

AN ENAMELLED DISC FROM GREAT SAXHAM

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THE INTEREST OF the magnificent Alfred and Minster Lovell ornaments which are justly famous examples of cloisonné enamel jewels is enhanced by the fact that they have often been regarded as the sole remaining representatives of enamelling as carried out in this country in the 9th century. It is pleasant, therefore, to record the recent finding of another disc, similar to the one in the Minster Lovell jewel, at Great Saxham, Suffolk (Pl. Ia, Figs. 2, 3a). The significance of this disc was recognised by Mr S. E. West, who reports on the finding as follows:

The roundel was found in 1972 by Malcolm Frost of Badwell Ash and subsequently shown to me in 1976. The findspot was immediately to the west of the remains of a small rectangular moat on the edge of Frizzeler's Green to the south of the church (TL 7845 6238) at Great Saxham (Fig. 2). 'Frizzeler's Green' is derived from the Frezill family, of whom Walter Fresel is known to have owned a house and sixty acres in *c.* 1286. In pre-Conquest times, this manor was held by Britulf the Saxon who appears to have been the principal landholder at that period. It is possible, therefore, that the later moat is on or beside this earlier site.

No pottery or other finds were seen at the time of the discovery and the site is now redeveloped. The roundel will be deposited in Moyses's Hall Museum, Bury St Edmunds.

DESCRIPTION

The bronze or copper¹ disc backplate, diameter 1.7cm, is slightly concave, or curved in one plane. There are the remains of an enclosing vertical bronze band on the outside edge. The face is covered with enamel in a cloisonné technique to a depth of *c.* 1mm. Both bronze and enamel are in a state of decomposition which obscures details. A basic design of a curvilinear cross (Fig. 1, cells 1-4) is filled with dark blue translucent enamel, and of the almond-shaped spaces between the arms, two (6 and 8) are still filled with opaque white enamel, 6 bearing a small patch of blue. In 5 and 7 there is a small triangle of decomposed discoloured enamel remaining in the point near the centre. 7 is otherwise empty of enamel, but contains an oval-shaped hollow tray like half an egg. In the corresponding position in 5 there is opaque yellow enamel with a streak of colourless enamel, apparently circular in shape. Some of the opaque yellow enamel does, however, extend further towards the centre, and so the original shape of this inner cell could have been oval as in 7. The central circular cell (13) is also filled with yellow enamel but of a more orange tint (? originally red). Four petal shapes (9-12) spread from the middle circular cell into the cross arms, and they are filled with a lighter, patchy blue opaque enamel. The separating cloisons are of bronze or copper.

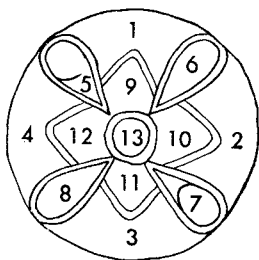


FIG. 1—The Great Saxham disc.

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DISCUSSION

After the art of enamelling came more or less to a halt in Europe at the time of the migrations, what evidence there is for its survival suggests that in general there was a continuance of the cloisonné technique in Byzantium. In various parts of Europe sporadic survivals of a few

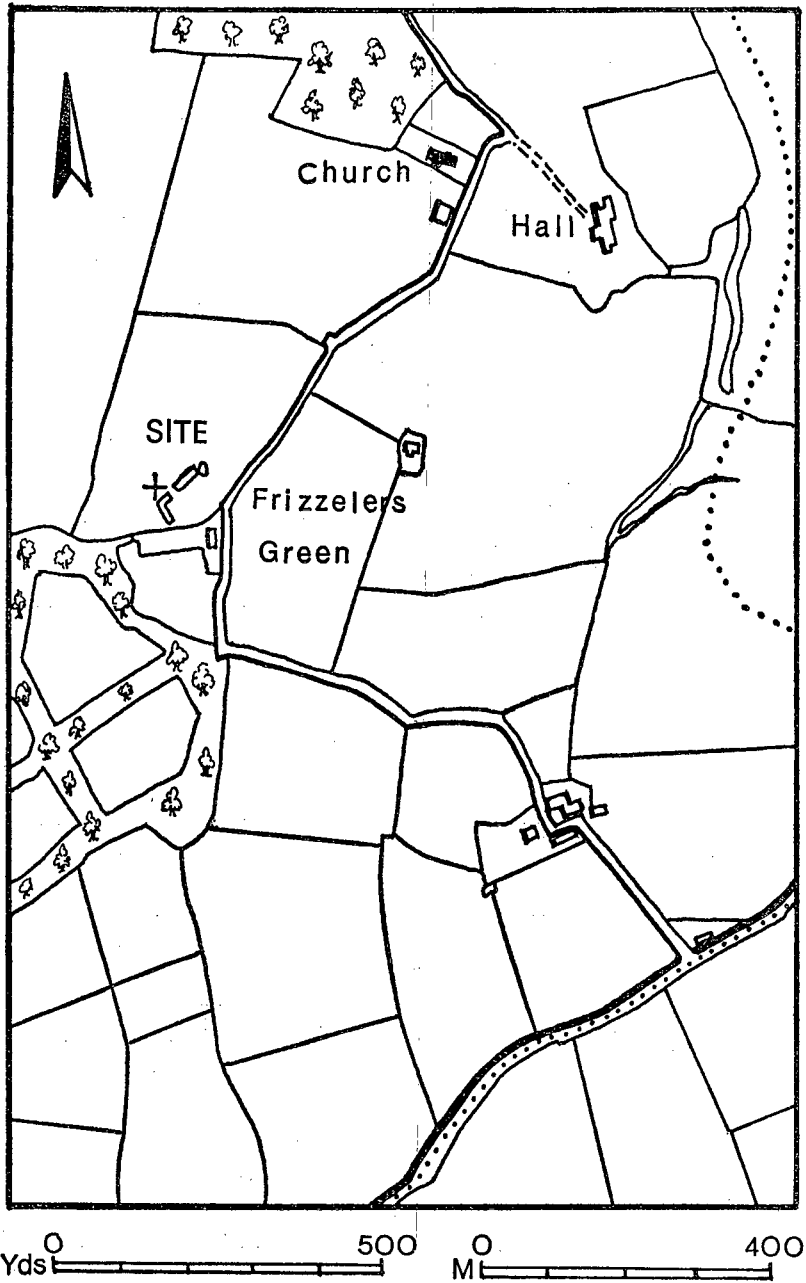


FIG. 2—Plan of Great Saxham showing position of discovery.

items here and there are proof of isolated workshops continuing the tradition in other places as well. In France, for example, a number of Merovingian buckles of the late 7th to 8th centuries show enamelling in *champlevé* with further decoration in a kind of *cloisonné* (Henry, 1956, 73-5, Pl. VII).

During this time there is very little to show that the pagan Anglo-Saxons were able to decorate metalwork with enamel, except for some bronze Anglian cruciform brooches in the Cambridge area which have a kind of inlay in circular depressions which looks like enamel (Fox, 1923, 260).² By the 7th century it is clear that the Anglo-Saxon and Celtic jewellers were beginning to work in close contact with each other, benefiting from the interchange of ideas on motifs and techniques, and although hanging bowls, which bore most of the enamelwork, must be mainly Celtic in origin, the Anglo-Saxons may have been responsible for a few of the *champlevé* hanging bowl escutcheons which were not carried out in the traditional Celtic curvilinear patterns.

One of the series of Kentish disc brooches from Gilton (Avent, 1975, No. 153), now unfortunately lost, was decorated with garnets in the customary Anglo-Saxon fashion, but the central stud, instead of being of shell and garnet, was in *cloisonné* enamel. The background of the roundel was dark green, and in the middle was a cluster of four circular cells containing white enamel. This is somewhat similar in appearance to the enamel studs which were produced at some Irish sites, such as Lagore, and which embellished Irish brooches as well as the Ardagh chalice (Henry, 1965, 93, Pl. 36). The pattern was not known to the Irish, however, for the most favoured design was a step-pattern grille, or C-scrolls, and with these the technique involved the placing of the grille in the stud mould before filling in the glass or enamel from the back. The Gilton stud, however, was presumably *cloisonné* enamelwork in which the filling was done from the front, and it was no doubt imported from the Frankish kingdom or even possibly from Byzantium.

After this date (i.e. the 7th century) there is a long period to which it is not possible to attribute any piece of enamelwork with certainty to an Anglo-Saxon craftsman, although some specimens have been found in the British Isles. Examples which have been discussed in this connection are the Alfred jewel, the Minster Lovell jewel (Pl. Ib, Fig. 3b), the Dowgate Hill brooch and the Towneley brooch (Pl. Ig, Fig. 4j) (Hinton, 1974, 27 *et seq.*, Pls. IX-XI; *B.M.*, 1976, Nos. 258, 259). The matter is complicated because of the many difficulties encountered in the dating of enamelwork between the 8th and 11th centuries, and opinions often differ substantially in regard to date and provenance of one particular piece. Work in enamel is necessarily limited to small areas of metal, the size being limited by that of the oven available. The small plaques produced were able to give much the same brilliant effect as real jewels, and so they were used in the same way and in the same kind of settings. These enamels were inset in many religious and, no doubt, secular objects as well, on splendid gold crosses, on book covers and on altars, and for some the place and date of production is certified by unassailable evidence such as an inscription, as on the altar of St Ambrogio at Milan (Elbern, 1965, 377-9; Lasko, 1972, 50-4, Pls. 46-8; Hubert *et al.*, 1970, Pls. 188, 220-4). The style of the objects on which the enamels are set may also be indicative of the country and period of origin, but complications arise, for these enamel jewels could be re-used in settings of a much later time as was the custom particularly with antique gems and cameos.

Leaving aside for the moment the Alfred and Minster Lovell jewels already mentioned, the only other enamelwork found in this country which has been considered to be Anglo-Saxon belongs to the 10th century. Two brooches, found at a considerable distance from each other, one at Hyde Abbey, Winchester and one in a Viking grave at Bedlington, Northumberland, each with a central roundel of *champlevé* enamel as a background to a bird, have been considered to be 10th-century English work (Wilson, 1975, 204, Pl. XXIVa). Unfortunately,

there is little to support this claim, for as observed, these brooches resemble some found at Kettlach in Austria and elsewhere in the eastern Alps (Riegl, 1923, 68 *et seq.*). The points of comparison are the form of a disc brooch of hollow convex shape, with an animal in reserved bronze in the middle of the central disc set in champlevé enamel and surrounded by a border of animals in relief. The animal ornament is not close enough to Anglo-Saxon examples to establish identity, but the type of enamelwork weights the evidence strongly in favour of a continental origin. The enamel on the Bedlington brooch has the characteristic to be found in the Kettlach enamels but not in classical or contemporary work: contrasting colours, often opaque and vivid, are juxtaposed in the same field, giving a variegated effect presumably achieved by placing together for fusing contrasting colours of powdered glass, or, more likely, contrasting coloured lumps of solid glass. There is no other evidence that this peculiarity of technique was absorbed by the Anglo-Saxon craftsmen.

Another brooch which has been grouped with these is one without provenance in the British Museum (Wilson, 1975, Pl. XXIVb).³ This is similar in form, with a central enamelled disc and animal border, but there are also several differences. The central animal is an *agnus dei*, and although the enamel colouring is bright of hue and opaque, it is not deliberately variegated, the field being all royal blue, and the halo and spot by the tail red. The animals in the border are more naturalistic and rounded, and belong to the species found both in Austria and England at this period.

There can be no doubt, however, of the Anglo-Saxon origin of a bronze brooch with champlevé enamel from Brasenose College, Oxford (Hinton, 1974, 52, Pl. XIV) (Pl. Ie, Fig. 3e) for the birds outlined are recognisable as close relations of birds depicted in 10th- to 11th-century Anglo-Saxon manuscripts and metalwork. The enamelwork is the normal kind, homogeneous of hue, at least in intention, the small discolorations being caused by accidental seepage in fusion. This one piece is very important, for it establishes the fact that champlevé enamelwork was practised in England in the 10th or 11th century.

Another enamel roundel from Oxford, probably found during the demolition of St Martin's Church, Carfax (Hinton, 1974, 53-5, Pl. XV) (Pl. If, Fig. 3g), has been considered to be somewhat later. The acanthus design has not, however, reached the Ringerike formalisation of the design on the gilt bronze plate from Winchester (Wilson, 1964, 19, Pl. Xa) with which its heart-shaped motif and pendent palmette have been compared. From the technical point of view there seems no reason why it should not come from the same workshop as the Brasenose College disc, for there are similarities in the colours of the enamels and the use of thin reserved lines of bronze with a middle groove to separate the fields. The design of a heart shape containing a suspended three-lobed palmette with two outer leaves, and a pair of curling tendrils below finishing in a pointed lobe with two curling side leaves, all sprouting from a stem base, is practically identical to the top element of a tree sculpture from a carved panel on the north face of the west tower of the Church of St John the Baptist at Barnack, Northants (Cramp, 1975, Fig. 20 middle) (Fig. 3f). The scrolls here have only two leaves, but the trilobed version occurs further down the stem. Of this Professor Cramp has recently commented (1975, 193), after making comparisons of this and its two companion panels with metalwork and manuscript illuminations of the 9th and 10th centuries: 'Although there are some hints of 9th-century originals behind the Barnack panels, I would more happily ascribe them to a rather old-fashioned atelier of the early 10th century'. The comparisons made with existing contemporary filigree work on a small scale and possible metal-work grilles on a larger scale are certainly valid, but the Oxford disc carries greater weight as a direct parallel of the design in champlevé enamel. Now that it is established that there are two champlevé enamel discs found at Oxford with closely similar technical characteristics, one showing bird motifs found in Anglo-Saxon manuscripts, and the other a tree vine found in local sculpture,

all doubts can be swept away and we can be sure of the existence of a *champlevé* enameller in the district in the 10th century.

The question now is whether the technique of *cloisonné* was also in the repertoire of this man or his fellows. The most recent detailed discussion of the Minster Lovell (Pl. Ib, Fig. 3b) and Alfred jewels shows that although the gold settings must be accepted without question as Anglo-Saxon work, the Anglo-Saxon origin of the enamelwork rests on a less secure basis (Hinton, 1974, 36-48). Reasons advanced for the Anglo-Saxon origin of the enamels are the thickness of the gold cell walls compared with continental *cloisonné*, and art historical parallels for the human figure. This is not entirely convincing proof, however, as the figure is a simple one and figures of comparable crudity are known on the Continent from the 8th century. It is admitted that a Frankish origin is most likely for the crystal covering, and so it is not impossible that the enamelled plaques, too, were imported. If they were in fact insular, it is not immediately apparent whether plaques in *cloisonné* technique like this, and Anglo-Saxon *champlevé* work as substantiated by the Oxford roundels, could have evolved in this country or whether the techniques were re-introduced by contact with continental work.

In an attempt to answer this we must retrace our steps to the pagan period. It appears, as we have seen, that the Anglo-Saxon craftsmen had already begun to practise *champlevé* enamel-work on cruciform brooches and probably on hanging bowl escutcheons. It must also be remembered that the manufacture of glass vessels, a related skill, was going on in Kent by the 7th century, and possibly as early as the 5th century. The inspiration for this *champlevé* work in the pagan period came from their Celtic neighbours, and the Anglo-Saxons no doubt learned to make the enamel studs with a metal grille as found on the Ardagh chalice for they were copied into Hiberno-Saxon manuscript art in the Lindisfarne Gospels (Kendrick, 1960, 26v, 94v, 139r). The *cloisonné* technique proper was not in use by the Irish, but there is a strong possibility that the élite Anglo-Saxon jewellers, who in the 7th century were almost exclusively busy with the technique of setting garnets in *cloisons* as on the Sutton Hoo jewellery, might have decided to combine the *cloisonné* technique with enamelwork. A connecting link here may be seen in the millefiori plaques which were used both in enamelwork on the Sutton Hoo hanging bowls, and in *cloisonné* work on the shoulder clasps, purse, etc (Bruce-Mitford, 1972, Pls. C, F, G). By the 8th century on the Continent the two types of *cloisonné*, cold insets and fused enamel, appear together on the Eger reliquary and the Lindau book cover (Lasko, 1972, Pl. 7; Hubert *et al.*, 1970, Pl. 192). There is no trace, however, of a legacy from the Irish of the preponderant characteristics of their works, the broad expanses of red and yellow enamel, or the curvilinear patterns, and so other sources of inspiration must be suspected.

Cloisonné enamel of fine quality was produced in Byzantium by the 6th or 7th century, and must have developed through the Iconoclastic period to the considerable output of high quality work which has survived from the 9th century and later. By this time copies of Byzantine enamels were being produced in Italy, and with less skill in other parts of north-west Europe. The subjects employed are rather limited, and seldom diverge from the three most common: geometrical designs (e.g. a cross, C-spirals or a flower-like cruciform composition), a bird, and the bust of a personage, usually male. The male figure in the Alfred jewel falls in with one of these types, but the *cloison* vanes have not the delicacy of their Byzantine forerunners. Copies of the bust type as seen on the Castellani brooch found in South Italy (*B.M.*, 1976, 135, No. 202) were made with varying degrees of skill, for example the technically competent but geometric rendering on the Cumberland disc which was in the Cathedral of St Blasius, Brunswick,⁴ and the shakiness of the Amsterdam plaques which may be by the same hand as the crucifixion plaque at St Odiliënberg, the indented shape of which was designed for the kind of border strip where enamel plaques alternate with circular jewels

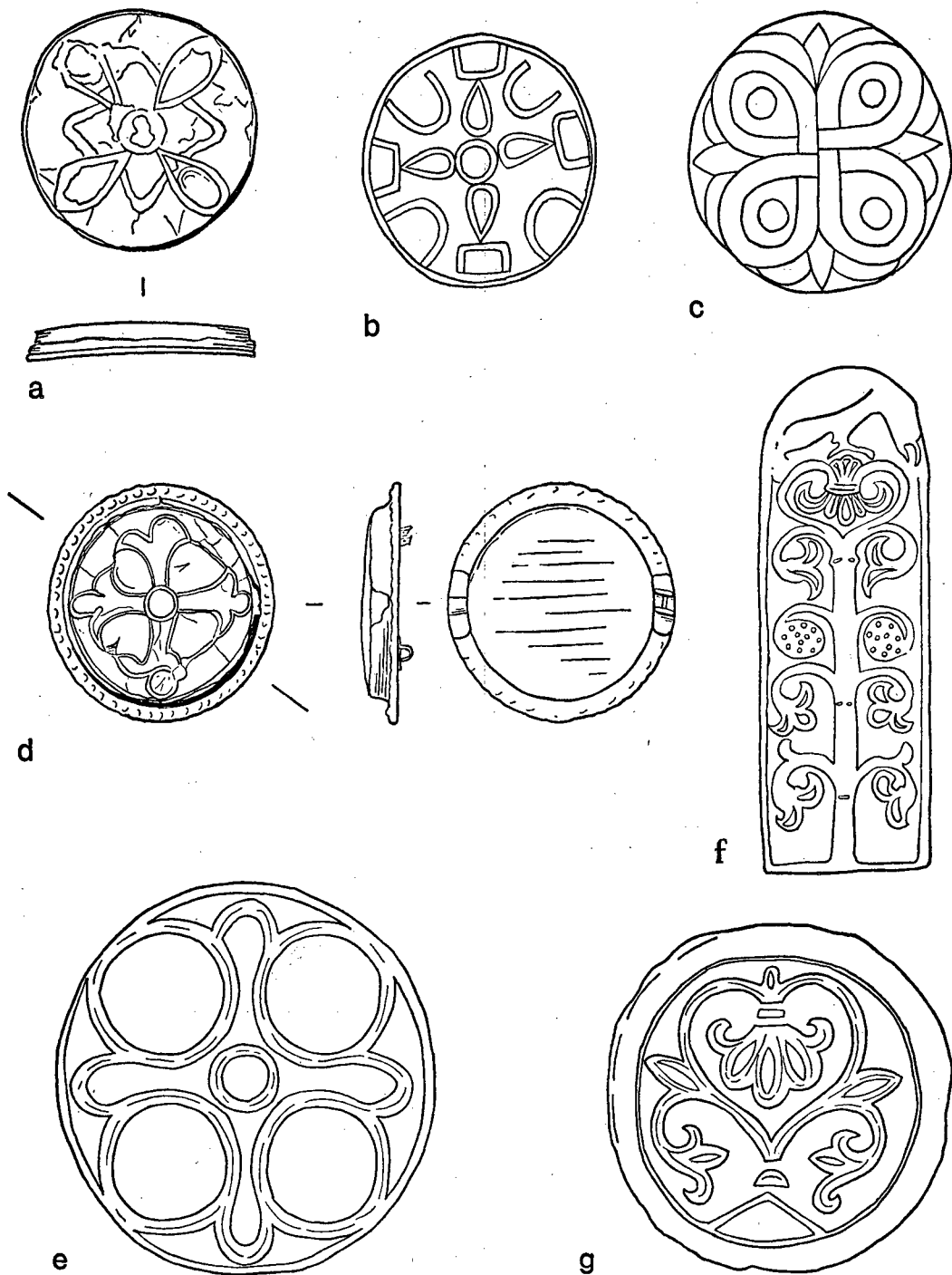


FIG. 3—*a*, Great Saxham (2:1); *b*, Minster Lovell (c. 5:2); *c*, Canterbury (c. 3:2); *d*, Coventry (1:1); *e*, Brasenose College, Oxford, brooch (1:1); *f*, Barnack, carved panel, not to scale; *g*, Carfax, Oxford, roundel (1:1).

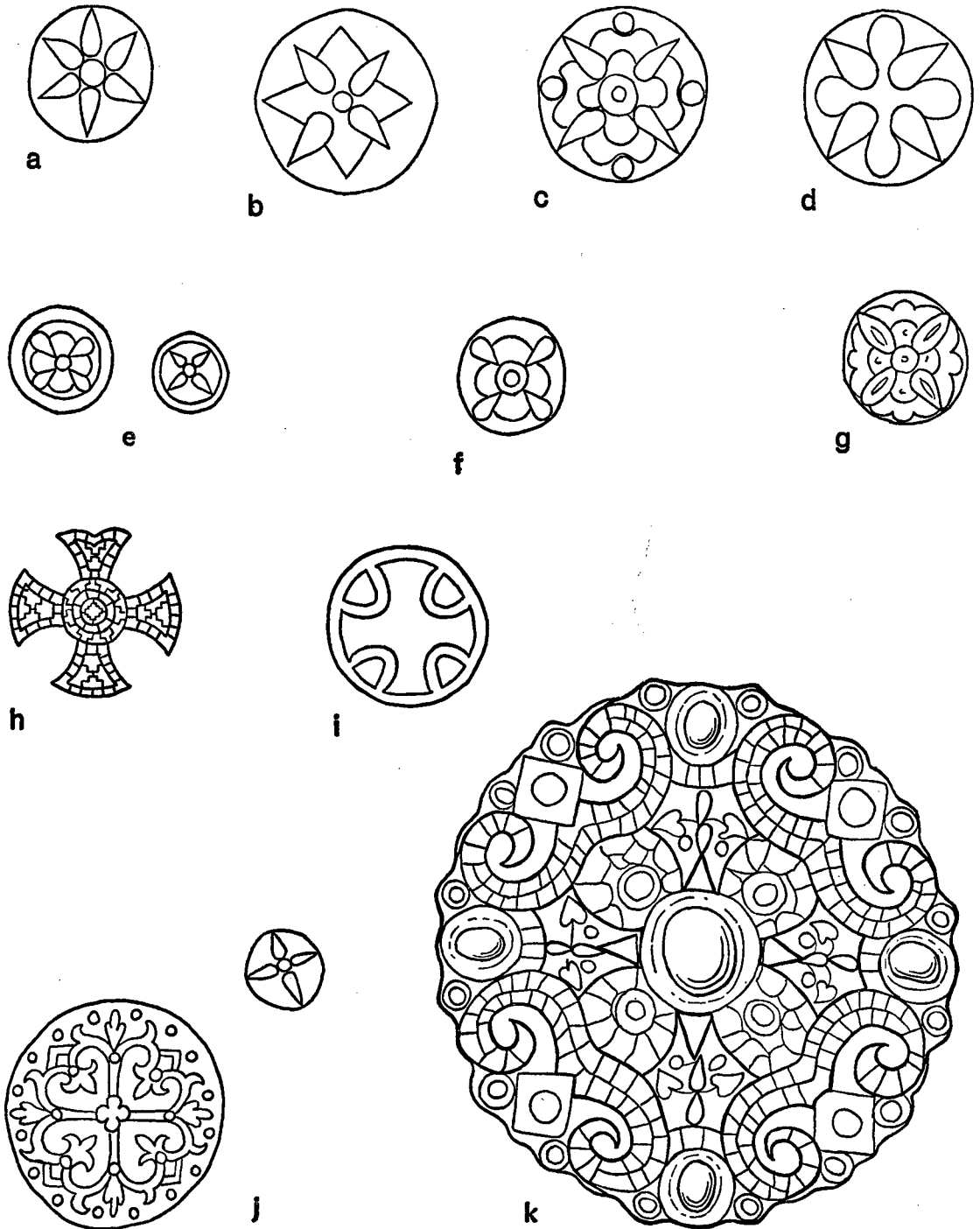


FIG. 4.—Enamel designs, not to scale: *a*, Antioch, pendant; *b*, Byzantine earrings; *c*, Risano, Dalmatia, capsule; *d*, Italy, finger ring; *e*, St Maurice d'Agaune, flagon; *f*, Italy, cross, Victoria and Albert Museum; *g*, Frankish manuscript; *h*, Ixworth, cross (1:2); *i*, Trier, Merovingian brooch; *j*, Towneley brooch; *k*, Dorestad, brooch (1:1).

(Rosenberg, 1922, III, Figs. 88-9; *Berichten*, 1950/1, *inter* 26-7).⁵ The personage (often Christ with a cruciferous nimbus) was also a favourite motif on bronze brooches of the Rhineland on which champlevé and cloisonné techniques were sometimes combined (Rosenberg, 1922, III, Figs. 78-80, 84-7; Dinklage, 1955, Abb. 3; Capelle, n.d., Taf. 7, 82, Taf. 49).

Enamels found in England with bird designs of the 9th century and later have already been mentioned. One on a finger ring found at Wincheap in Kent⁶ (Pl. 1c) has not received much attention, and as it was excluded from the British Museum *Catalogue of Ornamental Metalwork 800-1100 A.D.* it was presumably then considered to be an import. The disc bezel with three gold granules at the junction with the hoop is a form known to the 7th-century Franks. The enamel design is of the head of a hook-beaked bird of Lindisfarne type biting a double rod, and the cell walls are of thin gold and deftly shaped. The colours, not well preserved, are opaque yellow, blue and possibly white. There are no close parallels, however, and its origin must therefore remain uncertain for the present.

Before returning our attention to the flower motifs, we must take into consideration also another relevant disc of cloisonné enamel in bronze which has been found in this country. The disc from the Cloister Garth, St Augustine's, Canterbury (Potts, 1930, 168-9; Rigold, 1970, 345-6, fig. 1, 1) (Fig. 3c) is 2.7cm in diameter, with the design of part of an interlace cross and background of dark opaque blue, two of the loops of the cross filled with yellow and a red roundel in the middle, the other two loops filled with white and a yellow roundel; the three leaves in the outer spandrels of the cross are white and two of the loops of the cross are translucent emerald. The disc is slightly dished, and must have been applied to a curved surface, such as a chalice.

The three enamel roundels from Canterbury, Minster Lovell and Saxham are basically all of the flower type, even if the Canterbury disc does not appear to conform absolutely. Its four-looped interlace motif is a tight version of the looped square which is found in Roman mosaics through to Merovingian and later designs. It is also related to the floriate cross motifs discussed below. However, the basic flower shape with almond-shaped petals disposed with points outwards is evident on the Minster Lovell jewel and the Saxham disc. This motif was already in use by the 3rd or 4th century A.D. for it forms the cloisonné enamel centre of a gold-mounted pendant said to have been found at Antioch⁷ (Fig. 4a) together with a gold necklace which also belongs to the same date. The pendant has a distinctive openwork gold ray border which may be closely compared with borders on pendants framing coins of Gallienus and Valerianus, and a cameo of Alexander Severus and Julia Mamaea found with a ring inscribed with the name Constantine. The motif was handed on by craftsmen and may be seen on the Byzantine earrings of the 6th or 7th century, on a capsule from Risano, Dalmatia of the 7th century, and on a ring from Italy probably of similar date (Rosenberg, 1922, III, Figs. 16 & 21, 18 & 50, 19) (Figs. 4b, c, d). It also occurs on the splendid enamelled flagon of St Maurice d'Agaune (Fig. 4e) where different versions of the flowers appear both on the handle and in the circular plaques (Rosenberg, 1922, III, Figs. 36, 39, 44-6; Lasko, 1972, Pl. 22). Their popularity persisted and they adorned the altar of St Ambrogio at Milan of the 9th century, and the Italian cross of the 9th century in the Victoria and Albert Museum (Mitchell, 1917), as well as in the form of the outer border of the Towneley brooch (Fig. 4j). Such enamelled motifs must also have been produced by the Franks as they appear on illuminated pages of Merovingian manuscripts which are clearly direct copies of enamelwork⁸ (Fig. 4g) and they occur on enamelled work at an even later date, as, for example, on a Byzantine chalice of the 11th century at Venice (Dalton, 1961, Fig. 340). Rosettes formed with the points of the almond-shaped units towards the middle were of course displayed on metalwork concurrently throughout the whole period, so perpetuating the tradition of the Roman marguerite motif (Beckwith, 1965, 288-300, Fig. 4).

It has already been noticed that a further motif is implicit on the Minster Lovell jewel—that of an Anglian cross with curved arms, a form which is well in evidence in England from the 7th century to the 9th century.⁹ It is, however, also used to adorn one of the Rhineland types of bronze disc brooches in champlevé enamel which must have made its first appearance by the 8th century as it is found in pagan Merovingian graves (Fig. 4i). A distribution map shows that some were found in the middle Rhineland, and others scattered in north Germany and Holland (Capelle, n.d., Map Taf. 49, Taf. 7, 83, 86). One of these, at least, found its way to this country, to Thetford in Norfolk.¹⁰ A second example from Norfolk at Castle Acre has been detected by Miss Barbara Green in the collection made by E. Beloe, now in Castle Museum, Norwich, and I am grateful to Miss Green for this information. One in cloisonné enamel from France is in the British Museum (*B.M.*, 1923, 150, Fig. 200).¹¹ The shape was already used in England during the 7th century for pectoral crosses in gold and cloisonné garnets (Bruce-Mitford, 1956, Pl. XV), so that the idea was available to be taken up by the Hiberno-Saxon enameller, and was no doubt transmitted by the Christian missions to the Continent. Enamelled plaques with this design were also used as a border to the portable altar of Adelhausen (Rosenberg, 1922, III, Fig. 95; Lasko, 1972, 9–10, Pl. 9). On the side panels of this altar, surrounded by Hiberno-Saxon type interlaced, there are two enamelled crosses with discoid expansions in the arms and swallow-tail terminals. The pattern in the enamel consists of triangles and small roundels. A significant new find which shows that Irish enamellers in the British Isles also were producing curvilinear cross brooches in the 8th century has come to light at York. The cross has swallow-tail arms and the cells of the centre roundel are in a kind of key pattern of Celtic origin (*Illustrated London News*, April 1977, 55).

Another version of this basic cross shape may be seen in the new jewel-encrusted brooch from Dorestad (Fig. 4k) where cloisonné enamel insets are combined with garnet cloisonné work (van Es, 1976, 249–66). The brooch may be dated to the second half of the 8th century because of the characteristics it has in common with late Merovingian disc brooches, the Lindau book cover, the Enger reliquary and the Adelhausen altar. Dr van Es has demonstrated its development from Merovingian circular brooches, and has interpreted its design as a combination of two crosses. The brooch seems, however, to derive some inspiration from the Anglo-Saxon curvilinear cross pendant. On the Ixworth cross the arms are outlined with a row of garnets in much the same way (Fig. 4h). All the colour of the Dorestad brooch, the garnets cloisonné and en cabochon as well as the enamel plaques, are contained within the raised garnet borders of the curvilinear cross with curled arm terminals. The vivid enamel plaques radiate from the centre cabochon in the normal curves of an expanding arms cross, the spaces between filled with badly fitting dull garnet cloisons that are suitably unnoticeable so that attention is not distracted from the main design. The axis of the cross is marked out by the most distinctive parts of the enamelwork, that is by the blue triangles and the white almond-shaped cells, by the cabochon garnet in each arm, and by the long axis of the central oval-shaped cabochon garnet.¹²

Among the English enamels an Anglian cross is the basic design of the Saxham disc with a flower superimposed. Further, it may be seen that the space left by the looped cross of the Canterbury disc is also an Anglian cross. Even the later bronze disc from Oxford (Pl. Ie, Fig. 3e) faithfully reproduces the Anglian cross with flower superimposed, and although it is carried out in champlevé, the outline of the petals and centre ring are thin reserved strips giving the appearance of cloisonné work. In pointing out these forms, the reservation must be made that it is sometimes difficult to be sure when this curvilinear cross is intentional and when it is the accidental result of breaking up a circular field by placing in it four circular or curved shapes, for this kind of cross can also be distinguished in the Berlin ring and the Frankish manuscripts (Figs. 4d, g) where opinions might differ as to how conscious the crafts-

man was of the curvilinear cross in the design.

A floriate cross motif also appears on a bronze cloisonné enamel brooch found about 30 years ago under the Gas Showrooms, Corporation Street, Coventry (Pl. Id, Fig. 3d), but which has so far remained unpublished except for a brief mention (Devenish and Elliott, 1967, 252).¹³ Again the ground is translucent dark blue, two opposing arms of the cross are opaque white, the other two opaque bright green and the centre disc is greenish yellow. The cloisons and rim are bronze and the enamel has a convex upper surface 2.8cm in diameter. It is held in a gilt copper collar which extends into a beaded border and turns over to form a frame on the back surrounding a separate gilt copper disc which adheres to the back of the enamel roundel. A double lug and rivet is fixed to the border for the pin, and a catch is riveted to the opposite side. The pin was at an angle to the cross design, as indicated on Fig. 3d. The cloisonné work is so inefficiently executed that only one of the cross arms is clear enough to show the intended trilobed shape, and the setting is an equally inexpert piece of work.

Although it probably owes its inspiration to the cloisonné roundels of superb craftsmanship produced in Austria with more complicated cruciform motifs, such as a roundel on the cloak belonging to the coronation insignia of the Holy Roman Empire (Dalton, 1904, 69, Fig. 2), it is a crude copy which might well have been produced by Anglo-Saxon beginners in the craft. At least one magnificent example of this floriate cross in enamel found its way to the British Isles in the form of the Towneley brooch, (Pl. Ig, Fig. 4j), which is said to have been found in Scotland. The cloison walls are thin and perfectly shaped, and the enamels are in excellent condition, the opulent effect of emeralds being given by the background setting of gold backplate shining through translucent emerald green enamel. A more tenuous connection between this cloisonné design and the design on the champlévé enamel disc from Oxford together with the Barnack sculpture (Figs. 3f, g) may be detected in the heart shape with pendent trilobed motif with two curling outer leaves which forms each quadrant of the cross. The trilobed terminals to the cross could obviously have derived from a design like that on the Canterbury disc, and cast bronze cruciform brooches of just this shape were found at Domburg in Holland and at Knufft in the Rhineland (Capelle, n.d., Taf. 7, 92; Ament, 1976, Taf. 80, 1). A similar cross brooch was found in a 7th-century Merovingian grave at Söst in the Trier region (Böhner, 1958, Taf. 18, 11).

The same kind of translucent emerald green background can be distinguished on the Dowgate Hill brooch (B.M., 1976, 158-9, No. 258) which was found in London but which has no technical or artistic features recognisable as exclusively Anglo-Saxon. Apart from the similarity of the emerald green background, the cloisons are fine and skilfully shaped. The gold setting in filigree and granular work has peculiarities not known in insular work, for example a ribbon scroll consisting of two strips together, one plain and one serrated. The fittings at the back are exactly the same as those on the Towneley brooch, namely strips applied on the border to form a loop at the top for suspension or a safety chain, with a double-lugged pin holder and a pin catch on either side of the loop placed so that the pin spanned the top one-third segment of the disc. These features in common might be taken to indicate a common foreign source for both brooches, and the translucent emerald green background, together with the use of opaque white, connect both brooches with the north Italian school responsible for the Milan and Adelhausen altars. However, the excellent quality of the cloisonné work and the subdued colours used on the Towneley brooch suggest to one authority (Lasko, 1972, 87) a Byzantine original work rather than an Italian copy.

The enamels on the disc from Canterbury are all opaque, even the dark blue, with the exception of two loops of the cross which are in translucent emerald. The colours therefore link it to these continental 9th- and 10th-century products, but the shaky bronze cell-work and the patchy enamel show that the craftsman was not in the same top rank, and this could be an insular copy.

From these observations it may be seen that of the cloisonné enamels found in this country there are five which have a fair claim to be Anglo-Saxon products. These are the Alfred and Minster Lovell jewels, the Saxham and Canterbury roundels and the Coventry brooch. Although gold is employed for the cloisons and backplate of Minster Lovell and bronze for the Saxham disc, this must only indicate a difference of purpose for which the jewel was to be used, and it may be noted that the Minster Lovell disc is only a little smaller than the Saxham disc, 1.4cm in diameter compared with 1.7cm. As the Saxham and Canterbury roundels are concave at the back on one plane only, they must have been applied to some surface curved like the upper wall of a bowl. The Saxham and Canterbury discs are both in bronze, but the similarities do not stop there. Both have four almond-shaped cells. On the Canterbury disc each has a circular cell in the middle, and two almond- or egg-shaped cells are white with a yellow disc centre, rather like the white almond-shaped cell on the Saxham disc which has a yellow inset roundel or oval shape. This prompts one to wonder whether the craftsman was visualising a real egg, its white and yolk. Although the Canterbury disc is no doubt later, the colours used on the other three discs are similar, consisting of translucent dark blue and opaque light blue, white, yellow, green and with a touch of red on the Canterbury disc and possibly originally in the centre of the Saxham disc. A similar colour scheme was selected for the Risano disc (Fig. 4c), dark blue and yellow petals, red centre on green ground (Evans, 1884, 50).

In one sense it is fortunate that one enamel setting is missing from the Saxham disc for this reveals an unexpected variation in technique. The cloisons are, as usual, ribbons of metal set at right angles to the back plate. In cell 7, however, there is a small oval tray (Figs. 1, 3a) set inside the almond-shaped cloison. This tray container technique appears to be rare, but was attributed to some Roman plaques where a gold leaf tray filled with enamel was pressed into a glass background (Rosenberg, 1922, I, 40, Fig. 58D, E, F).

The five cloisonné enamels, the Alfred and Minster Lovell jewels, the Saxham and Canterbury roundels and the Coventry brooch are therefore to be regarded as probable Anglo-Saxon work. This is a small number on which to propose the existence of the enameller's craft in this country in the late 8th and 9th centuries, but although enamelling is much more in evidence on the Continent in this period there are no pieces there which appear to come from the same workshops. Flower designs are less geometric and slightly more naturalistic, like the 'tree of life' on the Dorestad brooch (Fig. 4k), the belt mount from Amsterdam and the gold altar at Milan (Rosenberg III, 1922, Figs. 90, 91). Nevertheless, the Anglian cross motif on the Dorestad brooch must have derived from Hiberno-Saxon sources. Further, small roundels and cells of almond shape are common on both sides of the Channel, and almond-shaped cells filled with opaque white and roundels of opaque red are common to the Canterbury, Saxham and Dorestad pieces. The Alfred jewel has reddish-brown roundels in the flowers. Simple geometric shapes of enamel cloisons do appear on a rectangular brooch type of the 8th century found in Holland and North Germany, two of which include U-shaped cells which may be compared with those on the Minster Lovell jewel.¹⁴ This brooch type has not so far been found in England.

By the beginning of the 10th century we can be certain of the existence of a workshop in the Oxford area which used the same dark blue translucent background in champlevé work with thin dividing strips in a cloisonné fashion. In these products can be discerned traditions emanating from Byzantium and filtering through Italian and German centres where output was far superior in quality and quantity, but the evidence, although thin, suggests that there was an enameller's craft being practised in England which had struggled through from the 7th century. Colours already used by the makers of the escutcheons on the large Sutton Hoo hanging bowl and the Ardagh Chalice were continued, translucent blue, opaque red and

green. Although the workshops were in an operative condition, they did not reach a very high standard. However, they were capable of receiving fresh impulses from abroad, and by the 10th century their champlévé work left little to be desired in design and technique.

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NOTES

- ¹ Where the original metal of this disc is preserved it has a red tint and is presumably copper. It should be noted that a number of the enamelled objects mentioned here are described as 'bronze' where the metal may well be copper.
- ² Although this substance has been examined in laboratories, it has not been established as enamel.
- ³ B.M. Reg. No. 1956 11-1 1.
- ⁴ *Early Christian and Byzantine Art, Exhibition Baltimore Museum of Art*, 1947, Pl. LXIX, 522; Frankish, 8th century.
- ⁵ Cf. the mounts on the votive cross in the Victoria and Albert Museum (Mitchell, 1917, Pl. I).
- ⁶ B.M. Reg. No. 1951 2-5 1.
- ⁷ Ross, 1965, 26, No. 24. The colours are not mentioned in the description. It is said to be of glass or enamel, but the illustration shows clearly that it is enamel for some of the almond-shaped cells have floated away in the firing and the spaces have filled up with the background enamel.
- ⁸ Hubert *et al.*, 1967, 164, Col. Pl. 175, roundel at base of cross; 180, Pl. 189, roundels on terminals of cross.
- ⁹ Not, however, so exclusively as stated by Bakka (1966, 278).
- ¹⁰ An example shown to me by the late Group Captain Knocker about 1960 and recorded by him as being a surface find in chicken runs between the site of St John's Church and Town ditch.
- ¹¹ B.M. Reg. No. ML 1904 2-4 1031.
- ¹² Cf. the centre stone on the Lindau Gospels book cover (Lasko, 1972, Pl. 2) and the Enger reliquary (Lasko, 1972, Pl. 7), etc.
- ¹³ I am very grateful to Mrs Charmian Woodfield who directed my attention to this brooch.
- ¹⁴ Stein, 1967, Taf. 69, 17, Abb. 64; Arbman, 1940, Abb. 275, Taf. 84, 1-2; Holtebützel-Nindorf near Verden in Niedersächsisches Landesmuseum, Hannover.

REFERENCES

- Ament, H., 1976. *Die Fränkischen Grabfunde aus Mayen und der Pellenz*.
- Arbman, H., 1940. *Birka I*. Uppsala.
- Avent, R., 1975. *Anglo-Saxon garnet inlaid disc and composite brooches*. B.A.R. 11. Oxford.
- B.M., 1923. *British Museum guide to Anglo-Saxon antiquities*.
- B.M., 1976. *Jewellery through 7000 years*. British Museum.
- Bakka, E., 1966. 'The Alfred jewel and sight', *Ant. Jour.*, XLVI, 277-282.
- Beckwith, J., 1965. 'Byzantine influence in art at the court of Charlemagne' in Braunfels, W. (ed.), *Karl der Grosse*, III. Düsseldorf.
- Berichten*, 1950/1. *Berichten Rijksdienst Oudheidkundig Bodemonderzoek* 1.
- Böhner, K., 1958. *Die fränkischen Altertümer des Trierer Landes*.
- Bruce-Mitford, R. L. S., 1956. 'The pectoral cross' in Battiscombe, C. F. (ed.), *The relics of St Cuthbert*. Oxford.
- Bruce-Mitford, R. L. S., 1972. *The Sutton Hoo ship burial: a handbook*. 2nd edn. London.
- Capelle, T., n.d. *Die frühgeschichtlichen Metallfunde von Domburg auf Walcheren*.

- Cramp, R., 1975. 'Anglo-Saxon sculpture of the reform period' in Parsons, D. (ed.), *Tenth-century studies*.
- Dalton, O. M., 1904. 'Some early brooches of cloisonné enamel in the British Museum', *Proc. Soc. Ant.*, 2nd ser., xx, 64-78.
- Dalton, O. M., 1911. *Byzantine art and archaeology*.
- Devenish, D. C. and Elliott, M., 1967. 'A decorated axe-head of Viking type from Coventry', *Med. Arch.*, xi, 251-2.
- Dinklage, K., 1955. 'Karolingischer Schmuck aus dem Speyer- und Wormsgau', *Pfälzer Heimat*, 6.
- Elbern, V. H., 1965. 'Die Goldschmiedekunst' in *Die Ausstellung Karl der Grosse—Werk und Wirkung*. Aachen.
- Evans, A. J., 1884. 'Antiquarian researches in Illyricum', *Archaeologia*, XLVIII, 3-105.
- Fox, C. F., 1923. *The archaeology of the Cambridge region*. Cambridge.
- Henry, F., 1956. 'Irish enamels of the Dark Ages and their relation to the cloisonné techniques' in Harden, D. B. (ed.), *Dark-Age Britain*. London.
- Henry, F., 1965. *Irish art in the early Christian period to 800 A.D.* London.
- Hinton, D. A., 1974. *A catalogue of the Anglo-Saxon ornamental metalwork, 700-1100, in the Department of Antiquities, Ashmolean Museum*.
- Hubert, J., Porcher, J. and Volbach, W. F., 1967. *L'Europe des invasions*. Paris.
- Hubert, J., Porcher, J. and Volbach, W. F., 1970. *Carolingian art*, trans. Gilbert, S. and Emmons, J. London.
- Kendrick, T. D., et al., 1960. *Codex Lindisfarnensis*. Oltun-Lausanne.
- Lasko, P., 1972. *Ars sacra 800-1200*. Harmondsworth.
- Mitchell, H. P., 1917. 'An enamel of the Carolingian period from Venice', *Arch. Jour.*, LXXIV, 122-31.
- Potts, Rev. R. U., 1930. 'Discoveries at St Augustine's Abbey, Canterbury', *Ant. Jour.*, x, 167-70.
- Riegl, A., 1923. *Die spätromische Kunst-Industrie nach den Funden in Osterreich-Ungarn*, II.
- Rigold, S. E., 1970. 'Six copper-alloy objects from St Augustine's, Canterbury', *Ant. Jour.*, L, 345-6.
- Rosenberg, M., 1922, I. *Geschichte der Goldschmiedekunst: Zellenschmelz I, Entstehung*.
- Rosenberg, M., 1922, III. *Geschichte der Goldschmiedekunst: Zellenschmelz III, Die Frühdenkmäler*.
- Ross, M. C., 1965. *Catalogue of the Byzantine and early mediaeval antiquities in the Dumbarton Oaks Collection*, II.
- Stein, F., 1967. *Adelsgräber des Achten Jahrhunderts in Deutschland*. Berlin.
- van Es, W. A., 1976. 'La grande fibule de Dorestad', *Festoen opgedragen aan A. N. Zadoks-Josephus Fitta*. Groningen-Bussum.
- Wilson, D. M., 1964. *Anglo-Saxon ornamental metalwork 700-1100 in the British Museum*.
- Wilson, D. M., 1975. 'Tenth-century metalwork' in Parsons, D. (ed.), *Tenth-century studies*.

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