium_biconical_headed subtype LXVIII ii.
        variant1 = unavailable.
      endif.
Biconical_headed subtype LXVIII rule_3:
      if subtype2 = yes
      and Type = Biconical_headed type LXVIII
      and Head Diameter ge 7
      then Subtype = Large_biconical_headed subtype LXVIII iii.
        variant1 = unavailable.
      endif.
Small_Inverted_pear_headed subtype LXIX i rule_1:
      if subtype2 = yes
      and Type = Inverted_pear_headed type LXIX
      and Head Diameter le 4
      then Subtype = Small_Inverted_pear_headed subtype LXIX i.
        variant1 = unavailable.
      endif.
```

```
Medium_Inverted_pear_headed  subtype LXIX ii rule_2:
     if subtype2 = yes
     and Type = Inverted_pear_headed  type LXIX
     and Head Diameter gt 4
     and Head Diameter lt 7
     then Subtype = Medium_Inverted_pear_headed  subtype LXIX ii.
       variant1 = unavailable.
     endif.
Large_Inverted_pear_headed  subtype LXIX iii rule_3:
     if subtype2 = yes
     and Type = Inverted_pear_headed  type LXIX
     and Head Diameter ge 7
     then Subtype = Large_Inverted_pear_headed  subtype LXIX iii.
       variant1 = unavailable.
     endif.
Shudy Camps Facet_headed subtype LXXII rule:
     if subtype2 = yes
     and Type = Facet_headed_shorter_than_85_mm  type LXXII
     and Facet Form = cuboid ¦ rectangular
     and Head Diameter lt 4
     then Subtype = Shudy Camps Facet_headed subtype LXXII i.
       variant1 = unavailable.
     endif.


Hamwic Facet_headed subtype LXXII rule:
     if subtype2 = yes
     and Type = Facet_headed_shorter_than_85_mm  type LXXII
     and Facet Form = cuboid ¦ rectangular
     and Head Diameter ge 4
     and Head Diameter lt 7
     then Subtype = Hamwic Facet_headed subtype LXXII ii.
       variant1 = unavailable.
     endif.
Coppergate Facet_headed subtype LXXII rule:
     if subtype2 = yes
     and Type = Facet_headed_shorter_than_85_mm  type LXXII
     and Facet Form = cuboid ¦ rectangular
     and Head Diameter ge 7
     then Subtype = Coppergate Facet_headed subtype LXXII iii.
       variant1 = unavailable.
     endif.
Hamwic Flattened_facet_headed  subtype LXXII rule:
     if subtype2 = yes
     and Type = Facet_headed_shorter_than_85_mm  type LXXII
     and Facet Form = flattened
     then Subtype = Hamwic Flattened_Facet_headed  subtype LXXII iv.
       variant1 = unavailable.
     endif.
Globular_headed  type LXXIX subtype rule_1:
     if subtype2 = yes
     and Type = Globular_headed  type LXXIX
     and Filigree Medial Band = present
     and Filigree Type = backwards S filigree
     then Subtype = Raised Setting globular_headed  subtype LXXIX i.
       variant1 = unavailable.
     endif.

Globular_headed  type LXXIX subtype rule_2:
     if subtype2 = yes
     and Type = Globular_headed  type LXXIX
     and Filigree Medial Band = present
     and Filigree Type = trefoil filigree
     then Subtype = Martelsham globular_headed  subtype LXXIX ii.
       variant1 = unavailable.
```

```
    endif.
Globular_headed type LXXIX subtype rule_3:
    if subtype2 = yes
    and Type = Globular_headed type LXXIX
    and Filigree Medial Band = present
    and Granule Ornament = present
    and Raised Discs = present
    then Subtype = London globular_headed subtype LXXIX iii.
      variant1 = unavailable.
    endif.

Globular_headed type LXXIX subtype rule_4:
    if subtype2 = yes
    and Type = Globular_headed type LXXIX
    and Filigree Medial Band = absent
    and Granule Ornament = present
    and Raised Discs = present
    then Subtype = Goathurst Common globular_headed subtype LXXIX iv.
      variant1 = unavailable.
    endif.

Globular_headed type LXXIX subtype rule_5:
    if subtype2 = yes
    and Type = Globular_headed type LXXIX
    and Filigree Type = foliate filigree
    and Applied Head Decoration Type = filigree & garnet set
    then Subtype = Sibton globular_headed subtype LXXIX v.
      variant1 = unavailable.
    endif.
Ely spatulate lozenge-headed subtype LXXX rule_1:
    if subtype2 = yes
    and Type = Ely spatulate lozenge-headed type LXXX
    and Finials = absent
    and Pierced = no
    then
    Subtype =
Ely spatulate lozenge-headed with angular terminals subtype LXXX i.
      variant1 = unavailable.
    endif.

Ely spatulate lozenge-headed subtype LXXX rule_2:
    if subtype2 = yes
    and Type = Ely spatulate lozenge-headed type LXXX
    and Finials = present
    and Pierced = no
    then
    Subtype =
Ely spatulate lozenge-headed with finials on the angles subtype LXXX ii.
      variant1 = unavailable.
    endif.

Ely spatulate lozenge-headed subtype LXXX rule_3:
    if subtype2 = yes
    and Type = Ely spatulate lozenge-headed type LXXX
    and Finials = present ¦ absent
    and Inlays = present
    then
    Subtype =
Ely spatulate lozenge-headed decorated by inlays subtype LXXX iii.
      variant1 = unavailable.
    endif.

Ely spatulate lozenge-headed subtype LXXX rule_4:
    if subtype2 = yes
    and Type = Ely spatulate lozenge-headed type LXXX
```

```
      and Finials = present ¦ absent
      and Pierced = yes
      then
      Subtype =
Ely spatulate lozenge-headed with pierced heads subtype LXXX iv.
        variant1 = unavailable.
      endif.

Ely spatulate lozenge-headed subtype LXXX rule_5:
      if subtype2 = yes
      and Type = Ely spatulate lozenge-headed type LXXX
      and  Finials = present ¦ absent
      and  Open_Work = yes
      then
      Subtype =
Ely spatulate lozenge-headed with an open_work head subtype LXXX v.
        variant1 = unavailable.
      endif.

Swing_ringed type LXXXIII subtype rule_1:
      if subtype2 = yes
      and Type = Swing_ringed type LXXXIII
      and Wire Ring Type = spiraled
      then Subtype = Spiral_ringed subtype.
        variant1 = unavailable.
      endif.
Swing_ringed type LXXXIII subtype rule_2:
      if subtype2 = yes
      and Type = Swing_ringed type LXXXIII
      and Swing Ring Knob Type = crutch knob
      then Subtype = Ringed_crutch_headed subtype.
        variant1 = unavailable.
      endif.
Swing_ringed type LXXXIII subtype rule_3:
      if subtype2 = yes
      and Type = Swing_ringed type LXXXIII
      and Swing Ring Knob Type = faceted knob
      then Subtype = Polyhedral_headed subtype.
        variant1 = unavailable.
      endif.
Swing_ringed type LXXXIII subtype rule_4:
      if subtype2 = yes
      and Type = Swing_ringed type LXXXIII
      and Swing Ring Knob Type = looped terminal
      then Subtype = Loop_headed_plain_ringed subtype.
        variant1 = unavailable.
      endif.

Swing_ringed type LXXXIII subtype rule_5:
      if subtype2 = yes
      and Type = Swing_ringed type LXXXIII
      and Swing Ring Knob Type = baluster knob
      then Subtype = Baluster_headed subtype.
        variant1 = unavailable.
      endif.
\Variants
   Garnet set disc_headed Variant LXI rule_1:
     if Subtype = Garnet set disc_headed subtype LXI i
     and variant2 = yes
     and Composite Elements # beaded wire
     then Variant = Garnet set disc_headed variant LXI i a.
     endif.

   Garnet set disc_headed Variant LXI rule_2:
     if Subtype = Garnet set disc_headed subtype LXI i
```

```
    and variant2 = yes
    and Composite Elements = beaded wire
    then Variant = Garnet set disc_headed variant LXI i b.
    endif.

Spiral_headed Variant LXVI_i_a rule_1:
    if Subtype = Spiral_headed subtype LXVI i
    and variant2 = yes
    and Double Spiral Form = split with flat section
    then Variant = Spiral_headed variant LXVI i a.
    endif.

Spiral_headed Variant LXVI_i_a rule_2:
    if Subtype = Spiral_headed subtype LXVI i
    and variant2 = yes
    and Double Spiral Form = split with D_section
    then Variant = Spiral_headed variant LXVI i b.
    endif.
Spiral_headed Variant LXVI_ii_a rule_2:
    if  Subtype = Spiral_headed subtype LXVI ii
    and  variant2 = yes
    and Double Spiral Form = round sectioned
    then Variant = Spiral_headed variant LXVI ii a.
    endif.
Spiral_headed Variant LXVI rule_2b:
    if Subtype = Spiral_headed subtype LXVI ii
    and variant2 = yes
    and Double Spiral Form = round sectioned with triangular plate below
    then Variant = Spiral_headed variant LXVI ii b.
    endif.
%
demons:
organic exclusion demon_1:
     when Organic Messa = provide
         then message
         "This system does not support the identification of",
         "pins made from Organic Materials".
     endwhen.
Spiral Headed Pin Demon:
     when Basic Other Head Form = single curled terminal
       then Single Or Double Curl = single spiral.
     endwhen.
\Identification Support Demons
Zoomorphic Bird Demon:
    when Flat Plate Head Form = bird_headed
    then
        Zoomorphic Head = present.
        Zoomorphic Head Form = bird_head.
    endwhen.
\Head Plate Clarification Demon I:
 \   when Head Type = flat plate
  \  then if Flat Plate Head Form = disc
   \ then Basic Knobbed Head Form = disc.
    \ else Basic Knobbed Head Form = not applicable.
    \endif.
    \endwhen.
Head Plate Clarification Demon II:
     when Head Type = knobbed
     then if
    Basic Knobbed Head Form = cruciform
     then Flat Plate Head Form = cruciform.
     endif.
     endwhen.
Head Plate Clarification Demon III:
    when Head Type = knobbed ¦ swivel ringed
```

```
    then if Basic Knobbed Head Form = disc
    then Flat Plate Head Form = disc.
    endif.
    endwhen.

\ Finish Demons
Stop Demon:
     when status(Type) = known
        then if subtype1 = unavailable
           then
             subtype2 = no.
             run clean screen.
              message " ", banner.
              message " ", combine ("This pin is of ", Type, ".").
              message " ", banner.
             message hold.
             break.
             menu choosen = one.
         endif.
         endwhen.
Stop1 Demon:
     when status (Type) = known
     then if subtype1 = available
       then run clean screen.
        message " ",
        combine (" ", "This pin is Type: ", Type).
         message " ", "The system will now identify any subtypes".
         message " ", " ", banner.
         message hold.
         break.
         subtype2 = yes.
          obtain Subtype.
              endif.
          endwhen.

Stop2 Demon:
     when status(Subtype) = known
     then if variant1 = unavailable
          then run clean screen.
     message success.
        message "There is no information available about variants.".
     message " ",
     combine (" ", "This pin is Type: ", Type).
     message " ",
     combine (" ", "The Subtype is: ", Subtype).
     message " ", success.
     message hold.
     break.
     menu choosen = two.
     endif.
    endwhen.
Stop2a Demon:
     when status(Subtype) = known
     then if variant1 = available
          then
     run clean screen.
     message " ",
     combine (" ", "This pin is Type: ", Type).
     message " ",
     combine (" ", "The Subtype is: ", Subtype).
     message " ", success.
     message hold.
     break.
               variant2 = yes.
               obtain Variant.
```

```
            endif.
     if status(Variant) = known
    then
     run clean screen.
     message success.
     message " ",
     combine (" ", "This pin is Type: ", Type).
     message " ",
     combine (" ", "The Subtype is: ", Subtype).
     message " ",
     combine (" ", "This Pin belongs to variant: ", Variant).
     message " ", success.
     message " ", " ", " ".
     message hold.
     break.
     menu choosen = three.
      else if status(Variant) = unknown
         then erase variant1.
         variant1 = unavailable.
         menu choosen = two.
         endif.
     endif.
     endwhen.

Quit Demon:
when Menu = Quit
       then stop.
endwhen.
\Message Demons
sphermessa demon:
when sphermessa = Display
       then message
       "This group includes numerous variants.  These can be differentiated",
       "by examination of the collar and the shaft form.".
       endwhen.
spiralmessa demon:
when Spiral Direction = outward
       then message
       "This pin type does not belong to the corpus of Anglo-Saxon material.".
       endwhen.

Do nothing demon_1:
when Menu = Identify a Pin And Collect Data
then erase Menu.
      askfor Menu.
      endwhen.

Do nothing demon_2:

when Menu = Load Earlier Case Data
then erase Menu.
      askfor Menu.
      endwhen.

Do nothing demon_3:

when Menu = Collect Data Only
then erase Menu.
      askfor Menu.
      endwhen.
\Collect Data Demons
Data Availability Demon:
when  Menu = Identify a Pin And Collect Data ¦ Collect Data Only
then CDO = first.
askfor findlocation.
```

```
askfor Degree Of Completeness.
      if Degree Of Completeness # complete
      then askfor Missing Elements.
            if Missing Elements = head
            then askfor Headless Data.
                  if Headless Data = yes
                  then Type = Organic Or Fixed.
      endif.
            endif.
                  endif.
askfor Set Character.
      if Set Character = part Of a set
      then askfor Pair Survival.
      endif.
askfor Material.
askfor Measurements.
endwhen.
Find Location Known Demon:
when findlocation = yes
     and CDO = first
then   askfor Site.
       askfor Site Location.
       askfor National Grid Reference.
       askfor Museum.
       askfor Accession.
       askfor Site Layer.
       askfor Grave.
endwhen.
Findlocation not Known demon:
when findlocation = no
     and CDO = first
then   askfor Museum.
       askfor Accession.
         Site = unknown.
         Site Location = unknown.
         Site Layer = unknown.
         Grave = unknown.
         Grave Identifier = unknown.
         Grave Details = unknown.
         Age = unknown.
         Sex = unknown.
         Position = unknown.
endwhen.

Metal demon:
when  Material = metal
     and CDO = first
then askfor Metal Type.
     askfor Compositional Data Availability.
       if Compositional Data Availability = available
       then askfor Compositional Data.
            askfor Compositional Data Source.
       endif.
     askfor Composite Structure Status.
       if Composite Structure Status = yes
       then askfor Composite Elements.
       endif.
   askfor Metal Manufacturing Process.
       if Metal Manufacturing Process = strip drawn
       then askfor Strip Drawn Evidence.
       endif.
if Metal Manufacturing Process = forged
       then askfor Hammer Mark Location.
       endif.
       askfor Secondary Working Evidence.
```

```
endwhen.
Burial demon1:
when Grave = yes
     and CDO = first
then    askfor Grave Details.
        askfor Age.
        askfor Sex.
        askfor Position.
        askfor Other Finds.
        askfor Associated Finds.
endwhen.
Dating Demon:
when Dating Evidence = available ¦ supposition possible
     and CDO = first
then askfor Associated Finds Date.
        askfor Contextual Date.
        askfor Comparative Date.
        askfor Probable Date.
endwhen.
Measurement Demon:
when Measurements = taken
     and CDO = first
then
     if determined (Head Diameter) = false
     then askfor Head Diameter.
     endif.
     if determined (Head Thickness) = false
     then askfor Head Thickness.
     endif.
       askfor Shaft Diameter1.
       askfor Shaft Diameter2.
       askfor Shaft Diameter3.
    if determined (Length) = false
    then askfor Length.
    endif.
endwhen.

Decoration Demon:
     when Decoration = present
         and CDO = first
     then askfor Decoration Location.
     endwhen.
Head Decoration Demon:
     when Decoration Location = head
         and CDO = first
     then askfor Head Decoration Type.
              askfor Head Decoration Application Method.
              if Head Decoration Type = ring And dot ¦ ring ¦ dot
              then askfor Ring And Dot Type.
              endif.
     endwhen.

Collar Decoration Demon:
     when Decoration Location = collar
         and CDO = first
     then askfor Collar Decoration Type.
     endwhen.
Shaft Decoration Demon:
     when Decoration Location = shaft
         and CDO = first
       then askfor Shaft Decoration Type.
              if Shaft Decoration Type = linear
              then askfor Shaft Decoration Line Configuration.
              endif.
endwhen.
```

```
Structural Attributes Demon:
     when status (Degree Of Completeness) = known
          and CDO = first
     then askfor Head Type.
          askfor Additional Head Refinement Data.
          askfor Top Of Head Form.
          askfor Supra Head Structure.
            if Supra Head Structure = attachment plate
                    or Attachment Device = present
               then askfor Attachment Process.
         askfor Chain.
         askfor Wire Ring Type.
        endif.
     askfor Shaft Form.
     askfor Shaft Section Position One.
     askfor Shaft Section Position Two.
     if Basic Knobbed Head Form = conical ¦ biconical ¦ globular
     then askfor Side Of Head Form.
     endif.
     askfor Collar Type.
 endwhen.
 Demon Menu Choosen_1:
     when menu choosen = one
     then askfor Type Known Menu.
     while Type Known Menu # show nothing do
       if Type Known Menu = show comments
       then
        Data Display = show comments.
        message hold.
        break.
       endif.

       if Type Known Menu = show parallels
       then
         Data Display = show parallels.
         message hold.
         break.
       endif.

       if Type Known Menu = show confusion
       then
         justify Type.
         message hold.
         break.
       endif.
     erase Type Known Menu.
     askfor Type Known Menu.
     endwhile.
     erase menu choosen.
     endwhen.

Demon Menu Choosen_2:
     when menu choosen = two

     then askfor Subtype Known Menu.
      while Subtype Known Menu # show subtype nothing do
       if Subtype Known Menu = show subtype comments
       then
         Data Display = show comments.
         message hold.
         break.
       endif.
       if Subtype Known Menu = show subtype parallels
         then
             Data Display = show parallels.
```

```
            message hold.
            break.
        endif.

        if Subtype Known Menu = show subtype confusion
        then
          justify Type.
          justify Subtype.
          message hold.
          break.
        endif.
      erase Subtype Known Menu.
      askfor Subtype Known Menu.
     endwhile.
     erase menu choosen.
    endwhen.

Demon Menu Choosen_3:
     when menu choosen = three
     then askfor Variant Known Menu.
      while Variant Known Menu # show variant nothing do
        if Variant Known Menu = show variant comments
        then
          Data Display = show comments.
          message hold.
          break.
        endif.
        if Variant Known Menu = show variant parallels
          then
              Data Display = show parallels.
              message hold.
              break.
        endif.

        if Variant Known Menu = show variant confusion
        then
          justify Type.
          justify Subtype.
          justify Variant.
          message hold.
          break.
        endif.
      erase Variant Known Menu.
      askfor Variant Known Menu.
     endwhile.
     erase menu choosen.
    endwhen.
Display Data Demon:
      when Data Display = show comments
then if Type = Organic Or Fixed
then run c1.
endif.
if Type = Type Muids III
then run c3.
endif.
if Type = Facet_headed with Shafts greater than_90_mm IV
then run c4.
endif.
if Type = Biconical_headed pins with shafts over_100_mm  V
then run c5.
endif.
if Type = Chessell Down mushroom_headed type VI
then run c6.
endif.
if Type = Multiple_knob_headed type VII
```

```
then run c7.
endif.
if Type = Spangle_headed type VIII
then run c8.
endif.
if Type = Kempston type IX
then run c9.
endif.
if Type =  Oar_headed type X
then run c10.
endif.
if Type = Morning Thorpe holed_rod type XI
then run c11.
endif.
if Type = Curled_headed type XII
then run c12.
endif.
if Type = Morning Thorpe Spherical_headed type XIII
then run c13.
endif.
if Type = Flat_ring_headed fillet collar Type XIV
then run c14.
endif.
if Type = Flat_sheet expanded headed type XV
then run c15.
message hold.
break.
endif.
if Subtype = Flat_sheet expanded headed subtype XV i
then run ca15.
endif.
if Subtype = Flat_sheet expanded headed subtype XV ii
then run cb15.
endif.
if Type = Short spatulated expanded headed type XVI
then run c16.
endif.
if Type = Hook_headed type XVII
then run c17.
endif.
if Type = Loop_headed type XVIX
then run c18.
endif.
if Type = Crook_headed type XVIX
then run c19.
endif.
if Type = Sleaford type XX
then run c20.
endif.
if Type = Forged_headed type XXI
then run c21.
endif.
if Type = Barrel cylinder_headed type XXII
then run c22.
endif.
if Type = Hourglass_headed type XXIII
then run c23.
endif.
if Type = Faversham bird_headed type XXXII
then run c24.
endif.
if Type = Holywell Row type XXXIII
then run c25.
endif.
if Type = Plated knob_headed type XXXIV
```

```
then run c26.
endif.
if Type = Knob_above_eyelet_headed type XXXV
then run c27.
endif.
if Type = Bifrons bird_headed type XXXVI
then run c28.
endif.
if Type = Moulded bird_headed type XXXVII
then run c29.
endif.
if Type = Thistle_headed type XXXVIII
then run c30.
endif.
if Type = Flat Plate Animal headed type XXXIX
then run c31.
endif.
if Type = Lyre_headed type XL
then run c32.
endif.
if Type = Dover bird_headed type XLI
then run c33.
endif.
if Type = Muffin_headed type XLIX
then run c34.
endif.
if Type = Kingston disc_headed type L
then run c35.
endif.
if Type = Pierced disc_headed type LI
then run c36.
endif.
if Type = Superior looped_disc_headed type LII
then run c37.
endif.
if Type = Superior looped_elliptical_headed type LIII
then run c38.
endif.
if Type = Applied disc_headed type LIV
then run c39.
endif.
if Type = Amethyst_bead_headed type LV
then run c40.
endif.
if Type = Castle Dyke wedge_headed type LVI
then run c41.
endif.
if Type = Sibertswold bird_headed type LVII
then run c42.
endif.
if Type = Cross_headed type LVIII
then run c43.
endif.
if Type = Composite_Cruciform type LIX
then run c44.
endif.
if Type = Wingham type LX
then run c45.
endif.
if Type = Garnet set disc_headed type LXI
then run c46.
endif.
if Type = Wicken Bonhunt triangular_plate_headed type LXII
then run c47.
endif.
```

```
if Type = Evesham type LXIII
then run c48.
endif.
if Type = Linked type LXIV
then run c49.
message hold.
break.
endif.
if Subtype = Composite Linked subtype LXIV i
then run ca49.
endif.
if Subtype = Cast Linked subtype LXIV ii
then run cb49.
endif.
if Type = Anthropomorphic_headed bird_terminated type LXV
then run c50.
endif.
if Type = Spiral_headed type LXVI
then run c52.
endif.
if Type = Globular zoomorphic_headed type LXVII
then run c53.
endif.
if Type = Biconical_headed type LXVIII
then run c54.
message hold.
break.
endif.
if Subtype = Small_biconical_headed subtype LXVIII i
then run ca54.
endif.
if Subtype = Medium_biconical_headed subtype LXVIII ii
then run cb54.
endif.
if Subtype = Large_biconical_headed subtype LXVIII iii
then run cb54.
endif.
if Type = Inverted_pear_headed type LXIX
then run c55.
endif.
if Type = Ball Or Spherical_headed type LXX
then run c56.
endif.
if Type = Domed_cone_headed type LXXI
then run c57.
endif.
if Type = Facet_headed_shorter_than_85_mm type LXXII
then run c58.
message hold.
break.
endif.
if Subtype = Shudy Camps Facet_headed subtype LXXII i
then run ca58.
endif.
if Subtype = Hamwic Facet_headed subtype LXXII ii
then run cb58.
endif.
if Subtype = Coppergate Facet_headed subtype LXXII iii
then run cc58.
endif.
if Subtype = Hamwic Flattened_Facet_headed subtype LXXII iv
then run cd58.
endif.
if Type = Flat zoomorphic_headed type LXXIII
then run c59.
```

```
endif.
if Type = Witham disc_headed type LXXIV
then run c60.
message hold.
break.
endif.
if Subtype = Witham disc_headed subtype LXXIV i
then run ca60.
endif.
if Subtype = Witham disc_headed subtype LXXIV ii
then run cb60.
endif.
if Type = Conical Or Trapezoid_headed type LXXV
then run c61.
endif.
if Type = Racquet_headed Or Lollipop_headed type LXXVI
then run c62.
endif.
if Type = Loaf_headed type LXXVII
then run c63.
endif.
if Type = Flixborough animal_headed type LXXVIII
then run c64.
endif.
if Type = Globular_headed type LXXIX
then run c65.
endif.
if Type = Ely spatulate lozenge-headed type LXXX
then run c66.
endif.
if Type = Watch_winder type LXXXI
then run c67.
endif.
if Type = Bramble_headed type LXXXII
then run c68.
endif.
if Type = Swing_ringed type LXXXIII
then run c69.
message hold.
break.
endif.
if Subtype = Spiral_ringed subtype
then run ca69.
endif.
if Subtype = Ringed_crutch_headed subtype
then run cb69.
endif.
if Subtype = Polyhedral_headed subtype
then run cc69.
endif.
if Subtype = Loop_headed_plain_ringed subtype
then run cd69.
endif.
if Subtype = Baluster_headed subtype
then run ce69.
endif.
erase Data Display.
endwhen.
Display_2 Data Demon:
     when Data Display = show parallels
then if Type = Organic Or Fixed
then run h1.
endif.
if Type = Type Muids III
then run h3.
```

```
endif.
if Type = Facet_headed with Shafts greater than_90_mm IV
then run h4a.
message hold.
break.
run h4b.
endif.
if Type = Biconical_headed pins with shafts over_100_mm  V
then run h5.
endif.
if Type = Chessell Down mushroom_headed type VI
then run h6.
endif.
\if Type = Multiple_knob_headed type VII
\then run h7.
\endif.
if Subtype = Double biconical_headed subtype VII i
then run h7a.
endif.
if Subtype = Double faceted_cuboid_headed subtype VII ii
then run h7b.
endif.
if Subtype = Biconical_headed subtype VII iii
then run h7c.
endif.
\Spangle_headed subtype VIII i
\Spangle_headed subtype VIII ii
\Spangle_headed subtype VIII iii
\Spangle_headed subtype VIII iv
\Spangle_headed subtype VIII v
if Type = Spangle_headed type VIII
then run h8a.
message hold.
break.
     run h8b.
message hold.
break.
     run h8c.
message hold.
break.
     run h8c.
message hold.
break.
     run h8e.
message hold.
break.
endif.
if Type = Kempston type IX
then run h9.
endif.
if Type =  Oar_headed type X
then run h10.
endif.
if Type = Morning Thorpe holed_rod type XI
then run h11.
endif.
\if Type = Curled_headed type XII
\then run h12.
\endif.
if Subtype = Curled_headed subtype XII i
then run h12a.
endif.
if Subtype = Curled_headed subtype XII ii
then run h12b. \variant 2a
message hold.
```

```
break.
     run h12c. \variant 2b
message hold.
break.
endif.
if Type = Morning Thorpe Spherical_headed type XIII
then run h13.
endif.
if Type = Flat_ring_headed fillet collar Type XIV
then run h14.
endif.
\if Type = Flat_sheet expanded headed type XV
\then run h15.
\endif.
if Subtype = Flat_sheet expanded headed subtype XV i
then run h15a.
endif.
if Subtype = Flat_sheet expanded headed subtype XV ii
then run h15b.
endif.
if Subtype = Short spatulated expanded headed subtype XVI i
then run h16a.
endif.
if Subtype = Short spatulated expanded headed subtype XVI ii
 then run h16b.
endif.
if Type = Hook_headed type XVII
then run h17.
endif.
if Type = Loop_headed type XVIX
then run h18.
endif.
if Type = Crook_headed type XVIX
then run h19.
endif.
if Type = Sleaford type XX
then run h20.
endif.
if Type = Forged_headed type XXI
then run h21.
endif.
if Type = Barrel cylinder_headed type XXII
then run h22.
endif.
if Type = Hourglass_headed type XXIII
then run h23.
endif.
if Type = Faversham bird_headed type XXXII
then run h24.
endif.
if Type = Holywell Row type XXXIII
then run h25.
endif.
if Type = Plated knob_headed type XXXIV
then run h26.
endif.
if Type = Knob_above_eyelet_headed type XXXV
then run h27a.
message hold.
break.
     run h27b.
message hold.
break.
     run h27c.
message hold.
```

```
break.
     run h27d.
message hold.
break.
endif.
if Type = Bifrons bird_headed type XXXVI
then run h28.
endif.
if Type = Moulded bird_headed type XXXVII
then run h29.
endif.
if Type = Thistle_headed type XXXVIII
then run h30.
endif.
if Type = Flat Plate Animal headed type XXXIX
then run h31.
endif.
if Type = Lyre_headed type XL
then run h32.
endif.
if Type = Dover bird_headed type XLI
then run h33.
endif.
if Type = Muffin_headed type XLIX
then run h34.
endif.
if Type = Kingston disc_headed type L
then run h35a.
message hold.
break.
     run h35b.
message hold.
break.
     run h35c.
message hold.
break.
     run h35d.
message hold.
break.
endif.
if Type = Pierced disc_headed type LI
then run h36.
endif.
if Type = Superior looped_disc_headed type LII
then run h37.
endif.
if Type = Superior looped_elliptical_headed type LIII
then run h38.
endif.
if Type = Applied disc_headed type LIV
then run h39.
endif.
if Type = Amethyst_bead_headed type LV
then run h40.
endif.
if Type = Castle Dyke wedge_headed type LVI
then run h41.
endif.
if Type = Sibertswold bird_headed type LVII
then run h42.
endif.
if Type = Cross_headed type LVIII
then run h43.
endif.
if Type = Composite_Cruciform type LIX
```

```
then run h44.
endif.
if Type = Wingham type LX
then run h45.
endif.
if Type = Garnet set disc_headed type LXI
then run h46.
endif.
if Type = Wicken Bonhunt triangular_plate_headed type LXII
then run h47.
endif.
if Type = Evesham type LXIII
then run h48.
endif.
if Type = Linked type LXIV
then run h49.
endif.
if Subtype = Composite Linked subtype LXIV i
then run h49a.
endif.
if Subtype = Cast Linked subtype LXIV ii
then run h49b.
endif.
if Type = Anthropomorphic_headed bird_terminated type LXV
then run h50.
endif.
if Variant = Spiral_headed variant LXVI i a
then run h52a.
endif.
if Variant = Spiral_headed variant LXVI i b
then run h52b.
endif.
if Variant = Spiral_headed variant LXVI ii a
then run h52c.
endif.
if Variant = Spiral_headed variant LXVI ii b
then run h52d.
endif.
if Subtype = Spiral_headed subtype LXVI iii
then run h52e.
endif.
if Type = Globular zoomorphic_headed type LXVII
then run h53.
endif.
\if Type = Biconical_headed type LXVIII
\then run h54.
\endif.
if Subtype = Small_biconical_headed subtype LXVIII i
then run h54a.
endif.
if Subtype = Medium_biconical_headed subtype LXVIII ii
then run h54b.
endif.
if Subtype = Large_biconical_headed subtype LXVIII iii
then run h54c.
endif.
\if Type = Inverted_pear_headed type LXIX
\then run h55.
\endif.
if Subtype = Small_Inverted_pear_headed subtype LXIX i
then run h55a.
endif.
if Subtype = Medium_Inverted_pear_headed subtype LXIX ii
then run h55b.
endif.
```

```
if Subtype = Large_Inverted_pear_headed  subtype LXIX iii
then run h55c.
endif.
if Type = Ball Or Spherical_headed  type LXX
then run h56a.
message hold.
break.
     run h56b.
message hold.
break.
     run h56c.
message hold.
break.
endif.
if Type = Domed_cone_headed  type LXXI
then run h57.
endif.
\if Type = Facet_headed_shorter_than_85_mm  type LXXII
\then run h58.
\message hold.
\break.
\endif.
if Subtype = Shudy Camps Facet_headed subtype LXXII i
then run h58a.
endif.
if Subtype = Hamwic Facet_headed subtype LXXII ii
then run h58b.
endif.
if Subtype = Coppergate Facet_headed subtype LXXII iii
then run h58c.
endif.
if Subtype = Hamwic Flattened_Facet_headed  subtype LXXII iv
then run h58d.
endif.
if Type = Flat zoomorphic_headed  type LXXIII
then run h59.
endif.
if Type = Witham disc_headed type LXXIV
then run h60.
endif.
if Type = Conical Or Trapezoid_headed  type LXXV
then run h61.
endif.
if Type = Racquet_headed Or Lollipop_headed type LXXVI
then run h62.
endif.
if Type = Loaf_headed  type LXXVII
then run h63.
endif.
if Type = Flixborough animal_headed type LXXVIII
then run h64.
endif.
\if Type = Globular_headed  type LXXIX
\then run h65.
\endif.
if Subtype = Raised Setting globular_headed  subtype LXXIX i
then run h65a.
endif.
if Subtype = Martelsham globular_headed  subtype LXXIX ii
then run h65b.
endif.
if Subtype = London globular_headed  subtype LXXIX iii
then run h65c.
endif.
if Subtype = Goathurst Common globular_headed  subtype LXXIX iv
```

```
then run h65d.
endif.
if Subtype = Sibton globular_headed subtype LXXIX v
then run h65e.
endif.
if Type = Ely spatulate lozenge-headed type LXXX
then run h66.
endif.
if Type = Watch_winder type LXXXI
then run h67.
endif.
if Type = Bramble_headed type LXXXII
then run h68.
endif.
if Type = Swing_ringed type LXXXIII
and status(Subtype) = unknown
then run h69.
endif.
if Subtype = Spiral_ringed subtype
then run h69a.
endif.
if Subtype = Ringed_crutch_headed subtype
then run h69b.
endif.
if Subtype = Polyhedral_headed subtype
then run h69c.
endif.
if Subtype = Loop_headed_plain_ringed subtype
then run h69d.
endif.
if Subtype = Baluster_headed subtype
then run h69e.
endif.
erase Data Display.
endwhen.
%
actions:

run clean screen.
display attach name of kb.
break.
run clean screen.
askfor Certification.
if Certification = yes
   then message " ", " ", " ", " ", " ".
   display attach certification of kb.
   message " ", " ", " ", " ".
   break.
   run clean screen.
   askfor Purpose.
   if Purpose = true
       then message " ", " ", " ", " ", " ".
         display attach purpose of kb.
         message " ", " ", " ", " ", " ".
         break.
         run clean screen.
       endif.
  endif.
while Menu # Quit do
        obtain Type.
      if status (Type) = unknown

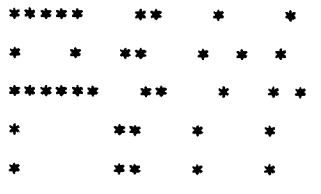
\      then message file = "pin.txt", Site, Site Location, Museum,
\      Accession, Site Layer, Grave, Age, Sex, Position, Other Finds.
\      break.
```

```
    then message " ",
        "The pin you have described is not known",
        "by this expert system, at present.  You ",
        "should contact your expert and increase",
        "my scope of expertise in case a similar",
        "pin should be recovered again.  If you are ",
        "confident of the context of the pin and",
        "have strong evidence that it is not residual",
        "you might want to update my database yourself. If",
        "you would like to append my Knowledge Base ",
        "please select 'Yes' when the",
        "'Update' menu appears.  Please, be sure",
        "to answer the questions precisely.",
        " ".
        message hold.
        break.
         message "This data has been stored in a file".
         endif.
        unprotect Menu.
        erase Menu.
        run clean screen.
        askfor Menu.
        if Menu = Identify a Pin Only
        then protect Menu.
        nextcase.
        endif.
endwhile.
stop.
%
```

# Appendix 2 (Part II)

# Sample Identification Sessions

## Session I



Pin Identification and Data Collection Assistant

This Expert System is designed to assist in the identification of and the collection of data about Anglo–Saxon Pins.

Ready for command: c

---

Would you like to see the certification of the Knowledge Base?
1. yes
2. no
=? 1

**********

This Knowledge Base (KB) is a prototype for a full implementation of a production pin identification expert system. Such a system will make it possible for archaeologists recovering pins to identify them quickly and efficiently, locate parallels, and determine whether the pin is hitherto unknown. If the latter is the case they will be able to update the knowledge base to contain the new information.

**********

Ready for command: c

---

Do you wish to have the purpose of the Knowledge Base

displayed?
1. true
2. false
=? 1

**********

This KB is based upon the examination of pins recovered from 'Anglo–Saxon Contexts'. The work was carried out as part of post–graduate work at the Institute of Archaeology, Oxford.

**********

Ready for command: c

---

Please select one of the following options:
1. Identify a Pin Only
2. Identify a Pin And Collect Data
3. Load Earlier Case Data
4. Collect Data Only
5. Quit
=? 1

---

How complete is this pin?

---

1. complete
2. more than seventy five percent complete
3. more than fifty percent complete
4. less than fifty percent complete
=? 1

---

What type of metal is the pin made from? (e)

---

1. Copper Alloy
2. Iron
3. Silver
4. Gold
=? 3

What type of treat did the metal receive?

1. gilt
2. silvered
3. tinned
4. enameled
5. none

(Multiple answers allowed)
=? 5

Examining the pin which process involved in manufacturing the pin (the primary process only)?

1. cast
2. composite
3. forged or hammered
4. folded Or rolled
5. strip drawn
6. undetermined
7. undeterminable

(Multiple answers allowed)
=? 1

What type of head does this pin have?

1. Knob head (e)
2. Flat plate head (e)
3. Ring passes through head (e)
4. Ring attached to head swings back and forth
5. Select this option if the head is another form, say moulded

=? 5

Which term best describes the primary geometric shape of the head?

1. single curled terminal
2. double curled
3. bent wire
4. Knob above eyelet

=? 2

In which direction do the spirals turn
  1. inward
  2. outward
=? 1

This pin is Type: Spiral_headed type LXVI <1.00>

The system will now identify any subtypes

**********
Enter 'c' followed by return to continue

Ready for command: c

What type of curled terminals does this pin have?
  1. split with flat section
  2. split with D_section
  3. round sectioned with triangular plate below
  4. round sectioned
=? 3

This pin is Type: Spiral_headed type LXVI <1.00>

The Subtype is: Spiral_headed subtype LXVI ii <1.00>

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Enter 'c' followed by return to continue

Ready for command: c
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

This pin is Type: Spiral_headed type LXVI <1.00>

The Subtype is: Spiral_headed subtype LXVI ii <1.00>

This Pin belongs to variant: Spiral_headed variant LXVI ii b <1.00>

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Enter 'c' followed by return to continue

Ready for command: c

Which of the following would you like to see:
  1. View Comments about this VARIANT of pin.
  2. Show Parallels.
  3. Justify the Identification.

```
  4. Return to main menu
=? 3


Type = Spiral_headed type LXVI <1.00>

Reasons for belief:
  rule: Spiral_headed type LXVI rule



Would you like to see the supporting knowledge sources and demons? (y/n) y


Name: Spiral_headed type LXVI rule
Kind of entity: Production Rule

     if ident_rate = probable ¦ maybe
     and Metal Type = copper alloy ¦ silver
     and Head Type = other
     and Basic Other Head Form = double curled
     and Spiral Direction = inward
     then Type = Spiral_headed type LXVI.
          subtype1 = available.
     endif.


Subtype = Spiral_headed subtype LXVI ii <1.00>

Reasons for belief:
  rule: Spiral_headed subtype LXVI rule_2



Would you like to see the supporting knowledge sources and demons? (y/n) y


Name: Spiral_headed subtype LXVI rule_2
Kind of entity: Production Rule

     if subtype2 = yes
     and Type = Spiral_headed type LXVI
     and Metal Manufacturing Process = cast
     and Double Spiral Form = round sectioned ¦ round sectioned with
triangular
plate below
     then Subtype = Spiral_headed subtype LXVI ii.
          variant1 = available.
     endif.


Variant = Spiral_headed variant LXVI ii b <1.00>

Reasons for belief:
  rule: Spiral_headed Variant LXVI rule_2b



Would you like to see the supporting knowledge sources and demons? (y/n) y
```

Name: Spiral_headed Variant LXVI rule_2b
Kind of entity: Production Rule

if Subtype = Spiral_headed subtype LXVI ii
and variant2 = yes
and Double Spiral Form = round sectioned with triangular plate below
then Variant = Spiral_headed variant LXVI ii b.
endif.

Enter 'c' followed by return to continue

Ready for command: c

---

Which of the following would you like to see:
1. View Comments about this VARIANT of pin.
2. Show Parallels.
3. Justify the Identification.
4. Return to main menu

=? s

# Session II

```
*****   **   *    *
*   *   **   * *  *
******  **   *  * *
*       **   *   *
*       **   *   *
```

Pin Identification and Data Collection Assistant

This Expert System is designed to assist in the identification of

and the collection of data about Anglo-Saxon Pins.

Ready for command: c

---

Would you like to see the certification of the Knowledge Base?
1. yes
2. no
=? 2

---

Please select one of the following options:
1. Identify a Pin Only
2. Identify a Pin And Collect Data
3. Load Earlier Case Data
4. Collect Data Only
5. Quit
=? 1

---

How complete is this pin?

---

1. complete
2. more than seventy five percent complete
3. more than fifty percent complete
4. less than fifty percent complete
=? 1

---

What type of metal is the pin made from? (e)

---

1. Copper Alloy
2. Iron
3. Silver
4. Gold
=? 2

---

Examining the pin which process involved in manufacturing the pin (the primary process only)?

1. cast
2. composite
3. forged or hammered
4. folded Or rolled
5. strip drawn
6. undetermined
7. undeterminable

(Multiple answers allowed)
=? 3

What type of head does this pin have?

1. Knob head (e)
2. Flat plate head (e)
3. Ring passes through head (e)
4. Ring attached to head swings back and forth
5. Select this option if the head is another form, say moulded

=? 5

Which term best describes the primary geometric shape of the head?

1. single curled terminal
2. double curled
3. bent wire
4. Knob above eyelet

=? 1

This pin is Type: Curled_headed type XII <1.00>

The system will now identify any subtypes

**********

Enter 'c' followed by return to continue

Ready for command: c

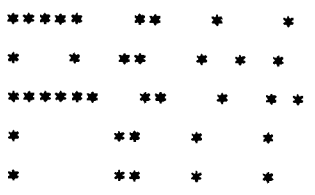
Does the head curve away before the curled terminal begins?

1. yes

2. no
=? 1

!!!

# Session III



Pin Identification and Data Collection Assistant

This Expert System is designed to assist in the identification of and the collection of data about Anglo–Saxon Pins.

Ready for command: c

---

Would you like to see the certification of the Knowledge Base?
1. yes
2. no

=? 2

---

How complete is this pin?

---

1. complete
2. more than seventy five percent complete
3. more than fifty percent complete
4. less than fifty percent complete

=? 1

---

What type of metal is the pin made from? (e)

---

1. Copper Alloy
2. Iron
3. Silver
4. Gold

=? 4

---

What type of treat did the metal receive?

---

1. gilt
2. silvered
3. tinned
4. enameled
5. none

(Multiple answers allowed)

=? 5

Examining the pin which process involved in manufacturing
the pin (the primary process only)?

1. cast
2. composite
3. forged or hammered
4. folded Or rolled
5. strip drawn
6. undetermined
7. undeterminable

(Multiple answers allowed)
=? 2

What type of head does this pin have?
1. Knob head (e)
2. Flat plate head (e)
3. Ring passes through head (e)
4. Ring attached to head swings back and forth
5. Select this option if the head is another form, say moulded

=? why

KES is asking for a value for 'Head Type' because:

The value of 'Head Type' is required by the rule 'Composite_Cruciform type LIX rule'
to determine a value for 'Type'.

A command in the actions section or an interactively
specified command is assigning a value to 'Type'.

Do you want to see more information? (Enter 'y' <RETURN> if yes)

Resuming deferred questioning...

Please reenter value:

What type of head does this pin have?
1. Knob head (e)
2. Flat plate head (e)
3. Ring passes through head (e)
4. Ring attached to head swings back and forth
5. Select this option if the head is another form, say moulded

=? 2

Which term best describes the primary geometric shape of the

Flat Plate Head?

1. Flat bird headed terminal
2. cruciform
3. diamond
4. disc
5. elliptical lozenge
6. lyre
7. oar_shaped
8. thistle
9. spatulate plate
10. spade_like plate
11. triangular
12. wedge

=? 4

---

How was the decoration applied to the head of the pin?

1. cast
2. punched
3. engraved
4. applied
5. no decoration present

(Multiple answers allowed)
=? 4

---

Which of the following items were used to make this pin

---

1. beaded wire
2. garnets
3. glass
4. glass bead
5. chain
6. gold foil
7. amethyst

(Multiple answers allowed)
=? 1 & 2 & 6

---

Does the pin have an attachment mechanism, such as a hole or loop?

1. present
2. absent

=? 2

---

Please describe the shaft between the collar and
the two–third's marker

1. Round (e)
2. Finely faceted round (e)
3. elliptical

4. area no longer extant
=? 1

This pin is Type: Garnet set disc_headed type LXI <1.00>

The system will now identify any subtypes

**********
Enter 'c' followed by return to continue

Ready for command: c

This pin is Type: Garnet set disc_headed type LXI <1.00>

The Subtype is: Garnet set disc_headed subtype LXI i <1.00>

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Enter 'c' followed by return to continue

Ready for command: c
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

This pin is Type: Garnet set disc_headed type LXI <1.00>

The Subtype is: Garnet set disc_headed subtype LXI i <1.00>

This Pin belongs to variant: Garnet set disc_headed variant LXI i b <1.00>

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Enter 'c' followed by return to continue

Ready for command: c

---

Which of the following would you like to see:
1. View Comments about this VARIANT of pin.
2. Show Parallels.
3. Justify the Identification.
4. Return to main menu

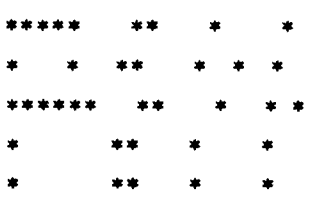
=? 4

---

Please select one of the following options:
1. Identify a Pin Only
2. Identify a Pin And Collect Data
3. Load Earlier Case Data
4. Collect Data Only
5. Quit

=? 1

# Session IV



Pin Identification and Data Collection Assistant

This Expert System is designed to assist in the identification of and the collection of data about Anglo–Saxon Pins.

Ready for command: c

---

Would you like to see the certification of the Knowledge Base?
1. yes
2. no

=? 2

---

How complete is this pin?

---

1. complete
2. more than seventy five percent complete
3. more than fifty percent complete
4. less than fifty percent complete

=? 1

---

What type of metal is the pin made from? (e)

---

1. Copper Alloy
2. Iron
3. Silver
4. Gold

=? 3

---

What type of treat did the metal receive?

---

1. gilt
2. silvered
3. tinned
4. enameled
5. none

(Multiple answers allowed)

=? 1

---

Examining the pin which process involved in manufacturing the pin (the primary process only)?

---

1. cast
2. composite
3. forged or hammered
4. folded Or rolled
5. strip drawn
6. undetermined
7. undeterminable

(Multiple answers allowed)
=? 2

---

What type of head does this pin have?

1. Knob head (e)
2. Flat plate head (e)
3. Ring passes through head (e)
4. Ring attached to head swings back and forth
5. Select this option if the head is another form, say moulded

=? 1

Which term best describes the primary geometric shape of the head?

1. faceted
2. disc
3. cruciform
4. hot air balloon like
5. conical
6. biconical
7. mushroom cap
8. globular
9. spherical
10. hourglass
11. watch_winder
12. bramble
13. barrel
14. baluster
15. upside_down trapezoid Or cone
16. domed_cone
17.

=? 8

---

Which of the following items were used to make this pin

1. beaded wire
2. garnets
3. glass
4. glass bead
5. chain
6. gold foil
7. amethyst

(Multiple answers allowed)
=? 1

Does the pin have an attachment mechanism, such as a hole or loop?

1. present
2. absent

=? 2

Is the head of the pin decorated

1. ring
2. dot
3. Ring-and-Dot
4. wrythen
5. spirals
6. filigree
7. animal ornament
8. plant Or vine ornament
9. interlace
10. Garnet or Glass Set
11. other
12. Not Evident
13. Undecorated
14. Head of Pin No longer present

(Multiple answers allowed)
=? 5

How was the decoration applied to the head of the pin?

1. cast
2. punched
3. engraved
4. applied
5. no decoration present

(Multiple answers allowed)
=? 4

Which term best describes the shaft's form

1. Plain Tapering (e)
2. Single line 2/3's of the way down the shaft (e)
3. Double line 2/3's of the way along (e)

4. swelling shaft
5. gradual confined zone swelling
6. sharply carinated zone swelling
7. catch hipping at tip
8. shouldered hipping
9. sufficient length Notx present
10. None of the above

=? 1

This pin is Type: Globular_headed type LXXIX <1.00>

The system will now identify any subtypes

************************************************************

Enter 'c' followed by return to continue

Ready for command: c

---

Is a filigree medial band present?
1. present
2. absent

=? 1

---

What type of filigree is present on the head of the pin?
1. backwards S filigree
2. trefoil filigree
3. foliate filigree

=? 1

---

Is Granule Ornament present?
1. present
2. absent

=? 1

---

Are Raised Discs present?
1. present
2. absent

=? 2

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

There is no information available about variants.

This pin is Type: Globular_headed type LXXIX <1.00>

The Subtype is: Raised Setting globular_headed subtype LXXIX i <1.00>

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Enter 'c' followed by return to continue

Ready for command: c

---

Which of the following would you like to see:
  1. Comments about this SUBTYPE of pin.
  2. Show Parallels
  3. Justify the Identification.
  4. Return to main menu
=? 4

---

Please select one of the following options:
  1. Identify a Pin Only
  2. Identify a Pin And Collect Data
  3. Load Earlier Case Data
  4. Collect Data Only
  5. Quit
=? 1

# Session V

```
*****   **    *    *
*   *  **    * * *
******  **    *   * *
*      **    *    *
*      **    *    *
```

Pin Identification and Data Collection Assistant

This Expert System is designed to assist in the identification of
and the collection of data about Anglo–Saxon Pins.

Ready for command: c

---

Would you like to see the certification of the Knowledge Base?
  1. yes
  2. no
=? 2

How complete is this pin?

1. complete
2. more than seventy five percent complete
3. more than fifty percent complete
4. less than fifty percent complete

=? 1

What type of metal is the pin made from? (e)

1. Copper Alloy
2. Iron
3. Silver
4. Gold

=? 1

Examining the pin which process involved in manufacturing the pin (the primary process only)?

1. cast
2. composite
3. forged or hammered
4. folded Or rolled
5. strip drawn
6. undetermined
7. undeterminable

(Multiple answers allowed)
=? 1

What type of head does this pin have?

1. Knob head (e)
2. Flat plate head (e)
3. Ring passes through head (e)
4. Ring attached to head swings back and forth
5. Select this option if the head is another form, say moulded

=? 1

Which term best describes the primary geometric shape of the head?

1. faceted
2. disc
3. cruciform
4. hot air balloon like

5. conical
6. biconical
7. mushroom cap
8. globular
9. spherical
10. hourglass
11. watch_winder
12. bramble
13. barrel
14. baluster
15. upside_down trapezoid Or cone
16. domed_cone
17.

=? 1

---

Which of these terms best describes the base pin_head before facetting?

1. cuboid
2. rectangular
3. flattened

=? 3

---

What type of treat did the metal receive?

---

1. gilt
2. silvered
3. tinned
4. enameled
5. none

(Multiple answers allowed)
=? 5

---

Does the pin have a secondary knob?

1. present
2. absent

=? 2

---

Please describe the shaft between the collar and
the two–third's marker

1. Round (e)
2. Finely faceted round (e)
3. elliptical
4. area no longer extant

=? 1

What is the length of the pin to the surviving end [in mm.]?
[constraint: Length gt 5 and Length lt 200]
(Enter a number)
=? 75

Does the pin have a zoomorphic head
1. present
2. absent
=? 2

Does the pin have an attachment mechanism, such as a hole or loop?
1. present
2. absent
=? 2

This pin is Type: Facet_headed_shorter_than_85_mm type LXXII <1.00>

The system will now identify any subtypes

**************************************************************
Enter 'c' followed by return to continue

Ready for command: c
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
There is no information available about variants.

This pin is Type: Facet_headed_shorter_than_85_mm type LXXII <1.00>

The Subtype is: Hamwic Flattened_Facet_headed subtype LXXII iv <1.00>

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Enter 'c' followed by return to continue

Ready for command: c

Which of the following would you like to see:
1. Comments about this SUBTYPE of pin.
2. Show Parallels
3. Justify the Identification.
4. Return to main menu
=? 3

Type = Facet_headed_shorter_than_85_mm type LXXII <1.00>

Reasons for belief:

rule: Facet_headed_shorter_than_85_mm type LXXII rule

Would you like to see the supporting knowledge sources and demons? (y/n) y

Name: Facet_headed_shorter_than_85_mm type LXXII rule
Kind of entity: Production Rule

if ident_rate = probable ¦ maybe
and Metal Type = copper alloy ¦ silver
and Metal Treatment = gilt ¦ none
and Metal Manufacturing Process = cast
and Head Type = knobbed
and Basic Knobbed Head Form = faceted
and Facet Form = cuboid ¦ rectangular ¦ flattened
and Shaft Section Position One = round
and Length lt 85
then Type = Facet_headed_shorter_than_85_mm type LXXII.
subtype1 = available.
endif.

Subtype = Hamwic Flattened_Facet_headed subtype LXXII iv <1.00>

Reasons for belief:
rule: Hamwic Flattened_facet_headed subtype LXXII rule

Would you like to see the supporting knowledge sources and demons? (y/n) y

Name: Hamwic Flattened_facet_headed subtype LXXII rule
Kind of entity: Production Rule

if subtype2 = yes
and Type = Facet_headed_shorter_than_85_mm type LXXII
and Facet Form = flattened
then Subtype = Hamwic Flattened_Facet_headed subtype LXXII iv.
variant1 = unavailable.
endif.

Enter 'c' followed by return to continue

Ready for command: c

---

Which of the following would you like to see:
1. Comments about this SUBTYPE of pin.
2. Show Parallels
3. Justify the Identification.
4. Return to main menu

=? 4

Please select one of the following options:

1. Identify a Pin Only
2. Identify a Pin And Collect Data
3. Load Earlier Case Data
4. Collect Data Only
5. Quit

=? 5

Map 5.1: Facet-headed pins longer than 90 mm (Type IV)

- Sites with a single find
- Sites with 2-5 pins

Map 5.2: Biconical-headed with a head diameter greater than 10 mm (Type V)

- Sites with a single find

Map 5.3: Multiple knob-headed pins (Type VII)

- Sites with Type VII pins

Map 5.4: Spangle-headed pins (Type VIII)

● Sites with Type VIII pins



Map 5.5: Curl-headed pins (Type XII)

- Sites with one Type XII pin
- Sites with 2 or more Type XII pins

Map 5.6: Flat sheet expanded headed pins (Type XV)

- Sites with a single Type XV pin
- Sites with 2-5 Type XV pins
- Sites with more than 5 finds of Type XV pins

Map 5.7: Spatulate-headed pins (Type XVI)

● Sites with a single Type XVI pin

Map 5.8: Hook-headed pins (Type XVII)

- Sites producing Type XVII pins

Map 5.9: Loop-headed pins (Type XVIII)

● Sites producing Type XVIII pins

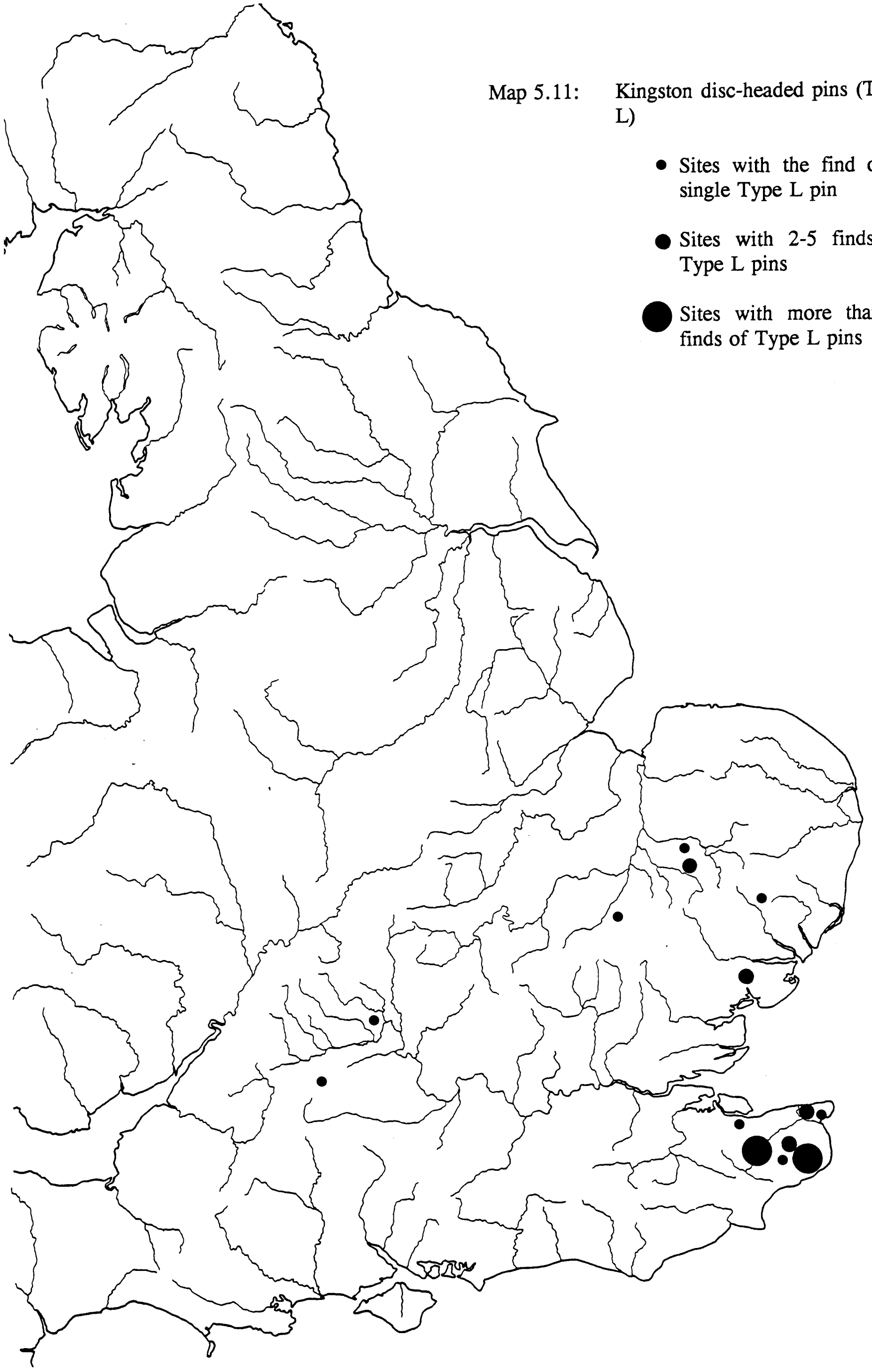


Map 5.10: Ring-dollop-headed pins (Type XXXV)

● Sites producing Type XXXV pins

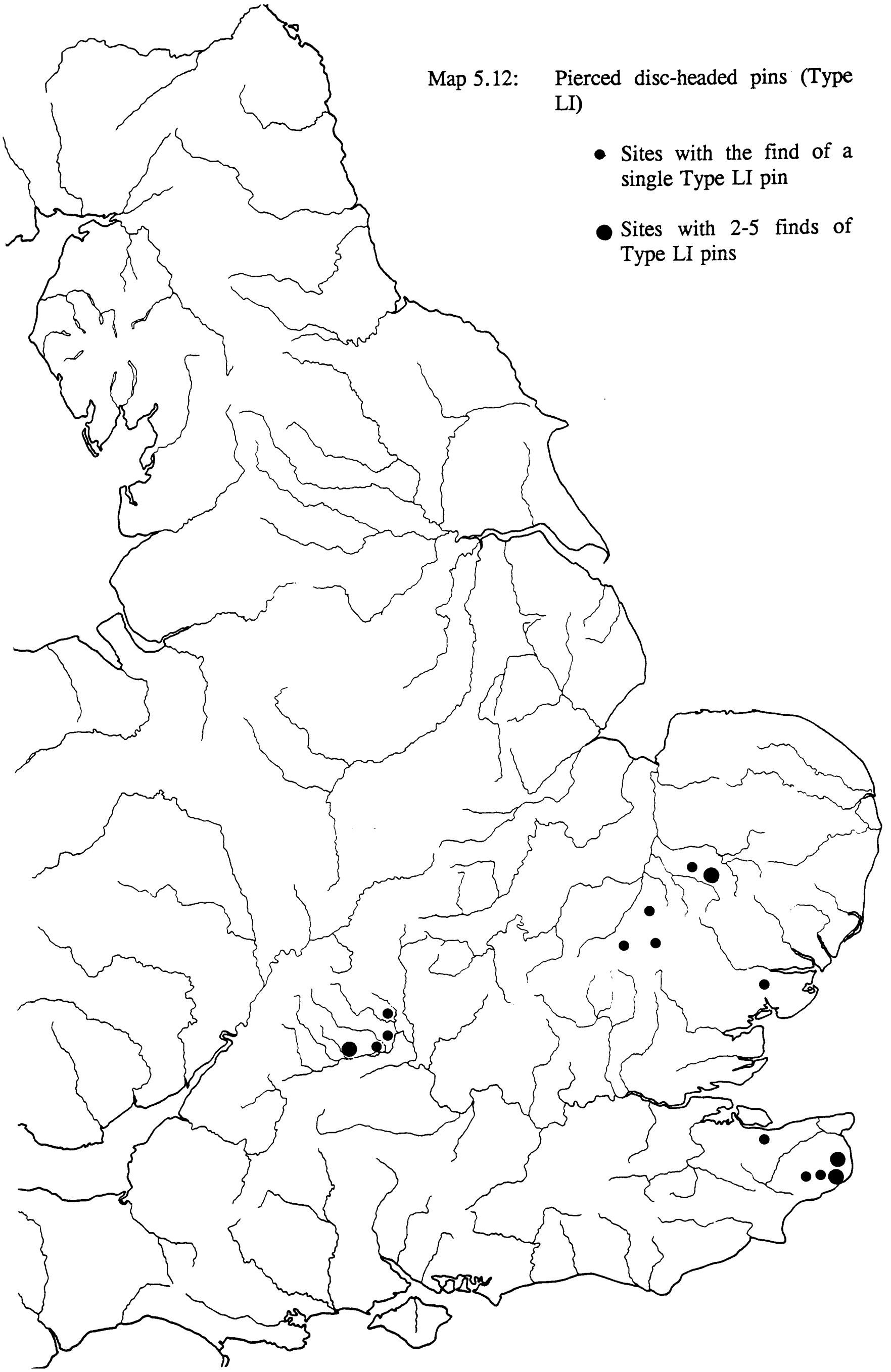
Map 5.11: Kingston disc-headed pins (Type L)

- Sites with the find of a single Type L pin
- Sites with 2-5 finds of Type L pins
- Sites with more than 5 finds of Type L pins



Map 5.12: Pierced disc-headed pins (Type LI)

- Sites with the find of a single Type LI pin
- Sites with 2-5 finds of Type LI pins



Map 5.13: Superior-looped disc/elliptical-headed pins (Type LII & Type LIII)

● Sites with a Type LII pin

▮ Sites with a Type LIII pin

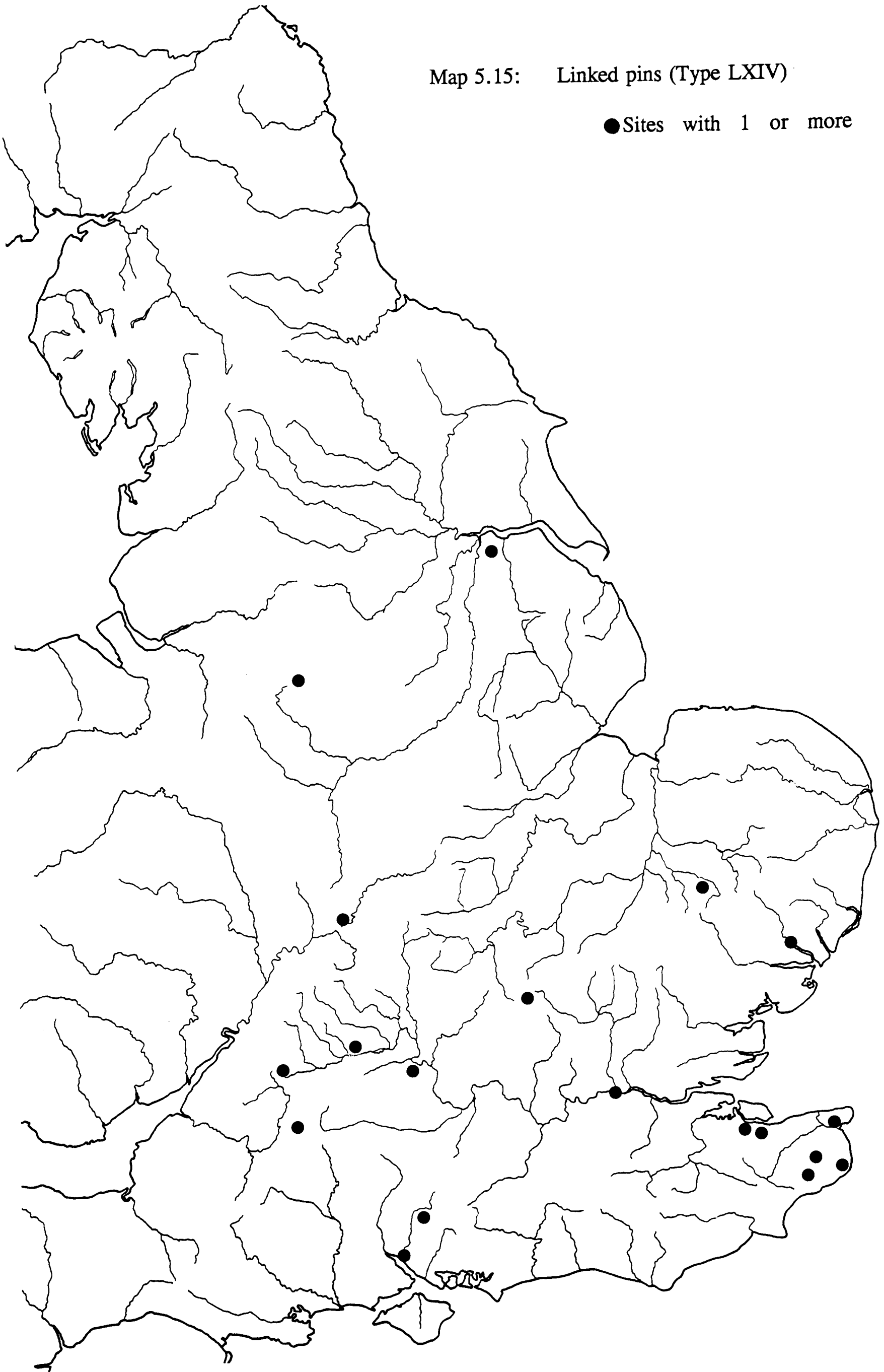
Map 5.14: Garnet-set disc-headed pins (Type LXI)

- Sites with the find of a single Type LXI pin
- Sites with 2-5 finds of Type LXI pins



Map 5.15: Linked pins (Type LXIV)

● Sites with 1 or more



Map 5.16: Spiral-headed pins (Type LXV)



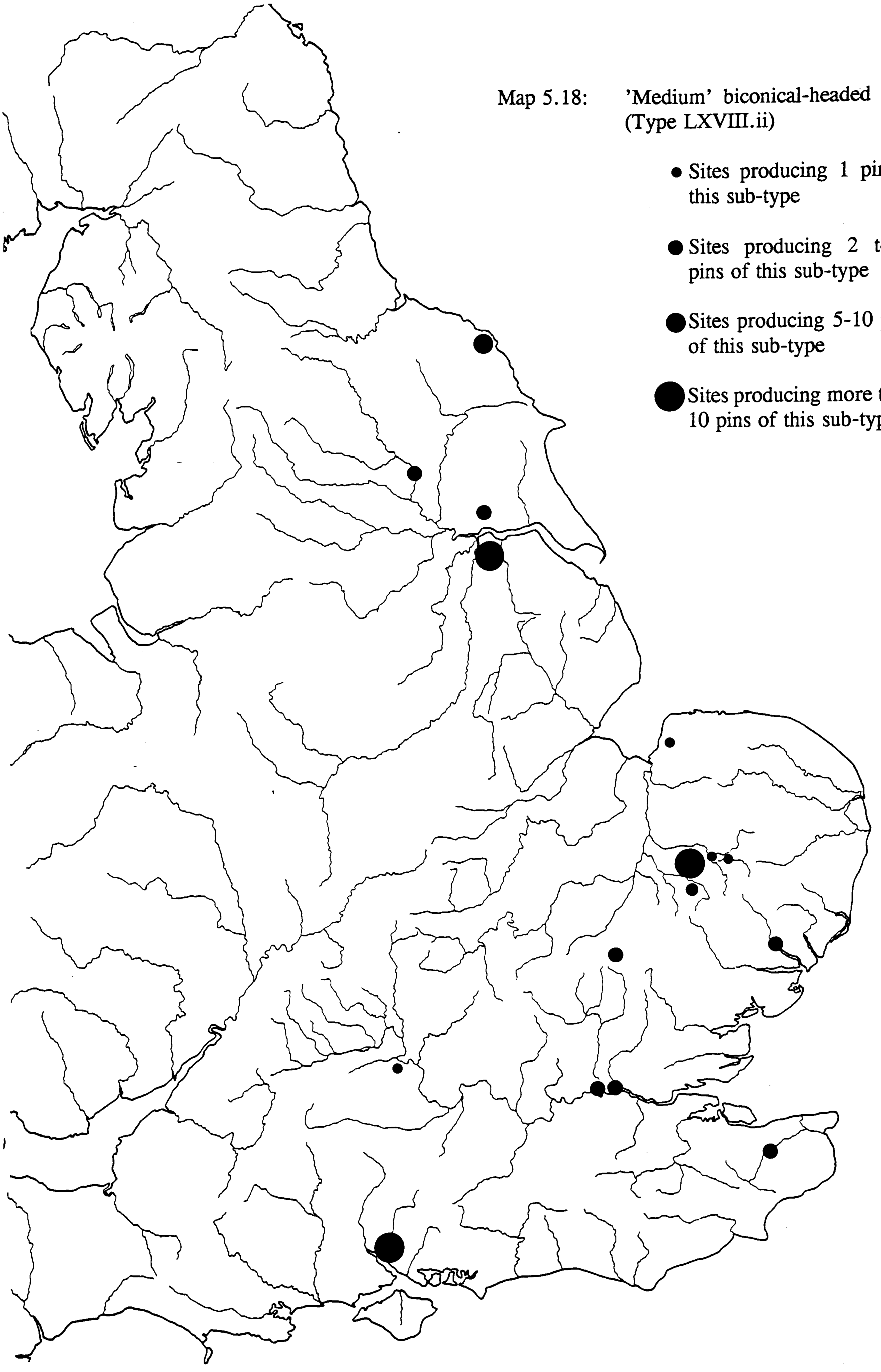
- Sites with the find of a Type LXV pin
- Sites with 2-5 finds of Type LXV pins
- Sites with more than 5 finds of Type LXV pins

Map 5.17: 'Small' biconical-headed pins (Type LXVIII.i)

● Sites with the find of a single Type LXVIII.i pin



Map 5.18: 'Medium' biconical-headed pins (Type LXVIII.ii)



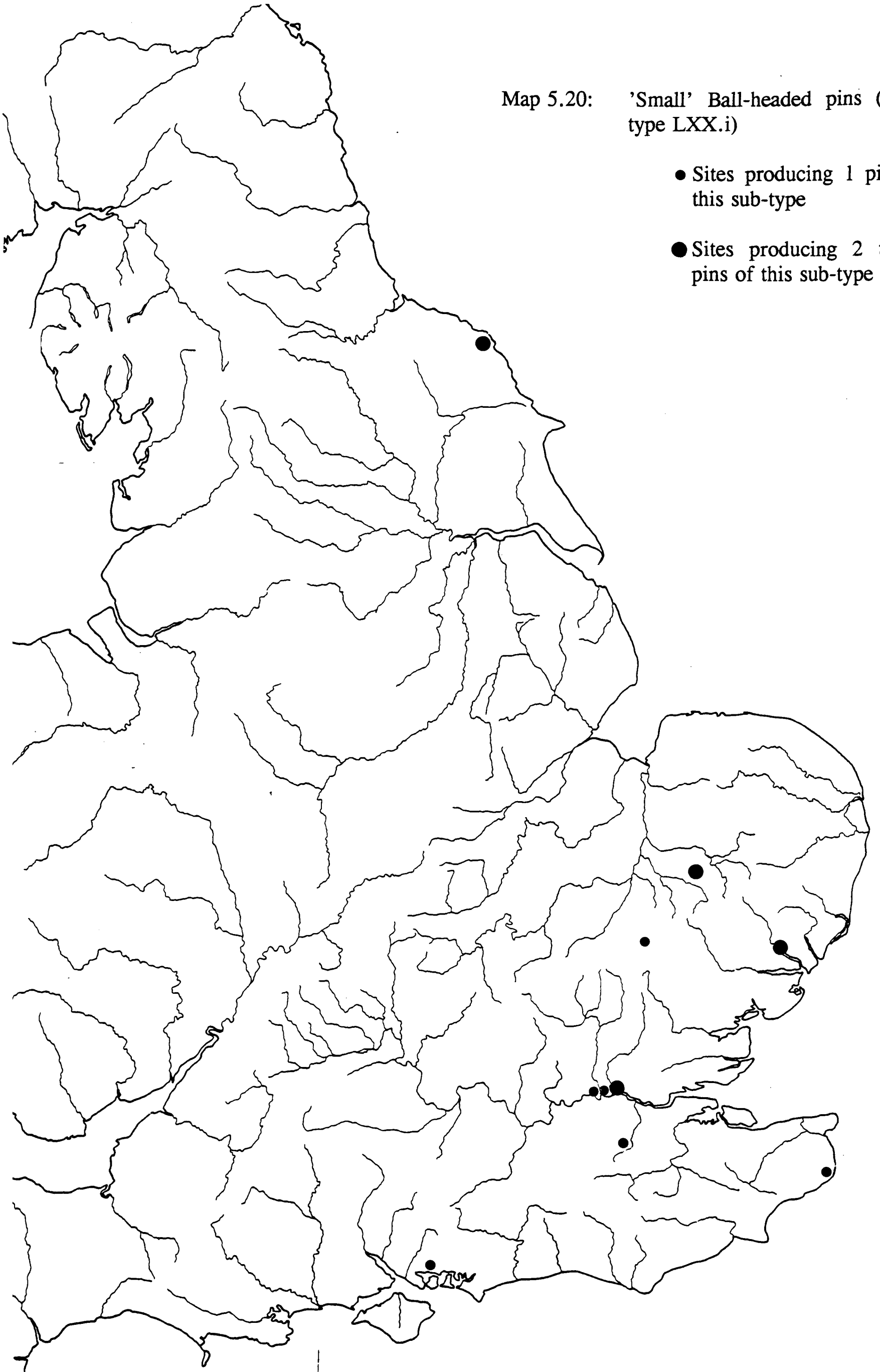
- Sites producing 1 pin of this sub-type
- Sites producing 2 to 5 pins of this sub-type
- Sites producing 5-10 pins of this sub-type
- Sites producing more than 10 pins of this sub-type

Map 5.19: 'Hot-air-balloon-headed pins (Type LXIX)

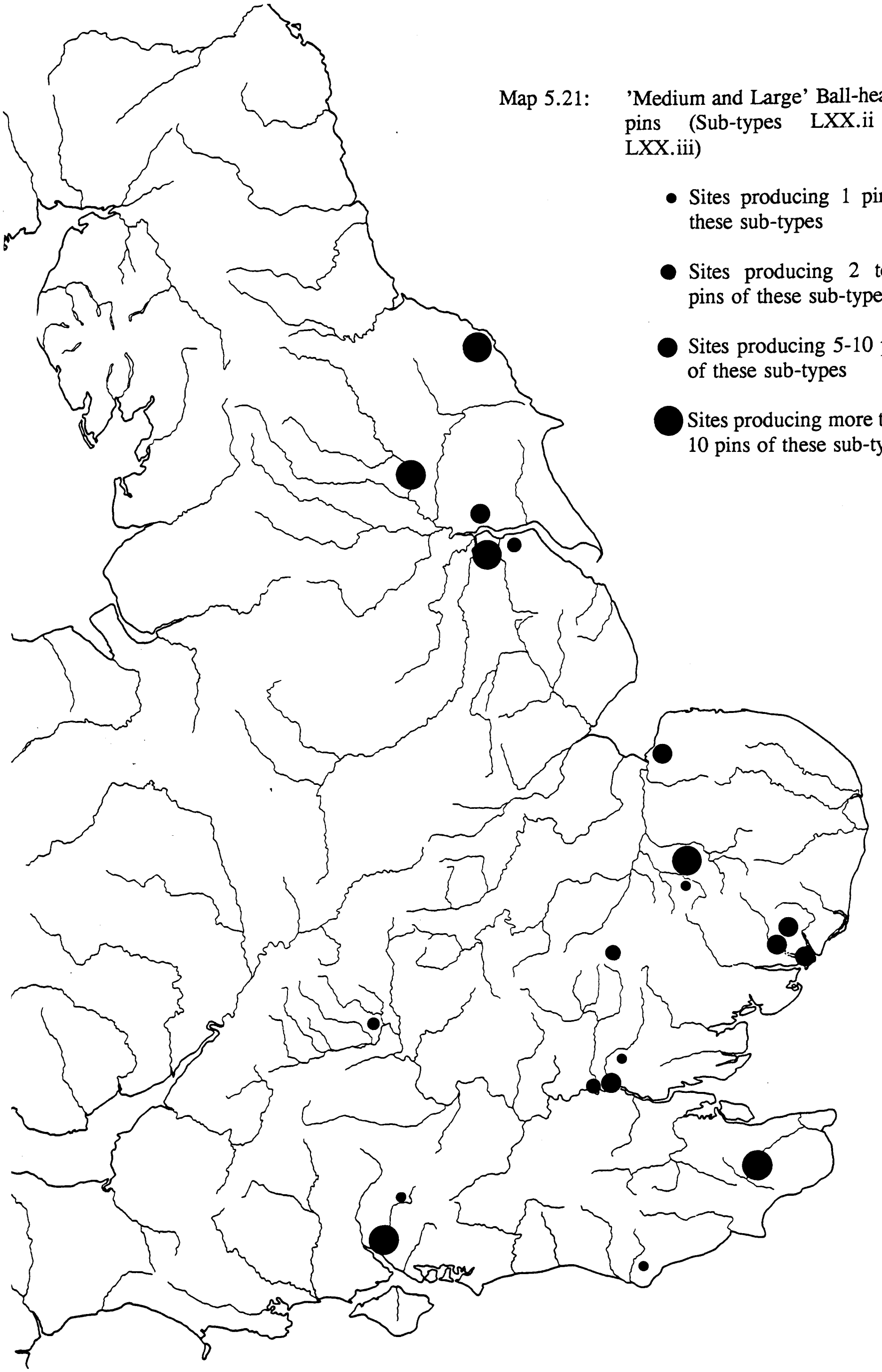
- Sites producing 1 pin of this type
- Sites producing 2 to 5 pins of this type
- Sites producing 5-10 pins of this type
- Sites producing more than 10 pins of this type

Map 5.20: 'Small' Ball-headed pins (Sub-type LXX.i)

- ● Sites producing 1 pin of this sub-type
- ● Sites producing 2 to 5 pins of this sub-type



Map 5.21: 'Medium and Large' Ball-headed pins (Sub-types LXX.ii & LXX.iii)

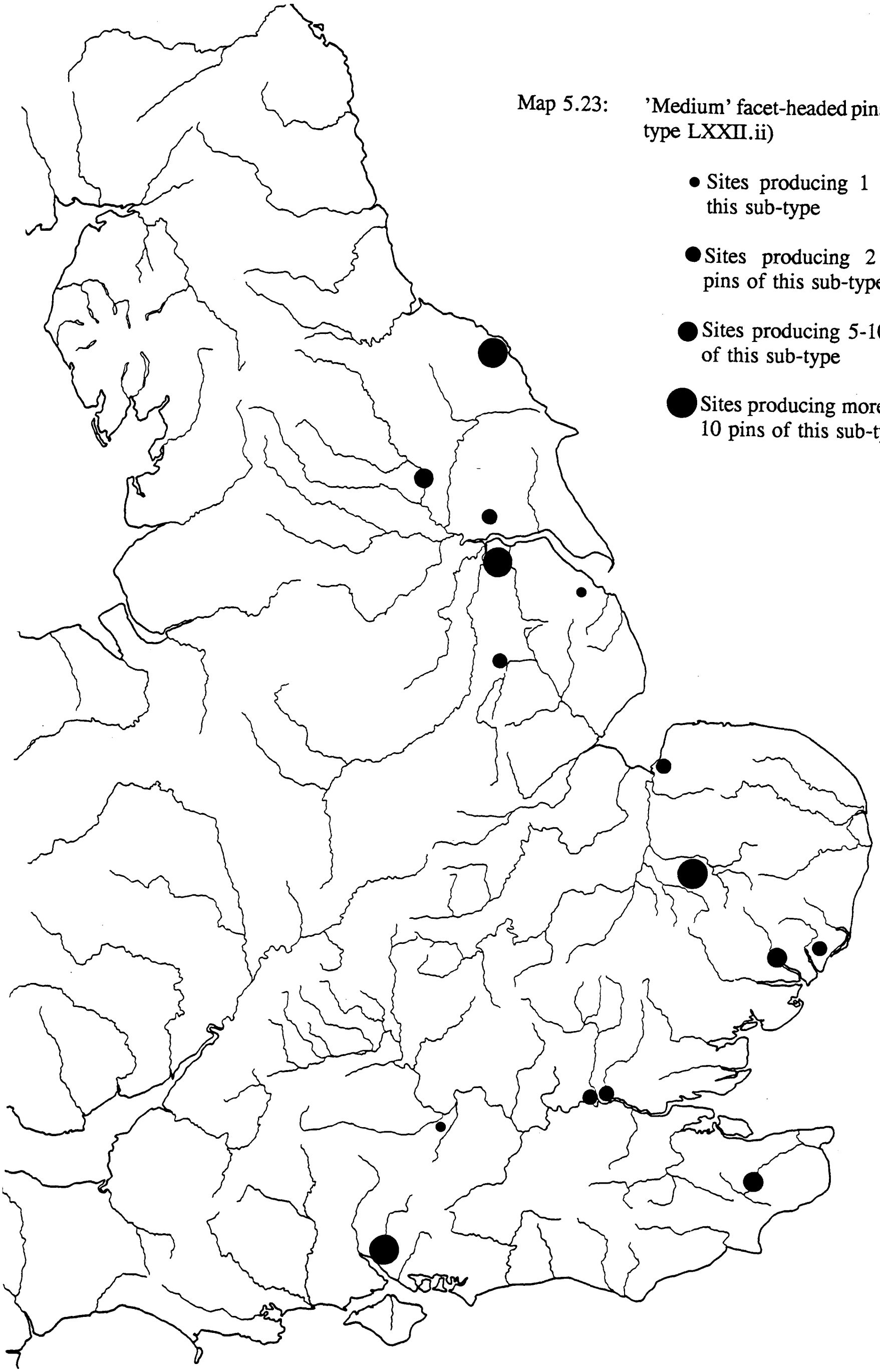


- Sites producing 1 pin of these sub-types
- Sites producing 2 to 5 pins of these sub-types
- Sites producing 5-10 pins of these sub-types
- Sites producing more than 10 pins of these sub-types

Map 5.22: 'Small' facet-headed pins (Sub-type LXXII.i)

- Sites producing 1 pin of this sub-type
- Sites producing 2 to 5 pins of this sub-type

Map 5.23: 'Medium' facet-headed pins (Sub-type LXXII.ii)

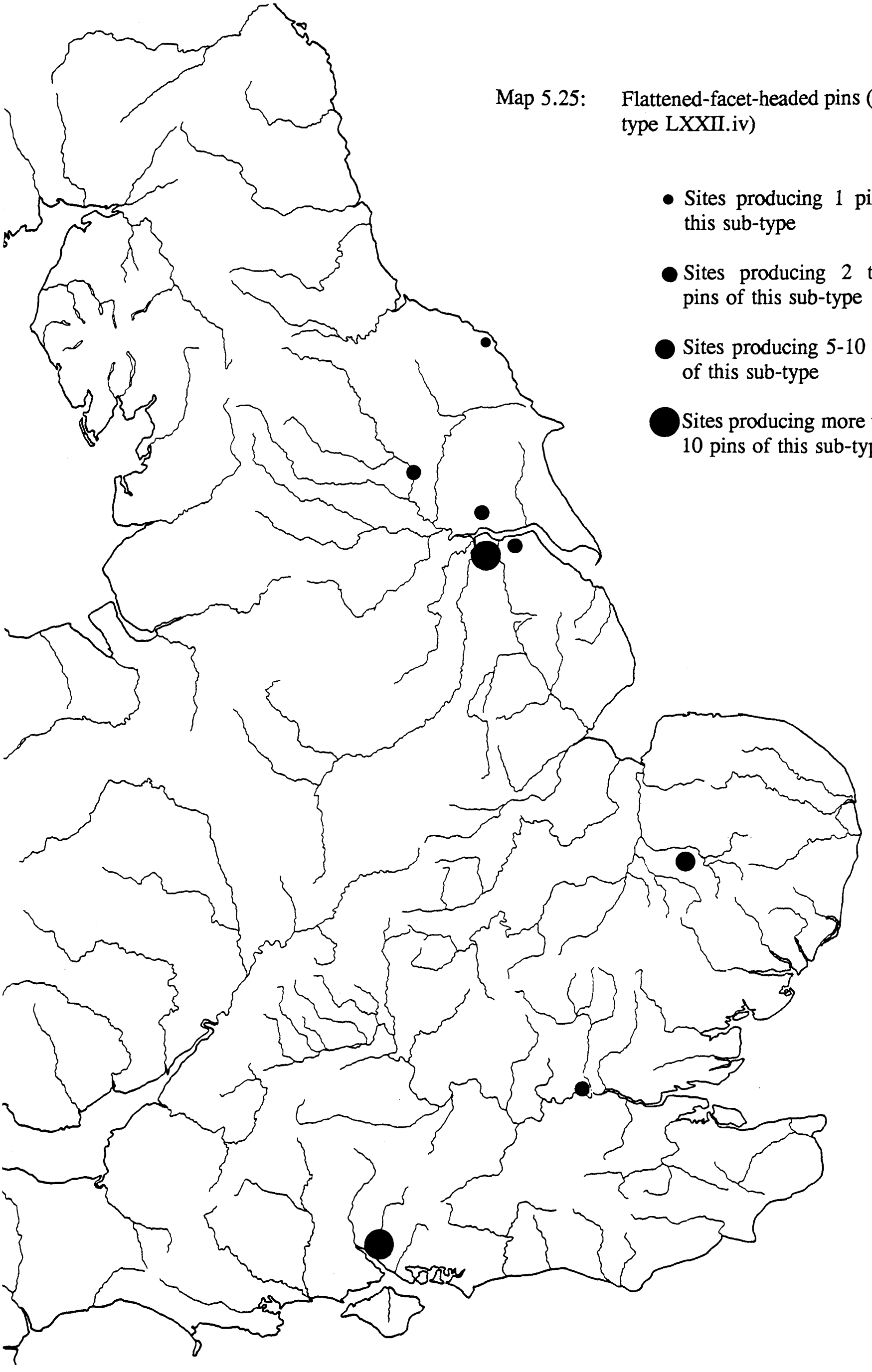


- Sites producing 1 pin of this sub-type
- Sites producing 2 to 5 pins of this sub-type
- Sites producing 5-10 pins of this sub-type
- Sites producing more than 10 pins of this sub-type

Map 5.24: 'Large' facet-headed pin (Sub-type LXXII.iii)

- ● Sites producing 1 pin of this sub-type
- ● Sites producing 2 to 5 pins of this sub-type

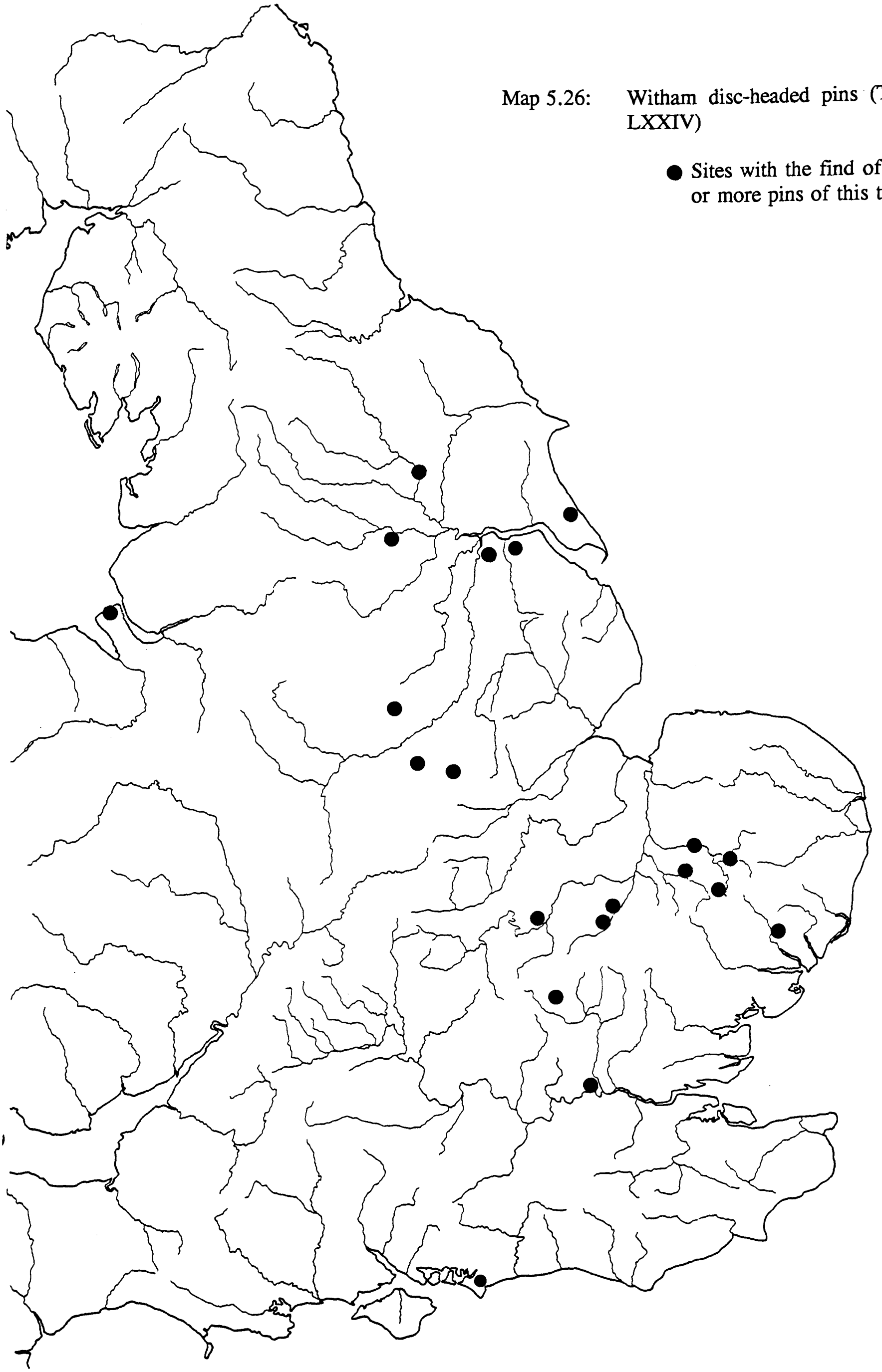
Map 5.25: Flattened-facet-headed pins (Sub-type LXXII.iv)



- Sites producing 1 pin of this sub-type
- Sites producing 2 to 5 pins of this sub-type
- Sites producing 5-10 pins of this sub-type
- Sites producing more than 10 pins of this sub-type

Map 5.26: Witham disc-headed pins (Type LXXIV)

● Sites with the find of one or more pins of this type

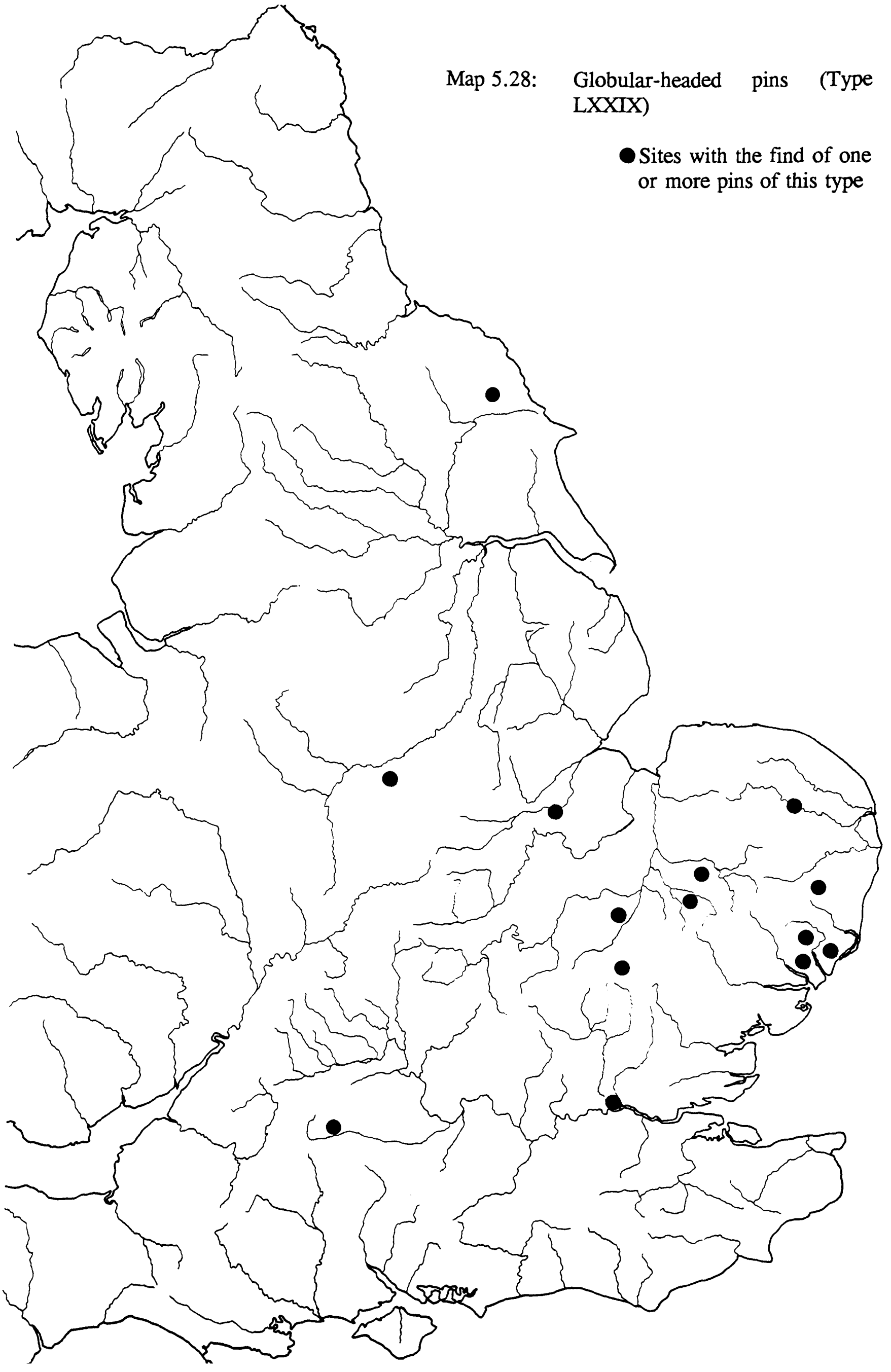


Map 5.27: Racquet-headed pins (Type LXXVI)

● Sites with finds of Type LXXVI pins

Map 5.28: Globular-headed pins (Type LXXIX)

● Sites with the find of one or more pins of this type



Map 5.29: Ely Lozenge-headed pins (Type LXXX)

● Sites with the find of one or more pins of this type

