

CELTIC METALWORK OF THE FIFTH AND SIXTH CENTURIES A.D.

A RE-APPRAISAL

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The original purpose of this study was to examine in detail the long accepted assumption that the Celtic metalwork of the Dark Ages had its origin in the British Iron Age. Specialist studies of certain objects have been made, notably by H. E. Kilbride-Jones, Dr. Françoise Henry, and H. N. Savory;¹ but until recently interest has tended to focus on the remarkable artistic achievements of the 7th and 8th centuries A.D. and there has been little investigation of the commoner objects. Recently, however, two important studies of earlier material have appeared — Mrs. Chadwick Hawkes² on a significant group of Late Roman metalwork and Charles Thomas³ on the animal art of the Scottish Iron Age — which have stimulated the writer into presenting the results of her own researches⁴ in the hope that it will be seen as complementary to their work.

The article is not intended as a complete survey of all the material. There is no attempt at detailed art analysis or excessive comparison of 'motifs', for it is felt that such discussions, based usually on a few unique and unusual objects, can only provide subjective opinions, not facts. Modern geographical terms have been used, but only for ease of reference: the dangers of projecting into the Celtic West of the Dark Ages the political and national frontiers of today are very real. If nothing else this study of the metalwork has shown how the Celtic West was culturally an entity with no one area pre-eminent. On the other hand, it is also evident that the old Military Zone of Roman Britain, was, as literary evidence suggests, of considerable importance during the 5th and 6th centuries, acting both as a buffer and a filter between the Christian Celtic West and the Pagan Saxon East.

Method of Study

Figs. 1 to 7 and Appendices 1 to 8 provide the factual evidence, descriptions and references, on which the interpretation of the material is based.⁵ Fig. 9 is an attempt to illustrate the main artistic motifs available to craftsmen in the sub- and post-Roman world.⁶ What follows therefore is a survey of the

¹ A bibliography of works cited by author and date will be found as an appendix to this article. A list of abbreviations is also included.

² Chadwick Hawkes, 1961 i, 1-70.

³ Thomas, 1963, 14-63.

⁴ This article is a condensed version of the B.Litt. thesis presented in 1962 in the University of Oxford. The complete work and corpus of the material is now in the Bodleian Library, Oxford. I gratefully acknowledge the help received from the Carnegie Trust for the Universities of Scotland, and especially the advice and criticism of Professor C. F. C. Hawkes, Dr. J. N. L. Myres and Dr. C. A. Raleigh Radford among numerous others.

⁵ The arguments for the origin and pre-Dark Age developments of the penannular brooch in Britain are set out in Fowler, 1960, 149-177 and will not be here re-stated.

⁶ A fuller exposition of certain of these motifs will be found in Charles Thomas' paper, see n. 3 above.

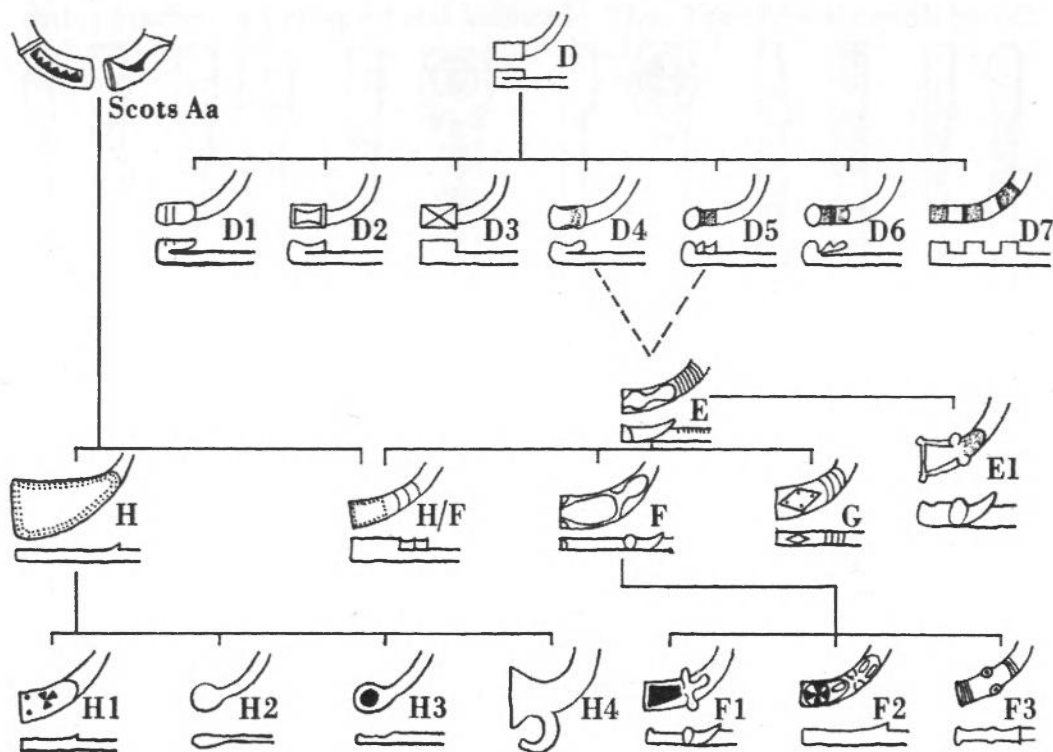


Fig. 1. The relationship of Romano-British and Early Christian Penannular Brooches.
(For the relationship to the preceding Types A-C, see Fowler, 1960, fig. 1.)
(Not to scale)

material,¹ in particular, penannular brooches and pins, and a discussion of its interpretation and significance.

PENANNULAR BROOCHES IN SUB- AND POST-ROMAN CONTEXTS

The specifically Dark Age penannular brooches have been classified as Types F, G and H, together with certain variants on older types, A₅, B₃ and D₇ (Figs. 2-5; Appendices 1-5). Type E (although not strictly a Dark Age type) foreshadows Type F and will be briefly mentioned.

Both E and F brooches have previously been discussed, notably by Kilbride-Jones, Dr. Raftery and H. N. Savory, and the author owes much to their work.² Savory's division of these brooches — the term 'zoomorphic' is not felt to be satisfactory — into small and large examples, and his broad

¹ I am much indebted to the many museum authorities who kindly allowed me to examine and draw most of the objects here listed. The illustrations have been prepared, from my original drawings, by my husband to whom my sincere thanks are due.

² Brooches listed by Kilbride-Jones are here referred to by his numbering, though this does not imply acceptance of his chronological or typological scheme.

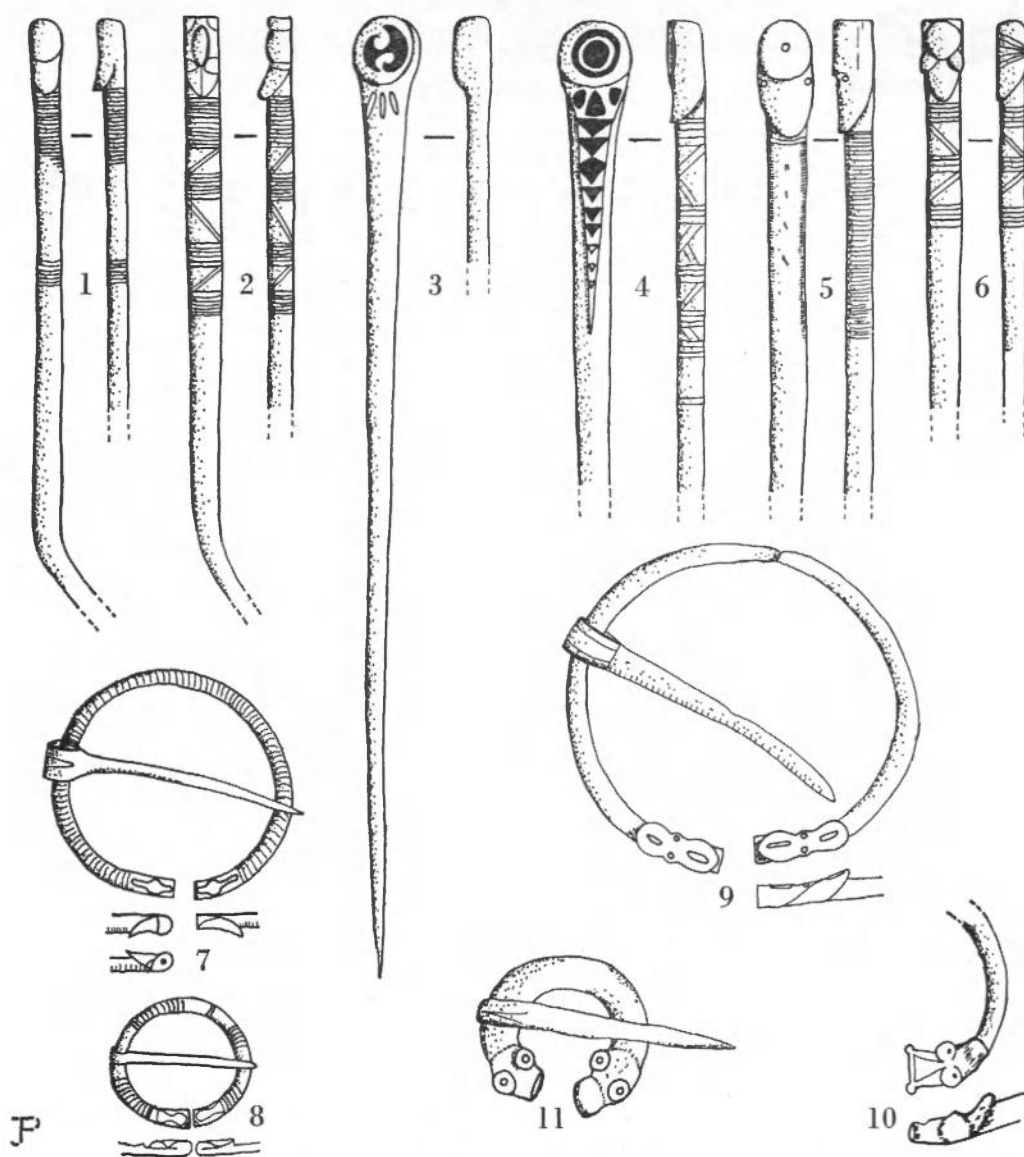


Fig. 2. Type E Brooches and Pins and Types E₁ and F₃ Brooches
(pp. 135-7, 150-1, Appendices 1, 2 and 8) ($\frac{1}{2}$)

Type E pins: 1, Traprain Law 102; 2, Traprain Law 108; 3, Cassington;
4, Cirencester; 5, Ireland, unprovenanced; 6, Halton Chesters

Type E brooches: 7, Birdoswald; 8, Icklingham; 9, Barnton

Type E₁ brooch: 10, Cahercommaun. Type F₃ brooch: 11, Glenluce

dating brackets, are accepted and followed.¹ Thus Type E² is the small brooch with terminals in the form of an animal's head,³ and E₁ is an aberrant version in which these features were confused. The enlarged pin-heads are decorated by incised grooves or mouldings, while some pins have a 'barrel-shaped' head (Fig. 2/7, 9). These features are not new, as the former have been noted on the pins of A₃ brooches from Langbank and Woodeaton,⁴ while the 'barrel' pin-head is clear on the pins of B₂ brooches⁵ from Corbridge and Newstead.⁶

The idea of more elaborate pin-heads may well have started with the coiled pin-head of C₁ brooches, though it is remarkable to note the similarity between the 'barrel' pin-head and the side-loops of certain bridle-bits.⁷

Type F⁸ is basically an enlarged version of E (hoop diameters of 3 in. or so as compared to 1 in.), and the techniques of manufacture are very similar. The hoops were cast, presumably in a one-piece clay mould (though none of this type has yet been found), and the ornamental details on the terminals finished off by hand with small gravers. The pins must have been cast separately and clenched over the hoops — a process which cannot always have been satisfactory and explains why many brooches are found without pins. The four decorative elements on the terminals — the triangles at the end, the lozenge-shape on the head, the ovoid triangles at the farther end of the lozenge and the rounded tail⁹ — remain more or less constant features of E and F brooches. Many of the hoops are decoratively incised, either continuously or in groups, a feature not confined exclusively to these brooches. Several found in Ireland have markedly flattened and expanded ends, almost paper thin, and this feature may be due to the influence of Type H brooches (see below p. 108). Sometimes it is not easy to distinguish between the two, hence the composite H/F Type.

Where the idea of animal-headed terminals originated is still a puzzle. Savory¹⁰ suggested the bird-head brooch (my Type B₃) but the probable date of this type is later than the earliest E brooch. Similarly the author¹¹ suggested that the penannular brooch with squared or diamond-faceted terminals might have inspired Type E. But this type too (p. 107) appears to be a later form. The only antecedents for E and F lie therefore in the earlier 1st and 2nd-century Types D₄ and D₅. This involved a time-lag, however, for the few well dated E brooches appear to have been lost in the mid or late 4th century (Birdoswald, South Shields, Cataractonium, Icklingham, Witcombe Villa), though one or two possible 3rd-century examples are known (Caersws and Traprain Law).

¹ Savory, 1956, 51.

² Appendix 1 and Fig. 2.

³ Richmond, 1931, 132, long ago characterised these as 'horse's head'.

⁴ Fowler, 1960, 175.

⁵ *Ibid.*, fig. 10.

⁶ This evidence demonstrates that to use the development of the pin-head to construct a typology of these brooches is inherently unsound.

⁷ Fox, 1958, pls. 5b and 72d.

⁸ Appendix 2 and Fig. 3.

⁹ The fact that this was tilted upwards would help to prevent the pin-point from slipping back through the opening in the hoop once the pin had been skewered through the folds of the cloak or mantle and the hoop twisted, under the pin, through 45°.

¹⁰ Savory, 1956, 49.

¹¹ Burley, 1955, 138.

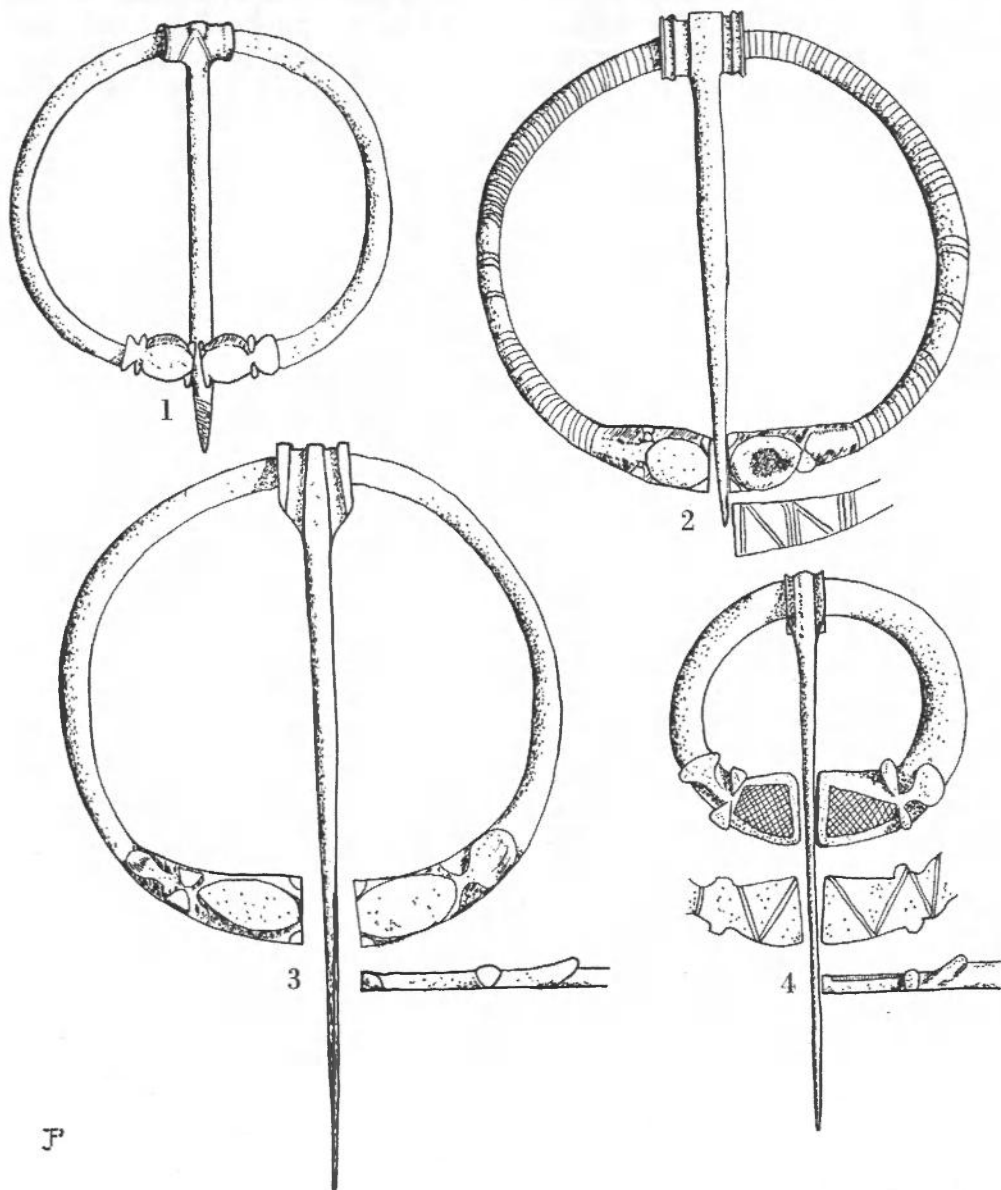


Fig. 3. Types F and F1 Brooches (pp. 137-9, Appendix 2) (1)

Type F: 1, Witcombe; 2, Ferwerd Terp; 3, Ardagh

Type F1: 4, Ireland, unprovenanced

The penannular brooch in general can never have had a particularly long life (p. 114), yet E brooches are very worn and not infrequently broken in half, which would imply a lot of use. The existence, notably at Traprain Law, of the Type E pins to which Kilbride-Jones first drew attention, does not really explain the origin of the zoomorphic design. The pins will be discussed below; suffice it to say here that whether they influenced the brooches or *vice versa*, the process must have taken place in the Military Zone, probably on Hadrian's Wall¹ from where the raiders from Ireland presumably acquired them. However, one possible source of inspiration for both pins and brooches lies in the Scottish series of snake bracelets which have generally been dated to the 1st-3rd centuries A.D. Certainly the similarities in treatment are very marked. On the Continent, where a few F brooches have been found,² the animal-head is invariably likened to those on the animal-headed cruciform fibulae dated to the 4th and early 5th centuries A.D.³ The Scottish bracelets seem a preferable source, largely because the dating fits the E and F brooches better. The distribution of the snake bracelets and the E and F brooches, however, is complementary rather than similar, suggesting two, not one, centres of manufacture.⁴

It is perhaps worthwhile to re-examine the arguments for the date of F brooches. Earlier writers have chosen various dates: the end of the 2nd century A.D.,⁵ the 3rd century,⁶ the 4th century⁷ and the 5th century.⁸ Savory⁹ plumped for a 'mid-fourth to mid-fifth century A.D.' date for the beginning of the type, disputing the earlier dates of Kilbride-Jones because of unreliable associations,¹⁰ and of Wheeler because the Segontium brooch was not in a sealed deposit. Savory's line of argument is perfectly valid, the only vaguely reliable dates for F brooches being those afforded by the few examples in Migration Period contexts. Yet in *both* cases, at Bifrons and Nassington, the brooches were old ones: the Bifrons example (Fig. 6/7) was in use as an armlet,¹¹ and the Nassington example hardly counts as a brooch at all — the hoop was lost and only the pin remained in use.

Some evidence is, however, instructive. Kilbride-Jones' late 2nd-century date was based on two brooches (Porth Dafarch, Anglesey, and Longfaugh, Midlothian); and two others (Segontium and Traprain Law 89) were added on typological grounds only. Porth Dafarch has now produced evidence of a two-period occupation,¹² and there is considerable doubt about the association

¹ Fowler, 1960, 169, fig. 13.

² Ferwerd Terp, Netherlands, and Mahndorf, Germany.

³ Salin, 1904, 182.

⁴ The reliability of the distribution of this metalwork for interpretative purposes is doubtful. The raids of the Irish, Scots and Picts into the North and through Hadrian's Wall presumably account for the very widespread distribution of F brooches, which therefore is little help in locating the original centre(s) of production.

⁵ Kilbride-Jones, 1935, 133.

⁶ Raftery, 1941, 59.

⁷ Wheeler, 1932 I, 137.

⁸ Smith, 1913, 223.

⁹ Savory, 1956, 51.

¹⁰ *Ibid.*, 43.

¹¹ This usage is paralleled by the Mahndorf example which, however, still possesses the remnants of the broken-off pin-head; and also by a B2 brooch in a 6th-century Merovingian grave at Cléry, France (Fowler, 1960, 167, fig. 12).

¹² *Arch. Camb.*, xcv (1940), 65.

of the Longfaugh brooch with a 2nd-century *patera*.¹ The Traprain Law 89 brooch came from the upper, probably 4th-century, levels, and is, in any case, typologically an F1 brooch since it had enamel on the head. There is, therefore, no need to push F brooches back, and a positive reason for accepting at least a 4th-century date, especially once E and F brooches have been distinguished from each other. The *terp* of Ferwerd, in the province of Friesland in the Netherlands, produced two F brooches, from a context which falls within Boeles' Third 'terpenperiode', 400/450-750 A.D.² The actual date of deposition is put at around the 5th-6th century. One brooch shows little sign of wear, and is remarkably like the Pike Hall, Derby, brooch (Kilbride-Jones, 85) and two from the Northern Isles (Aikerness Broch, Orkney, and Pinhoulland, Walls, Shetland: Kilbride-Jones, 14 and 13). The other brooch (Fig. 3/2) is smaller and has a ribbed hoop, while the lozenges on the terminal are roughened, as if for enamel. The terminal backs carry an engraved design of vertical and oblique lines, a feature also noted on certain E pins and several F brooches (Figs. 2/2, 4, 6 and 3/4). Exact parallels for the ribbed hoop exist on the Porth Dafarch, Longfaugh and Stratford-on-Avon brooches. It is suggested that these brooches were being produced in Britain, almost certainly in the West Midlands and Northern Britain, during the primary settlement of the Anglo-Saxons. Somehow two brooches found their way to Frisia, possibly as the possession of a man returning thence.³

It is extremely likely that the Irish series of F brooches runs parallel to the British. They have elements in common, though there are certain differences. The terminals are enlarged and flatter, while the ovoid tail is more projecting. Further, few have ribbed hoops; but those with them also have other features linking them to those found in Britain. Given the existence of a basic type in the 4th century, which is reasonable if E brooches were already in existence, and given the demand for more showy brooches, F brooches could well have evolved quite simply. Irish raiders would then have taken examples back to their home country, in the same way that the Angles and Saxons acquired examples which were buried with them later on (p. 114).

The very close similarities between certain brooches strongly suggest manufacture in the same workshop. The closeness in style between the Aikerness Broch and Pinhoulland brooches, plus the Ferwerd and Pike Hall examples, is suggestive of this, and the ribbed hoops of the examples quoted above demonstrate the likelihood of another workshop. Further, there seems to have been a craftsman whose peculiarity it was to engrave a spiral near the point of the pin of his brooches: the Witcombe, Gloucs. (Fig. 3/1), Caerwent and Abingdon brooches, and the Silchester pin are linked in this way as well as by their terminal design, though the Abingdon one also has enamel and an

¹ Savory, 1956, 43.

² Boeles, 1951, 332. I am extremely indebted to G. Elzinga of the Friesch Museum, Leeuwarden, for recent photographs of these brooches and for other information.

³ Dr. Myres, in the 1959 Ford Lectures, drew attention to the similarities in pottery and cruciform brooches in England and Frisia which perhaps implied a movement to Frisia of Anglo-Saxons ejected from their settlements after the British victory at Mons Badonicus. As he pointed out, however, no substantial evidence of areas being evacuated and reoccupied exists.

engraved design on the back of one terminal. None have associations, though three at least — Witcombe, Caerwent and Silchester — come from sites where occupation is attested well into the 5th century.

The F1 brooches have been distinguished from F because the terminals now carry a blob of enamel (where recognisable it is red) in the hollowed-out lozenge on the head. There is no means of dating this group, except for the fact that the Traprain Law example¹ comes from the probable 4th-century level. But the stratification on this site is still open to dispute. The usual argument that the presence of red enamel equates with manufacture in Ireland will not answer here, as from other evidence (p. 126) it is clear that enamel was applied to ornaments found in Northern British contexts, and with antecedents specifically not found in Ireland. It seems likely, however, that the Traprain and Abingdon brooches and the one from 'near Navan Fort' are approximately contemporary and, because of their similarity to the F brooches, reasonably close in date to the beginning of those examples — perhaps early 5th century. The remaining F1 brooches can only be 'dated' typologically, a method not attempted here.

The largest class of Type F brooches is that most familiar to students of Dark Age metalwork: the brooch with expanded, less zoomorphised terminals, decorated with champlevé enamel of various colours, embellished with mille-fiori, using designs variously described as 'Celtic' or 'Ultimate La Tène'. It is here classified as F2. The find-spots of these brooches are almost entirely confined to Ireland and present the strongest case for the survival there, and nowhere else, of Celtic art motifs. This argument is discussed after all the factual evidence has been surveyed (p. 133), though it has been thought inadvisable to construct a chronology based on analysis of their designs, since there are no fixed points for beginning, middle or end, and the only parallels are with equally imprecisely dated objects. Of greater interest are the kinds of designs used and their implication that skilled metal-working craftsmen existed throughout the Celtic West.²

One curious feature about F2 brooches is their almost complete absence from areas with known historical associations with Ireland, particularly Western Scotland (Dal Riada), and Wales (Gwynedd and Dyfed).³ Presumably these movements of people had taken place before the full flowering of F2, or during its early stages, which implies a mid 5th-century or later date for the beginnings of F2. Alternatively, perhaps these movements never involved more than a group of younger sons looking for new lands to settle and travelling without many possessions.⁴ The most that can be said is that the F2 brooch from Mull, Argyll, is either due to trade from Ireland or actual Irish settlement. The lead model for an F2 brooch from Dinas Powis, Glam.,⁵ dated by the excavator to

¹ Burley, 1955, fig. 2/89.

² Kilbride-Jones' analysis of the designs and distinguishing of various 'groups' is most illuminating in this context (Kilbride-Jones, 1935 i, 379-455).

³ Powell, 1958, fig. 34.

⁴ Though in a similar process, the early Viking settlements, the raiders did come with their own distinct culture.

⁵ L. Alcock kindly supplied a photograph and information.

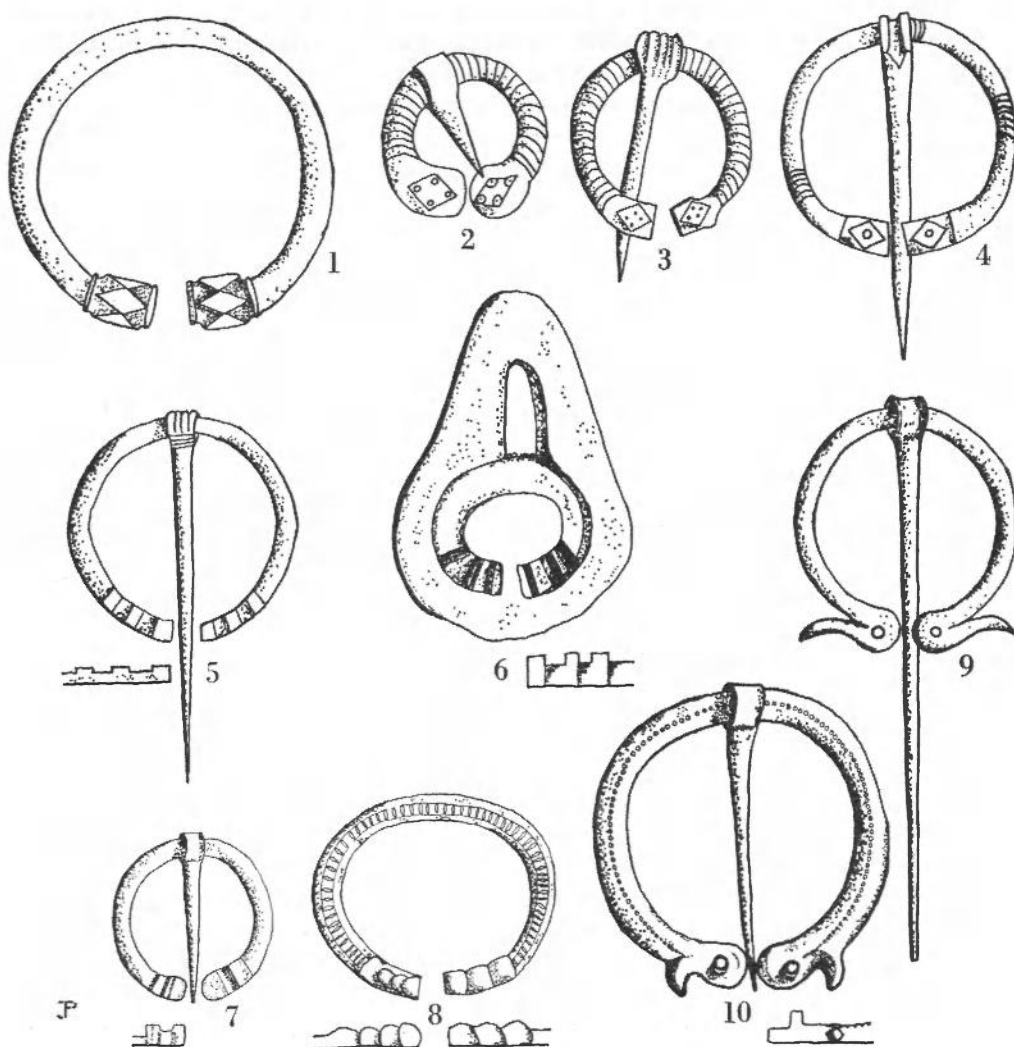


Fig. 4. Types G, B₃ and D₇ Brooches (pp. 140-1, 145-6, Appendices 3 and 5) (i)

Type G: 1, Dowalton Loch; 2, Sleaford; 3, Lydney; 4, Castell Collen

Type D₇: 5, Ballycatteen; 6, Dunadd mould; 7, Richborough; 8, Castlehaven Fort

Type B₃: 9, Ballyfallon; 10, Caerwent

'a little before A.D. 600', offers confirmatory evidence especially as there is other evidence of metal-working on the site, possibly inspired by Irish craftsmen, since some of the clay crucibles are of the lidded Garryduff variety. It is true, however, that in a sense there was no need for the sub-Roman population to want F2 brooches. As the succeeding paragraphs will show, they had their own penannular brooches in styles to which they were well accustomed. In Ireland there is as yet no evidence for any penannular brooches other than those of types F and H, apart from two exceptions, so there were clearly some local preferences within the Celtic West.

F3 brooches (Fig. 2/11) must be briefly described here, though most of them probably belong to a date later than the main period under consideration. The characteristic of F3 is the 'staring eye' and often the use of enamel, amber or glass settings, rather than patterns, on the terminals. Many of them would be elsewhere classified as 'ring-pins' since the pin is much longer than the hoop diameter. But this is a peculiarly Irish feature and is evident on the F and F2 brooches as well. It is arguable that the 'eyed' effect was borrowed from Anglo-Saxon work.¹

The 'zoomorphic' brooch has been treated at some length because of frequent misconceptions and statements on the subject. But what few realized, until Savory² pointed it out, was the existence of other post-Roman penannular brooches, common throughout the Celtic West and Anglo-Saxon England. The following paragraphs seek to amplify his comments and draw attention to the Continental evidence.

The penannular brooch with which Savory was largely concerned is here designated Type G.³ It has features—size, the ribbed hoop and an ornamental pin-head (Fig. 4/1-4) — in common with Type E brooches, but the top of the terminal is decorated with a lozenge, often containing one or more dots. From the side, the terminal appears faceted, more so than on E brooches. The obvious inspiration for this design is an E brooch, but clearly interpreted in a new manner, though in some cases there is room for dispute over the type to which a brooch should be assigned — *e.g.* the Dowkerbottom Cave brooch.⁴ But the two types can be distinguished because all Type G terminals are cast square, whereas most E brooches show traces of the original fold-back line. Like E brooches, Type G must have derived from the D group,⁵ at about the same time and under similar inspiration, but with slightly different results.

The dating of Type G is uncertain. With three exceptions — the Castell Collen, Radnor, brooch from a 3rd/4th-century context, the Lydney one from a similar context, and the Trewhiddle brooch from the ecclesiastical hoard of *c.* 872-75 A.D.⁶ — there are no securely dated examples. Several brooches from Welsh, Scots and Irish sites came from places with indications of early medieval settlement, though a wide dating bracket is frequently assumed. The

¹ Chadwick Hawkes, 1961, 49, fig. 10.

² Savory, 1956, 52-55.

³ Appendix 3 and Fig. 4.

⁴ Savory, 1956, 53, calls this a zoomorphic brooch.

⁵ In Fowler, 1960, 151, fig. 1, Type G was incorrectly shown as developing from Type H2.

⁶ Wilson, 1961, 86.

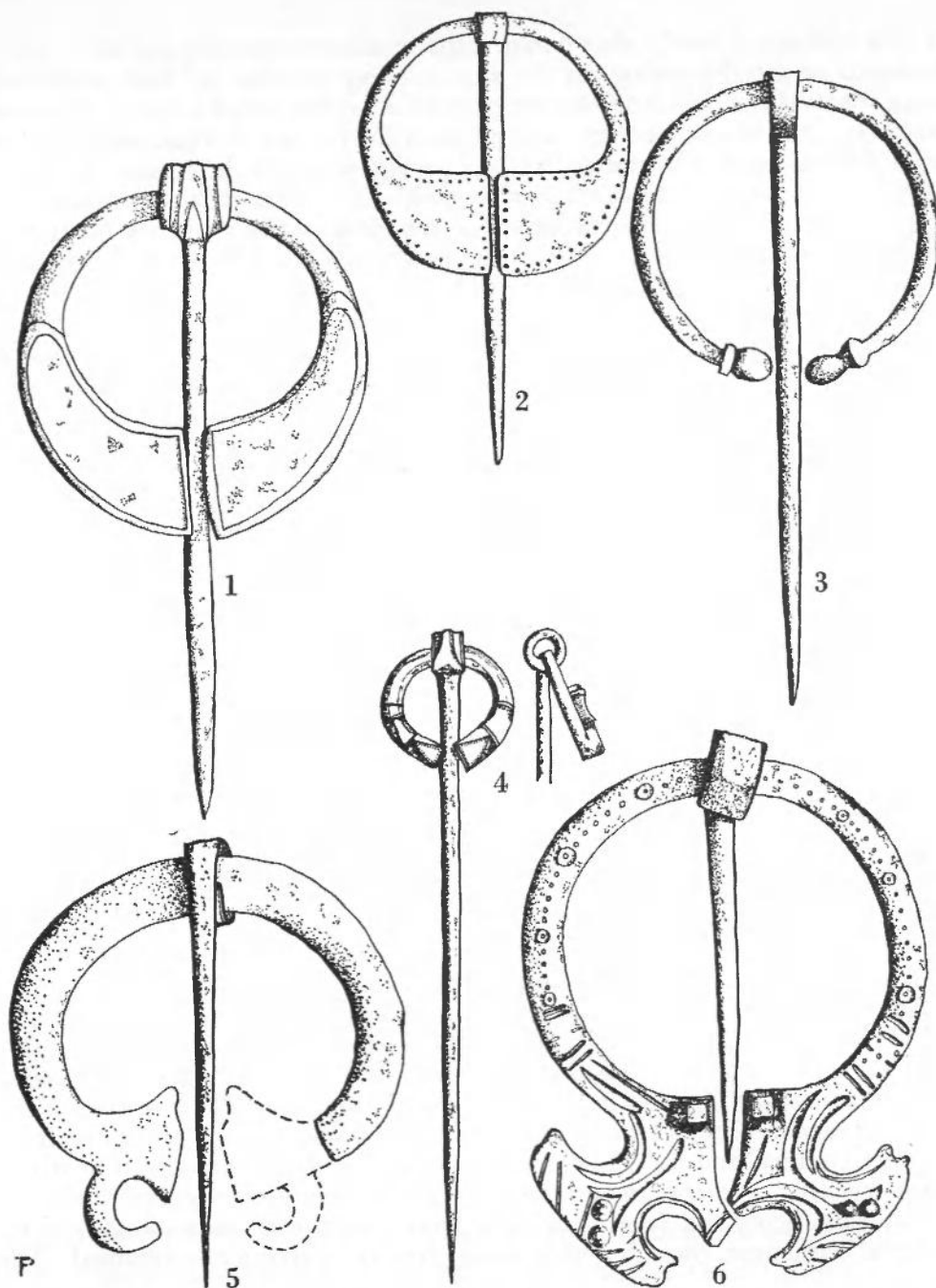


Fig. 5. Types H, H4, H/F and A5 Brooches (pp. 142-3, 145, Appendices 4 and 5) (†)

Type H: 1, Pant-y-Saer; 2, Lagore

Type A5: 3, Lagore. Type H/F: 4, Lagore

Type H4: 5, Richborough; 6, Hallum Terp, Friesland

Castlehill brooch, of tin-plated bronze, comes from a fort with probably an early Roman and a later occupation, though none of the finds were stratified. It has been suggested that the Trehiddie and Skye brooches are connected with the moulds for similar brooches from the Mote of Mark, which have been dated to the 9th century. But again there is evidence of two-period occupation, and the moulds may well have come from the earlier, probably of the early 6th to 8th centuries.¹ There is, however, only one mould from the Mote of Mark for a Type G brooch, the other moulds are less easy to define, and the evidence is clearly insufficient for dating all G brooches. Analysis of all G brooches into those with one dot within the lozenge and ones with four dots offers no chronological solution, since both sorts come impartially from sub-Roman and Anglo-Saxon contexts. However, the Trehiddie and Skye brooches, and certain Irish ones, have an additional feature of grooving at the terminal ends, and this strongly suggests, on the Trehiddie dating, a later group of G brooches, perhaps of the 8th and 9th centuries. The earlier group probably began in the 3rd/4th century, very likely in the West Midlands/Welsh Marches region. Both incoming Saxon settlers and the older inhabitants of the Celtic West could obtain the brooch from there. A recent piece of evidence² from Cannington, Somerset, demonstrates the hypothesis that G was a sub-Roman, rather than a truly Celtic type, for two dissimilar G brooches occurred in the 'general level with Late Roman — sub-Roman context', not actually in the graves of the cemetery. There are other G brooches from Somerset in possible late or sub-Roman contexts.

Two further pieces of evidence about G brooches need to be stressed. One is the use of silver, or tin-plating on bronze. This use of silver or metal resembling silver is a particular feature of much Dark Age metalwork and was presumably possible because much of the silver tableware from the wealthier inhabitants of Roman Britain was passing, in various ways, into the hands of traders and craftsmen during the vicissitudes of the 4th century. The other item of interest is the fact that actual moulds for G brooches have been found. The Mote of Mark ones have been mentioned and there is a possible one from Dunadd. The most recent example comes from an Early Christian site at Dooley, Co. Donegal, and in view of the presumed links between Northern Ireland and Western Scotland it is perhaps significant that this mould would have produced a brooch remarkably like the Dowalton Loch, Crannog 2, example (Fig. 4/1).

The last penannular brooch type to be distinguished is Type H (Fig. 5), the brooch with much flattened and expanded terminals which nearly meet, a large hoop and a simple pin bent round the hoop. The edges of the terminals are usually, though not invariably, outlined by a series of closely spaced, punched dots. On one brooch, from Pant-y-Saer (Fig. 5/1), the dots are replaced by an incised line, and this brooch³ also has a barrel pin-head, like

¹ Radford, 1956, 63-4; Harden, 1956, 151.

² I am much indebted to P. Rahtz for supplying this information and for allowing me to mention it in advance of his own publication.

³ L. Alcock kindly informed me that the brooch is bronze, not silver as so often stated.

the pins of F brooches. A further indication of the relation between F and H brooches is the 'humping-up' of the hoop end of the terminal, appearing in profile as a definite bump. In fact, this occurs during manufacture when a round-sectioned hoop is beaten thin at each end, a point demonstrated by the unfinished brooch from Garranes. A composite class H/F (Fig. 5/4) consists of brooches, all from Irish sites, which are smaller than the usual H brooch, and which bear features, especially the oval tail or 'snout', of the zoomorphic brooch proper. Other types of H brooch will be detailed below.

Recently¹ attention has once more been drawn to the dating of the Pant-y-Saer brooch and it is apposite here to consider not only this brooch but also the others of the same type. For unlike Types F and G, most of the H brooches have been found in contexts which permit of some attempt at dating. Seven, including three H/F examples, came from habitation sites, while the Scottish examples are from two hoards. Variants occur in Anglo-Saxon cemeteries. Previously, both the Pant-y-Saer and Garranes brooches were dated by reference to the three in the Tummel Bridge hoard, to which Leeds² had given a probable 5th-century date from which has derived a generally accepted 4th/6th-century bracket. The Norrie's Law hoard, deposited probably in the late 7th century,³ contained two *unique* H penannular brooches and it is unwise to apply this date to all the H brooches as a result. Finally, the Lagore H brooch belonged to Period 1a, dated on literary grounds *only* to the 7th century.⁴ It should be admitted here that Type H is a relatively simple type to manufacture, and cannot have required as much skill as, say, a Type F, and its simplicity precludes typological analysis.

There are, nevertheless, cogent reasons for dating the beginnings of Type H to the late-Roman period and moreover asserting its possible origin in Scotland. There are three Type Aa brooches from Scottish sites, one of which, Newstead, can be assigned to the late 2nd century,⁵ and the others must be close in time. These are like the earlier Aa penannulars but have significantly more flattened, expanded terminals — in fact approaching a Type H. None carry the punched dot decoration, though the Newstead brooch has enamel and silver ornamentation on both terminals: a geometric design on one and a quasi-interlace of loose scrolls on the other — designs of considerable interest in view of later developments. Secondly, the use of silver (Tummel Bridge, Norrie's Law), is not in itself an argument for a late date, for we have seen that some G brooches were made of this metal, and there are also two small silver Aa brooches (Waukmill, Tarland, Aberdeen, and Great Horwood, Bucks.)⁶ both of which came from 4th-century hoards. This evidence makes the Tummel Bridge brooches less surprising and the possibility of their origin in Scotland acceptable. The hanging-bowl fragments in the same hoard, wherever made, belong to the series which was probably early 5th-century in date. But the brooches and

¹ Alcock, 1963, 283-4.

² Leeds, 1933, 145.

³ Stevenson, 1955, 291.

⁴ Hencken, 1950, 6. Both Norrie's Law and Lagore will be further discussed below.

⁵ Fowler, 1960, 161, fig. 7.

⁶ *PSAS*, xxxix (1904-5), 217, fig. 14, and V.C.H., *Bucks.*, II, 7-8.

hanging-bowl need not have come from the same source, and the completeness of the brooches as opposed to the fragmentary nature of the bowl suggests that the hoard was the stock-in-trade of a craftsman producing new jewellery from old metal. Like other hoards buried about the time of the end of the Roman Empire, Tummel Bridge contained objects which in origin were possibly widely separated in time.¹

Of particular interest is that many of the H brooches have been found on sites where imported pottery, especially E ware, has also occurred.² Though further evidence about the dating and place of origin of this pottery is still needed, there seems no valid reason to dispute Thomas' contention that E ware probably came to the Celtic West from the Rhineland region between the mid 5th and early 8th centuries.³ For the reasons cited above, it is probable that H brooches cover a similar span of time, beginning slightly earlier. The probable dating of E ware and the probable date of H brooches do not make a certainty, but one argument strengthens the other and thus perhaps increases the probability. At Garranes, Lagore and Dalkey Island,⁴ other imported wares were found along with the E ware and the brooches, and there seems no compelling reason to deny the essential Early Christian nature of these sites.

The variants on the basic H brooch follow the pattern of F brooches: H₁ has enamel or millefiori decoration; H₂ has expanded disc terminals; and H₃ has H₂ terminals, decorated, usually with red enamel. H₄ is rather a miscellaneous group, characterised by terminals flattened either inwards, or outwards, and very often carrying appendages in the form of hooks, or crescentic shapes. The great series of late 7th/8th-century penannular brooches, of which the Tara, Hunterston and St. Ninian's Isle examples are the most outstanding, belongs in essence to the H group, but because all of them tend to have compartmentalized ornament and interlace, possibly they should be separately classified as H₅. Most fall outside the scope of this paper. H₁ brooches are probably late in the series, but H₂ and H₄ seem to be Romano-British in origin, though few are firmly dated. There are H₂ brooches from Camulodunum, Traprain Law, Silchester and Corbridge, which are almost certainly of the Roman period, while H₄ brooches occur on a number of sites.

The most unusual H₄ is the Richborough example (Fig. 5/5), unfortunately unassociated but perhaps significantly in the topsoil. The Hallum Terp brooch (Fig. 5/6) is clearly similar, if equally unusual, and the foreshadowing, or anticipation, of the St. Ninian's Isle No. 28,⁵ extraordinary. The other curious H₄ brooch, unprovenanced in Friesland,⁶ is more annular than penannular but its pin-point rests in a V-shaped slot, and square stops each side prevent it from

¹ The St. Ninian's Isle Treasure is another case in point.

² Thomas, 1959, 100-106.

³ The recent re-assessment of the imported pottery (Alcock, 1963, 281-294) advises caution in using this pottery to date Dark Age sites. The author feels that Alcock has not proved his arguments in entirety, and in particular he has not explained how it is that the bulk of the imported pottery is found on sites without 'Romano-British associations', if his belief, that much of the imported pottery is Late Roman, *i.e.* 4th-century A.D., is correct.

⁴ The brooch from here was discarded in the midden material.

⁵ *Antiquity*, xxxiii (1959), colour plate facing p. 241.

⁶ Halbertsma, 1959, fig. 14.

slipping out. Two pairs of opposed beaky animals jut out from the ring either side of the pin-point, and one animal of each pair has additionally a waving lappet (the ring of the Hallum brooch must originally have joined to form a V-shaped slot with similar square stops). There is also part of a possible animal-headed H4 from a Long Wittenham grave. The closest parallel for the V-shaped slot and stop-knobs is on the magnificent series of silver quoit-brooches from Kent, and the smaller bronze versions from Sussex.¹ Linked to the Kentish series by style, technique and material are the two penannulars from Alfriston and Lyminge² the burials of which have been dated to the early-mid 6th century. All Chadwick Hawkes' Jutish style A quoit brooches, except Howletts no. 3, have in fact a penannular ring inside a broad annular or square frame and it will be argued below that small annular brooches may be late or sub-Roman in date. The combining of the two is undoubtedly the work of the Germanic craftsmen in the late 5th century,³ but it is at least arguable that the Alfriston and Lyminge penannulars were made by British craftsmen in the new style, following their abortive attempts to produce a new penannular brooch form in the H4 Richborough/Friesland category. The corpus of late Roman buckles prepared by Mrs. Chadwick Hawkes and G. C. Dunning clearly demonstrates that the open mouthed animal-head was much in use in the 5th and 6th centuries, and yet several buckles had extraordinary variants on this type.⁴ In this context the Richborough and the Friesland brooches seem at home, together with the Jutish style A penannulars.⁵

The H3 brooches carry designs akin to those on the hand-pins (p. 128) and hanging-bowls. A number have the usual long Irish pin, and are incorrectly described as ring-pins.

Finally, a number of penannular brooches, closely related to Romano-British ones, but of probably Dark Age date, must here be mentioned. Their relationship is indicated by the alphabetical designation.⁶ Thus A5 has knob terminals (Fig. 5/3), in the form of thistle heads, B3 has outcurving ends transmuted into birds' heads (Fig. 4/9, 10), and D7 has terminals like 'castellations' (Fig. 4/5-8).

There are at most five examples of A5 (two certain and two probable, and one possibly related hoop with broken terminals). The real curiosity is the High Down, Grave 74, silver brooch, for here the terminals carry a kind of zig-zag ornament round the top with an 'eye-brow' motif or 'mask' incorporated into this on one terminal. The hoop appears to have been made by riveting together two sections, while the pin is the usual Type F ribbed head. The only parallel for the riveting technique is to be seen on the Dunbell Rath, Co. Kilkenny, hoop. The terminal decoration seems unique though perhaps closer to the

¹ Chadwick Hawkes, 1961, 46, but see below p. 119.

² *Ibid.*, 39 and 48.

³ *Ibid.*, 71-2.

⁴ *JMA*, v (1961), fig. 18/k.

⁵ The Richborough example from the topsoil could be late or even post-Roman, the Hallum example belongs to the 'third terpenperiode', 400-750 A.D., and the Friesland one to the 6th century.

⁶ Fowler, 1960, fig. 1.

Jutish style A than anything else, and therefore perhaps made in Sussex, like other High Down pieces.¹

The B₃ penannulars, like the H ones, probably have their beginnings early in the Romano-British period, clearly deriving their inspiration from the B₁ and B₂ brooches current on a few military sites.² The bird's head idea is taken direct from the La Tène world,³ but in some examples is much simplified. The Llanferres, Denb., brooch is probably 1st or 2nd-century, and, on typological grounds only, the Lydney, Caerleon and Caerwent examples should be of a similar date and presumably from a Welsh workshop. The Traprain Law example is unique, neither a true penannular brooch, nor a buckle since the pin lies parallel to the long axis of the brooch,⁴ and the craftsman who made it, perhaps more accustomed to annular brooches, seems to have been influenced by the Type B₃ penannular. Since it came from the latest levels on Traprain, it may well be sub-Roman. The Irish B₃ brooches seem to spring directly from the Welsh series,⁵ as the Ballyfallon one suggests, though a curious feature of the Irish ones is the abandonment of the ornithomorphic look in favour of a stylised head, represented by grooves. Two brooches at least have glass settings for the bird's eye, but in these cases the entire terminal is the bird's head and beak and no longer turns outwards. The more immediate inspiration for these is surely not B₃ but the annular ornithomorphic brooches of Anglo-Saxon England, and we shall return to this below (p. 119).

Only a few brooches and one mould of type D7 have been found so far. Nevertheless, they point to the close links between various areas of the Celtic West and late-Roman Britain. The Ballycatteen example is dated 'late sixth or early seventh' while the Castlehaven Fort brooch has no close dating. The Dunadd mould was found in the area *below* the nuclear fort A⁶ and thus presumably would qualify for inclusion among the 'Dalriadic remains'.⁷ The dating bracket of Dunadd is probably 5th to 9th-century, admittedly largely on historical grounds. The D7 brooches are by no means identical, though the Dunadd mould produces a brooch very similar to the Ballycatteen one. It is difficult to say more about them than that they seem to be a post-Roman elaboration on the widespread Romano-British D6 brooch. The few possible D7 brooches from England occur on sites where late Roman occupation is attested (Richborough, Colchester, Woodcuts). It seems very probable that the type was produced at the end of the 4th century, examples being taken to the West as part of the loot of Irish raiders.

¹ Chadwick Hawkes, 1961, 36, 39, and 1961 i, 59.

² Fowler, 1960, 166, fig. 10.

³ Fox, 1958, 79-80.

⁴ Burley, 1955, fig. 2/90.

⁵ Type B penannular brooches *are* in fact known from Ireland, but in contexts which suggest post-Roman rather than pre-Roman dates. The idea of a B₃ brooch could have developed independently in Ireland, and certainly there are a number of B type or 'omega' brooches from Irish sites (*JRS* AI, xc1 (1961), 62).

⁶ Stevenson, 1948, 193-4.

⁷ Alcock, 1963, 292, rightly indicates the difficulties involved in accepting Dunadd as Dalriadic in construction but it is by no means certain that all the excavated material came entirely from the area of the nuclear fort A. Some came from outside, and in any case the excavations on Dunadd were exceedingly haphazard and while some material is clearly closer to the Traprain Law material, *i.e.* Romano-British, a larger proportion is equally clearly closer to that from the Mote of Mark, the only comparable site in Scotland so far excavated.

PENANNULAR BROOCHES IN ANGLO-SAXON AND CONTINENTAL CONTEXTS

E. T. Leeds first classified the penannular brooches from Anglo-Saxon cemeteries in 1945 and H. N. Savory followed him in 1956.¹ The author's classification differs from that of Leeds but a concordance is given below. Some of the types have been found on Romano-British sites (Types A₁, A₃² C, D₁, D₃, D₄, D₅ and E) though only Type C appears in any number.³ The other types are A₅, F, G and H. The penannular brooches in general are exactly like their predecessors of the first four centuries A.D. This is particularly true of the A₁, A₃ and D brooches, and this raises the question of how they came to be buried in Anglian or Saxon cemeteries. These brooches could have been acquired by the Anglo-Saxon invaders from their owners, but seem rather a poor thing to remove from a corpse.⁴ Is it likely that an Anglo-Saxon warrior would grub around in the mud and straw of house-floors to pick up discarded brooches? These brooches then were either acquired from a Briton, forcibly or otherwise, or the person with whom they were buried was a Briton and not necessarily an Anglo-Saxon.⁵

There is a strong argument in favour of interpreting the Anglo-Saxon penannulars as made for the persons with whom they were buried. This is that the very fragility and ease of manufacture of the brooches, and the ornament which appears on certain of them, notably Type C, suggest manufacture on the spot. This ornament, incised lines, triangles, dots or zig-zags, is close to that on various items of Anglo-Saxon metalwork — for example the annular brooches. This fact implies that new craftsmen were involved, and indeed the very technique of manufacture is different. These Anglo-Saxon ones are made from a thin narrow band of metal instead of the usual round or oval-sectioned wire of pre-Roman and Romano-British times. The terminals have fewer coils, but are more tightly rolled; the pins, and sometimes the whole brooch, are iron. One could interpret this as the actual work of Saxon craftsmen and there are three further pieces of evidence to be cited to support this argument.

Type C brooches preponderate in Saxon and Anglian graves. Over 30 graves have either one or a pair of C brooches, whereas A, D and E brooches are comparatively rare. This perhaps implies that the latter were 'acquired' from the native inhabitants while the former were made by Saxons. In this context it may be significant that the distribution of finds of C brooches shows a strong concentration in Eastern England — almost precisely the same area in which C brooches predominated in the pre-Roman and Roman periods.⁶

¹ Leeds, 1945, 44-45; Savory, 1956, 52-54.

² Leeds' Class I = Type C, Class II = Type G, Classes III and IV = Type A₁, and Class V = Type A₅.

³ Appendix 6 and fig. 6.

⁴ Cf. the considerable evidence that 3rd and 4th-century coins, and Romano-British brooches, came into the possession of the newcomers, presumably by theft, e.g. the Basset Down double interment (Leeds, 1954, 45-60).

⁵ Lethbridge, 1956, 118, made a similar point from studying cemeteries in Eastern England, i.e. that Britons and Anglo-Saxons lived side by side. However the place-name evidence is not as substantial for this area as it is further west (Jackson, 1953, 220; Loyn, 1962, 6-9).

⁶ Fowler, 1960, fig. 9.

Thirdly, and most important of all, penannular brooches were not unknown in the Continental homeland of the newcomers.¹ Some of the penannular brooches in Roman military contexts on the Continent were probably taken there from England.² This argument refers not to the B₁ and B₂ penannulars which on the Continent, as in Britain, may owe their distribution to the presence of Iberian auxiliaries in Roman forts,³ but to the Type A, C and D brooches which can only be paralleled in Britain.⁴ Type C especially must be of British origin, and could be accounted for by the presence of British *auxilia* on the Continent, and so presumably can the few other types of penannular brooch.⁵ But there are a number of penannular brooches actually in the early cremation cemeteries⁶ of North Germany, one of the regions from which the later Anglian and Saxon invaders came.

While it seems likely that the B₁ and C brooches, which predominate in an admittedly incomplete list of European penannular brooches, could well have been manufactured on the Continent by copying their Iberian and British prototypes, it is not so evident that the 'Saxon' cemetery examples were locally made. The reason is their relative scarcity and their very close similarity to the British (and in the case of Aa, Scandinavian) ones. If penannular brooches could be made by Saxon craftsmen, why so few, and why so like the apparently contemporary British ones? Certainly some of the cemeteries go back to the 2nd century (Fohrde and Hohenferchesar) and have produced Type A₁ and B penannulars. The Aa penannular (Westerwanna and possibly Altenwalde) could have come from Scandinavia just as well as from British troops, like the A₁ examples. The B penannulars can be equally well accounted for with their commonness in Roman and post-Roman European contexts (they are scarce in Pagan Saxon graves in England), and the Feddersen-Wierde examples belong to Settlement Period V, the 4th-5th centuries. The D₂ and D₄ brooches from Hamburg-Fuhlsbüttel are most unusual and cannot be paralleled anywhere except in Britain, and one was in a grave with an early Roman brooch. In fact, the associations of these penannular brooches are remarkably like those in Britain, and the most reasonable explanation for their presence in these Saxon cemeteries is that they were acquired from the Britons serving with or attached to the Roman Army. Only two penannular brooches stand out,⁷ those from Vahrendorf and Rahmsdorf, Kriese Harburg. Both are of iron, the first (Fig. 6/1) has silver wire bound spirally round the hoop, the second

¹ Much of my information on these penannulars has been most willingly supplied by Dutch and German colleagues. I am also much indebted to Professor and Mrs. Hawkes, Dr. Myres, E. Rynne and my husband for information and assistance.

² Fowler, 1960, 166-7.

³ *Ibid.*, 167.

⁴ My husband has drawn my attention to a pair of Aa penannular brooches found in the cemetery of Sandager-Turup, Vestfyn, Denmark, inside a handled jar with a smaller bowl containing the cremation (Odense Museum, acc. no. B. 441-2). The date, recently confirmed by new finds, is late 2nd century B.C. Penannular brooches are rare in the Danish pre-Roman Iron Age and these examples could be an import from Britain. The argument propounded in 1960 (Fowler 1960, 160) on the origin of Types A and Aa penannular brooches is still not really settled, and independent development in Scandinavia is possible.

⁵ Cheesman, 1914, Appendix II.

⁶ I have not been able to examine any of these brooches personally, nor to consult all the literature, but believe that I have sufficient information from the larger sites to make some general comments.

⁷ Dr. Willi Wegewitz kindly supplied me with details of these two brooches.

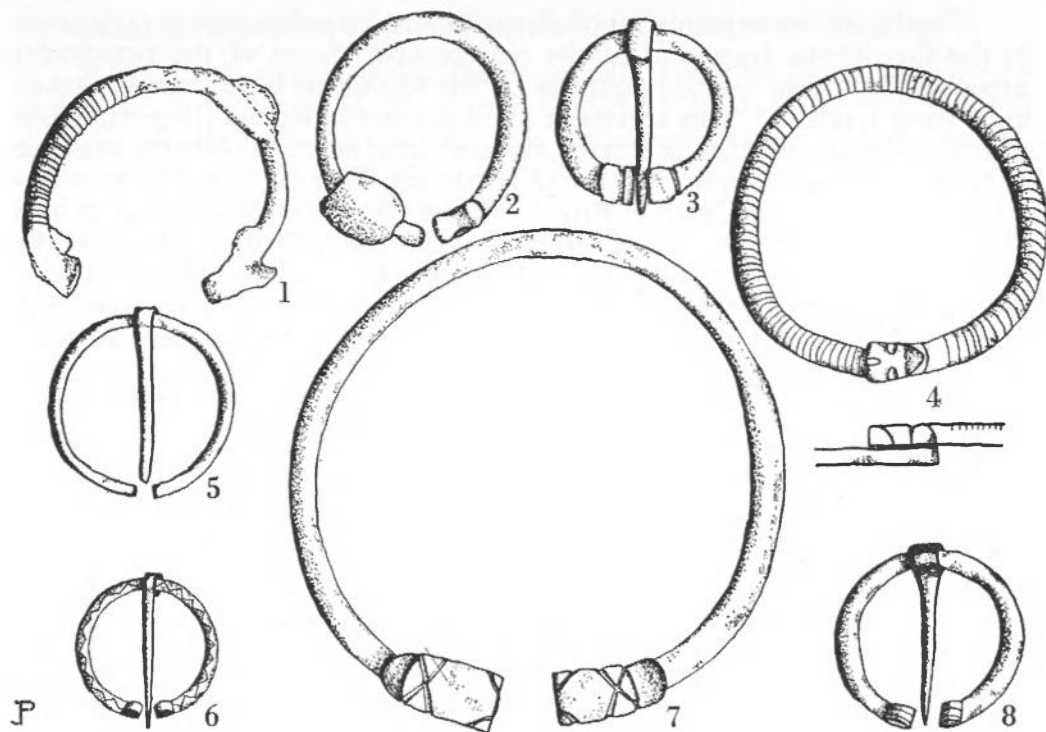


Fig. 6. Brooches from Saxon contexts (pp. 146-9, Appendices 6 and 7) (†)

1, Vahrendorf; 2, Long Wittenham; 3, Bidford-on-Avon; 4, Brighthampton;
5, Westerwanna; 6, Fimber; 7, Bifrons; 8, Sleaford

bronze wire. Both have much corroded terminals, but the Vahrendorf one might be Type C. These may be of local manufacture,¹ and the burials seem to be early in the cemetery. It must be stressed, however, that penannular brooches are rare in any of the Saxon cemeteries,² and their occurrence could well be due to acquisition from the *auxilia* of the Roman army, or from contacts with the people of Scandinavia.³

The point is that, however obtained, penannular brooches were not unknown to the Anglo-Saxons before they came to England, and this is presumably why they continued to acquire and wear them. Later on, perhaps, the C brooches were made by Saxons, or Britons, reverting to a pre-Roman type interpreted in a new style. This is a singular occurrence — dare one suggest continuity? However, there is a gap of some centuries, and the author feels that the real explanation, despite the argument, p. 114, about fragility, is that

¹ Silver and bronze inlay was a North German technique (Evison, 1955, 21).

² Tischler, 1937, 49.

³ Since penannular brooches were not common elsewhere on the Continent, it is hardly surprising that there are so few in Saxon cemeteries. Fohrde and Hohenferchesar, for example, produced only *two* out of four hundred graves. They are almost characterised by their absence.

the C penannulars were produced during the latter years of the Empire. As the study of the buckles and late Roman pottery has shown, Germanic influences were already at work before the official end of the Empire. Conditions in the late 3rd, 4th and early 5th centuries were not those of the 1st and 2nd, and it would not be impossible for an older piece of jewellery to be revived in a new guise.

The associations of penannulars in Anglo-Saxon graves do not assist much in dating, and often the penannular brooch, one or a pair, is the only ornament in a grave. Any distinctions between inhumed and cremated burials is no guide since frequently the penannular brooches are only listed in excavation reports and not attached to grave groups. The fact that only two penannulars (an A1 from Girton and a B from Sancton) were certainly found with cremations is no evidence, therefore, that they are more common with inhumed than cremated burials. Equally, where the fact is recorded, the penannulars come from male and female graves, and quite often from children's. Occasionally a penannular forms part of a richly furnished grave,¹ and this is so for Type C particularly. But on analysis the ten graves out of the thirty or so with bronze or iron C brooches fall into no recognisable grouping. Some seem to be 6th-century (Basset Down, Holywell Row), others a century later (Castle Bytham). There appears to be no typological pattern, in form or decoration, between a C brooch in an early burial and one in a later. This means that C brooches cannot, by themselves, date a burial, and a similar caution should be observed with all penannular brooches (and much else) in Anglo-Saxon contexts. The only further point to make is that in some graves the penannular brooch is associated with Romano-British as well as Saxon material, which suggests perhaps that the dead person was a Briton rather than a Saxon (Brighthampton grave 7 — a woman; Holywell Row 39; Basset Down — a double male interment). Sometimes too, penannular and saucer brooches occur together. It has been suggested² that the saucer brooches are early in any assemblage of Anglo-Saxon material, and may represent the first successful thrust North and West of the Saxons under Aelle. Certainly the decoration on some of the saucer brooches, as on the annular and penannular brooches, seems to come from the barbarianized late Roman world rather than from true Saxon contexts, if indeed such a dichotomy can be suggested.

If, then, the C penannular brooches together with the few examples of other types are not significant for dating purposes, are the G, E and F brooches any more so? The G ones³ are found in the West Midlands and Western cemeteries, and these, on historical grounds, should be 6th to 7th-century in date, which means that the G brooches had either survived for a hundred years or more, or were recently made by native craftsmen. The few E and F brooches are also like 4th-century types found in Western Britain. It has been argued⁴ that these brooches, and other objects like pins and hanging-bowls, are evidence of trade

¹ *i.e.* a grave containing more than the usual knife and buckle, and therefore possibly datable material.

² Mrs. Margaret Sanders, B.Litt. thesis quoted by Dr. Myres, 1959 Ford Lectures.

³ Savory, 1956, 52-3.

⁴ *Ibid.*, 55.

between Ireland and the Saxon-occupied areas of Britain. But these objects, as should now be clear (see also below p. 125), were not *necessarily* made in Ireland. All were circulating freely in 5th-century Britain; as the Saxons came into Britain they found these brooches in use, and 'acquired' them. The Bifrons armlet (Fig. 6/7) is merely a re-used 5th-century F brooch, while the pin from Silchester is a reminder that people were wearing, and discarding, F brooches in the early 5th century. The penannular brooches found in Anglo-Saxon graves were either taken from 5th-century Britons, or were made by Saxon craftsmen copying a British ornament, or belonged to the dead Briton with whom they were buried.

That there was contact between the Celtic and Saxon worlds is evidenced by the obvious borrowings, one from the other, of complex metal-working techniques.¹ But in a less obvious way a few objects may have passed from Saxon England to the Celtic West, just as some penannulars, pins and hanging-bowls came the other way. The mechanism of these operations is still not fully understood, but trade and/or gifts, as much as the results of war, seem possible.

The particular objects in question are related to the annular zoomorphic brooches.² There are two varieties: in one the hoop is given a penannular appearance by terminating in two incurving touching bird-beaks and the pin swings freely; in the other the creatures form a circle with joined tails but their gaping jaws, opposite to the tails, hold the bar on which swings the fixed pin. The hoops of both varieties are half-round or oval in section and decorated with bead and reel ornament. This ornament characterised Leeds' group f annular brooches³ and is seen in a simplified form on several annular brooches⁴ and penannulars.⁵ Three points are raised with reference to these zoomorphic annular brooches. How, if at all, are they related to the penannular brooches? What is their relationship to the animal-headed buckles and other examples of provincial late Roman metalwork? Are they to be connected with the ornithomorphic B₃ penannular brooches?

Leeds frequently argued that the annular brooch, particularly the broad flat type, originated in the penannular brooch, and developed 'in that short period between the departure of Rome and the Anglo-Saxon invasions'.⁶ He believed that the annular brooches in South-Eastern England and Wessex were 'a pre-invasion type' and belonged to the first phases of the settlement, but that the majority of annular brooches were Anglian and belonged to the latter half of the 6th century.⁷ Leeds never fully indicated which penannular brooch type was the direct ancestor, unless his 'recurved terminal' type meant either Type B or C. The initial drawback to Leeds' derivation is the method of hingeing the pin, since the annular brooch is different from the penannular in this respect. There are, however, two points which can be made. Buckles

¹ For the most important borrowings from the Saxons by the Celtic West see de Paor, 1958, Chapter 4.

² Leeds, 1936, 99.

³ Leeds, 1945, 48.

⁴ Chadwick, 1958, fig. 61.

⁵ Savory, 1956, 52 and 56.

⁶ Leeds, 1936, 3, and 1944, 120.

⁷ Leeds, 1945, 84.

invariably have fixed pins, and there must have been numbers of buckles available on Roman military sites which could have supplied the idea. Secondly, there is some evidence that annular brooches, with the hoop recessed for the pin-point, were being produced before the end of the Roman occupation. A very curious example was found in an early 4th-century context at Verulamium,¹ and the Caerleon, Caerwent and Cirencester examples, being unassociated, might just as well be late Roman as sub-Roman.² Indeed, Savory is perhaps too circumspect over the Minchin Hole annular brooch, and there seems no reason why some annular brooches, especially those with shallow transverse groovings in groups (as on certain F hoops), should *not* be sub-Roman and 5th-century.³ There is one annular brooch, if accepted at its face value, which implies that the decorated annular brooch was current in the 'late Roman or early Saxon period'. This is the bronze brooch with bead and reel decoration, and originally an iron pin, from the homestead at Crook Cleugh, Roxb.⁴ The site cannot be closely dated, for the Votadinian pottery found there is not susceptible to accurate dating because of its coarse quality.⁵ But there was a fragment of late 2nd/early 3rd-century glass on the site, which may be an indication of the approximate date. Possibly, therefore, the buckle plus the penannular brooch provided the inspiration for the annular brooch; but annular brooches, with bead and reel decoration, also occur on the Continent. An example from Norway is dated 400–600 A.D.⁶ while another from the large Rhenen cemetery in the Netherlands is dated 400–700 A.D.⁷ However, there is a distinct possibility that these brooches were obtained in or from Britain, as the same Rhenen grave group included a typical Anglian flat annular brooch with dotted ornament.

A real clue to the origin of the zoomorphic annular brooch is afforded by the 'animal-ornamented' buckles,⁸ some of which were made in the late 4th and early 5th century in Britain. The inspiration provided by these buckles could imply that the zoomorphic annular brooches were in existence in the 5th century.⁹ Presumably therefore the confronted animals clasping a pellet between their jaws which appear in the inner zone of the Howletts brooch could have been borrowed from the annulars or from the buckles.¹⁰

There remains the question of the connection, if any, between these annular brooches and the B₃ penannulars. The two particular ones in question are from Lagore and Co. Antrim.¹¹ Hencken derived these bird-headed brooches, with settings for eyes, from the Migration Period bird-brooches, and saw the

¹ Wheeler, 1936, fig. 45/41.

² Savory, 1956, 51–52.

³ *Ibid.*, 54, fig. 12/2, 4, 5, 6.

⁴ Steer, 1946, 155, fig. 7/8 and 156.

⁵ Richmond, 1942, 121–33.

⁶ Universitetets Oldsaksamling, Oslo.

⁷ Grave 66g² on show (in 1960) in the laboratories of the State Service for Archaeology, Amersfoort.

⁸ Chadwick Hawkes, 1961 i, 1–70.

⁹ Chesters Fort on Hadrian's Wall yielded an annular brooch, with bead and reel decoration on the hoop and gaping-jawed animals holding the bar round which the pin was hinged. Bead and reel ornament is used on the handle of the late 3rd-century bucket from Mount Sorrel (Hawkes, 1951, 199, n.115).

¹⁰ Chadwick Hawkes, 1961, 56, n.5.

¹¹ Hencken, 1950, fig. 10/A and B.

idea reaching Ireland along with the Germanic animals of the Book of Durrow.¹ Yet the inturned touching beak and large eyes are far more characteristic of the Anglo-Saxon annulars, and the closest parallels are to be seen in the Uncleby type of annular bird brooch with cabochon garnets in gold filigree settings for eyes.² Contact of some kind seems probable here. It is not at all easy to sort out the various animal and bird-motifs available to sub- and post-Roman craftsmen, for there seems no doubt that both the Celtic bird (swan or duck) and the Germanic hooked beaked bird were thoroughly confused by the 7th century.

Before discussing pins, one final note on the penannular brooches should be made. This arises as a result of the discovery of the St. Ninian's Isle treasure and of a remark by Radford when publishing the Whitby excavations. The St. Ninian's Isle hoard contained a remarkable assortment of objects, among them twelve penannular brooches. These have always been claimed as secular ornaments and hence have led to the most tortuous arguments to explain their presence in the hoard.³ But recently the Very Rev. Monsignor David McRoberts has demonstrated the essentially ecclesiastical nature of all the objects in the hoard,⁴ and in particular cites literary evidence to show that brooches were treasured. Admittedly it is only brooches, not specifically penannular brooches, but since only these were worn in the Celtic West during the Early Christian period until the Viking settlements it is not too far-fetched to equate the literary with the archaeological and sculptural evidence.⁵ Further, penannular brooches have occurred on and in ecclesiastical sites and contexts. The Trewhiddle hoard is the prime example, but the Croy hoard had three penannulars together with part of a possible 'disciplinarium', and two were found at Whitby. Radford⁶ suggested that these were 'taken over by the Saxons from the provincial Roman art'. One of the Whitby ones is a Type B, which was not a common type in Roman Britain, which probably did not last till the 5th century, and which seldom appears in Anglo-Saxon graves in Britain. But Type B is common in Ireland and occurs frequently on Early Christian sites.⁷ The Whitby penannular may, then, really have belonged to an Irish monk. The presence of Irishmen in the Northumbrian monastic settings is perhaps more real than the nationalistic arguments allow.

PINS AND ALLIED MATERIAL

R. B. K. Stevenson's review in 1955 has been the only recent study of dress and hair-pins since Armstrong's initial work in 1921, and the present survey, though differing in some respects, owes much to both authors.

¹ *Ibid.*, 61 and 64.

² Leeds, 1936, 99, pl. xxvii/31.

³ Bruce-Mitford, 1959, 267-8, seems unnecessarily to complicate the issue.

⁴ McRoberts, 1960, 301-313.

⁵ The reference to Giraldus Cambrensis (McRoberts, 1960, 306) is illuminating and one wonders if he meant the sort of brooch represented earlier by the curious A5 penannular from High Down, Sussex, which was of sections, linked together.

⁶ Radford, 1943, 58.

⁷ Ó Riordáin and Rynne, 1961, 62.

On p. 102, reference was made to the zoomorphic pin and its connection with the E brooches. The origin of this pin (here called Type E, Appendix 8) is confused, though it is possible that the upright head type of swan's neck pin¹ provided a kind of basic form, while the D₄ and D₅ penannular brooches inspired the decoration. A similar process was at work converting the projecting ring-head pin into the beaded ring pin (p. 122). The distribution of Type E pins² demonstrates their Military Zone provenance but the outliers, Cirencester and Cassington, require a special mention. Of the 26 pins so far noted, 16 have the simple rounded head (Fig. 2/1) while 4 of these also possess a hollow or dimple on the head. The remaining 10 are more like a Type E brooch terminal with squared heads and carefully delineated animal features. This division into simple and complex variants is, however, of neither general typological nor chronological validity, despite the Traprain evidence.³ The simple rounded-head type turned up in a late 3rd to 4th-century occupation (Crossgates, Scarborough) and, more significantly still, in the Cassington Saxon cemetery. The simple type began early and persisted, and the reason seems to have been the need to provide a convenient surface for decoration and enamel. It will be recalled how the F brooches lost their formal zoomorphic terminal as the craftsmen needed more space for ornament (p. 105).

The four pins with a hollow in the head are also significant. At least one (Newstead) had red enamel in the hollow, and the others, by analogy, may also have been so decorated. The unprovenanced Irish example of this type has three shallow grooves below the head (*i.e.* on the snout) in addition to the hollow (Fig. 2/5). This embellishment is paralleled or copied by the pins from Cassington and Corinium (Fig. 2/3, 4),⁴ the two most interesting of the series. Neither can be closely dated, the latter being part of a collection of objects acquired in and around Cirencester, the former having accompanied an 'elderly arthritic man' with iron knife buckle, shield grip and disk-stud in the Saxon cemetery. The Corinium pin like the Irish one has the central red enamel dot surrounded by a circle of red enamel, with three fillings of red enamel below. The stem, however, bears a series of pendant triangles in red enamel which is a new feature. The existing length of this pin is over 9 in. and the point is missing.⁵ The Cassington pin retains the three enamel fillings below the head but the dot and circle is replaced by a palmette derivative design (Fig. 9/16), which can be likened to that on an F₂ penannular brooch from Togher, Co. Louth,⁶ and also perhaps to that on the broken mould for a penannular from the Mote of Mark, Kirkcudb.⁷ This motif, like several others in Fig. 9, is related at some remove to the B10 motif of Fox's Grammar of British Early Celtic

¹ Dunning, 1934, fig. 2/4.

² Fowler, 1960, fig. 13.

³ The author (Burley, 1955, 138, 169) showed that the simple type at Traprain came from the lowest, earliest levels, the more complex from the upper, later, levels.

⁴ I am indebted to G. C. Dunning for first drawing my attention to this pin.

⁵ The length is not exceptional; at least two of the pins found in Ireland are over 1 ft. in length. An average length is between 4 and 8 in. For practical reasons Fig. 2 only shows the top part of each pin, except for the Cassington pin.

⁶ Kilbride-Jones, 1935, no. 44.

⁷ Curle, 1931, fig. 14.

Ornament.¹ Whatever date is given to the object from which the Bio motif is taken,² there is a gap of some centuries during which the motif remained in abeyance — that is, unless these particular pins *are* pre-Roman. But, if they are, the 2nd/3rd-century non-enamelled pins at Traprain, and the survival of the Cassington pin, would be extraordinary. It is more reasonable to assume that these enamelled pins are a sub-Roman type, an idea supported by the engraved decoration on the stems and underside of the heads. This seems to be a late-Roman trick, employed on many objects as well as the 5th-century F penannular brooches. The Onnum silver pin (Fig. 2/6)³ is further evidence of a 4th or 5th-century date.⁴

A possible Type E pin sequence can now be constructed. The rounded head type began in the late 2nd or early 3rd century (Traprain, Covesea) and persisted alongside the squared head variety with engraved decoration, which developed in the late 3rd or 4th century when Type E, and later Type F brooches, were evolving. From the outset it was the simpler head which was ornamented, first with a red enamel dot, later with more elaborate, but still geometric, designs.⁵ The Cassington pin remains a puzzle, as much for its associations as for its decorative motif. Was it buried with its original owner or was it lost? The fact that the body was that of an elderly male suggests that the former is a real possibility; despite the apparently Saxon nature of the cemetery, there were other Romano-British objects and it is a relatively early cemetery, perhaps early 6th-century. A 4th to 5th-century date for these pins would explain their arrival in Ireland as part of the loot of the Irish raiders of this period. It is nevertheless curious that the Corinium/Cassington type of pin was not similarly taken.

The starting point for all other pin types is the projecting ring-head pin, a characteristic feature of the Scottish Iron Age.⁶ Stevenson⁷ showed how this pin developed into the rosette and beaded pin in North Britain, with Traprain Law again being a centre of production.⁸ The type seems to start in the later 3rd century while the projecting ring-head pin seems not to occur much beyond this date. The heads of these pins were used, however, to decorate brooch and wheel-house pottery which dates between the 3rd and 7th centuries A.D.⁹ Some ring-stamped pottery may be earlier.¹⁰ But sherds showing the use of a loose-ring pin may be later in date, though a sherd and a pin from Cnoc a Comhdhaloch, N. Uist,¹¹ show that the ring-head pin and loose-ring pins co-existed

¹ Fox, 1958, 147, 149.

² Conventionally early 3rd century B.C., but Jope (1958, 78) hints at a 1st-century B.C. date.

³ Cowen, 1960, 231.

⁴ Burley, 1955, 174.

⁵ While this paper was in proof, I noticed belatedly the curious bronze pin from Silchester (Boon, *Roman Silchester*, fig. 15/1). This has a 'zoomorphic' head of the rounded variety with dots of enamel, but a silver ring revolves through a hook-type projection of the head. The stem appears to be grooved. The mixture of elements is surprising but it would seem to be a late or sub-Roman product, like Cassington.

⁶ Fowler, 1960, 163.

⁷ Stevenson, 1955, 289.

⁸ Burley, 1955, 169 and 219.

⁹ Stevenson, 1955, 293.

¹⁰ Cf. the aisled farmhouse at Allasdale, Isle of Barra (Young, 1952, 100).

¹¹ Young, 1952, pl. ix/1; Beveridge, 1911, pl. facing 206.

in that particular wheel-house context. The nature of this material from brochs and wheel-houses is such that there is considerable uncertainty about the dating.

There are two types of rosette and beaded pins,¹ one with either small or large beads, the other with small beads on the upper part of the ring only, the remainder being plain. The small-beaded pin may be typologically earlier than the large-beaded² but the distribution of both suggests an origin in Northern Britain. Traprain Law³ yielded both the large-beaded pins and their moulds as well as moulds for the small-beaded/plain-ring variety. The Covesea pins are clearly related to this type since they have a corrugated upper part and beads on the remainder. The dating evidence for both implies a development from the rosette form in the 3rd or 4th century A.D. Both variants are found outside Scotland, notably in Ireland, and at Lydney and Corbridge. Stevenson characterised the variant with beads on the upper part of the ring as the 'proto-hand pin' and we will return to this later. It is virtually impossible to construct a typological sequence for the Covesea-type pins as there are almost as many odd versions of the beading and corrugations as there are pins. The two Lydney ones well illustrate the possible extremes, the beginning and end of any typology. Presumably the pins, from Lydney and Halton Chesters (Fig. 7/5), with the upper part of the ring-head plain and the lower portion wider but still plain, are a degeneration from the true bead and corrugated type, but the ordinary projecting ring-head pin is just as likely a progenitor.

Few of these pins can be securely dated, which increases the difficulty of constructing any sequence. The exception is the beaded and corrugated pin known as 'ibex-headed'. Originally these were given a 1st-century B.C. date but Stevenson has finally refuted this⁴ and offered a 4th-century A.D. date. Jope⁵ preferred a 1st-century A.D. date because of the association of the Dunfanaghy pin with a 1st-century brooch. A corpus of all known examples, Appendix 8, illustrates the problem of dating involved since a time-span of some ten centuries is possible. But many of the pins are worn and the details blurred which alone argues for caution in identification and dating. Possibly this 'ibex-head' pin is of early Romano-British date, and so it could be the originator of the rosette and beaded pins. But one simplified version survived long enough to appear in an Anglo-Saxon grave at Duston (Fig. 7/3). Longevity of pin types is not remarkable: the Cassington pin might have been a hundred years old when buried, and the Anglo-Saxon cemetery at Wheatley, Oxon., had an Iron Age simple ring-pin among its grave goods.⁶ The few 'ibex-head' pins with red enamel, usually dots on the centres of the beads, could be used to argue an earlier date, were it not for the fact that this technique of spotting

¹ Appendix 8, Fig. 7/4-6. These paragraphs owe much to Stevenson's list of such pins.

² Stevenson, 1955, 290.

³ Burley, 1955, 219.

⁴ Stevenson, 1955, 291.

⁵ Jope, 1950, 54-6.

⁶ *PSA Lond*, xxix (1916), 55.

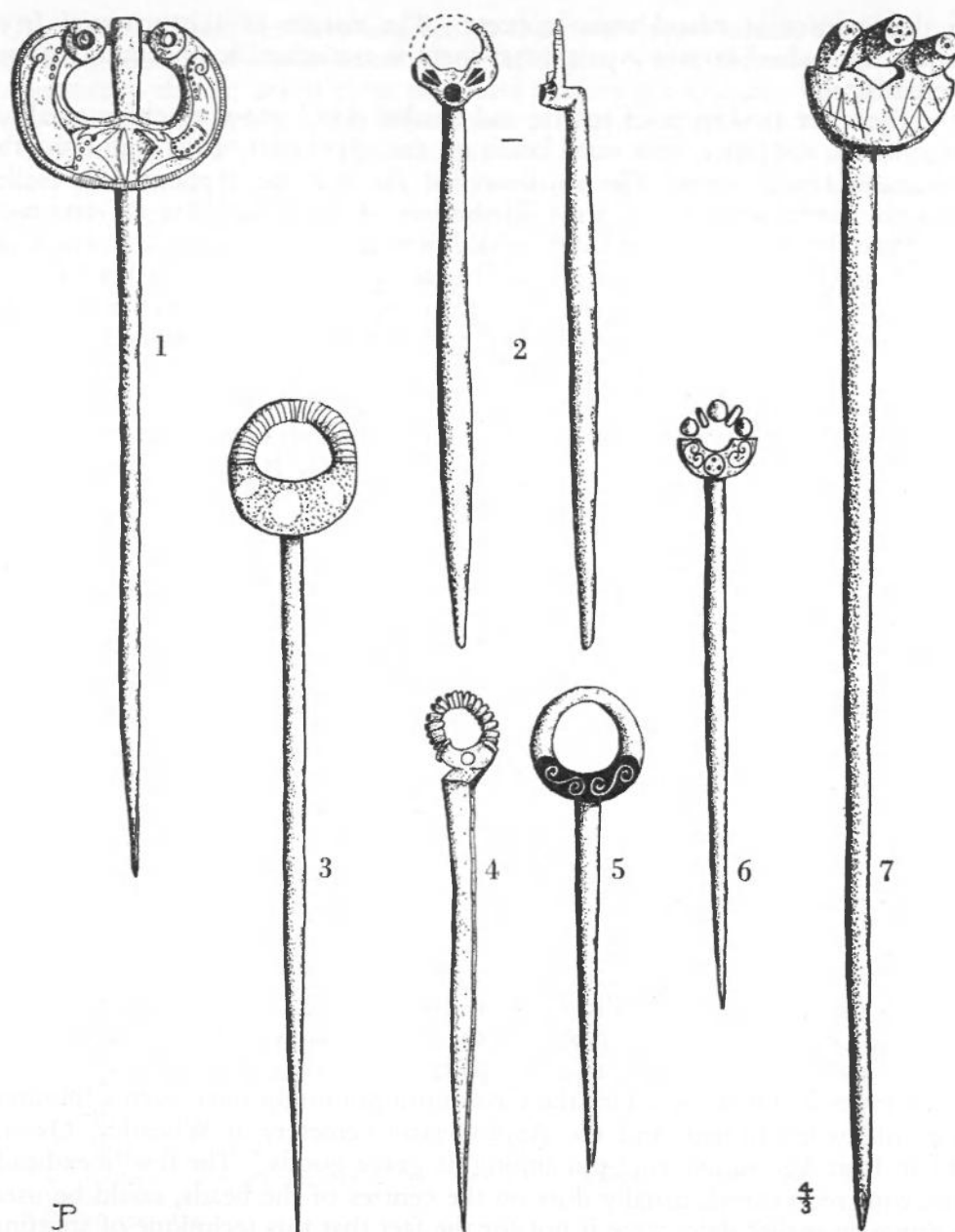


Fig. 7. Representative Pin Types (pp. 150-6, Appendix 8) (†) except 7 (§)

Loose-ring pin: 1, Arnoy. 'Ibex' pins: 2, Dundrum Sandhills;
3, Duston; 4, Woodperry. Proto-hand pins: 5, Halton Chesters;
6, Ireland, unprovenanced. Hand-pin: 7, Hallum Terp

with red enamel was in use on Type E pins which are probably 3rd to 5th-century. Such associations as do exist for these pins indicate a sub-Roman date for their *floruit*, implying an unspecified earlier date for their origin.

The most controversial of all 'Dark Age' pins are the hand-pins, long held to be Irish in inspiration and manufacture.¹ But like the F brooches and E pins, there are no forerunners in Ireland; the hand-pin appears there fully formed. There are, however, several proto-hand pins, but again mostly from

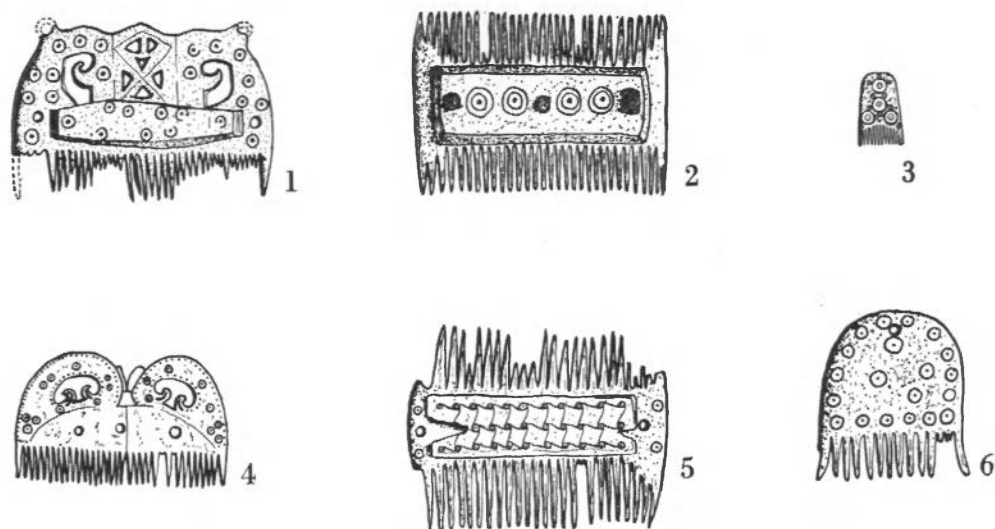


Fig. 8. Bone combs from Dark Age sites in the British Isles (p. 133) (1/2)

1, Dun Cuier, Isle of Barra; 2, Broch of Burrian, Orkney;
3, Abingdon, Berks.; 4-6, Lagore, Ireland

Northern Britain. The same is true of the beaded and corrugated pins. Once again Irish raiders must have been responsible for taking back to Ireland either these pins or their makers or both. The proto-hand pin is like the beaded and corrugated pin, for the pin-head has a semi-circular lower plate and beads continuing the curve of the ring. The number of beads was immaterial but the hand-pin emerged when the curved row of beads approximated to a straight row of 'fingers'. The earliest, typologically and chronologically, are Traprain 118, Corbridge and Covesea. The remaining Traprain hand-pins, 119 and 120, have fewer beads but in a straighter line. Traprain 119 was found 'in the vicinity of the Traprain Treasure' but almost certainly not buried with it. These early hand-pins are probably 4th-century, and one from Ireland is very similar to the Moresby pin which shows the characteristic lengthening of the 'fingers'.²

¹ Henry, 1936, 223.

² See Appendix 8 for full description of these early pins.

At this stage it is necessary to discuss two closely related types of pin which apparently had considerable influence on the ornamenting of the hand-pins proper. On p. 123 reference was made to the two pins from Lydney and Halton Chesters (Onnum) both of which have plain ring-heads but with the lower portion expanded into a flat plate. The Onnum pin is, however, embellished with two opposed S-scrolls on a field of red enamel on this lower portion (Fig. 7/5). The related pin is like those from Covesea where the beads on the upper part of the ring are separated by fillets. These are probably 3rd or 4th-century. There are, however, several pins from Ireland¹ in this class, of silver and two at least bearing ornament. The pin with the National Museum, Dublin, registration number 7.W.24, has C-scrolls faced across a central circle containing three dots in the form of an equilateral triangle (Fig. 7/6). This motif is common on hand-pins and appears usually on the central 'finger', as on the National Museum, Dublin, no. 1944. 95, silver pin. Again on this pin the beads are separated by fillets and are still curving, while the broader portion below carries two S-scrolls linked together by a central whorl. The ends of the scrolls appear to be eyed. These pins, from Onnum and Ireland, provide us with many of the hand-pin motifs, with the important exception of the eyed peak (Fig. 9/5). A possible date for the Onnum pin would be the late 4th century; the pin was found in that part of the fort which lies North of the line of Hadrian's Wall and several 3rd and 4th-century coins were found in the same field. Recent excavations at Onnum have demonstrated that there was re-occupation of the fort and considerable re-building well after the middle of the 4th century,² and this is the kind of context which would suit the arrival on the site, if not the actual manufacture, both of this pin and the silver Type E pin already discussed. It is a little difficult to imagine a member of an Irish raiding party attacking this fort so far inland, and losing his dress pin: it is much more likely that this pin was made in Northern Britain, and decorated with a late Roman scroll motif (p. 133).

We have then some evidence from Northern Britain that bronze pins decorated with red enamel were being made in the last years of the Roman Empire, and that silver pins were also being made and ornamented either in the same area or in Ireland. Almost certainly too, proto-hand pins were in existence by this time. The Traprain pins 119 and 120 are evidence of this, and interestingly 120 is of silver, while the Traprain 118 pin is of tinned bronze, presumably in imitation of silver (p. 108). There is no need to assume the use of silver to be confined exclusively to the Irish part of the Celtic West;³ after all, the Picts as well as the Scots, Irish and Saxons, must have acquired pieces of silver tableware in their frequent raids into the Civil Province during the 4th century. Confirmation of a late 4th-century or 5th-century date for the earliest ornamented proto-hand pins is afforded by the silver example, very much worn, found at Hallum Terp, Friesland (Fig. 7/7). Boeles⁴ dated it to his

¹ Henry, 1936, fig. 6b, quite plain.

² J. P. Gillam *in litt.* My thanks are due to him for his help.

³ Stevenson, 1954, 229.

⁴ Boeles, 1951, 332, pl. LI/3.

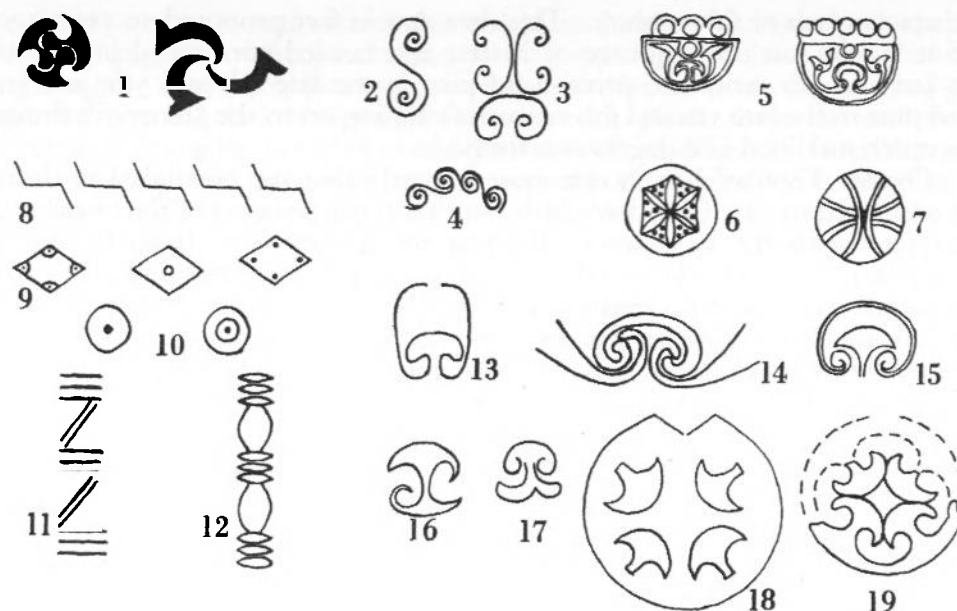


Fig. 9. A grammar of 'Dark Age' art:

1, voids; 2, S-scroll; 3, C-scroll; 4, running S-scroll; 5, eyed peak; 6, marigold; 7, Greek cross; 8, step pattern; 9, lozenge; 10, dot and circle; 11, horizontal/oblique lines; 12, bead and reel; 13-19, variations on the basic pelta and palmette shapes

third 'terpenperiode' 400/450-750 A.D. The pin, like the F penannulars, must have been the result of trade or loot from the Celtic West. The Hallum pin, incidentally, has a Greek Cross pattern of five dots on the central finger and, while these fingers project, they are still arranged in a slight curve. The plate below the finger is heavily scored as if ornament had been removed, or as if it was desired to prepare a space for enamel. The pins closest in form to this Hallum pin are the silver ones from Norrie's Law, and the silver-plated bronze Castletown Kilpatrick pin. On these the ornament consists of joined scrolls against red enamel, and the central 'finger' is decorated with an equal-armed cross on one Norrie's Law pin and with opposed dotted triangles on the Castletown Kilpatrick pin.

The three Norrie's Law pins, all silver and red enamelled, pose the most crucial question of all. One of them is ornamented on the back with a Pictish symbol, and it has long been argued that these symbols are 7th or 8th-century in date. Stevenson¹ dated the pins to the late 7th century, holding that they were the result of someone 'copying an old pin' and putting late Pictish symbols on the backs of the heads. If, however, there were no Pictish symbols on the pins, they would probably be given a date closer to the beginnings of the hand-pins,

¹ Stevenson, 1955, 291 and 1955 i, III.

perhaps late 5th or 6th-century. This date was in fact proposed 50 years ago,¹ and it would suit the sequence of rosette and beaded/corrugated pins in the late 3rd and 4th centuries, proto-hand pins in the late 4th and 5th, and true hand-pins in the late 5th and 6th centuries running on to the 8th or 9th though in a much modified and degenerate form.

Charles Thomas² has shown most cogently that the Norrie's Law hoard has been used to date Class I symbols but that the deposition of the hoard itself cannot satisfactorily be dated to the late 7th century A.D. It could well be 6th-century — the late 6th-century Byzantine coin *was* found with the hoard and therefore the hoard cannot have been concealed earlier. But this date of deposition is only a *terminus post quem* and the various objects may well cover a considerable span of years. The St. Ninian's Isle hoard reminds us that this could be so.³ If we accept Thomas' arguments,⁴ that the Pictish Class I symbols are early 6th or even 5th-century in date, and on grounds other than the dating of Norrie's Law (deposited perhaps around A.D. 600), then the whole Pictish art problem becomes less puzzling. We shall return later to this question when discussing Dark Age metalwork as a whole.

In order to assess the various 'motifs' used in the decoration of hand-pins and to attempt to construct a series, we have to return to the proto-hand pins cited on p. 126 with their simple unlinked S or C-scrolls against red enamel. Two of the Norrie's Law pins have two similar scrolls, but linked in the centre rather as if the designer was not sure how to manipulate a linked spiral design in a semi-circular space. The Irish equivalent, from Castletown Kilpatrick,⁵ has the same idea but better arranged. Almost exactly the same motif, but this time admirably adapted to a circular area, appears on the oval plaques from Norrie's Law, and a simplified version on the terminal link of the Whitecleuch silver chain. It begins to look as though the earliest hand-pin motifs were simple scrolls which the designers attempted to link together and compress into an unsuitable space. At the same time (National Museum Dublin pin, 1944.95, with beads and fillets) a craftsman had linked two complete S-scrolls together through a central whorl and dotted the thickened loose ends of the scrolls. The Norrie's Law and Castletown Kilpatrick pins show this thickening to some slight degree. Apart from the hand-pin from Ballycatteen, Co. Cork, and the other from Ireland, with five fingers, the loose scroll or linked spiral design appears to have been superseded by the pelta and eyed peak motif. The Ballycatteen pin has been dated to the late 6th or early 7th century A.D. and thus the typological sequence might have some foundation; it was found near the D7 penannular brooch at the bottom of the black occupation layer in the fort, one of the sites yielding E ware (p. 111). The pelta and eyed peak motif is by

¹ Smith, 1913, 287.

² Thomas, 1963, 42-45.

³ Bruce-Mitford, 1959, 263.

⁴ Thomas, 1963, 44-45.

⁵ There seem to be two Castletown Kilpatrick pins, but the pin here referred to has the National Museum, Dublin, registration number P.634 and has also been said to come from Clonmacnoise. The other Castletown Kilpatrick pin has the number N.M.D. 7.w.24 and is from the Castletown Kilpatrick Collection but is the bead and fillet type of proto-hand pin.

far the commonest on the hand-pins and is used almost exclusively on the five or more 'finger' variety, which are probably typologically later than the three finger type. There are, however, several examples of three finger hand-pins with no opening below through the crescentic plate; these are said to be degenerate examples but they could just as well be offshoots from the main line of development, especially as none can really be dated. The curious feather ornament on the Dunadd pin can possibly be paralleled, however, on the side of one of the Norrie's Law pins and on the hanging-bowl escutcheons from Hildersham, Cambs.¹ The technique of filling the ends of the 'fingers' and the narrow grooves around the sides of the semi-circular plate with red enamel seems comparable with the spotting technique used on some of the Type E and 'ibex-headed' pins, while the incised line and dot ornament on the backs of the plates of some hand-pins is a more elaborate version of the lines on the undersides of Type F terminals.

It might be argued that the use of crosses on hand-pins (Norrie's Law, Long Sutton, Gaulcross, Hallum Terp) must indicate manufacture in Ireland where St. Patrick and his successors established Christianity in the late 5th and 6th centuries. But if it is accepted that proto-hand pins are late 4th and 5th and true hand-pins late 5th and 6th, then there is no reason why some hand-pins should not bear Christian symbols. St. Ninian had established his church at Whithorn sometime in the 5th century (and incidentally converted the 'Southern Picts', according to Bede), and St. Columba in the late 6th century visited King Brude of the Northern Picts and converted him and his people. There is, therefore, no inherent reason for *not* giving the cross-ornamented hand-pins at least a late 6th-century date, if not earlier, and, in view of their find spots, for not assuming their manufacture in Northern Britain. It is reasonable to assume that the decoration of the Norrie's Law pin with cross and Pictish symbol was carried out at the same time as the enamelling. The Pictish symbol presumably indicated an owner's or craftsman's 'mark' and it is interesting to note that the oval plaques in the hoard carry the complete floriated Z-rod which appears broken on the hand-pin.

The other large class of Dark Age pins is the 'ring-pin' which Armstrong² studied in some detail. The essentials of this kind of dress pin are a pin stem bent round at one end through which a ring, sometimes lozenge-sectioned, passes. The ring is usually unornamented but the stem is sometimes engraved. Subsequently,³ the head of the pin stem is cast solid, either square or polygonal, but the ring always revolves freely. There is a small group of related ring-pins where the loose ring is more like a semi-circular plaque and does not revolve freely through the pin-head. The interesting feature of the first type is that it was not confined to the Celtic West, for, as Boon showed in discussing late Roman material from Silchester,⁴ they occur, usually as pins minus their

¹ Lethbridge, 1951, pl. IX.

² Armstrong, 1921, 71.

³ The author differs here from Stevenson (1955, 292) who regards the square or polygonal-headed ring-pin as the earliest type, dated to the 7th or 8th century.

⁴ Boon, 1959, 82.

rings, in Anglo-Saxon as well as late Roman contexts. It has not been possible to make an exhaustive search for every example but the list in Appendix 8 shows clearly that the type began in the latter part of the Roman occupation (Chester and Jewry Wall) and reached Ireland (Cush) perhaps in the 3rd century A.D.¹ The pins found in Saxon contexts have either the usual bent-over head (Harnham Hill, Grave 61) or flat heads pierced to take a loose ring (Harnham Hill, Grave 42). It is perhaps significant that many of these pins occur in graves with associations that are not characteristically Saxon, a point already noted with reference to penannular brooches of Types A, D and E (p. 117).

Several of these loose-ring pins have decorated stems. The Chester pin has a slightly broadened stem and transverse grooves above the squared pin-head; it probably dates from the 3rd century. The broadening of the pin stem is seen more clearly on some Irish pins. The Craig Hill pin, dated by its excavator to the last centuries of the first millennium A.D., has a tongue-like pin-point and engraved transverse lines near the pin top. The two Dalkey Island pins are extremely interesting. One was certainly associated with B iii and E imported wares,² and the other, a large decorated example, came from clean soil over the floor of a hut belonging to the Early Christian Period of the settlement.³ The criss-cross lines and step-pattern decoration on the stem of the bronze pin are not foreign to the kind of material under discussion. Indeed the step pattern can easily be paralleled at Lagore (pin stem),⁴ at Ballycatteen,⁵ and at Lochlee Crannog (complete pin).⁶ Here the pin-head is square and carries a different pattern on each face, one being reminiscent of the four dots within a lozenge seen on Type G brooches. Other Scottish sites, some of which show post-Roman occupation, have produced ring-pins with similar dot and line ornament. The trick of broadening the pin-point is probably borrowed from the 2nd/3rd-century A.D. Aa brooches found in Scotland.⁷

The dating of these pins is complicated because some undoubtedly occur in 8th-century and later contexts.⁸ Some, however, must be earlier. All the examples quoted above come from sites where occupation in the 5th, 6th and 7th centuries is reasonably well attested, and indeed the Scottish examples could well be earlier. In addition, the curious brooch/pin from Garryduff dated between 500 and 700 A.D. may provide confirmation for the early beginnings of ring-pins. This ornament has several features which recall both pins and penannular brooches. The two bronze strips are bent over and clenched at one end in a way which resembles the D4 brooch terminals. The other end of one strip is flattened and tongue-like, and passes through a hook made by bending under and back the other end of the first strip. Both pieces

¹ Ó Ríordáin, 1940, 176. It is hard to stretch the occupation beyond the 3rd century A.D., although Ó Ríordáin showed much caution in the dating of the site.

² Thomas, 1959, 89-111.

³ Dr. David Liversage kindly allowed use of this information in advance of his own publication.

⁴ Hencken, 1950, fig. 6/1026.

⁵ *PRIA*, 49C (1943), fig. 5/82.

⁶ Munro, 1882, fig. 144.

⁷ Fowler, 1960, fig. 7.

⁸ Waterman, 1959, fig. 11/13.

have cross-hatched punch marks in groups, on the pin-point of the under piece and the stem part of the upper. Two wire rings pass through the looped end of this piece. But it is hard to see how this ornament worked unless it originally had a chain linking the two looped ends together. However, the flattened pin-point, the decorated stem and the type of looped head would indicate a date like that already cited for loose-ring pins.

The second, smaller, group of loose-ring pins is only really marginally related, as the ring cannot truly revolve through the pin-head. They might be better defined as plaque ring-pins. It is difficult in some cases to distinguish this type from the type of penannular with a long pin where the 'penannularity' is scarcely evident (*e.g.* Lagore, Co. Meath).¹ Furthermore, the entire group is small, and no two pins are identical or even similar. It is, therefore, impossible to construct any kind of typological sequence, but it is worth pointing out some interesting features, beginning with the example published by Mahr as a 4th-century A.D. piece.² This is silver-plated bronze with symmetrically arranged voids and a simple pelta engraved in the centre. The design is outlined by punched dots and on either side of the pin-head are hollows for enamel or stone settings. The ring-pin from Ballybunion is simpler with an expanded ring decorated with loose S-scrolls emanating from a central circle opposite the pin-head. The various features of these ring-pins can be paralleled elsewhere. The openwork voids are very evident on certain of the hanging-bowl escutcheons. The dotted outline is one of the characteristics of H brooches, and incidentally of the Cathach of St. Columba, dated to the late 6th or early 7th century,³ which possibly borrowed it from the metalwork.⁴ The simple S-scrolls are seen on early hand-pins, and the settings for enamel or stones on several other plaque ring-pins.

The most interesting of these plaque ring-pins is that from Arnoy, Co. Antrim (Fig. 7/1).⁵ The ring carries two opposed down and inward facing 'dolphins' or S-dragons⁶ with beaky jaws grasping an oval pellet. The animals' bodies were once spotted, and the edge of the ring was once beaded, but the whole is now much worn. The obvious parallel is the Faversham hanging-bowl escutcheon;⁷ but with a large number of Mrs. Chadwick Hawkes' Type IA and IIA buckles⁸ now seen to be 4th and 5th-century and probably British made, the whole hanging-bowl problem takes on a new aspect. Secondly, Thomas has indicated that the Pictish S-dragon has a long ancestry.⁹ There is, however, a very real possibility that its appearance in Pictish art was directly due to the contact between Pict and 'Roman' soldier in the late 4th or 5th century when buckles of Type I and IIA were being worn.¹⁰ The Faversham

¹ Hencken, 1950, fig. 18/A.

² A. Mahr, *Christian Art in Ancient Ireland*, 1, pl. 1/4.

³ Nordenfalk, 1947, 141-174.

⁴ Thomas, 1963, 56, n.1.

⁵ Cited by Haseloff (1958, 88, n.82) but noted independently by the author in the British Museum.

⁶ Thomas, 1963, 54-56, figs. 13, 14.

⁷ Haseloff, 1958, 88.

⁸ Chadwick Hawkes, 1961 i, figs. 13, 17 and 18.

⁹ Thomas, 1963, 53-5.

¹⁰ Chadwick Hawkes, 1961 i, 32.

escutcheon, the Arnoy ring-pin and the zoomorphic annular brooches would represent similar responses, at a little later date, to the basic opposed animal motif.¹

The only possible ring-pin from a British context is the tiny fragment from the Atworth Villa, found during the excavation without any associations.² It is extremely small, and too fragile to have formed a free-riding ring on its own, but as it is silver the intention may have been to mount it in a bronze surround. It shows a design in bronze against red enamel, resembling the hand-pin motifs of the 6th century, consisting of a pelta expanded into an S-scroll, each thickened and ending in an eyed peak. If it is 6th-century, its appearance on a Roman villa site is odd unless the site was only abandoned then in the face of a renewed Saxon push under Cealwin.

The remaining pin types can be dealt with briefly since, although instructive, they are not numerous. The solid round-head pins, seen at Garranes in a plain form, probably derive, as O Riordáin suggested, from the projecting ring-head sequence. The decorated ones, although with C-scrolls, seem closer to late 7th and 8th-century metalwork, and another has interlace patterns. The double spiral-head pin occurs in quantities in Ireland but also in Wales and the West Midlands³ and has been dealt with fully by Rynne.⁴ An unnoticed pin type, however, has a mushroom-shaped head, lightly grooved in a manner identical with the terminals of A2 penannular brooches. There are some in Roman contexts in Britain, and from native sites as well. These pins also appear on at least four early Christian sites in Ireland, and a variant type at Whitby presumably came from Ireland.

The significance of the numerous pin types is their probable origin in the Highland Zone of Britain in the 4th and 5th centuries, and the use of silver, of red enamel and of forms of La Tène ornament in a new format. The links between pins and penannular brooches are evident, but already it is clear that both pins and brooches are related to other metalwork.

CONCLUSIONS

This account, necessarily highly condensed, of two related groups of dress ornaments does not claim to be revolutionary in its conclusions. It seeks to draw attention to some new points and to several made earlier which now seem to be more significant.

There can be little doubt that there was considerable metal-working in the area of the old Military Province of Roman Britain long before the final collapse

¹ The Sir John Evans Collection in the Ashmolean Museum, Oxford (registration 1927.391), possesses a bronze tinned or silvered Roman brooch dated to the 2nd-3rd centuries A.D., from the South of France. In all essentials this brooch is similar to the Arnoy ring-pin, and demonstrates the universality of the motif.

² Since writing this, I have seen in the National Museum of Wales the bronze pin from Lesser Garth Cave, Radyr, Glam. (registration 20.359/11). This pin has a simple grooved bent-over head through which a ring revolves. The lower portion of the ring expands to provide an area for ornamentation, apparently of two opposing loose scrolls, each with a central dot. The other finds from the site, including an iron slotted, pointed object like those from Lagore and Dunadd, clearly indicate an Early Christian date.

³ Savory, 1956, 55, n.98.

⁴ Rynne, 1956, 212-3.

of the Imperial Administration. All the accepted 'Dark Age' types of ornament were in existence during the late 4th century, the time for which we have actual records of barbarian inroads into Britain from the West, North and East. In such a time of confusion, it was no wonder that brooch and pin types changed quickly and were distributed widely. One Scottish raid from Ireland would in theory be enough to enable the Scots smiths to learn new forms, just as one Pictish raiding party could have acquired, and passed on to their allies, the S-dragon motif or the running scroll (Fig. 9/4).

What is equally clear is that the various simple motifs (Fig. 9) provided a common source for Pictish, Scots, Saxon and British craftsmen. The basic 'palmette' motif (Fig. 9/19) of the Tummel Bridge hanging-bowl or the 'pelta' of the Richborough roundel¹ and the Wilton hanging-bowl (Fig. 9/18) was not a new invention in the late 4th century, as it was the characteristic feature of the openwork military trappings of the Roman Army. All that happens in the late 4th and 5th centuries is that it is adopted by various craftsmen for use on a variety of objects, from hanging-bowls to penannular brooches and pins, from buckles to Pictish memorial stones (*cf.* Fig. 9/13-19 with examples shown by Chadwick Hawkes² and Stevenson³). Similar comparisons can be made for the simple and complex scroll motifs (Fig. 9/2-4), the dot and circle (Fig. 9/10) and the other geometric patterns. In fact, to search for 'parallels' for the motifs on Early Christian metalwork only in Ireland is to restrict oneself unnecessarily, and to be unhistorical. Nothing was more likely in the disturbed conditions of the 5th century than that there should be a wide dispersal of motifs — and, as Fig. 8 demonstrates, of ordinary articles like bone combs as well. By the end of that century regional styles seem to have developed — thus the Jutish style A in Kent, the hand-pin eyed peak (Fig. 9/5) in Ireland (here probably drawing heavily on earlier material), and the Celtic and Romano-British part running scroll, part geometric styles of the brooches, pins, and some hanging-bowls. Incidentally, there is as much British as Irish evidence for the survival of red enamelling, and a survival in Britain as well as in Ireland of the technique is the simplest explanation of the occasional use of spots of red enamel on undoubtedly Saxon-made objects like saucer, and a few other, brooches.

With the question of enamelling and the use of 'La Tène' motifs (Fig. 9/1, 5, 15) we reach the crux of Dark Age problems. If it is assumed that the Early Christian craftsmen were continuing the work of the pre-Roman smiths, then there obviously remains a hiatus of some two or three centuries during which La Tène motifs and techniques 'survived' apparently in a vacuum. But perhaps, like the inappropriate term 'Dark Age',⁴ this survival notion and hence the hiatus is purely of our making. For the metalwork of the late 4th and 5th centuries onwards was not exactly like that of the pre-Roman Iron Age. Then, large scale objects were common (and may even have survived four hundred years or more), but the Early Christian world required smaller, less

¹ Bushe-Fox, 1928, pl. xix/35.

² Chadwick Hawkes, 1961 i, fig. 19/c and d.

³ Stevenson, 1955 i, fig. 15/A1.

⁴ Hunter Blair, 1963, 7-8.

flamboyant articles. Nor are the motifs identical, so that survival or revival are not strictly applicable terms. Rather is it a case of a re-interpretation of old styles acting under new stimuli, a point made long ago by Kendrick.¹

The archaeological evidence provided by the development of new brooch and pin types in the Highland Zone supports the historical evidence of a Celtic political resurgence in the 4th and 5th centuries. The shift in power from Roman to native barbarian authorities² is paralleled by a return to strong native cultural traditions. The Votadini, for example, once they took over the job of protecting the eastern end of the Wall, assumed the authority of Rome but paradoxically preferred their own culture.³ It is surely significant that in those areas where it is known historically that Celtic princes began to take over from Rome, archaeologically there are signs of intense activity and inventiveness represented by the metalwork. It almost seems like a deliberate revitalising of age-old traditions: there was little Roman about these tribes, even if red cloaks were sometimes worn and even though the leader of one of them followed late-Roman imperial practice by inviting barbarians to settle and defend his lands. If Vortigern represents the Celtic re-assertion of ability and Hengest the incoming Anglo-Saxons, then Ambrosius, and even Arthur, stand for the *civitates* of Britain, trying desperately to maintain Roman authority and culture in a world already deeply barbarianized. For although much of the archaeological evidence for this tends to be disregarded because it occurs in the topsoil of excavated sites, there is nevertheless sufficient to show that certain places were occupied well into the 5th century, with pottery and metalwork 'Germanized'.

But, significantly again, the Romano-Britons of the late 4th and 5th centuries were by no means culturally or politically identical with those of the 1st and 2nd. Basic changes had taken place: even the Army had adopted barbarian fashions, as well as leaders. The buckle types collected by Mrs. Chadwick Hawkes remind us of this. It follows therefore that it is false to represent the Romano-British of the 5th century as totally unlike the Saxons. There were obvious political and religious differences but the cultural distinction may not be as real as one imagines. The Battle of Mount Badon may really mark a turning-point: after it there could be no doubt that the surviving Britons meant to hold the Saxons back from the West Midlands and South-West as long as possible: hence the attacks of Cerdic and later Cealwin were particularly remembered. Before Mount Badon the population of the eastern part of England, as the Upper Thames and Kentish cemeteries attest, may well have been a very mixed one with foederati and Briton fighting Saxon. Fifth-century conditions were not those of the late 6th and 7th centuries. A semi-mixed population in Lowland Britain would partly explain the transference of objects and ornaments, and even provide a commonsense answer for the 'hanging-bowl' problem.⁴

¹ Kendrick, 1932, 177. Also Wheeler, 1932 ii, 292-300.

² Richmond, 1953, 63. Hunter Blair, 1963, 89.

³ Burley, 1955, 141.

⁴ I hope to offer some solutions in another paper.

This article has attempted to single out some archaeological problems of particular significance within the immediately post-Roman period. In concentrating on the 5th century, the achievements of the craftsmen of the 7th and 8th have not been forgotten. The unique pieces of metalwork and manuscripts were not created from nothing; the experiments and techniques lay ready to hand in the work of earlier smiths. The Cathach of St. Columba bears many similarities to the metalwork we have here discussed. The Book of Durrow and the Tara Brooch owe much to a long tradition of skill and artistic imagination. As in the 5th century, so in the 8th could a craftsman draw on a variety of sources for his ornaments, and so the mingling of Irish, Germanic and Mediterranean elements, which we see in the Lindisfarne Gospels for example, is perhaps not so strange against such a background.

APPENDIX 1

PENANNULAR BROOCHES, TYPES E AND EI

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+number where ascertainable)</i>
TYPE E			
<i>Cumb.</i>	Birdoswald	'Horsehead' terminals, moulded pin-head, ribbed ring (Fig. 2/7). From a sealed deposit dated 369-383 A.D.	Richmond, 1931, fig. 4/3D
<i>Co. Durham</i>	South Shields	1. Carefully moulded ends, barrel pin-head, ribbed hoop.	<i>Arch. Ael.</i> , XI, fig. 2
		2. Ends flatter and more incised. Barrel pin-head, hoop incised in regularly spaced groups of four. Published as late 4th cent. A.D.	
		3. Possible example, no details.	Blackgate Mus., Newcastle-on-Tyne
<i>East Lothian</i>	Traprain Law	1. Half only. Lower level. 2. Less emphasised ends, barrel pin-head. Upper level.	Burley, 1955, fig. 2/85, 87
<i>Essex</i>	Colchester	Partly cast, partly engraved ends, grooved pin-head, hoop irregularly ribbed.	Colchester Mus., Joslin Coll. 996
<i>Glam.</i>	Minchin Hole	Half only, neat terminal close to Birdoswald. Ribbed hoop.	Savory, 1956, pl. v/b
	Whitford Burrows	Cast, tooled terminals, as South Shields 1. Ribbed hoop.	<i>Ibid.</i> , pl. v/d
<i>Gloucs.</i>	Lydney	Crudely shaped ends, no pin, irregularly spaced ribbing on hoop.	Wheeler, 1932, fig. 14/38

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
<i>Gloucs.</i>	Witcombe Villa	Cast, tooled ends, plain pin, hoop ribbed closely near ends, bead and ribbed decoration in centre, as on some annulars. Late 4th cent. A.D.	Clifford, 1954, fig. 14/1
<i>Midlothian</i>	Barnton	Cast terminals, deep hollows on head and snout, plus eyes. Grooved pin-head, ribbed hoop (Fig. 2/9).	Kilbride-Jones, 1935, fig. 2/2
<i>Mont.</i>	Caersws	Cast, tooled terminals. Hoop ribbed in groups of two. No pin. Pre 4th cent. A.D.?	Wheeler, 1932 i, fig. 60
<i>Northumb.</i>	Corbridge	Half only, details not well reproduced.	Corbridge Mus.
	Housesteads	Cast, tooled terminals, much worn.	Housesteads Mus.
	Unprovenanced	Cast, moulded ends, barrel pin-head.	Blackgate Mus., Newcastle-on-Tyne
<i>Orkney</i>	Okstrow Broch, Birsay	Much corroded terminals, though hollowed like Barnton, ribbed hoop, grooved pin-head.	PSAS, xi, fig. p. 85
<i>Oxon.</i>	Woodeaton	1. Cast, moulded terminals. Incised hump pin, partly ribbed hoop.	JRS, vii, pl. vi/e
		2. Small, brooch much worn, only one terminal now clear.	Ashmolean Mus., Gordon Coll. R.83
<i>Staffs.</i>	Wall	Cast moulded ends like Barnton.	Wall Mus.
<i>Suffolk</i>	Icklingham	1. Cast, tooled ends, like Bird-oswald. Pin-head bent round, grooved. Irregularly ribbed ring.	Savory, 1956, pl. v/c
		2. Silver? Small, cast tooled terminals, plain pin, irregularly ribbed hoop (Fig. 2/8). Possibly the one found with late 4th-cent. A.D. coin hoard, see next entry.	Ashmolean Mus., 1927, 140
	Lackford	Crudely moulded terminals, said to resemble the Icklingham one found with silver 4th-cent. coins. Possibly an E1.	CAS, 4to, vi, fig. 35 centre
<i>Yorks. E.R.</i>	Aldborough	No details.	Savory, 1956, 50
	Cataractonium	Small, cast terminals, like Wood-eaton, ribbed ring.	YAJ, xxxix, fig. 5/11
	Dowkerbottom Cave	Cast, tooled terminals with details not well marked. Hump pin, slight ribbing near ends.	All illustrations inaccurate. BM, 57. 11-13, 8

<i>Location</i>		<i>Description and Associations (if any)</i>	<i>Publication or Museum (+number where ascertainable)</i>
<i>Unprovenanced (probably Scotland)</i>		Half only, well moulded terminal.	NMAE, FC 233
TYPE E1			
<i>Co. Clare</i>	Cahercommaun	Half only, eyes and snout emphasised (Fig. 2/10). Pre A.D. 800	Hencken, 1938, fig. 11/372
<i>Leics.</i>	Jewry Wall	Larger than usual, terminals moulded but curious tooled 'ears'. Barrel pin-head. Disturbed levels.	Kenyon, 1948 fig. 82/9
<i>Yorks.</i>	York	Emphasised staring eyes, grooved pin-head.	Kilbride-Jones, 1935 i, fig. 28/88
<i>Westmeath</i>	Ballinderry 2	Cast terminals, ending in rounded knob, enlarged snout.	Hencken, 1942, fig. 15/735
<i>Italy</i>		Gilt bronze, cast, moulded terminals, eyes and ears hollowed. Hoop ridged and humped alternately.	Ashmolean Mus., Nesvill Coll. 1909, 777

APPENDIX 2

PENANNULAR BROOCHES, TYPES F, F1-3

(Since Kilbride-Jones (1935 and 1935 i) documented and illustrated these Types this Appendix contains only additions since that date.)

<i>Location</i>		<i>Description and Associations (if any)</i>	<i>Publication or Museum (+number where ascertainable)</i>
TYPE F			
<i>Co. Armagh</i>	Armagh	Gilt bronze, cast, badly moulded terminals, barrel pin-head.	NMAD, no registration number visible
<i>Caithness</i>	Shurrerary	Broken and corroded.	PSAS, LXXXI, 193
<i>Co. Clare</i>	Toomullin	Good example.	Raftery, 1941, fig. 2
<i>Co. Cork</i>	Garranes	Pin only.	O Ríordain, 1942, 330
<i>Gloucs.</i>	Witcombe	Neat cast terminals, barrel pin-head, screw engraved on pin-point (Fig. 3/1).	Clifford, 1954, fig. 13/2
<i>Hants.</i>	Silchester	Pin only, barrel head, mid-rib cross-hatched, faint cross on pin-point.	Boon, 1959, pl. iii/B1
<i>Longford</i>	Ardagh	Thin cast terminals, tooled, barrel pin-head (Fig. 3/3)	BM, 98. 6-18. 19
<i>Co. Mayo</i>		Solid cast terminals, well-marked details.	BM, Tr.149
<i>Northants.</i>	Nassington	Pin only, tubular head. Anglian cemetery.	<i>Ant. J.</i> , xxiv, pl. xxx/11a

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
<i>Northumb.</i>	Corbridge	Cast, tooled terminals, barrel pin-head, partly ribbed hoop.	Corbridge Mus.
<i>Co. Roscommon</i>		Large version, nearer H/F.	BM, 49.3-1.41
<i>Waterford</i>		Thick cast terminals, thin barrel pin-head.	BM, 88.7-19.108
<i>Westmeath</i>	Mullingar	Thick cast terminals, details well-marked.	BM, 1913.7-15.4
<i>Ireland</i>	Unprovenanced	Cast, flattened, tooled terminals, broad tubular pin-head.	Ashmolean Mus., 1927.101
		Cast, flattened terminals, barrel pin-head.	Ashmolean Mus., 1927.102
		Thick cast terminals, tubular pin-head.	Belfast Mus., 374
		Small cast tooled terminals, tubular pin-head with pointed mid-rib.	Belfast Mus., Benn Coll. 1911.1140
		Thin terminals, details barely show, barrel pin-head.	BM, 49.3-1.42
<i>Germany</i>	Mahndorf, nr. Bremen	Thick cast terminals, hoop bent, remnants of plain pin-head.	Grohn, 1953, 324, fig. 91b
<i>Netherlands</i>	Ferwerd, prov. Friesland	1. Cast terminals, scored, ribbed hoop, barrel pin-head (Fig. 3/3). 2. Larger, cast moulded terminals, tubular pin-head.	Friesch Mus., Leeuwarden. 101/1522 101/1293

TYPE F1

To Kilbride-Jones (1935 i, nos. 81, Abingdon; 8, Traprain Law; and 51, Co. Westmeath) add:

<i>Co. Armagh</i>	nr. Navan Fort	Cast moulded terminals, fillings of red enamel, ribbed hoop, small barrel pin-head.	<i>UJA</i> , III (1940), fig. D
<i>Cumb.</i>	Meolsgate	Cast terminals, hollowed. Plain pin.	Tullie House Mus., Carlisle
<i>Co. Meath</i>	Clonard	Like Meolsgate, barrel pin-head.	BM, 1902.12-192
<i>Ireland</i>	Unprovenanced	Thick cast terminals, engraved lines on underside, barrel pin-head (Fig. 3/4). One flattened tooled terminal, other similar but grooved for enamel. Barrel pin-head. (Kilbride-Jones (1935 i), nos. 51, 60, 65, 67, 68, 69 and 77 may be F1, though millefiori decoration rather than enamel is possible.)	Ashmolean Mus., 1927.120 BM, 68.7-9.18

TYPE F2 (enamel)

<i>Co. Antrim</i>	Ford of Toome	? Kilbride-Jones 37	<i>JRSAL</i> , LXII, 208
<i>Co. Armagh</i>	nr. Navan Fort	Broad cast terminals, four black dots in yellow enamel. Elaborate barrel pin-head, ribbed hoop.	<i>UJA</i> , III (1940), fig. C

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
<i>Co. Cavan</i>	Stantemon	Broad cast terminals, loose S-scroll on red enamel on one, pair of broken C-scrolls on other. Tubular pin-head, central ridge.	No details
<i>Co. Roscommon</i>	Bloomfield	Quasi-palmette with elongated arms, on red enamel.	<i>JRSAI</i> , LXXXVIII, 130
<i>Ireland</i>	probably Lough Neagh	Linked S-scrolls on red enamel.	<i>PSA Lond.</i> , iv, fig. 62
<i>Ireland</i>	Unprovenanced	Cast terminals, one flat and plain, other with bronze marigold on red enamel and ovoid leaves on snout. Barrel pin-head, four central ribs, hoop ribbed and pin-stem partly ribbed.	Ashmolean Mus., 1886.5819
		Cast terminals, triskele on enamel, plain pin.	Henry, 1936, pl. 29/3
		Cast terminals, opposed triangles on enamel (<i>cf.</i> Kilbride-Jones 36)	<i>Ibid.</i> , pl. 24/2
MODEL:			
<i>Glam.</i>	Dinas Powis	Lead model for F2 brooch, terminal portion only.	Inf. L. Alcock
TYPE F2 (millefiori)			
<i>Co. Dublin</i>	Clontarf	Squares of millefiori in red enamel, barrel pin-head with lentoid leaves on central rib, ribbed hoop.	Mus. of Archaeology and Ethnology, Cambridge
<i>Ireland</i>	Unprovenanced	Two, details not clear.	Henry, 1936, pl. 24/6
		Millefiori circles in enamel, three ribs on pin head.	<i>Ibid.</i> , pl. 35/7
		Millefiori dots in enamel, barrel pin-head, three ovals on ribs.	Alnwick Castle Mus.
TYPE F3			
<i>Co. Donegal</i>	Inishbofin	Squat cast terminals, separated from ribbed hoop by triple ridges. Pair of eyes with sockets for enamel. Long pin, grooved pin-head.	<i>PRIA</i> , 42c, pl. xxi/76
<i>Co. Westmeath</i>	Ballinderry 2	Similar to above. Larger. No pin.	Hencken, 1942, fig. 15/512
<i>Wigtowns.</i>	Glenluce Sands	Pair, not identical, and second one corroded, with no pin. (Fig. 2/11).	NMAE, BH. 8560; BH. 8561
<i>Ireland</i>	Probably Derryhullogh	Similar to Inishbofin, tubular pin-head, long pin.	NMAD, C.818
	Unprovenanced	As above, plain pin.	Belfast Mus., 843. 1930.
		One with very corroded ends.	NMAD, 1897.16

APPENDIX 3

PENANNULAR BROOCHES, TYPE G

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
<i>Ayr</i>	Castlehill Fort, Dalry	Bronze, plated with white metal. Lozenge ends, lozenge on top with hollowed centre. Pin-head ridged each side, ribbed line down centre of pin. Two period occupation, 1st cent. A.D. and possibly 5th-7th cent. A.D.	PSAS, LIII, fig. 4/2
<i>Cheshire</i>	Meols	1. Squared ends, central hollow. No pin, ribbed ring. 2. Rounder ends, central hollow, plain pin and hoop.	THSLC, 112, fig. 2/b <i>Ibid.</i> , fig. 2/a
<i>Cornwall</i>	Padstow	Squared ends, three dots on top, ribbed pin-head, three groups of ribbing on hoop.	V.C.H., <i>Cornwall</i> , pt. 5 (1944), 6
	Trewiddle	Silver, lozenge ends, grooved each side, sunken diamond with four dots, moulded pin-head, hoop ribbed in centre. Hoard buried end 9th cent. A.D.	Wilson, 1961, pl. xxviii, b
<i>Denb.</i>	Trevor Rocks, Llangollen	Squared ends, lozenge with four dots, no pin, hoop ribbed regularly.	Savory, 1956, 57
<i>Glam.</i>	Twlic Point, Llangenydd	Squared ends, dot on top, moulded pin-head, two grooves on hoop next terminals.	<i>Ibid.</i> , 53
<i>Gloucs.</i>	Fairford	1. Faceted ends, lozenge and hollow, moulded pin-head, ribbed ring. 2. Squared ends, hollow on top, slightly hollowed pin-head, ribbed ring. Found in woman's grave with pair saucer brooches with linked spiral design.	Wylie, 1852, pl. v/5 Ashmolean Mus., 8.3.1851
	Lydney	Faceted ends, lozenge with four dots, ridged pin-head, ribbed hoop (Fig. 4/3).	Wheeler, 1932, fig. 14/39
<i>Hunts.</i>	Woodstone	Squared ends, possible hollow, much corroded. Saxon burial.	BM, 73.6-2.110
<i>Lincs.</i>	Sleaford	Two, grave 140 in Anglian cemetery. 1. Faceted ends, joined by a bar, lozenge and four dots, pin bent round, engraved head, ribbed hoop (Fig. 4/2). 2. Squared ends, no decoration.	BM, 83.4-1.263 BM, 83.4-1.262

	Location	Description and Associations (if any)	Publication or Museum (+number where ascertainable)
<i>Northumb.</i>	Wooler	Faceted ends, lozenge and hollow, ribbed pin-head, ribbed hoop.	BM, 1928.1-18.1
<i>Radn.</i>	Castell Collen	Squared ends, lozenge and sunken hole, moulded pin-head, hoop ribbed in places (Fig. 4/4). With 3rd or 4th-cent. A.D. pottery.	<i>Arch. Camb.</i> , xiv, fig. 14/4
<i>Co. Roscommon</i>		Squared ends, sunken lozenge panel, surrounding criss-cross lines. Plain, long pin.	BM, 81.3-10.16
<i>Som.</i>	Camerton	Faceted ends, central dot, barrel pin-head, long pin.	Wedlake, 1958 fig. 54/62
	Cannington	Two, not identical, dots in lozenge.	Possession of P. Rahtz
	Worlebury	Silver, faceted ends, no design.	Dymond and Tompkins, 1886, pl. x/17
<i>Warwicks.</i>	Baginton	Enlarged, but corroded ends. Possibly not this type. Ribbed hoop, pin. Saxon cemetery.	Coventry Mus.
	Longbridge	Squared ends, lozenge ends and hollow, simple pin with incised saltire on head. Alleged associations of gold bractate, cruciform, square headed and annular brooches.	<i>Arch. J.</i> , xxxiii, 380
	Watling Street, Rugby?	Faceted ends, lozenge and dots, pin looped round narrowed portion of hoop.	Akermann, 1855, pl. xviii/4
<i>Wigtowns.</i>	Dowalton Loch	Large, faceted ends, lozenges each side (Fig. 4/1). Crannog 2.	Munro, 1882, fig. 16
<i>Wilts.</i>	Harnham Hill	Faceted ends, no decoration, ribbed ring. Like Worlebury.	<i>Arch.</i> , xxxv, pl. xii/16
<i>Ireland</i>	Unprovenanced	Three, not identical. Squared ends, lozenge and four dots, barrel pin-heads, long pins.	Belfast Mus.
MOULDS:			
<i>Argyll</i>	Dunadd	Possibly for this type.	<i>PSAS</i> , LXIV, fig. 7
<i>Co. Donegal</i>	Dooley	Clay mould for Dowalton Loch type penannular.	Ó Ríordáin and Rynne, 1961, 62, fig. 7
<i>Kirkcud.</i>	Mote of Mark	Parts of two moulds, one for plain faceted ends, other for faceted ends with lozenge and four dots.	Curle, 1913, fig. 13, 14/8 and 4

APPENDIX 4

PENANNULAR BROOCHES, TYPES H, H/F, H1-4

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
TYPE H			
<i>Anglesey</i>	Pant-y-Saer	Bronze, expanded ends, incised line round edges, barrel pin-head, pointed central rib, and long pin (Fig. 5/1). Sub-Roman occupation?	<i>Arch. Camb.</i> , LXXXIX, 18-21
<i>Beds.</i>	Kempston	No data.	Salin, 1904, fig. 711
<i>Co. Cork</i>	Garranes	Unfinished, flattened broad terminals. Site D, black deposit, end 5th cent. A.D.	O Ríordáin, 1942, fig. 3, 265
<i>Co. Dublin</i>	Dalkey Is.	Part only, tinned, expanded end, outlined by dots, plain long pin. Midden behind bank, unstratified.	Possession of Dr. David Liversage
<i>Fife</i>	Norrie's Law	Two, silver, flattened ends, twisted hoops. Unusually large. Probable 7th-cent A.D. deposition.	<i>PSAS</i> , VI, pls. 1 and 11
<i>Kent</i>	Higham	Probably this type, flattened ends, barrel pin-head, ribbed hoop.	Baldwin Brown, 1915, pl. xxxvii/3
<i>Lincs.</i>	Sleaford	Pair, like Kempston. Grave 213 in Anglian Cemetery.	BM, 83.4-1.461, 462
<i>Co. Meath</i>	Lagore	Expanded ends, outlined by dots, plain long pin (Fig. 5/2). Period 1a. Possibly one other.	Hencken, 1950, fig. 6/1009
<i>Perth</i>	Tummel Bridge	Three, silver: 1. Plain ends, pin-head hammered up. 2. Plain ends, pin-head grooved, dots on slightly expanded stem. 3. Two rows of dots outline edge, pin-head moulded. Early 5th-cent. A.D. hoard with hanging-bowl fragments.	<i>PSAS</i> , xxii, fig. 1
<i>Yorks. E.R.</i>	Eastburn, nr. Driffield	Small, expanded ends. Saxon.	<i>YAJ</i> , xxxiv, 45-46, pl. vii/1
<i>Ireland</i>	Unprovenanced	Broken, dots outline edge of terminals, plain pin. Slight humping at hoop end. Broad flat terminals, slight humping at hoop end. Very large broad terminals, flanged hoop.	Ashmolean Mus., 1886.5820 Belfast Mus., Benn Coll. 1911.1143 Belfast Mus., 12.1906

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
TYPE H/F			
<i>Co. Down</i>	Lough Faughan	Flattened expanded ends, with upright snout, long plain pin. Crannog, possibly 6th or 7th cent. A.D.	<i>UJA</i> , xviii, fig. 9/22
<i>Co. Meath</i>	Lagore	Cast terminals, triangular dotted head, ribs for eyes, barrel pin-head, long pin. Unstratified (Fig. 5/4).	Hencken, 1950, fig. 18/365
<i>Co. Sligo</i>	Lough Gara	No details.	
<i>Co. Westmeath</i>	Ballinderry 1	Flat expanded ends, slight hump. Long plain pin. In hearth.	Hencken, 1936, fig. 24/D
TYPE HI			
<i>Glam.</i>	Kenfig Burrows	Part only, decorated with cross and ring and dot motif.	<i>Arch. Camb.</i> , viii, fig. 2
<i>Co. Meath</i>	Lagore	Enamel and millefiori.	<i>JRSAL</i> , cxi, fig. 26
<i>Isles of Scilly</i>	Bay Hill, St. Martin's	Expanded, enamel star. Barrel pin-head.	<i>Ant. J.</i> , xxxiii, 210, fig. 1
TYPE H2			
<i>Cheshire</i>	Meols	Rounded discs; thin plain pin.	<i>THSLC.</i> , 112, fig. 2/c
<i>East Lothian</i>	Traprain Law	Tinned bronze, rounded, hollow discs, barrel pin-head, flat central plate, oblique lines engraved on it, oval plate for pin.	Burley, 1955, fig. 2/91
<i>Essex</i>	Colchester	Oval hump discs. Plain pin.	BM, 70.4-2.761
<i>Glam.</i>	Minchin Hole	Large, disc-shaped ends.	Savory, 1956, 42
<i>Hants.</i>	Silchester	Terminal only, incised with diagonals.	Boon, 1959, pl. iii/B3
<i>Co. Meath</i>	Lagore	Two large iron ones, long plain pins. Small iron one, long pin.	Hencken, 1950, fig. 34/B and C BM, 53.11-17.15
<i>Northumb.</i>	Corbridge	Two, flattened disc ends.	Corbridge Mus.
<i>Pemb.</i>	Linney Burrows	Flattened disc ends, incised marks on top, grooved pin-head.	Savory, 1956, fig. 11/5
TYPE H3			
<i>Co. Antrim</i>	Moylurg Crannog	Expanded disc ends, red enamel, long pin.	<i>JRSAL</i> , xxiv, fig. 5
<i>Co. Donegal</i>	Maghera	Part only, disc, red enamel, chevrons on hoop.	<i>PRLA</i> , xliii, pl. viii/3

<i>Location</i>		<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
<i>Co. Meath</i>	Lagore	Disc ends inlaid with two circles of copper, barrel pin-head, long pin. Period 1a.	Hencken, 1950, fig. 15/1531
<i>Co. Meath</i>	Ervery Crannog	Two examples: 1. Red enamel on discs and hoop. 2. Silver-gilt, amber stud.	<i>JRS.</i> 41, xc, fig. 27, 29
<i>Shetland</i>	Walls	Rounded terminals, red enamel, plain long pin.	NMAE, H.D. 446, 1914
<i>Ireland</i>	Possibly Antrim	Disc ends, sunk for enamel.	Ashmolean Mus., 1927.121
	Unprovenanced	Elaborate disc ends, joined, and ornamented with scrolls. Moulded pin-head. Oval discs, scored for enamel, hoop narrows to take long pin. Round discs, red enamel and scrolls above, grooved pin-head, long pin.	Ashmolean Mus., 1886.5816 Ashmolean Mus. 1924.775 Henry, 1936, fig. 7/i
MOULD:			
<i>Kirkcud.</i>	Mote of Mark	Part only, disc end, palmette motif.	Curle, 1913, fig. 14/6
TYPE H ₄			
<i>Berks.</i>	Long Wittenham	Part only, animal head with ear, flattened.	BM, 75.3-10.49
<i>Caern.</i>	Segontium	Iron, flattened terminals.	Wheeler, 1932 i, fig. 58/5
<i>Cheshire</i>	Chester	Flattened inwards terminals.	<i>Annal. Arch. Anth.</i> xi, pl. vi/3
<i>Glam.</i>	Bacon Hole	Possibly this type.	Savory, 1956, 55, n. 100
	Cave Minchin Hole	2. Terminals thickened vertically, transverse mouldings, possibly D7.	<i>Ibid.</i> , 42
<i>Kent.</i>	Richborough	Curious projecting hook and expanded terminals (Fig. 5/5). Topsoil.	Bushe-Fox, 1928, pl. xvi/6
<i>Netherlands</i>	Hallum Terp, Friesland	Expanded and hooked terminals, flat hoop with dots, plain pin (Fig. 5/6).	Friesch Mus., Leeuwarden, 27A-2
	Unprovenanced, Friesland	Projecting opposed biting animal heads, grooved pin-head. (Both brooches are joined at the terminals.)	Halbertsma, 1959, 196, fig. 14

APPENDIX 5

PENANNULAR BROOCHES, TYPES A₅, B₃, D₇

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
TYPE A ₅			
<i>Argyll</i>	Eigg	Doubtful, Viking grave.	<i>PSAS</i> , xii, fig. 14
<i>Co. Donegal</i>		Doubtful. Barrel pin-head.	<i>JRSAI</i> , LXIII, pl. viii/8
<i>Co. Kilkenny</i>	Dunbell Rath	Pin and hollow riveted hoop.	<i>JRSAI</i> , III, 307
<i>Co. Meath</i>	Lagore	Iron, long pin (Fig. 5/3).	Hencken, 1950, fig. 34/A
<i>Sussex</i>	High Down	Decorated thistle knobs, barrel pin-head, hoop joined by rivets, as Dunbell Rath. Grave 74, Saxon cemetery.	<i>Arch.</i> , LV, pl. ix/5
TYPE B ₃			
<i>Co. Antrim</i>		Bird's beak terminals, yellow glass eyes, oval panels on pin-head and stem.	BM, 98.6-18.8
<i>Denb.</i>	Llanferres	Out-turned bird beak terminal, with eyes, plain pin.	Savory, 1956, pl. v/a
<i>Co. Donegal</i>	Dooley	Many iron and bronze 'omega' brooches.	Ó Ríordáin and Rynne, 1961, 62
	Dunberg (Bunberg?) Maghera	Out-turned bird-beak terminals, ribbed pin-heads, long pins. As above, long pin.	Armstrong, 1921, fig. 3 <i>JRSAI</i> , xci, fig. 23/a
<i>East Lothian</i>	Traprain Law	Oval annular version, one bird-beak terminal joined to oval end. Pin lengthwise.	Burley, 1955, fig. 2/90
<i>Galway</i>	Aran	Silver, projecting neck and head of bird. Moulded pin-head, long pin.	Armstrong, 1921, fig. 5
<i>Gloucs.</i>	Lydney	Bird-beak terminals and eyes, enlarged pin-head.	Wheeler, 1932, fig. 14/40
<i>Co. Meath</i>	Ballyfallon	Very like Llanferres, but long pin (Fig. 4/9).	Armstrong, 1921, fig. 4
	Ervery Crannog	Terminals of blue glass with out-turned ends, plain long bronze pin.	<i>JRSAI</i> , xc, 35, fig. 25
	Lagore	Out-turned ends, grooved pin-head, long pin. In-turned bird-beaks, long pointed pin.	Hencken, 1950, fig. 17/c <i>Ibid.</i> , fig. 10/A
<i>Mon.</i>	Caerwent	As Lydney or Llanferres, but hoop decorated with small incisions (Fig. 4/10).	Caerwent Mus.
<i>Co. Westmeath</i>		Out-turned squared terminals, moulded pin-head, long pin.	<i>Arch. J.</i> , ix, 200

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
	<i>Co. Wexford</i>	Out-turned ends, moulded pin-head.	<i>JRSAI</i> , xci, fig. 23/c
	<i>Ireland</i> Unprovenanced	Out-turned ends, plain long pin.	Ashmolean Mus., 1924.773
TYPE D7			
	<i>Co. Cork</i> Ballycatteen	Three castellations on terminals, grooved pin-head (Fig. 4/5).	<i>PRIA</i> , 49c, fig. 5/78
	<i>Dorset</i> Woodcuts	Terminals flattened upwards.	Pitt-Rivers, I, pl. xvi/10
	<i>Essex</i> Colchester	Terminals taper upwards.	Colchester Mus.
	<i>Kent</i> Richborough	Flattened, incised terminals (Fig. 4/7).	Bushe-Fox, 1928, pl. xvi/8
	<i>Kirkcud.</i> Castlehaven Fort	Three ribs, ribbed hoop (Fig. 4/8).	<i>PSAS</i> , xli, fig. 8
MOULD:			
	<i>Argyll</i> Dunadd	Clay mould, three ribs on terminal (Fig. 4/6).	<i>PSAS</i> , xxix, fig. 35

APPENDIX 6

PENANNULAR BROOCHES IN SAXON CONTENTS (EXCLUDING TYPES F, G, H)

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
TYPE A1			
	<i>Cambs.</i> Girton	Spoon ended pin. Cremation.	Hollingworth and O'Reilly, 1925, 26
	<i>Northants.</i> Holdenby	Iron.	Leeds, 1945, 44
	<i>Suffolk</i> Holywell Row	Iron, described as an 'annular'. Grave 61.	<i>CAS</i> 4to, III, 32, fig. 19/01
	<i>Yorks. E.R.</i> Sancton		Leeds, 1945, 44
TYPE A3			
	<i>Berks.</i> Blewburton Hill	Ribbed terminals, grooved pin-head, long pin. Burial 16.	<i>Berks A.J.</i> , 57, fig. 5/13
	<i>Gloucs.</i> Fairford	Double discs.	Wylie, 1852, pl. ix/5
	<i>Lincs.</i> Quarrington	Knobbed, grooved ends.	Alnwick Castle Mus.
	<i>Warwicks.</i> Alveston	Disc and knob. Grave 5, square head brooch, two saucer brooches.	Stratford-on-Avon Mus.
	Bidford-on-Avon	Disc and knob (Fig. 6/3). Grave 43.	<i>Arch.</i> , LXXIII, 102, pl. XII/2a
	Unprovenanced	Ridged terminals, ribbing badly spaced on hoop. Pin.	BM, 93.7-16.69

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
TYPE B			
<i>Yorks. E.R.</i>	Sancton	Coil ends, twisted hoop.	Ashmolean Mus., 1886.1338
	Whitby	Complete.	Radford and Peers, 1943, fig.12/17
TYPE C			
<i>Berks.</i>	Abingdon	Pair, iron. Grave 61, child, on breast, bucket mounts, etc.:— Iron, Grave 95, adult, under right ear. Iron, Grave 103, aged male, under left ear.	Harden and Leeds, 1936, pl. xiii/61, pl. xvi/95
	Long Wittenham	Pair, no pins. Grave 18, woman.	BM, 75.3-10.86, 87
<i>Cambs.</i>	Barrington A	One, tight coil; one, tight coil and pin.	Ashmolean Mus., 1909, 265e, 267d.
	Girton	Pair, no pins.	Hollingworth and O'Reilly 1925, pl. iii
<i>Derby.</i>	Linton Heath	Pair, loose coil.	<i>Arch.J.</i> , II, 112
	Middleton by Youlgrave	Complete.	<i>J.D.A.N.H.S.</i> , LXXIV, fig. 4
<i>Gloucs.</i>	Fairford	Loose coil.	Wylie, 1852, pl. vi/3
<i>Kent.</i>	Faversham	1. Small tight coil.	BM
	Horton Kirby	2. Tightish coil, flat ring, incised. Loose coil, ring ribbed.	BM, 1175.70 Maidstone Mus., 39.19.33
<i>Lincs.</i>	Polhill, Otford	Loose coil.	Maidstone Mus.
	Castle Bytham	Small, loose coil.	Mus. of Archaeology and Ethnology, Cambridge Beck Coll.
	Ruskington	Small. Grave 3.	47.2634.5 <i>Ant.J.</i> , XXVI, pl. x/9
	Sleaford	Tinned bronze, grooved, loose coil, slightly shaped pin-head (Fig. 6/8). Grave 19, with two annulars. Very corroded, Grave 79, with large cruciform brooch.	BM, 83.4-1.52
<i>Norfolk</i>	Kenninghall	Part only, broken coil.	BM
<i>Northants.</i>	Duston	Complete.	Ashmolean Mus., 1909.361
	Nassington	Grave 14, complete, with cruciform brooch, rings, iron knife, buckle, key, beads.	Baldwin Brown, III, pl. xxxvii/4 <i>Ant.J.</i> , XXIV, 106, 107, 112

Location		Description and Associations (if any)	Publication or Museum (+ number where ascertainable)
Northants.	Nassington	Grave 19, iron, with beads. Grave A, flat sectioned hoops with S-motif decoration lengthwise. Hardly coiled ends.	<i>Ibid.</i> , 107 <i>Ibid.</i> , pl. xxiii/c
Oxon.	Brighthampton	Grave 7, iron, half only. Grave 25, corroded.	<i>Arch.</i> , xxxvii, 395 <i>Arch.</i> , xxxviii, 86
Rutland	Glaston	Small, Grave 1, with 'Celts-Saxon' brooch.	<i>Ant. J.</i> , xxviii, 169-70
Suffolk	Holywell Row	Grave 39, bronze, iron pin, with two small long brooches, Roman coins. Grave 83, pair, not identical. One has grooved pin-head, other iron pin.	<i>CAS</i> 4to, III, fig. 10/A3 <i>Ibid.</i> , 37, fig. 19/A3, A4
Wilts.	Basset Down	Iron, tight coil, with two skeletons, and two sets of grave goods. c. A.D. 500	<i>WAM</i> , xxviii, 104 and figs.
Yorks. E.R.	Fimber	Complete, hoop incised with zig-zag (Fig. 6/6).	Mortimer, <i>Forty Years' Researches</i> , fig. 486
TYPE C. (Possible but unverified examples)			
Beds.	Kempston	Two	
Suffolk	Icklingham	Two	
Warwicks.	Baginton	Three	
Yorks. E.R.	Sancton	Two	
TYPE D			
Kent	Lyminge	Terminals are animals' heads. Jutish Style A ornament.	Chadwick Hawkes, 1961, fig. 5, no. 18
Sussex	Alfriston	Silver, Jutish Style A ornament.	<i>Ibid.</i> , pl. xvii/e, no. 17
Warwicks.	Bidford-on-Avon	Grave 43, corroded.	<i>Arch.</i> , LXXIII pl. xii/2a
Yorks. E.R.	Whitby	Complete, incised zig-zag on hoop.	Radford and Peers, 1943, fig. 12/13
TYPE D ₃			
Essex	Barrowfield, Kelvedon	Terminals engraved with saltire and dots, hoop with triangles and dots. With two Style II disc brooches and garnet-set buckle.	Colchester Mus.
TYPE D ₄			
Berks.	Long Wittenham	Bronze, iron pin (Fig. 6/2).	BM, 75.3-10.50
Yorks. E.R.	Sancton	Half only.	<i>TERAS</i> , xvi, fig. 1/25
TYPE D ₅			
Oxon.	Brighthampton	Brooch pushed together, only one terminal shows D ₅ or even E elements (Fig. 6/4).	Ashmolean Mus., registration illegible

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
TYPE E			
<i>Cambs.</i>	Barrington A	Complete, cast splayed terminals, deliberately tooled, plain pin.	Ashmolean Mus., 1909.256e
<i>Yorks. E.R.</i>	Staxton	Complete, cast, tooled terminals, pin. Not reliably associated with relics from this cemetery.	Hull Mus. Pub. 195, pl. vi/46
TYPE B ₃ ANNULARS			
<i>Kent</i>	Faversham	Two types: 1. Touching bird beaks, hoop incised and raised mouldings alternately. 2. Gaping jaw animal holding pin, equally spaced ribs on hoop.	BM, 81.12-7.3
<i>Lincs.</i>	Searby	No details, probably Faversham 2.	
<i>Northumb.</i>	Chesters	Like Faversham 2, except that the tails of the animals touch, and coil back.	Chesters Mus.
<i>Yorks. E.R.</i>	Uncleby	Both Chesters and Faversham 2 types represented.	Leeds, 1936, pl. 27

APPENDIX 7

PENANNULAR BROOCHES FROM MIGRATION PERIOD CONTEXTS IN N. GERMANY

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
TYPE Aa			
	Altenwalde	Possible example.	A. Pletke, 1920, pl. 14/17
	Westerwanna	Bronze, with 4th-cent. urn. (Fig. 6/5).	Zimmer-Linnfeld, 1960, pl. 132/1054b
TYPE A1			
	Amte Hagenow	Bronze	Asmus, 1938, 82, fig. 74
	Fohrde and Hohenferchesar	Bronze.	Müller, 1962, pl. 75/380c
	Quelkhorn	Bronze, ends pushed together into finger-ring.	Waller, 1959, pl. 29/55
	Rahmsdorf	? Possible example with bronze wire wound spirally round ring.	Helms-Museum 60746
	Westerwanna	Possible example.	Unpublished, in Alterndorfer Mus.
TYPE B			
	Feddersen-Wierde	One example, possibly others. Period V of the settlement, 4th-5th cent. A.D.	<i>Germania</i> , xxxiv (1956), 140, fig. 4/3
	Fohrde and Hohenferchesar		Müller, 1962, pl. 68/335a

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+number where ascertainable)</i>
TYPE B	Hamburg-Fuhlsbüttel	B1 brooch, grave 383.	Tischler, 1954, pl. 40
TYPE C	Hamburg-Fuhlsbüttel	Bronze, grave 66 with urn, Group V coil spring brooch and piece of armour.	Tischler, 1954, pl. 8(b)
	Quelkhorn	Bronze, loose coil	Waller, 1959, pl. 29/58
	Vahrendorf	Possible example, silver wire wound spirally round iron ring (Fig. 6/1). Grave group with early urn and brooch.	Wegewitz, 1960, pl. 1, top
TYPE D	Hamburg-Fuhlsbüttel	Possible D1 brooch. Grave 334	Tischler, 1954, pl. 37/1892.208
		Type D4 brooch, with urn and Group 7 brooch. Grave 212.	Tischler, 1954, pl. 26(b)

APPENDIX 8

PINS

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+number where ascertainable)</i>
TYPE E PINS			
<i>East Lothian</i>	Traprain Law	Nos. 102-106 have rounded heads, slight 'snout'; 106 has hollow on head; 102 has incised lines below snout (Fig. 2/1). Nos. 107-108 have squared, tooled heads; horizontal and oblique lines on stem on 108 (Fig. 2/2).	Burley, 1955, 168-9
<i>Glouc.</i>	Cirencester	Rounded head, slight snout. Circle and dot of red enamel on head, three triangles of red enamel on snout and extending down stem a long triangle carrying red enamel triangles. Side of stem below head engraved horizontally and obliquely (Fig. 2/4).	Cirencester Mus., B 280.
<i>Moray</i>	Covesea Cave	Round head, snout. 'Romano-British layer.'	PSAS, LXV, fig. 9/9
<i>Northumb.</i>	Chesters	Possibly three, one with rounded head and hollow.	Chesters Mus., registration not visible.
	Corbridge	1. Rounded head. 2. Squared head, incised stem.	Corbridge Mus., registration not visible.
	Halton Chesters	Silver, squared head and incised stem (Fig. 2/6).	Cowen, 1960, pl. xi, top

<i>Location</i>		<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
<i>Oxon.</i>	Cassington	Rounded head, bearing palmette motif in red enamel, three tongues of red enamel below (Fig. 2/3). Grave III, man.	<i>Oxon.</i> , VII, fig.16
<i>Roxb.</i>	Newstead	Rounded head, hollow for enamel.	Curle, 1911, pl. xcii/11
<i>Yorks. E.R.</i>	Scarborough	Rounded head, incised lines on face and sides. Possibly late 3rd-4th cent. A.D.	<i>Scarborough and District Arch. Soc. Research Report 1</i> , fig. 13/37/2
<i>Ireland</i>	Unprovenanced	Six: two have plain heads, no decoration; two have rounded heads and close incisions round stem at top; one has rounded head, hole in centre, three grooves on snout, and faint incisions round stem (Fig. 2/5). One has squared tooled head, engraved on back with horizontal and oblique lines.	NMAD: No. 4-A. 1898.50; No. 6 merely 'Old Stock'. No registration except W for remainder.
BEADED AND CORRUGATED PINS			
<i>Caithness</i>	Bowermadden Broch	Flattened lower portion, ribbed upper ring.	Stevenson, 1955, fig. B/12
<i>East Lothian</i>	North Berwick	Lower portion, three beads and fillets, corrugated upper ring.	<i>PSAS</i> , xli, fig. 4
	Traprain Law	Numbers 110-113, 115-117 projecting ring, six beads. Number 114, fragments of 18-beaded ring.	Burley, 1955, 169
<i>Fife</i>	Tentsmuir	Fragments of 16-beaded ring.	NMAE, BN, 135. 1930.768
<i>Gloucs.</i>	Lydney	1. Lower portion, three beads, corrugated upper part. 2. Flattened lower portion, flat upper ring.	Wheeler, 1932, fig. 18/63
<i>Co. Derry</i>	Keady	Beaded lower portion, corrugated upper part.	BM, 1849. 3-?.42
<i>Moray</i>	Sculptor's Cave, Covesea	1. Six-beaded ring.	<i>PSAS</i> , lxxv, fig.16/1
		2. Three beads on lower portion, corrugated above.	fig.16/6
		3. Three flattened beads, corrugated above.	fig.16/8
		4. Three beads, and fillets, corrugated above.	fig.16/7
		5. Three flattened beads, flattened upper portion.	fig.16/9
		6. One bead, corrugated upper portion.	fig.16/10

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+number where ascertainable)</i>
<i>Orkney</i>	Birsay	Six-beaded ring.	PSAS, XLIII, 9
PROTO-HAND PINS			
<i>Cumb.</i>	Moresby	Flat expanded lower portion, three beads in a curve.	PSA Lond., 2nd ser. xx, fig. 8
<i>East Lothian</i>	Traprain Law	1. Flat expanded lower portion, five beads in a curve. 2. Flat expanded lower plate, three beads in a curve. 3. Silver, expanded lower plate, three beads.	Burley, 1955, fig. 3/118, 119, and 120
<i>Hebrides</i>	Bernary	As Traprain Law, 3; bronze, and beads in straight line.	NMAE, Gr.237
<i>Co. Meath?</i>		Silver, flattened lower portion, carrying C-scrolls each side circle with dots, possibly enamelled. Three beads and fillets above (Fig. 7/6).	NMAD, 7.w.24
<i>Moray</i>	Sculptor's Cave, Covesea	Flattened lower portion, four beads above.	PSAS, LXV, fig. 16/5
<i>Northumb.</i>	Corbridge	Like Covesea one.	Arch. Ael., VII, fig. 34
	Halton Chesters	Flattened lower portion carrying S-scrolls on enamel, flat upper part (Fig. 7/5).	PSA Newcastle, 4th ser. 1, 205, pl. v
<i>Ireland</i>	Unprovenanced	Silver, flattened lower portion, five beads and fillets above. Silver, lower portion carrying linked S-scrolls with eyed ends, five beads and fillets in a curve above	NMAD, 1920.53 NMAD, 1944.95
HAND-PINS (Not a complete list)			
<i>Co. Antrim</i>	Craigwarren Bog	Five fingers, enamelled, palmette and scroll ends.	PSA Lond., 2nd ser. xx, fig. 9
<i>Argyll</i>	Dunadd	Three solid joined fingers, incised feather on plate.	PSAS, xxxix, fig. 50
<i>Caithness</i>	Freswick Links	Silver, three fingers, red enamelled, trumpets from roundel, red and blue enamel.	PSAS, LXXX, fig. 1/3
<i>Co. Cork</i>	Ballycatteen	Five fingers, three spiral scrolls on red enamel.	PRIA, 49C, fig. 5/74
<i>Fife</i>	Norrie's Law	1 and 2. Silver, three fingers joined by bars, cross in central finger. Diverging spirals on red enamel on plate. Pictish symbol on back of 1. 3. As above, smaller, central finger has stone setting.	PSAS, xviii, fig. 10

Location		Description and Associations (if any)	Publication or Museum (+number where ascertainable)
<i>Hebrides</i>	Is. of Pabbay	Three enamelled fingers, enamelled plate.	<i>PSAS</i> , xxxv, fig. 2
<i>Co. Limerick</i>	Carraig Aille I	Iron, three fingers, solid plate, no hole.	<i>PRIA</i> , 52c, fig. 21/136
<i>Co. Meath</i>	Lagore	Three fingers, solid plate, no hole; ? enamel.	<i>PSA Lond.</i> , xx, 352
	Castletown Kilpatrick	Silverplated bronze, three fingers, central one has dotted opposed triangles. Three running spirals, possibly on enamel.	<i>NMAD</i> , p.634
<i>Moray</i>	Culbin Sands	Three fingers, enamelled, three trumpet scrolls on enamel.	<i>PSAS</i> , xxv, fig. 33
	Urquhart	Four enamelled fingers, trumpet scrolls on enamel.	<i>PSAS</i> , xxxv, fig. 3
<i>Orkney</i>	Birsay	Three fingers, plate probably enamelled.	<i>PSAS</i> , XLIII, 9
	Kirbister	Six beads, scroll on enamel.	<i>PSAS</i> , LXV, 15
<i>Somerset</i>	Long Sutton	Silver, cross on finger.	Taunton Castle Mus.
<i>Co. Tyrone</i>	Clogher	Five fingers, enamelled, peaked scroll.	<i>PSA Lond.</i> , 2nd ser. xx, fig.10
<i>Ireland</i>	Many examples		Henry, 1936, pl. xxvi/2, pl. xxviii/2, 5, pl. xxxv/8, 9
<i>Netherlands</i>	Hallum Terp, Friesland	Silver, three fingers in curve, flat scored plate below (Fig. 7/7).	Friesch Mus., Leeuwarden, III.113
'IBEX-HEAD' PINS			
<i>Cambs.</i>	Newnham	Corrugated upper portion.	Mus. of Archaeology and Ethnology, Cambridge
<i>Beds.</i>	Sandy	As above.	
<i>Bucks.</i>	Tingewick Villa	Plain upper portion, ibex-head.	<i>VCH, Bucks</i> , 1, pt. 5, fig. 9
<i>Co. Donegal</i>	Dunfanaghy Sandhills	Corrugated upper part, three knobs. Doubtfully associated with 1st-cent. A.D. brooch.	Joep, 1950, 54-56
<i>Co. Down</i>	Dundrum Sandhills	Broken, ribbed ring, red enamel on central knob, pair of triangles each side (Fig. 7/2).	Belfast Mus.
<i>Co. Kerry</i>	Ballybunion	Usual type, but red enamel on knobs.	<i>JCHAS</i> , xcv, pl. 2
<i>Leics.</i>	Jewry Wall	Broken, three knobs?	Kenyon, 1948, fig. 89/15
<i>Co. Limerick</i>	Carraig Aille II	Broken, possibly ibex-head.	<i>PRIA</i> , 52c, 69-70

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
<i>Moray</i>	Sculptor's Cave, Covesea	Complete.	<i>PSAS</i> , LXV, fig. 16/8
<i>Northants.</i>	Duston	Usual type (Fig. 7/3). Grave 423, Saxon cemetery.	Northampton Mus.
<i>Northumb.</i>	Corbridge	Complete.	Corbridge Mus.
<i>Orkney</i>	Swandro, Rousay	Broken, corroded.	NMAE
<i>Outer Hebrides</i>	Bruthacha Tuath, Benbecula	Degenerate, three fingers only.	<i>PPS</i> , XVIII, 184
<i>Oxon.</i>	Woodperry	Complete (Fig. 7/4).	<i>Arch. J.</i> , III, fig. 10
<i>Co. Wexford</i>		Complete.	<i>JRSAL</i> , xci, fig. 23b
<i>Ireland</i>	Unprovenanced	Three	NMAD. 1920.51, 1920.52; NMAE, FD 21.
LOOSE-RING PINS (PLAIN)			
<i>Co. Antrim</i>	Craig Hill	Ring narrowed to take pin, flattened and incised at top, spoon ended point.	<i>UJA</i> , 3rd ser. XIX, fig. 2
<i>Ayrshire</i>	Lochlee	Ring narrowed, squared pin top decorated with swastika, step pattern on pin stem.	Munro, 1882, fig. 144
<i>Cheshire</i>	Chester	Loose ring, flattened pin-head, incised top, stem broadened.	<i>Annal. Arch. Anth.</i> , XXIII, pl. xix/8
<i>Co. Cork</i>	Garryduff	Many examples	Cork Mus.
<i>Co. Dublin</i>	Dalkey Is.	1. Bronze, lozenge sectioned ring, narrowed to take pin-head, which is grooved and dotted. Pin-point broadened, ornamented with crosses and step pattern. 2. Bronze ring, iron pin, associated with Biii and E ware.	Possession of Dr. David Liversage As above
<i>Hants.</i>	Silchester	Pin only, recurved head.	Boon, 1959, B2
<i>Hebrides</i>	Garrylochdroch, N. Uist	Pin only, decorated with dots.	NMAE
<i>Leics.</i>	Jewry Wall	Lozenge sectioned ring, plain pin sweated round.	Kenyon, 1948, fig. 89/14
<i>Co. Limerick</i>	Cush		Ó Riordain, 1940, fig. 35/318
<i>Lincs.</i>	Ruskington	Pin, flattened oval pierced head.	<i>Ant. J.</i> , XXVI, 69
<i>Co. Meath</i>	Lagore	At least seven bronze pins.	Hencken, 1950, fig. 14
<i>Orkney</i>	Okstrow Broch, Birsay	Loose ring; pin with incised and crossed lines.	<i>PSAS</i> , XI

	<i>Location</i>	<i>Description and Associations (if any)</i>	<i>Publication or Museum (+ number where ascertainable)</i>
<i>Pemb.</i>	Gateholm	Faceted top, loose ring.	No details
<i>Co. Westmeath</i>	Ballinderry I	Iron pin, recurved top, penannular ring.	Hencken, 1936, fig. 31/D
	Ballinderry II	1. Plain pin, narrowed to take ring. 2. Faceted pin-head.	Hencken, 1942, fig. 18/73, 651
<i>Wilts.</i>	Basset Down	Pin, made from rolled strip of bronze, flattened at top and pierced for thick twisted ring. Part of another?	<i>WAM</i> , xxviii and figs.
	Harnham Hill	Double Saxon interment. 1. Bronze pin, recurved head as Silchester. Grave 61, with two Style I saucer brooches. 2. Flattened top, incised crosses below. Grave 42, two disc brooches.	<i>Arch</i> , xxxv, pl. xix/6
RING-PINS (DECORATED)			
<i>Co. Antrim</i>	Arnoy	Expanded ring carrying opposed dolphins biting an oval ball, settings for enamel or stones either side narrowed bar for plain pin (Fig. 7/1).	BM, 98.6-18.21
	Moylurg	Lead model for a similar ring, ornamented with a palmette.	<i>JRSAI</i> , xxiii, fig. 4
<i>Co. Donegal</i>	Grousehall	Elaborate openwork plate, decorated with interlace, amber and human head.	<i>PRJA</i> , 42c, pl. xxi/73
<i>Co. Kerry</i>	Ballybunion	Expanded flat ring, trumpet motifs rising from central hollow.	<i>JCHAS</i> , xlv, pl. 1
<i>Co. Limerick</i>	Cush	Ribbed ring, with projecting extension opposite narrow bar on which pin swings.	Ó Ríordain, 1940, fig. 35/319
<i>Co. Offaly</i>	Clonmacnoise	Resembles Cush example, though possibly spot of enamel on projection.	<i>JRSAI</i> , xci, fig. 28
<i>Perth</i>	Dunipace	Close to Grousehall.	No details.
<i>Wilts.</i>	Atworth	Silver, fragment only and unfinished. Palmette in enamel with loose scrolls.	<i>WAM</i> , xlix, 46
<i>Ireland</i>	Unprovenanced	Silverplated bronze. Large openwork plate, narrowed to take pin with enamel each side. Palmette in centre.	Mahr, 1932, pl. i/4
CIRCULAR-HEADED PINS			
<i>Co. Cork</i>	Garranes	Solid circular head. Late 5th-cent. A.D.	Ó Ríordain, 1942, fig. 3/351

Location		Description and Associations (if any)	Publication or Museum (+number where ascertainable)
Ireland	Unprovenanced	1. As above.	NMAD, W.200
		2. Circular head, three C-scrolls placed back to back.	NMAD, W.201
		3. Silver. Elaborate version of above, and stem decorated.	NMAD—no number known
MUSHROOM-HEADED GROOVED PINS			
Co. Antrim	Moylurg Crannog	Flat ribbed knob.	JRSAI, xxiii, fig. 2
Berks.	Knowl Hill	Round head, grooved irregularly in triangles, red enamel.	No details.
	Lowbury Hill	Very like Garranes.	
Cheshire	Chester	Flat head, ribbed.	Annal. Arch. Anth., xv, pl. ix/8
Co. Cork	Ballycatteen	Pointed ribbed knob.	PRIA, 49c, fig. 5/77
	Garranes	Large ribbed knob.	Ó Ríordain, 1942, fig. 4/351
Herts.	Verulamium	Flat head, ribbed.	Verulamium Mus.
Co. Meath	Lagore	Bone copy of a bronze writhen knob pin.	Hencken, 1950, fig. 104/620
Wilts.	Cold Kitchen Hill	Ridged knob.	Devizes Mus.
Yorks. E.R.	Whitby	Conical head, ridged.	Radford and Peers, 1943, fig. 14, top

Possibly also Colchester, Essex, and Silchester, Hants.

ABBREVIATIONS

Museums

BM	The British Museum, London
NMAD	National Museum of Antiquities, Dublin
NMAE	National Museum of Antiquities, Edinburgh

Periodicals

<i>Annal. Arch. Anth.</i>	Annals of Archaeology and Anthropology
<i>Ant.</i>	Antiquity
<i>Ant. J.</i>	Antiquaries Journal
<i>Arch.</i>	Archaeologia
<i>Arch. Ael.</i>	Archaeologia Aeliana
<i>Arch. Camb.</i>	Archaeologia Cambrensis
<i>Arch. J.</i>	Archaeological Journal
<i>Berks. A. J.</i>	Berkshire Archaeological Journal
<i>CAS 4to</i>	Cambridge Antiquarian Society, Quarto Publications, New Series
<i>JCHAS</i>	Journal of the Cork Historical and Archaeological Society
<i>JDANHS</i>	Journal of the Derbyshire Archaeological and Natural History Society
<i>JMA</i>	Journal of the Society for Medieval Archaeology
<i>JRS</i>	Journal of Roman Studies

ABBREVIATIONS—*continued*

JRSAI	Journal of the Royal Society of Antiquaries of Ireland
Oxon.	Oxoniensia
PCAS	Proceedings of the Cambridge Antiquarian Society
PPS	Proceedings of the Prehistoric Society
PIRA	Proceedings of the Royal Irish Academy
PSA Lond.	Proceedings of the Society of Antiquaries, London
PSA Newcastle	Proceedings of the Society of Antiquaries, Newcastle upon Tyne
PSAS	Proceedings of the Society of Antiquaries, Scotland
TERAS	Transactions of the East Riding Antiquarian Society
THSLC	Transactions of the Historical Society of Lancashire and Cheshire
UJA	Ulster Journal of Archaeology
WAM	Wiltshire Archaeological Magazine
YAJ	Yorkshire Archaeological Journal

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