

# The Winchester Reliquary

By DAVID A. HINTON, SUZANNE KEENE  
and KENNETH E. QUALMANN

*DURING an excavation outside the NW. corner of the defences of Winchester, Hants., an object was discovered which careful conservation proved to be an early medieval burse-reliquary. It has a wooden core, to which are tacked thin, gilt copper-alloy metal sheets, with embossed decoration. The context of the reliquary suggests its loss in the late 9th or early 10th century, and its art-historical associations indicate that it had been made at some time in the previous hundred years. It is the first early medieval reliquary of this type to have been found in England.*

## INTRODUCTION

In April 1976 archaeological excavation of a small area along the W. side of Sussex Street, Winchester, Hants. was undertaken by the Winchester Archaeology Office in advance of road construction. The site was just W. of the walls of the Roman, Saxon and medieval city (Fig. 1), and was investigated as part of a programme of suburban excavation begun in 1972.<sup>1</sup>

Near the bottom of one of a group of deep pits was found a complex and fragile object of copper alloy and wood (Pl. iv, A). Its importance was recognized immediately and specialist help sought.<sup>2</sup> Fortunately a conservator (S. K.) was available to undertake initial lifting, and subsequently to carry out all treatment and to co-ordinate specialist analyses.<sup>3</sup> Painstaking conservation over the past five years has revealed the object to be a burse-reliquary — an archaeological find unique in this country.<sup>4</sup> As reconstructed, it measures 150 mm across the base, and is 175 mm high (Pl. II). It is 35 mm thick at the base, tapering to 10 mm just below the semi-tubular ridge across the top (Pl. III, A, B). Its beechwood core is enclosed in gilded copper-alloy sheets, with embossed decoration.

A full report on the Sussex Street site, together with details of other work in the western suburb, will be published in 1982.<sup>5</sup> However, conservation and research have shown that the Winchester reliquary requires a detailed examination of its treatment and significance. The following paper therefore sets out the archaeological context of the find (K. E. Q.); describes the conservation of the object and the results of analyses (S. K.); and discusses the parallels to and wider significance of the reliquary (D. A. H.). A more detailed account of the conservation, and the results of further specialist analysis, will be published elsewhere.

All finds from the Sussex Street site will be deposited with Winchester City Museum after publication, under site catalogue number 3157; the reliquary will be recorded as 3157.80.

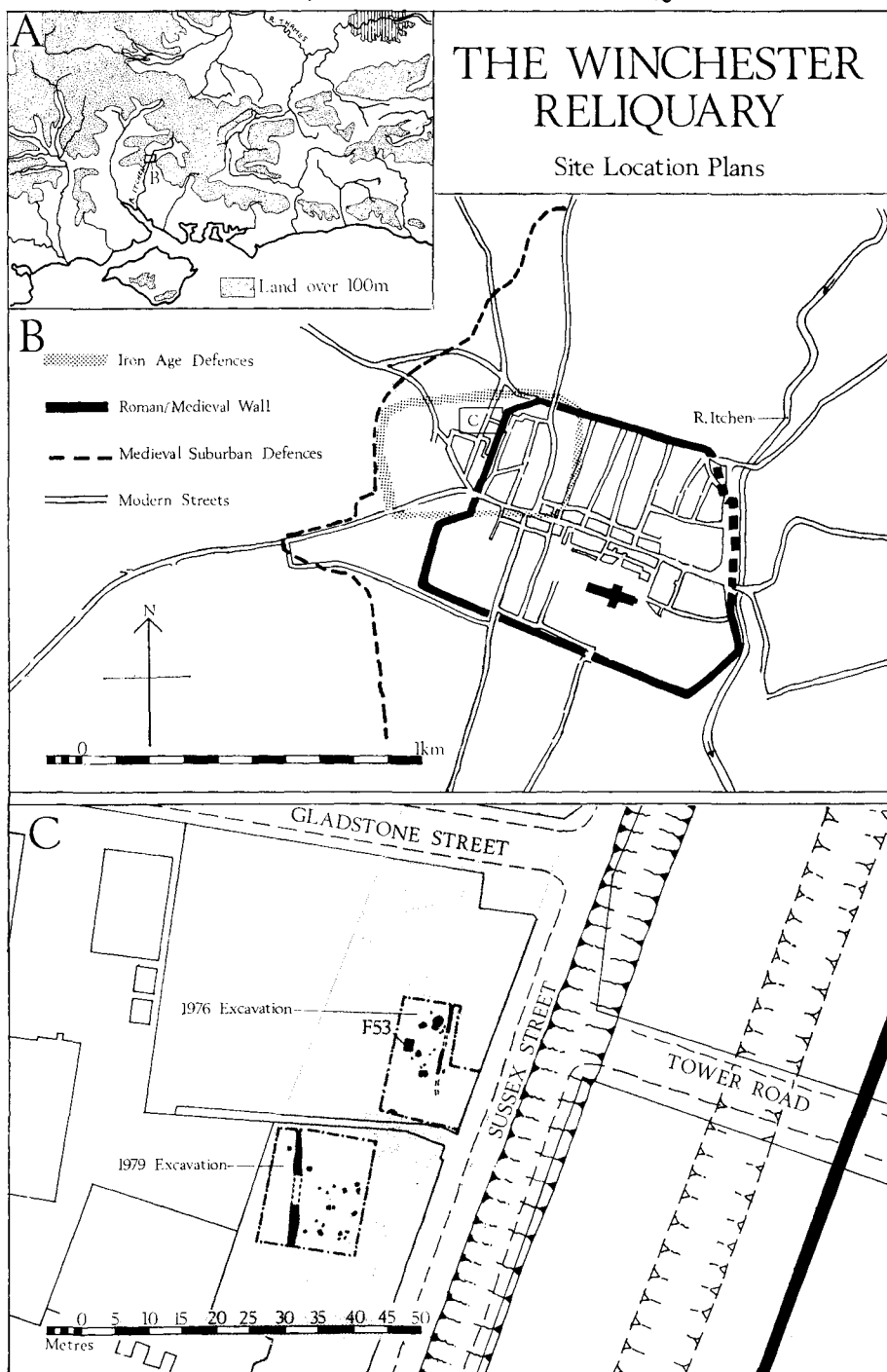


FIG. 1

Location map of Winchester and the find-spot (F 53) of the reliquary

THE WINCHESTER RELIQUARY  
THE CONTEXT OF THE DISCOVERY

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By KENNETH E. QUALMANN

WINCHESTER'S WESTERN SUBURB

Winchester is sited on the lower slopes of a spur of the southern English chalk downlands, at the convergence of natural communications routes: the R. Itchen running N.-S. and an E.-W. ridge of high downland (Fig. 1, A). At some time during the 1st century B.C. a large, perhaps 40-acre (16 hectares), area of the spur was defended by a line of bank and ditch (Fig. 1, B).<sup>6</sup> The Roman and later walled city which succeeded and partly overlay this enclosure was centred further to the E. towards the valley bottom.

The western suburb of the later city was thus at the heart of the earliest permanent settlement on the site of Winchester. Within the circuit of the Roman town, the Iron Age defensive ditch was deliberately infilled early in the Flavian period.<sup>7</sup> Elsewhere, the bank and ditch seem to have had a legal significance as a boundary during the Roman period. Very little evidence of any sort of Roman activity has been found within the area between the Iron Age earthworks and the city wall.<sup>8</sup> By contrast, several Roman burials have been found at separate sites on the line of or adjacent to the Iron Age defences,<sup>9</sup> which may thus have defined the formal limit of the urban area on the western side of the Roman city. This arrangement survived into, or was revived in, the early Middle Ages, and from then until 1835 the Iron Age ditch in one form or another continued to serve as the suburban boundary. By the 12th century an area of the suburb was known as *Erdberi*, a name which expressed the earthen character of the defences.<sup>10</sup>

The tenurial complexity and the extent of royal holdings recorded in the 12th-century surveys of Winchester suggest that the western suburb was the earliest to develop, and that the area bounded by the Iron Age ditch was probably within the formal limit of the city from at least as early as the late 9th century.<sup>11</sup> Its two main streets were the approach roads from the W. which converged on West Gate: *Wodestret*, today the Romsey Road, and *Athelyngestreet*, now Upper High Street. A third route carried traffic from Newbury and Oxford along the line of Sussex Street to the West Gate. This route may have been of particular importance before the late 9th century, when the North Gate into the city appears to have been established. Subsequently it seems to have been incorporated in the regular circuit of streets which ran around the outer edge of the city ditch.

By the 12th century, most of the street frontages were built up, a development which was probably well under way during the first half of the 10th century.<sup>12</sup> The seven parish churches of the medieval suburb are another measure of its early wealth and population. One of these was established just outside the West Gate between 934 and c. 939; another, later dedicated to St James, played a part in the Easter processional liturgy and probably existed as early as c. 970. The site of a third, St Anastasius, was found in 1972.<sup>13</sup>

The built-up area at the limits of the suburb was still being extended in the late 11th century. It was probably then or soon after that a part of the surviving length of the Iron Age ditch was recut and that elsewhere the earthwork was realigned so as

to take in the expanded settlement, including the churches of St Anastasius and St James which now defined the entries to the suburb. The ditches enclosing the northern and southern suburbs probably originated in the same period of construction.

The expansion of the western suburb probably ceased in the 12th century. Excavation has shown that by *c.* 1200 small, densely occupied properties were being amalgamated into larger units defined by substantial ditches.<sup>14</sup> By *c.* 1330 the area was largely deserted — a situation which continued until the 1830s, when the construction of the railway stimulated new growth.

#### THE SUSSEX STREET SITE

Proposals to widen Sussex Street and also to construct a new road led to excavation of trial trenches on several threatened sites late in 1974. Two sites were subsequently excavated in full. One of these comprised a 190 m<sup>2</sup> area, formerly the gardens of the Gladstone Arms public house and no. 1 Gladstone Street (Fig. 1, C), excavated between January and May 1976. Subsequent road construction during 1976–77 provided the opportunity to record archaeological deposits over substantial areas adjacent to the 1976 site and also along the line of the new road 95 m to the W. From April 1979 to January 1980, 250 m<sup>2</sup> were investigated on the site of nos. 43–57 Sussex Street, immediately S. of the 1976 site (Fig. 1, C). These sites provided the context in which the reliquary was found.

The earliest excavated features dated from the middle Iron Age and included the Iron Age defensive ditch. No features of Roman date were found, except in the partly filled ditch, where mid 4th-century burials were excavated. On both Sussex Street sites the Roman period was represented by a 30 cm thick layer of plough soil. Near the uppermost surface of this deposit were found a few sherds of early Saxon grass-tempered pottery.

Immediately overlying this ploughsoil, and probably largely accounting for its survival, was a series of layers of redeposited chalk, clay and gravel, up to one metre thick alongside Sussex Street, diminishing gradually to the W. and merging into the rising ground about 25 m W. of Sussex Street. This deposit was traced as far as the Iron Age defences to the N. and at least as far as Newburgh Street to the S. — a minimum total length of 130 m (shown in tone on Fig. 1, C). Its extent and situation suggest an association with the western defences. Little dating evidence was found in it, but the succeeding phase of activity contained no pottery later than the local chalk-tempered wares which are thought to date from the late 9th or 10th centuries.<sup>15</sup> The deposit has therefore been interpreted as the upcast from the redigging of the town defences which presumably took place during the reign of King Alfred. This work probably included a double ditch, as shown on Fig. 1, C.<sup>16</sup>

Virtually all areas excavated in Sussex Street provided evidence for occupation in the late 9th or early 10th century. This would appear to have been densest towards the southern part of the street, and even at this early date pits were dug well back from the frontage. Fairly intensive activity continued for perhaps 250 years. The 13th century saw the excavation of substantial boundary ditches, perhaps marking out new and larger properties, and the construction of a stone house with full

undercroft on the 1979 Sussex Street site. This house had been demolished by the end of the 13th century and very little non-agricultural activity occurred until the area was replanned and built up in the 19th century.

A complex of early medieval features on the 1976 Sussex Street site was found to cut into the redeposited chalk described above. Many of these were found to date from the last few decades of the 9th century and perhaps the first half of the 10th. Although from several phases, all have been shown on Fig. 1, C so as to give some indication of the level of activity on the site in the period at which the reliquary was deposited.

A shallow ditch roughly parallel to Sussex Street is interpreted as representing the first phase of activity after the spreading of the redeposited chalk. A line of post-holes probably representing a fence was found immediately to the W. The ditch soon silted up and was re-cut as a deeper feature at about the same time that a group of stake- and post-holes was dug. These probably formed two relatively insubstantial structures. The ditch again silted up and the structures were swept away prior to the use of the area for a series of latrine pits, 1.6–4.4 m in depth. This use continued over a lengthy period — certainly throughout the 10th century and probably the 11th.

The reliquary was found near the bottom of one of the earliest pits of this group — F53.<sup>17</sup> This feature was roughly rectangular, measuring 2.4 by 2.2 m in plan, and was 2.1 m deep with straight sides and a flat bottom. The lowest 10 cm of the filling was a fine, reddish-brown soil with much decayed wood and organic staining (layer 323). Above this was a 1.7 m thick deposit of grey soil and occupation debris representing deliberate infilling (layers 269 and 243). The reliquary came from the very bottom of this layer — in other words, on the upper surface of the cess-like primary fill. The uppermost 30 cm of the pit was filled with a chalk plug.

The pottery from the pit consists mostly of the local, hand-made chalk-tempered wares (86.9% by sherd count, 79.2% by weight). A very similar fabric has been identified at Saxon Southampton, where it became the predominant type in the late 8th or early 9th century,<sup>18</sup> although in vessels with flat bases. All the chalk-tempered vessels from F53 have sagging bases, and most are cooking-pots with straight, flat-topped rims. The 9th–10th-century wheel-thrown 'late Saxon sandy wares' make up the next largest element (8.9%, 17.9%) in the assemblage, although a single nearly complete vessel in layer 323 somewhat distorts their importance. Only cooking-pots were represented. A few sherds of Michelmersh pottery and a single sherd of Portchester ware were also found, but not in the primary fill.<sup>19</sup>

Several pits in this general period of activity on the 1976 site contained similar ceramic groups (two features even contained sherds from the same pots as those in F53) and showed deliberate infilling like that of the reliquary pit. It is therefore suggested that the area was set aside for latrine use which eventually extended over a considerable period of time — one pit being backfilled with domestic rubbish and another dug. No property or properties served by these latrines could definitely be identified in the area excavated. There may have been houses on the Sussex Street frontage either E. of the excavated areas or destroyed by the large 13th-century ditch, or the pits may have been used by adjacent properties to the N. or S.

## THE CIRCUMSTANCES OF THE RELIQUARY'S LOSS

It is only possible to speculate on the circumstances which led to the reliquary coming to rest near the bottom of a deep pit. Although the object was not new, it was still in quite good condition when it was deposited, and it will be shown below that its contents had not been removed. It was not, however, in a pristine state, for one of its metal sheets had been removed, and had been folded up, apparently deliberately and with some care. This piece was found in the pit with the rest of the reliquary. If the reliquary had been stolen, and discarded as valueless because it was found neither to be covered in pure gold nor to contain precious treasures, its thief would hardly have been so careful with the separated sheet. Nor perhaps would the sheet and the rest of the reliquary have remained in such close contact when discarded. This association also demonstrates that the reliquary was deposited straight into the pit: had it for instance been part of the general *débris* of some destroyed church, shovelled into the pit in a clearing-up operation, its two pieces would almost certainly have become separated.

## CONSERVATION AND ANALYSIS

*By* SUZANNE KEENE

Conservation of the reliquary fell into three phases: first, its recovery from the site and its initial stabilization; second, the long process of cleaning and investigation; and third, the reconstruction.

## I. RECOVERY AND STABILIZATION

The object lay in the ground with its incomplete face uppermost (Pl. iv, A). The excavator had only removed the fragments of loose metal which were later to be reconstructed as the folded-up figure of Christ. It is not known how these fragments lay in relation to the rest of the reliquary, but they must have been close to or with it. There could have been some damage to the exposed wooden core during excavation, but this seems on balance unlikely: no fresh breaks were apparent. The size and shape of the object as it lay in the ground were clarified by careful, slow excavation. It could be seen from the start that the copper-alloy sheets had relief decoration (Pl. iv, B) and were gilded: gilding was visible along the edges of the breaks. The possibility that the object might have been enclosed in a bag or wrapping, or that it might be part of something larger, was kept constantly in mind; but no traces of textile, leather or wood could be detected, other than those forming part of the object. The absence of any such detectable traces is not conclusive proof that there was no container: quantities of plant and insect remains were found in the pit from immediately around the object, but proteinaceous materials such as leather and wool may have been less resistant to decay. It is likely that the wooden core of the reliquary and the organic remains close by were preserved principally by the copper salts which would have diffused outwards during the process of corrosion, both impregnating the material and inhibiting bacterial and fungal growth. The pit fill was damp but certainly not sufficiently waterlogged to create the anaerobic conditions which favour

the survival of organic tissues. Study of samples of the general pit fill for environmental evidence found no identifiable remains except charcoal. A flat piece of pale, brittle leather- or skin-like material, rounded in shape, with untrimmed edges and about 50 mm wide, was lying above and to the side of the reliquary. There was no sign that it was connected with it in any way. Its presence does not mean that leather or parchment would have survived, however, since conditions can vary widely from one spot to another in the ground.

The object was removed from the ground by covering it in paper tissue, sifted soil and finally plaster of Paris; and then sliding a metal plate under the whole assemblage. It was, of course, impossible to excavate far enough underneath to be certain beforehand that the artefact did not extend downwards into the ground.

At the laboratory, loose earth was removed and the structure, composition and condition of the object were evaluated (Pl. IV, B). The metal casing from the face of the object which lay uppermost, and one corner of both the wooden core and the metal casing, were missing, as were other parts of the core. There were dozens of loose fragments of metal, removed separately by the excavators. However, the underneath face of the object was almost complete, as was one side, the top, and part of the base.

Both the metal and the wood were very decayed. The copper alloy appeared to have corroded away almost completely, leaving a film of gilding supported on corrosion products in place of the original metal, and covered by similar corrosion products which had leached out through the gold layer and crystallized over it. The embossing of the metal could be seen in blurred outline. There were numerous breaks in the metal. The wood forming the core was fragile and splintery, and a different material could be seen to be enclosed within it.

From this preliminary examination it was concluded that if allowed to dry in air the wooden core would shrink and warp so greatly that it would break up the metal casing. It was decided to dehydrate the wood by immersing the object in successive baths, three of alcohol and then two of ether. Having a lower surface tension than either water or alcohol, ether will evaporate away without causing the collapse of degraded wood cells.

A well-fitting support was made from plaster of Paris lined with plastic 'cling' film and Terylene net, on which the object in its broken state could rest throughout its treatment. Dehydration was carried out over four weeks. At the end of that time the object was lifted out, still on its plaster support, and allowed to dry. The wooden core did warp and shrink somewhat, enough to detach itself from the metal casing with the minimum of damage, probably for two reasons: first, the object had not been completely waterlogged (i.e. preserved because of immersion in water), so that many of the cells of the wood contained air, and this prevented the free entry of the solvents; second, soil and corrosion products prevented the entry of the solvents between the more complete side of the metal casing and the wood.

After dehydration, the wooden core was lifted out of the broken and corroded metal casing, which remained in the supporting plaster tray. The pieces of casing were realigned as far as possible and stuck together. A thin lining of polyester resin and glass fibre tissue was applied, in order to support the corroded metal sufficiently

for cleaning to be possible. Tests on fragments confirmed that this lining can be removed with a cutting burr mounted in a drill.

## 2. CLEANING AND INVESTIGATION

First, the many loose fragments of metal casing recovered separately by the excavators were pieced together. It was thought that these would form the remainder of the fragmentary side of the casing. The task proved unexpectedly difficult; the reason only became apparent when instead of a flat sheet the fragments formed a small package: the sheet had been folded up, apparently deliberately, gilded side inwards (Pl. iv, d). It was impossible to unfold this package, because virtually no metal remained, and so its outside was cleaned to the level of the original under-surface of the copper-alloy sheet and a cast taken in silicone rubber. This flexible material could be peeled off and flattened out, and provided a copy of the embossed decoration on the sheet in positive relief, which has been used in the drawing of this face (Fig. 5). The image is slightly blurred, because it comes from the underside and not the top gilded side. Only then was it possible to make out that a seated, haloed figure had been depicted on this face of the reliquary.

The corrosion overlying the gilded surface of the main part of the object was removed (Pl. iv, c), using a scalpel and an electric engraving tool holding a needle sharpened to a chisel point, under a binocular microscope. During cleaning, the corrosion layer and the organic remains overlying it were carefully inspected for traces of anything which might have been associated with the object: apart from some possible slight traces of leather round the tacks on the shoulder of the object (see below) nothing was found other than components of the pit fill. The layer of preserved organic remains, about 5 mm thick, which surrounded the object was mostly composed of very finely divided straw and grass, with small insects and seeds. Longer pieces of straw lay criss-cross over the narrow end of the front. Among the identifiable items were possible pea and bean fragments,<sup>20</sup> seeds of corn cockle, campion and stitchwort, and fragments of grass.<sup>21</sup>

### *The core and its contents* (Pl. v, b, c)

The wood forming the core was extremely degraded, and part of it was missing, so that it was difficult to come to conclusions about its original form. Analysis showed that the wood was beech.<sup>22</sup>

Small pieces of untanned skin, probably parchment,<sup>23</sup> can be seen protruding from the centre of the wood. The wood could either have been one solid block, with chambers hollowed out, or it could have been two separate pieces sandwiched together, with chambers channelled out of one piece. The parchment seems to lie between two separate chambers, and there is a pronounced split or division down the sides of the wood, so perhaps a two-piece core is more likely.

The X-radiograph of the core (Pl. v, c) shows clearly one, and part of a second, hollow (see Fig. 2). The visible straight edge of the parchment can be seen continuing inside the wood. Within the complete hollow chamber lies something stick-shaped, about 50 mm long and 7 mm wide, of approximately the same density to X-rays as



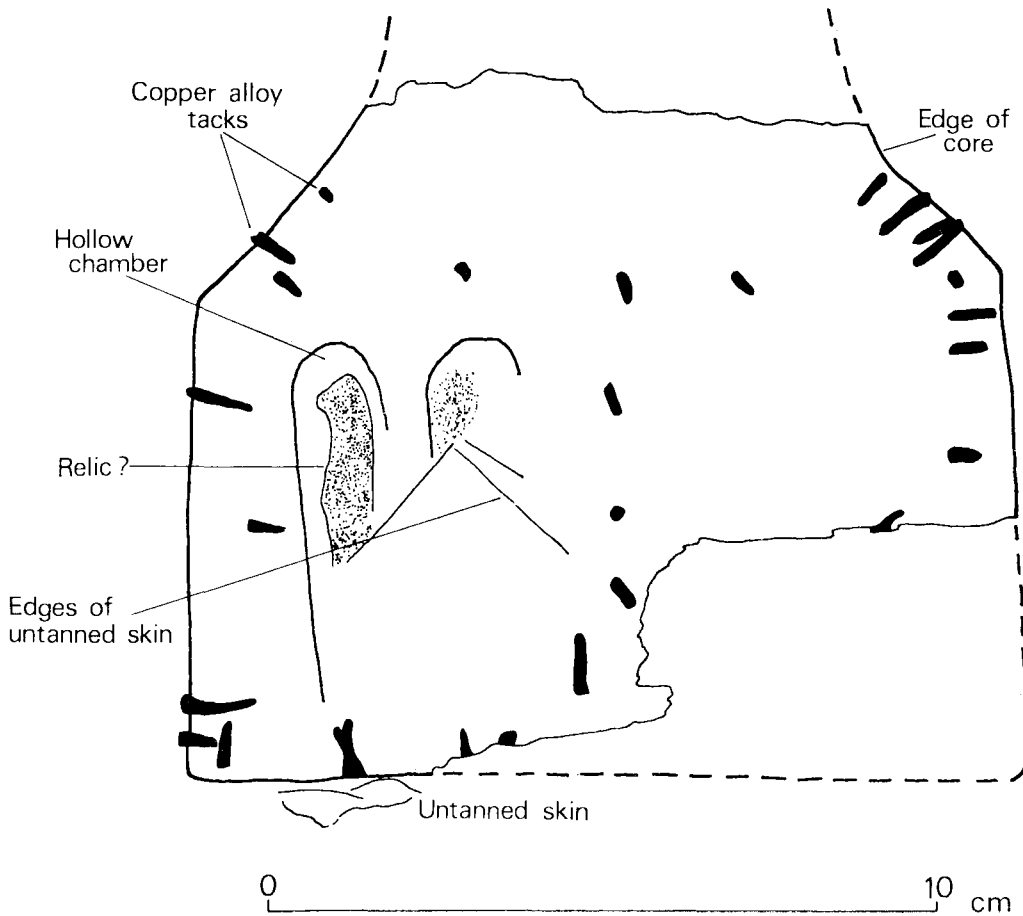


FIG. 2

Outline drawing of the wooden core of the Winchester reliquary, with chambers reconstructed from X-radiographs

the wood and the parchment, and much less dense than the copper alloy tacks. This is not iron: there is no sign of iron corrosion. Any other metal (possibly excepting very thin and corroded copper-alloy sheet) would show up as more dense. There is no sign of wood grain, nor of textile threads, both of which are often visible on X-radiographs. It does not appear to be bone. The surface of the 'relic' seems not to be smooth, but has a rather crumpled appearance. Perhaps the most likely possibility is that it is a piece of rolled-up and rather crumpled parchment or skin.

#### *Construction of the metal casing*

As cleaning proceeded, various original marks on the gold surface of the copper-alloy sheets were revealed (Pl. v, A). The whole surface of the underlying copper alloy appeared to be covered with fine striations, more or less parallel to each other and to the vertical axis of the embossed decoration on each separate panel. These

marks were probably made during the manufacture of the sheet, before it was embossed.<sup>24</sup> Other marks had been deliberately applied: an implement had been used to score the outlines of the embossed decoration. The tip of this implement left slight parallel scratches in the scored grooves.

There were also a few scratches (though not many) acquired by the reliquary during use, and the highest points of the relief decoration, especially the large beading round the sides, mostly lacked some of their gilding. The gold layer did not adhere well to these high spots and in some places detached itself during the removal of corrosion, but in general the impression was gained that gilding over the high spots might have been rubbed bare or thin during use. Many of the individual beads had been dented in, possibly before the rubbing wear had occurred, since the indentations contained thick gilding. This wear on high spots, together with the generally unscratched, smooth surface of the gold, raises the possibility that the reliquary was often wrapped up or put into a bag; and that considerable care was taken in its handling.

Large areas of the surface were dark and copper-coloured rather than golden. Careful observation established that the gilding was not being removed during the cleaning process. These areas were probably dark at the time when the beaded strips at the edges were applied, since the copper colour extends under at least one strip. This can be seen where a small piece has broken away since excavation.

The metal casing had been fixed to the wooden part of the reliquary by copper-alloy tacks, about 10 mm long, with round heads, driven straight through the metal and into the wood. The undamaged face is described first for simplicity, although it is interpreted as the reverse in the later discussion.

#### *The reverse*

One face of the reliquary was made from three separate pieces, all with similar decoration of acanthus (Fig. 3 and Pl. II). A fourth piece with a similar design was bent to form the semi-cylindrical ridge across the top. Parts of the border of large, bold beading (that on both the straight sides of the casing, and the border running horizontally across the centre) were integral with, but did not always respect, the acanthus design. The similar large beading around the curved sides of the upper part of the casing, that across the base, and across the front of the top ridge, were all applied as separate strips. The lines of smaller dot-and-dimple running down the vertical centre of the acanthus sheet had been executed on top of the acanthus decoration, partly disguising the join between the two sheets.

The repeating (though not identical) motif on each of the separate acanthus sheets, the arbitrary way in which the design on some of these had been cut through to suit the shape of the reliquary, and the strong vertical stems, suggest that a continuous strip may have been cut up and used (reconstruction, Fig. 4). It seems possible that there was originally a border of large beading to either side of the acanthus design, and that one border was clipped off and applied as the separate beaded strips. Viewed with plant stems upright, two pieces of sheet have a beaded border to the left, while the third has one to the right. This suggests that the borders were cut off after the original strip, if indeed there was one, had been cut into pieces.



FIG. 3

The reverse of the Winchester reliquary. Drawn by Nigel Fradgley. Slightly smaller than actual size

There is no evidence in the form of old nail-holes or unrelated distortion or damage to suggest that the acanthus sheets had been used previously, although there are of course many ways in which such sheets could have been applied without leaving traces (by glueing, or slotting into undercut wood or leather, for example).

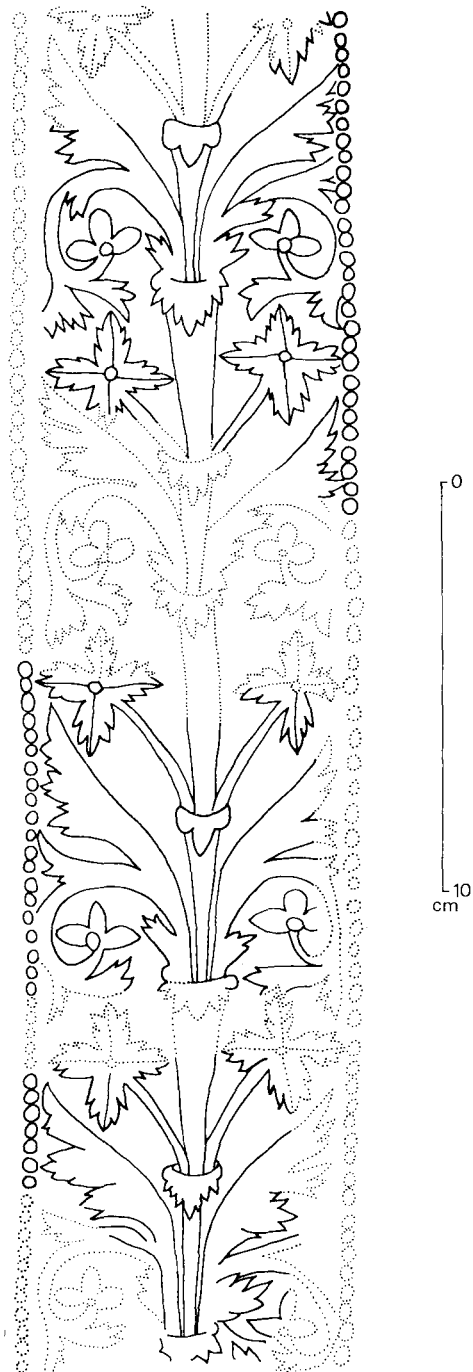


FIG. 4

Reconstruction of the original strip from which the pieces of the reverse of the Winchester reliquary may have been cut. Drawn by Martin Oake

There is a possible exception to this: the loss at the lower left corner of the acanthus face, which may possibly have occurred before the use of that sheet on the reliquary, for there appear to be one or two extra tacks, and the curving crack to its right accompanies distortion and overlapping which is not likely to have occurred during the removal of the front plate of the reliquary. The wooden core, however, is itself missing in that corner, so the loss may be due to some other accidental damage.

### *The front*

The construction of the front of the reliquary, depicting the figure of Christ, (Fig. 5) was not so easy to examine thoroughly because of the fragmentary state in which it survived, and the damage which had been deliberately inflicted on it. The pieces to the lower right show that the front and the left side of the lower part of the reliquary were made from one continuous sheet. The sheet continues and is tucked under the border of the acanthus sheet on the reverse (Pl. III, B).

It seems that the front of the reliquary, together with at least one, and probably both (see below), of the sides, must have been purpose-made for it. The dot-and-dimple decoration, which exactly fits the side (Pl. III, B), closely matches the dot-and-dimple border on the front. The possibility that a figure on a larger, plain panel was used, and the border applied later when it was re-used on the reliquary, seems also to be remote: the beading on the lozenge-shaped throne base or footstool, and on the hem of the robe, both match the dot-and-dimple border. The rhomboidal side panel (Pl. III, B) must have been made to fit the reliquary. It seems unlikely that an existing sheet would have had large blank areas on either side of the figure which would permit its re-use in this way.

There are features common to both the front and the reverse of the reliquary. The reverse, acanthus, face has a line of dot-and-dimple down the central join of the acanthus sheets, which is identical to the border dot-and-dimple of the front and side. However, this type of decoration must be very easy to copy. The embossing on both front and reverse is outlined with the scored lines described above, which are also used to depict the whorls beside the feet of the figure; but such outlines are a common feature in work of this date.

It is suggested that the front and at least the extant side (probably both sides: see below) were purpose-made to fit the reliquary, but the reverse could have been made from acanthus sheet already available, either held as stock or first intended or possibly even used for another object. The heavy embossing and scored outlines might however indicate a common source for the front and the back. Analysis of the base metal offered no positive evidence that the composition of the front and the reverse differs (see report by W. A. Oddy et al. below).

### *The sides*

Both the upper, curved parts of the sides of the reliquary were made by bending the upper, sideways-orientated acanthus sheet round and tucking it beneath the front plate, a small part of which survives in place at the left shoulder of the reliquary, as seen from the front. The beaded strips which on the reverse form a curved frame for either side of the upper panel were attached separately.

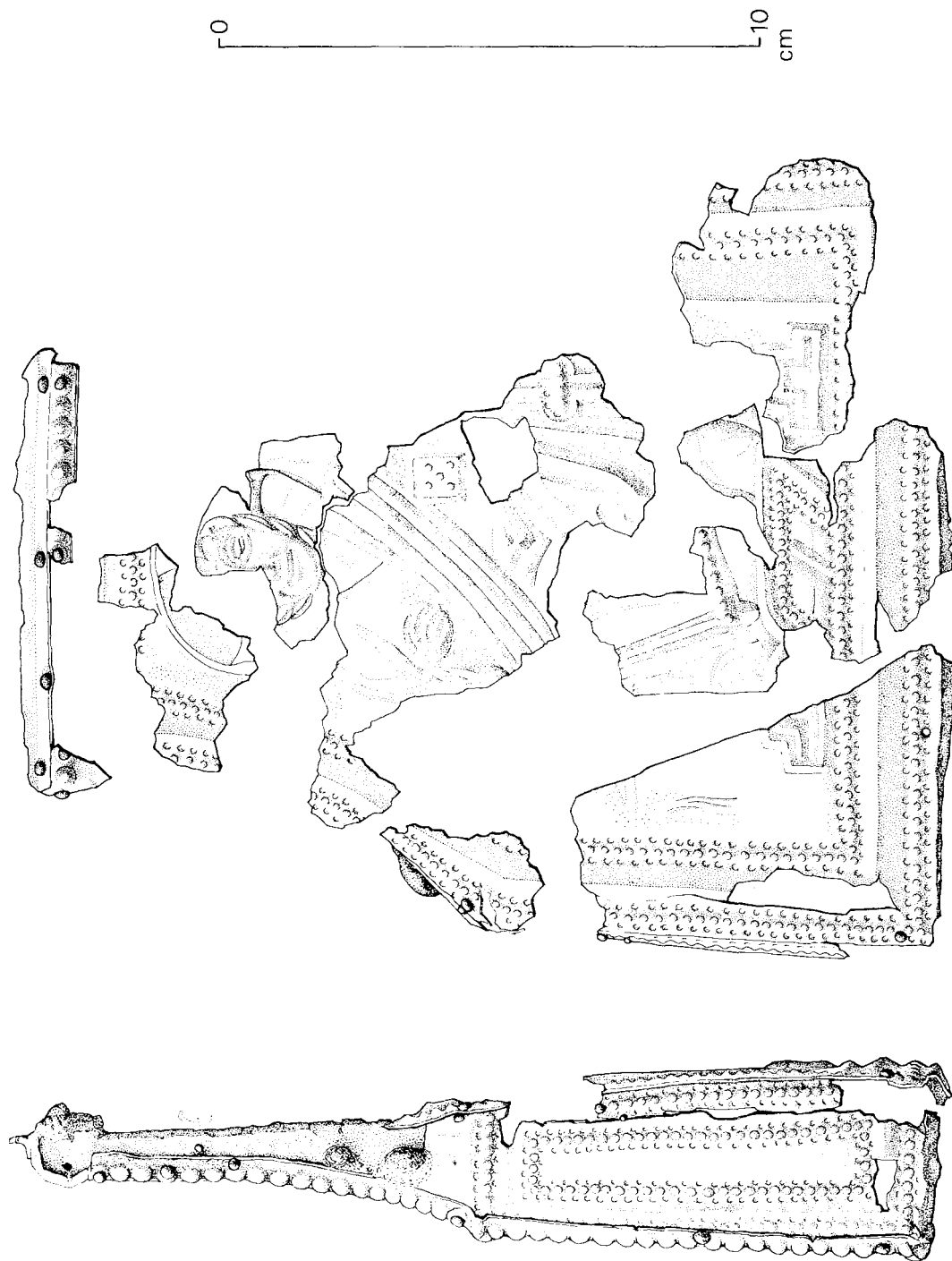


FIG. 5

The front of the Winchester reliquary and the more complete side; compare Pl. III. Drawn by Nigel Fradgley. Slightly smaller than actual size

Only one of the lower, straight parts of the sides is complete, to the left as seen from the front of the reliquary. The complete side is part of the front plate, which has been bent round, cut and decorated to form the flat, rhomboidal side (Fig. 5). Two small fragments of the missing side survive, one attached to the acanthus sheet on the reverse, and one overlapping the upper curved part of that side. The construction of both these areas is identical to that of the corresponding areas of the complete side, and it is probable that the missing side was also part of the front sheet.

There are extra tacks, or holes for them, where the curved and the straight parts of the sides overlap, and these may have attached a strap to the reliquary (see Conservation: A strap? below).

### *The top*

The ridge forming the top of the reliquary was made from a piece of acanthus sheet bent into a cylinder, with the vertical acanthus stem running across the width of the reliquary. On the reverse, the top edge of the acanthus sheet in the upper part overlaps the top, leaving its cylindrical form clearly visible. Across the front of the cylinder was attached a piece of beaded strip, now broken and displaced, but originally identical to those framing the reverse. This strip may have concealed the top edge of the front sheet. It has not been possible to detect any fragments of the front sheet beneath the strip of beading, but if the displacement of the strip was caused by the tearing off of the front sheet, as seems likely, then the beading must have lain over the sheet.

A small flange of flat gilded copper-alloy sheet was attached along the top of the cylindrical ridge, forming a straight-edged crest for the reliquary.

### *The base*

As it exists now, the base is open but surrounded with a flange of gilded sheet formed by bending in the front, side, and reverse sheets all round. This flange is tacked down and only about half of it is present (one side, and half each of the front and the reverse). There is no indication that there was ever a base plate, even in the form of broken-off tacks or tack holes; a plate held in position by a flange would not, however, have left any traces.

*Report on the scientific examination.* By W. A. ODDY, N. D. MEEKS and M. R. COWELL, Research Laboratory, British Museum

This examination was carried out in order to characterize the alloys of which the outer metal casing of the reliquary were made and to determine, as far as possible, how the metal casing was fabricated.

The reliquary was examined under the binocular microscope and a qualitative analytical survey was carried out by X-ray fluorescence spectrometry. Three samples of metal were then removed from broken edges of the shrine and mounted in blocks of synthetic resin. These were ground and polished to reveal transverse sections through the metal which were examined on the metallurgical microscope and on the scanning electron

microscope (SEM), where further analyses were carried out with an X-ray fluorescence (XRF) analyser attachment.

#### *Examination of the surface*

The first point of interest was to determine whether the designs, especially the foliage on the reverse of the reliquary (Pl. II) were embossed in a repoussé manner or by hammering the sheet of metal over or into a carved matrix. It proved impossible to make a decision on this point, although it is abundantly clear that the outlines of the foliage have been worked up with a sharp tool after embossing. This may have been a blunt punch, but the use of a sharp engraving tool cannot be excluded because of the presence of very fine parallel scratches in the bottom of the resulting lines. These resemble marks made with a U-shaped engraving tool. Whatever type of tool was used it must have been made of metal, rather than wood or bone, in order to have left parallel scratches in the tool-marks.

In a number of places on both the front and the reverse of the reliquary long deep scratches are visible. These are uninterrupted by the embossed decoration (Pl. v, A) and so must have been present on the metal sheet before the decoration was applied. It is to be presumed that they resulted from a rather careless smoothing or polishing operation applied to the metal sheet, either when it was being made or just before it was embossed. Examination at a high magnification suggests that the gilding was carried out after these scratches had been made, but it proved impossible to determine whether the gilding preceded or followed the embossing; the latter is more probable.

Quite large areas of the reverse of the reliquary appear to have lost their covering of gold and have a coppery appearance. Under the microscope this copper layer is seen to be only a thin skin and the body of the metal sheet appears to be totally corroded. Qualitative analysis shows that gold is, in fact, present in these coppery areas which are probably a gold/copper alloy caused by interdiffusion of the applied gilding with the copper sheet during the fire-gilding operation (see below). Slight overheating could cause *all* the gold to be absorbed in the copper, leaving it the wrong colour. If this had happened during manufacture the metalsmith would surely have applied a second coat of gold, but accidental heating during the lifetime of the reliquary might have caused the observed apparent loss of gold by absorption. Had the gold peeled away before or during burial, the underlying metal would be unlikely to have retained a coppery-looking surface; it would have been totally corroded.

Qualitative XRF analyses were carried out in eight positions. In all cases the main element detected was copper with some gold. In addition, tin, lead, and arsenic were detected in various amounts indicating that the alloy of which the reliquary casing was made consists of a bronze containing lead and arsenic which has been gilded. Analysis of the back of the metal sheet from the front of the reliquary gave the same result, but without the presence of gold.

#### *Examination of the sections*

Three samples were taken for sectioning. The samples from the main front and reverse pieces of the reliquary were very similar. Both the copper-alloy sheets were totally corroded, but retained a layer of gilding of even thickness on the outer surfaces. The gold was about 4  $\mu$  thick on the front of the reliquary and 5  $\mu$  thick on the reverse. It contained mercury and had the typical appearance of having been applied by the fire-gilding technique. The supporting metal sheet was confirmed as a leaded bronze. Arsenic was not detected (although it can be presumed to be present from the analyses of the surface) but a trace of silver was found in the sample from the front of the shrine. The only other difference between the front and reverse samples was that the main corrosion product present on the sample from the front of the shrine was a copper chloride, while that on the sample from the reverse consisted of about equal amounts of chloride and sulphide. The sulphide has formed large crystals, which may reflect the original structure of the metal. In



addition, some phosphorus was detected in both samples, and the presence of this and the large amount of sulphide can be attributed to the conditions in the latrine where the reliquary was found.

The sample from the beaded strip on the bottom edge of the reverse of the reliquary was rather different. The cross-section showed that the sample consists of two pieces of completely corroded copper alloy joined together and gilded on both the top and bottom surfaces. Mercury is present in the gold which must have been applied by the fire gilding technique. The alloy is almost totally corroded and once again the XRF detected chlorine, phosphorus and sulphur in the corrosion products. One small area of partly corroded metal was located in which about 1.7% of tin was detected in the copper, any lead in the original alloy having been lost at the now corroded grain boundaries. However, the surface analysis had detected lead and arsenic in addition to tin, and it must therefore be assumed, on balance, that this strip did not differ markedly in composition from the rest of the reliquary.

The cross-section suggests that the beaded strip was made from two strips of bronze fastened together longitudinally. No evidence was found for the presence of any solder between them, but as a hard solder would contain the same elements as the bronze, only in different proportions, it is hardly surprising that solder was not detected between the totally corroded strips.

#### *A strap?*

It is considered likely that the reliquary had a strap.<sup>25</sup> There are more tacks on its shoulders than have been used elsewhere to hold the casing in place. Those on the complete side (Pl. III, B) include some sort of iron fitting, perhaps a washer through which they both pass, though they are not themselves made of iron. At this point two of the copper-alloy sheets overlap by *c.* 5 mm (see The sides, above), making a slightly reinforced area. On the other, broken, side (Pl. III, A) two large holes are presumably from similar tacks. If there was a strap it was probably attached at these points. If the two holes held tacks, they were perhaps lost when the strap was pulled off.

Close to the remaining tacks and, as far as could be seen, beneath their heads, some homogeneous dark brown material was present in the corrosion. No fibrous structure was visible in this material, and no leather remains could be identified anywhere among the organic materials plentifully preserved in the corrosion and concretion; but it is possible that this dark brown material represents the remains of leather rather than an iron or copper corrosion product.

### 3. RECONSTRUCTION

The loose pieces from the front face of the reliquary had been joined as far as possible before they were cleaned, and backed with polyester resin and glass fibre tissue. The two folded-up pieces, the central figure piece and the section at the lower right corner, presented a problem. It was quite impossible to unfold them, because they were totally corroded, but reproductions made in plastic using the moulds taken from them looked unconvincing. Reconstruction of the reliquary has not been completed at the time of writing this report, but it is intended to have electrotype reproductions made in gilded copper,<sup>26</sup> which can be mounted with the rest of the metal casing on a synthetic resin form.

## INTERPRETATION

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## THE WOODEN CORE AND ITS CONTENTS

The Winchester reliquary belongs to a class of bag- or purse-shaped portable containers for relics of which several examples survive on the Continent. These burse-reliquaries range in date from the 7th century to the 11th.<sup>27</sup>

The importance of relics for the early Christian church is attested by Bede and many others.<sup>28</sup> Bishop Acca of Hexham, for example, obtained 'relics of the blessed apostles and martyrs of Christ from all parts and put up altars for their veneration, establishing various chapels (*porticus*) for this purpose within the walls of the church'.<sup>29</sup> Relics were not only needed for altars, however: 'After Terce, we walked in procession with the relics of the Saints, as the customs of the day required'.<sup>30</sup> For this use of relics, portable containers were needed. Nor did relics necessarily stay within the church: Bishop Germanus, according to Bede, cured a blind girl by applying to her eyes a little bag (*capsulam*) containing saints' relics that hung around his neck.<sup>31</sup> They might be taken from place to place to raise money.<sup>32</sup> William of Poitiers even records that at Hastings William the Conqueror had with him the relics on which Harold had sworn his oath of allegiance, and fought with them hung round his neck.<sup>33</sup> Portable reliquaries often had a strap-fitting at the sides. Even if it was not intended to take the reliquary outside the church, it was sensible that there should be a strap round its bearer's neck, to free his hands. There was almost certainly provision for strap-fittings on the sides of the Winchester reliquary (see Conservation: A strap?, above). The evidence of the wear on the gilding (see Conservation: Construction of the casing, above) is that the object had been very carefully handled, so perhaps it had only been carried in procession on certain occasions in the liturgical year.

The most popular small reliquary seems to have been the house-shaped type, which conveniently allowed a hinged lid. These could also be used by an itinerant priest for carrying the communion host and small vessels.<sup>34</sup> The burse-shaped reliquary was less suitable for this purpose, as it was generally very much narrower, and was not meant to be opened regularly. A good example of the latter type is that at St Maurice d'Agaune,<sup>35</sup> which has gilt-silver sheets nailed over a solid wooden core, and is *c.* 50 mm wide at the base. Hollowed out of the wood at the bottom is a rectangular cavity, *c.* 10 mm wide, 70 mm long and 35 mm deep. The sides of the base of the wooden core are rebated; metal sheets are nailed to the edges on three sides and project over the cavity to form flanges for a sliding metal panel. A rectangular slot in the panel may have been for a simple lock, but there is no trace of fittings for this on the inside. The St Maurice burse-reliquary is usually ascribed to the 9th century. A similarly constructed burse-reliquary of earlier, perhaps 7th-century, date is in the Musée de Cluny, Paris.<sup>36</sup> Not all opened at the base, however. The Stephanusbursa in Vienna has six cavities cut into the back of the wooden core.<sup>37</sup> The metal plate over the back is not as old as the rest of this reliquary, which is generally attributed to the 9th century, so it is not certain that originally the whole

back plate did not slide open, but there is no trace of a rebate in the wood, and it does not appear that access to the relics was intended. The Enger burse-reliquary in Berlin also looks as though it was permanently closed: at any rate its base plate is nailed into place;<sup>38</sup> its wooden core is made of two separate boards. It is usually dated to the later 8th or early 9th century.<sup>39</sup>

The bottom of the Winchester reliquary is damaged, and there is now no base panel — on which there might have been an inscription, as there is on the base of the reliquary of Bishop Altheus at Sion. The X-ray photograph (Pl. v, c) shows at least one cavity in the wooden core, which might have been open at the bottom to allow access to the relic. If the core is made from a single piece of wood, drilling or gouging from the bottom would be the only way of creating the compartment. If two separate boards are involved, however, the compartment could have been made by channeling into one or both of them. It is impossible now to determine this, but the latter is perhaps more likely (see Conservation, The Core, above). The relics might then have been accessible only by dismantling the metal sheets and the boards altogether, as with the Enger reliquary. It may be this type of construction which is described in the record of the discovery in the grave of Bishop Acca at Hexham of a wooden table like an altar made of two pieces of wood joined by silver nails.<sup>40</sup> Interestingly, it was not known whether relics had been placed in it,<sup>41</sup> but the writer clearly knew that this was frequently the practice. The passage is a 12th-century interpolation into Symeon's 11th-century text,<sup>42</sup> and is not therefore proof that an 8th-century object had been found. What it does show, however, is that an object of this kind was thought in the 12th century to be appropriate as an accompaniment to an early English ecclesiastic's grave, and that it was known that the two pieces of wood might have had relics sealed between them.

Emerging from one of the cavities between the boards of the Winchester reliquary is a fragment which has been identified as untanned skin (Pl. v, b). It is best explained as the remains of a parchment label, on which would have been written an identification of the relic. Such *authentiques* were needed to prevent confusion, particularly in churches with large collections of relics, or if several relics were kept together in a single container. At Sens, for instance, there are over 150 tags dating from Merovingian times onwards, which were originally at Saint Maurice.<sup>43</sup> They are of various shapes and sizes, but most are long strips; no. 97 is a Merovingian example, 160 mm long and 15 mm high, with a two-line cursive inscription, '*Hii sunt reliquias sanctorum thebarum id est Maurici Exsuperii. . .*' Most labels were much shorter, with just a saint's name, or the brief formula '*Reliquias sancti. . .*'. No writing can be seen on the fragment inside the Winchester reliquary.

As it has been decided not to destroy the integrity of the Winchester reliquary by carving into the central cavity, the nature of the contents is not certain. The X-ray shows it to be not very solid (Pl. v, c): it is not nearly so dense as the tacks, for instance. It may be a small roll of parchment (see Conservation: The Core, above). This might be the end of the *authentique*, or a container for a tiny quantity of dust,<sup>44</sup> soil,<sup>45</sup> hair,<sup>46</sup> or a minute supposed piece of the Cross, or it might be a *brandea*, usually a piece of silk or linen blessed by contact with a saint's shrine.<sup>47</sup> Tantalizing though it may seem to be uncertain on this point, little would be gained

by opening up the reliquary, as there is very little chance that at present direct inspection of the fragment would elucidate its purpose.

#### THE FRONT PLATE

The plate on the front of the reliquary was in many fragments when found, and the drawing (Fig. 5) is inevitably incomplete: it is partly based on the flexible cast made from the rolled-up central part of the plate, and this also means that not all the details can be exact. That the figure is Christ is beyond doubt, however, because small but unmistakable portions of cross-arms within the nimbus survive on various fragments making up and relating to the unbearded head. The rectangular element below the figure's shoulder is presumably the Book of Judgement, the five bosses on it perhaps being decorative, perhaps symbolizing the five wounds (Pl. III, D, centre). The hand gesturing towards the book is entire, not drawn from several fragments (Pl. III, D, top), so that there is no doubt about the pose. The hand which held the book would have been swathed in drapery. There are diagonal folds of drapery across the figure's shoulder, and the V-fold below these is presumably to indicate the fall of the robe across the knees, as the figure is seated. The robe has a beaded hem, and a foot protrudes below it (Fig. 6).

Interpretation of other elements in the composition is more doubtful. The beaded rhomboid touched by the figure's foot can probably be taken as a legless footstool, such as can be seen in the Matthew picture in the Lindisfarne Gospels,<sup>48</sup> an Insular adaptation of Mediterranean originals. More difficult are the two stepped patterns on either side of it. Neither is complete: the steps are reminiscent of the bases of many canon table arcades,<sup>49</sup> of arches framing apostles,<sup>50</sup> or of thrones.<sup>51</sup> These are all bases of columns or legs and there is just room on the reliquary plate for columns surmounting the steps. There are traces of vertical lines on the extant fragment with a beaded line which breaks through the folds of Christ's robe on the right side. This could be the arm of a throne, and it is possible that the lightly-incised concentric whorls and the more deeply-scored short lines on the left of the figure are the ends of cushions or drapery hangings, rather than mere space-fillers.<sup>52</sup> The incomplete state of this face of the reliquary makes certainty impossible, however.

Pictures of Christ are much less frequent in Insular art than are, for instance, evangelist portraits, and although there are more in the 10th and 11th centuries, there is none which provides a close parallel to the Winchester figure. The late 7th-century Codex Amiatinus has a Majesty scene in which Christ is shown seated, with a closed book held in his left hand.<sup>53</sup> A similar scene is in the Book of Kells,<sup>54</sup> where the design is much more angular than in the Codex Amiatinus. In neither does the book have five bosses on the cover, but these occur in continental manuscripts produced in monasteries with strong insular contacts.<sup>55</sup> The bosses may symbolize the five wounds, an iconography referred to in *The Dream of the Rood*.<sup>56</sup> Christ is shown bearded in the Insular manuscripts, but is clean-shaven in some continental works which have Insular influence.<sup>57</sup> Neither feature can be regarded as an indication of a continental rather than an insular origin for the source of the design on the reliquary.

The gesture made by Christ's right hand on the Winchester reliquary is an indication that the artist was either not following a very adequate model, or did not



FIG. 6

Reconstruction of the front of the Winchester reliquary. Only the deeply-scored lines are included. Compare Fig. 5 and Pl. III. Drawn by Nigel Fradgley

fully understand it. The fingers should be clearly separated in the act of blessing, and the hand should either be raised, or more unequivocally directed towards the book. Something of this lack of direction occurs in the Trier Codex, although in that case the hand is touching the book.<sup>58</sup> The limpness of the Winchester hand seems to be matched only in the various rather vague gestures of the figures on the Stole and Manipel embroidered for Bishop Frithestan of Winchester in the early 10th century, which seem to have no particular significance.<sup>59</sup> None of those figures is Christ, however. It is not really possible to compare the slender, standing figures of the Stole

and Maniple to the apparently more thick-set, seated Christ of the reliquary. The textiles have more oval faces, which is a fairly marked difference. They have robes passing diagonally across their shoulder, but this is a common-place. What may be more significant is the very heavily corrugated lines forming the robes which feature on the reliquary. These can be seen in both northern and southern English art before 900,<sup>60</sup> and again in Winchester work between 900 and 950,<sup>61</sup> before the 'Winchester School' developed. Some of the faces in these later manuscripts are rounder-chinned than on the embroideries, and have the nose-line joined to the eye-brow in the same way as on the reliquary,<sup>62</sup> a trait also seen in earlier illuminations.<sup>63</sup> Hair-styles are not so easily matched, however. Most of the heads shown in manuscripts and on the embroideries have central partings with long straight locks, not the tightly-bunched curls of the reliquary. Christ in the Athelstan Psalter is perhaps the closest comparison,<sup>64</sup> but the hair is shoulder-length. Nor do earlier pictures come very much closer: David the Psalmist in a southern English 8th-century manuscript has some similarities,<sup>65</sup> as does St John in the Book of Cerne.<sup>66</sup> Carolingian works do not seem to provide better analogues.

The double row of beading round the border is reminiscent of the parallel lines of dots which surround letters and panels of ornament in some late 7th-, 8th- and 9th-century Insular and Insular-derived manuscripts,<sup>67</sup> but other features such as the beaded bottom hem of Christ's robe are not more distinctive of time and place than any already discussed. Viewed in isolation, the front plate of the Winchester reliquary is not a piece that can be attributed with any certainty to a particular centre. Some of its characteristics, such as the drapery, the stepped base of the throne, and the footstool, appear to have pre-Carolingian Insular antecedents: the hand gesture and the face perhaps have their closest parallels in the Winchester work of the early 10th century.

#### THE REVERSE AND THE SIDES

Unlike the front plate, the reverse is almost complete (Fig. 3 and Pl. II). It is made of three separate metal sheets, embossed with a series of trumpet-shaped tree-stems. A fourth embossed sheet forms the tubular top, on which is a plain ridge crest. The lower half of the reliquary has two sheets, with the one on the right placed so that its stem is growing downwards: the upper half has a single sheet on which the stem is at right-angles to the other two. Some of the edges of the sheets have been cut without regard to the pattern, and have had beading added to them which similarly does not always respect the main design. In the upper, curved, half the beaded edges are separate strips, as they are also across the base and the front of the top ridge. One bottom corner of the reliquary had been damaged and repaired before its loss. (For further details, see *Conservation: The reverse*.)

One, very fragmentary, side of the reliquary's casing is made of the same embossed sheeting as the reverse: it survives only on the upper half (Pl. III, A). The other side is complete, and is part of the same sheet as comprised the front (see *Conservation: The sides*). Its lower half (Pl. III, B) is rhomboidal, with beaded borders.

The possibility should be considered that the front and back plates are not contemporary. The front and at least one side were clearly made for a burse-reliquary, as the design fits the shape. The sheets on the back, however, seem to have been cut from a continuous strip of metal, and adjusted to fit regardless of the pattern. It could be argued that the front is older than the back, which was added at a time when the reliquary was dismantled, or was in need of repair. This was a not-infrequent occurrence: the Stephanusbursa provides an example.<sup>68</sup> The beading on the back of the Winchester reliquary is bolder than on the front. In other respects, however, the workmanship is not noticeably different, and the composition of the metal alloys is practically the same (see *Conservation: Report on the scientific examination*, above). Although some of the edges do not respect the pattern on the back, that pattern is nevertheless very skilfully executed, and is not inferior in quality to that on the front.

The continuous strip from which the embossed sheets were apparently cut had as decoration a tree-stem with two types of symmetrical leaf pattern, a many-pointed acanthus frond from the lower part of which grows a trefoil flower on the end of a curling stem, and a quatrefoil acanthus leaf growing on the end of a fairly straight stem (reconstructed in Fig. 4). Each type grows from cup-shaped calices, some plain, some covered by down-growing acanthus leaf, as on the left sheet in the lower half. These two calix designs were not used alternately, as both have examples of the straight-stemmed quatrefoil growing from them. The strip may have been designed for use on some large object such as the shaft of a cross, if it was not always intended that it should be cut into smaller segments.

The tree-stem is a well-studied ornamental pattern.<sup>69</sup> It is used as a reference to the tree-of-life,<sup>70</sup> often being inhabited by birds and animals. It was less common in early Insular art than the vine-scroll, although there is often little distinction between the two, but there are more examples of it in the 10th and 11th centuries. The reliquary's stem is unlike other examples from England in that it has very spiky acanthus leaves, not the more voluptuous palmette and bell-shaped leaves and flowers which are thought to have their origins in Carolingian works<sup>71</sup> and Oriental textiles.<sup>72</sup> The acanthus used in north-western Europe usually has softer outlines than on the reliquary. Nevertheless, pointed leaves have a long ancestry,<sup>73</sup> and are found in such Merovingian works as the crypt of St Paul at Jouarre.<sup>74</sup> None of these has developing from it a secondary stem ending in fruit or a flower, however, like the trefoil leaves on the reliquary. This may not be an absolute reason for rejecting a 7th- or 8th-century date for the Winchester tree-stem, but it should be noted also that there are no known examples of the spiky leaf in an English context of that period. The spiky leaf appears again in a late 8th-century screen at Metz, which has the leaves growing from a series of trumpet stems.<sup>75</sup> It is occasionally found in 8th-century<sup>76</sup> and Carolingian manuscripts,<sup>77</sup> and on ivories attributed to Metz of the second half of the 9th century.<sup>78</sup> These also have the heavy veining which characterizes the Winchester acanthus leaves.

Another feature of the acanthus leaves is the little roundel in the centre of each quatrefoil. There are similar roundels in the trefoil leaves. The use of this roundel within a symmetrical acanthus pattern is best seen in English art in the later 10th

century when it appears in the splendid whorls of the Benedictional of St Ethelwold,<sup>79</sup> but it is also in the top left panel of the presentation scene in the earlier *Life of St Cuthbert*.<sup>80</sup> It does not occur in pre-10th-century English works with acanthus leaves, although there is a roundel in the centre of a quatrefoil leaf pattern in the Codex Amiatinus.<sup>81</sup> On the Continent it can be seen in the Sacramentarium Gelasianum of c. 750,<sup>82</sup> and in later ivories.<sup>83</sup>

Although the cup-shaped calix is quite common in southern English works of the 7th, 8th and 9th centuries,<sup>84</sup> none of these has a leaf overlying it. This detail occurs on early 10th-century works, such as the small maniple embroidered for Bishop Frithestan,<sup>85</sup> and the *Life of St Cuthbert*.<sup>86</sup> It is also on earlier Carolingian work, such as the Deventer chalice<sup>87</sup> and Aachen gates,<sup>88</sup> but is not common. The trumpet-shaped stem also has both English and Carolingian parallels, although in England it is often characterized by a 'scooped triangular segment',<sup>89</sup> which the reliquary stems do not have. Usually such stems do not have a calix at the top: these more often surmount straight or convex-sided stems,<sup>90</sup> but the Winchester type occurs in the Vivian Bible<sup>91</sup> and to the left of St John in the Barberini Gospels, usually attributed to 8th-century England.<sup>92</sup> Also found with vine-scroll or acanthus patterns on both sides of the Channel are trefoil leaves: the Aachen gates,<sup>93</sup> the Godescalc Gospels<sup>94</sup> and the Psalter of Louis the German<sup>95</sup> have examples, but they are much less common in Carolingian art than in English work both of before<sup>96</sup> and after c. 850. The latter includes the Afredian *Pastoral Care*,<sup>97</sup> all the Frithestan embroideries<sup>98</sup> and the *Life of St Cuthbert*.<sup>99</sup> In the last, however, a pecking bird implies that they are grapes rather than leaves, and none has a centre roundel like the Winchester trefoils, a detail for which there do not seem to be obvious parallels.

Although the differences between the reliquary's tree-stem and others have been stressed, it should also be stressed how little the design shows of 7th-, 8th- and 9th-century Insular influence: apart from the trefoil leaves, and the concept of a balanced plant design, very few parallels can be drawn. The reliquary is entirely without the animal or interlace ornament, for instance, which characterizes much English art, including metalwork, of this period. Nor are there any close affinities even with the few 'Anglo-Carolingian' objects which like the reliquary do have some plant ornament without zoomorphic detail, such as the Tassilo chalice.<sup>100</sup> The parallels for the tree-stem on the reliquary plates seem to lie rather with the late 9th- and early 10th-century English objects. The spikiness of the leaves may not be matched, but the flowing curve of the largest of them is very like the design on some of the veined acanthus in the Frithestan embroideries, from which secondary stems develop.<sup>101</sup> The *Life of St Cuthbert* panels have also been cited several times as providing comparisons.

It may also be significant that there are some parallels with Metz, particularly its 9th-century ivories, which have long been acknowledged as a source for later 10th-century Winchester work such as the Benedictional of St Ethelwold.<sup>102</sup>

#### ANALOGUES

The Winchester reliquary is the first early medieval portable reliquary to have been found in England, but at least one English parallel is preserved in a continental



treasury. This is the *coffret de Mortain*, attributed to England because of its runic inscription, which records that it was made for Æada, and which has what might be Anglian, perhaps west Mercian, word forms.<sup>103</sup> The *coffret* is a house-shaped box, with opening lid, and has embossed gilt copper-alloy mounts nailed to a wooden base. Both the top and bottom of the box are solid pieces of wood, with cavities hollowed out of them like the Cluny and St Maurice reliquaries already described.<sup>104</sup> It shows that English workmen were making reliquaries in the same fashion as their continental contemporaries. Like the Winchester reliquary, it has Christ on the front, but He is flanked by the Archangels Michael and Gabriel. A (mutilated) angel and a pair of birds are on the lid, and the sides and back are plain, apart from the inscription. The decorative programme is somewhat different to Winchester's therefore, and the details of such features as Christ's robe and book are also different. It is not closely dated, but an 8th- or 9th-century attribution seems likely.

Another English parallel is provided by the St Cuthbert relics, now in Durham. The small altar which the saint carried with him has embossed silver sheets nailed to it, enshrining the wooden tablet.<sup>105</sup> On one side, fragments show the robes of a figure and some of the letters of an inscription, on the other is a more complete inscription with plant ornament. It is usually assumed that the sheets were added to the Cuthbert altar in 698 or very soon thereafter, but there is no direct evidence. A later date, 9th or even 10th century, was favoured for the central roundel on the back by Dr C. A. Ralegh Radford, but this is a separate sheet and may be an added feature.<sup>106</sup> The letters of the text do not preclude a date as late as the 10th century.<sup>107</sup> A date appreciably later than c. 698 for the sheets would help to explain the absence of ornament of the Lindisfarne Gospels type, and would not be unsuitable for the long-and-short leaves and trumpet stems of the four plants in the spandrels. There is no reason to suppose that the monks of Lindisfarne could not have found someone to execute the work long after the translation of St Cuthbert's body in 698. It is even possible that the sheets were among the many gifts made to the shrine by King Athelstan when he visited it in c. 934, and were the work of a craftsman in his entourage.

Another ecclesiastical work in England is the small plaque from Hexham, which is incised rather than embossed.<sup>108</sup> It has a very crudely-rendered saint upon it, and it may well be early in date, perhaps from France: its similarity to the 7th-century Mumma reliquary at St Benoît-sur-Loire has been noted.<sup>109</sup> The Mumma reliquary is house-shaped, and has figures on the lid;<sup>110</sup> its base has a compartment like that in the St Maurice burse-reliquary.<sup>111</sup> It shows the sort of crude figure-work characteristic of the Merovingian period. Insular and Anglo-Carolingian ornament on other embossed metal reliquaries on the Continent makes it possible that any one of them might be an export from England, or at least have been made by craftsmen trained in England,<sup>112</sup> but only Mortain has the direct evidence.

Burse-reliquaries continued to be made in the 9th century. The Enger reliquary probably belongs to the very end of the 8th or early 9th century, and shows an improvement in figural representation, although still somewhat crude.<sup>113</sup> The Stephanusbursa, perhaps only a generation later, is far more subtle, and is comparable to the Utrecht Psalter of c. 830.<sup>114</sup> The heads on the Ellwanger reliquary, like

Winchester an excavation find, though in a crypt not a rubbish-pit, are very delicately modelled.<sup>115</sup> The Monza reliquary of *c.* 870 has a *pointillé* Crucifixion scene.<sup>116</sup> These figures show that the 9th-century continental metalworkers had moved away from the heavy embossing characteristic of the Winchester reliquary. If therefore a continental origin is to be sought for this, it is unlikely that a date later than *c.* 825 should be considered. On the other hand, the continental series has one hint towards a date in the mid 8th or 9th century rather than earlier, in that the beaded border seems from then on to be almost exclusively used, whereas the Mumma, Cluny and other reliquaries have cabled or patterned borders, like the Hexham plaque, as well as occasional beading. This is another possible reason for suggesting a date later than *c.* 698 for the Cuthbert altar cover, which has beading on the back, but not cabling.<sup>117</sup>

Another reason for doubting that the Winchester reliquary was made on the Continent is the form of the decoration: many continental reliquaries are encrusted with cabochon gems on the front, back or sides, and none has the Winchester/St Cuthbert programme of full-plate robed figure on one side, and plant patterns on the other. One face of Bishop Altheus' casket at Sion has St Mary and St John above tree-stems — which suggest Anglo-Carolingian influence in their bird-headed leaves — but has the busts of saints in enamel plaques on the other face.<sup>118</sup> A tree-stem is embossed on one face of the St Maurice burse-reliquary, but the other is studded with gems.<sup>119</sup> No continental reliquary has one of its faces made up of three different sheets of metal, like the back of the Winchester reliquary, but that is not a feature that can be paralleled in the Anglo-Saxon world either. There are of course remains of numerous Irish reliquaries and shrines, but these do not help in assessing the Winchester reliquary, for none has comparable ornament.<sup>120</sup>

Most of the reliquaries and objects cited are embossed, and the use of this technique gives no information about the source or date of the Winchester reliquary. The Cuthbert altar plates show incontrovertibly that it was practised in England, and there are many other small objects and fragments whose English provenances would strongly suggest manufacture by native craftsmen. The most famous is perhaps the Ormside bowl,<sup>121</sup> usually ascribed to the 8th or 9th century — its decoration of inhabited vine-scroll is quite unlike the Winchester reliquary's tree-stem. A very delicate silver-gilt sheet with trumpet-stemmed vine-scroll and trefoil leaves, probably of the same date, was excavated recently at North Elmham, Norfolk.<sup>122</sup> The only English ecclesiastical objects surviving from the 10th and 11th centuries are cast in bronze,<sup>123</sup> but secular embossed objects are known, such as the Sulgrave brooch.<sup>124</sup> Another embossed brooch of this type has been excavated in Winchester.<sup>125</sup> Embossing was therefore in use both in England and on the Continent throughout the early Middle Ages.

The decorative programme on the Winchester reliquary, with a figure on one side and a plant-pattern on the other, has its closest parallel in the St Cuthbert altar, not in any of the continental reliquaries. Other English parallels for this programme include the Alfred Jewel, which on one interpretation has Christ on the front and a tree-of-life on the reverse, exactly as on the reliquary.<sup>126</sup> Christ is also on the front of the Lechmere stone grave-marker at Hanley Castle, Worcs., which has a wheel-headed

cross flanked by plants on the reverse.<sup>127</sup> The grave-marker at Whitchurch, Hants, has Christ on the front, and a plant-pattern on the back.<sup>128</sup> The Alfred Jewel is probably to be ascribed to a royal workshop, and the Whitchurch stone is located very close to Winchester. All three pieces are usually dated to the 9th century.

#### RELICS AND CRAFTS IN SOUTHERN ENGLAND

The figure of Christ on the front of the Winchester reliquary might be taken to imply that it had held a relic associated with the Saviour. King Alfred was sent a piece of the True Cross by Pope Marinus,<sup>129</sup> and a *brandea* blessed by contact with this would be one possible interpretation of the object visible in the X-ray plates. Reliquaries often reflected the nature of their contents in their design, so a relic associated with the Cross might be expected to have a cross pattern on it,<sup>130</sup> or an analogue such as the tree-of-life on the back of the Winchester reliquary. There were various relics at Winchester associated with minor saints such as St Judoc of Picardy, St Birinus and St Swithun,<sup>131</sup> and by the end of the 11th century the New Minster had assembled an impressive collection among which were several associated with Christ, including wood of the Cross, which had its own shrine. Many of these relics were kept in a single container, the 'great cross' given by King Cnut and Queen Aelfgyfu,<sup>132</sup> and it may well be that the excavated Winchester reliquary had held an assortment of relics from various sources, for which Christ and the tree-of-life had no particular symbolic relevance. It has been noted (see Context of the Discovery, above) that the western suburb, Winchester's wealthiest, had seven parish churches, one of which played a part in the Easter processional liturgy by c. 970. The reliquary could have had a place in such a ceremony, but its iconography does not permit any precise role to be suggested.

Documentary evidence shows that by the end of the 10th century, there were no fewer than three goldsmiths among the community at the Old Minster, and that King Edgar had a reliquary for the shrine of St Swithun made in his household near Winchester.<sup>133</sup> These are the direct records of craftsmanship in the area, but other treasures were probably also made locally, such as the silver shrine for Grimbald's body presented by Bishop Aelfheah (934-51), which was replaced by another in Edward the Confessor's reign,<sup>134</sup> and the shrine at the New Minster which had been made by Alfwold the church-ward.<sup>135</sup> Cnut's great cross yielded 30 marks of gold and 500 lbs of silver when it was melted down in 1141 to pay soldiers' wages.<sup>136</sup> Some of the splendours were imports, however: Cnut's widow Aelfgyfu gave a shrine of 'Greek work'.<sup>137</sup> All these references are too late to throw direct light on the Winchester reliquary, but the manuscripts and the Frithestan embroideries show that allied crafts were certainly being practised in the town by at least the early 10th century.

In the wider sphere of southern England, there are references to earlier ecclesiastical treasures and shrines with relics. Most of these are from William of Malmesbury writing in the 12th century about Aldhelm, and the treasures which honoured him or the churches associated with him. King Ethelwulf (839-58) gave a silver shrine with images on one side, and miracles in 'polished' or 'raised' metal on

the other.<sup>138</sup> To it he added a crystal lid on which his (or its) name could be read in gold letters. It might have been possible once to see and venerate the relics through the lid, but it was too worn in William's day to know.<sup>139</sup> King Athelstan (925–39) was also very generous to Malmesbury, with gifts from Hugh the Great.<sup>140</sup> King Ethelwulf was obviously a patron of some importance in Wessex history, for a finger-ring with his name on it has survived.<sup>141</sup>

The Winchester reliquary is the only ecclesiastical treasure in metalwork to survive from Wessex, but not from the whole of southern England, for there is the chalice in the Trewhiddle hoard, deposited *c.* 873–75.<sup>142</sup> No extant illuminated manuscripts have been attributed to Wessex before King Alfred's reign, and the sculptural record is not comparable to what remains in Northumbria or Mercia. Nevertheless, 9th-century dates are usually ascribed to some fairly high-quality Wessex carvings,<sup>143</sup> although the precise place of individual pieces may be open to question. There is a quantity of secular metalwork attributable to the 8th and 9th centuries, much of it in precious metal.<sup>144</sup> All this shows that, although there are no precise parallels in Wessex for the Winchester reliquary, there is no reason therefore to assume it could not have been made in the kingdom.

#### CONCLUSIONS

Since so few examples of the objects used in the early church in England have survived, the Winchester reliquary is a valuable addition to a limited corpus. It is also the first complete early medieval portable reliquary to have been found in England. Since it was discovered with pottery of the late 9th or early 10th century, it has a precise archaeological context. Despite this, it may not have been made either at that time or in Winchester.

It has been argued that the method of construction of the reliquary was known in England, as was the method of its ornamentation with embossed sheets. The figure of Christ on the front has some features that can be traced as far back as the 7th century, but the face, the hand gesture and the robes all have parallels in early 10th-century Winchester works. The sheets on the reverse could be a later addition to the reliquary, but the balance of evidence is against this. Their details have also been shown to have parallels with early 10th-century Winchester works, but the acanthus leaf on them is more likely to derive from the 9th-century school of Metz, particularly its ivory carvings. It has long been appreciated that these ivories were an inspiration to those who produced the works of the 'Winchester School' in the later 10th century,<sup>145</sup> and one at least seems to have been in England at Athelstan's court.<sup>146</sup> The reliquary too may have been made on the Continent and have been brought to Winchester, perhaps to be one of the sources of influence on such works as the Frithestan embroideries and Athelstan's manuscripts. Or it may indeed be an English product, like them closely modelled on admired continental treasures. Nothing about it precludes this conclusion, and the combination of Christ on one side and the *trec-of-life* on the other is a programme certainly known and perhaps particularly venerated in England.

The reliquary can therefore take its place as a further example of the works of art in Winchester during the renaissance which King Alfred and his successors

fostered. Like its contemporaries, it was conservative in design, and blended Carolingian and Insular traditions. Its importance is not just that it is a rare example of ecclesiastical metalwork, but that it can be given a place in the cultural history of a particular centre at a particular time.

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## NOTES

<sup>1</sup> The programme has been jointly funded throughout by the City of Winchester and the Department of the Environment, with the co-operation of Hampshire County Council.

<sup>2</sup> We are grateful to the volunteer who found the object, David Godfrey: and to the site supervisor, Patrick Ottaway. Without their initial care, reconstruction and a full understanding of the reliquary might well have been impossible to achieve.

<sup>3</sup> Employed at the time of excavation by the Winchester Research Unit, to whom thanks are due. Subsequent work has been on a freelance basis.

<sup>4</sup> This essential work could not have been completed without the generous grants provided by the British Academy, the Department of the Environment, the Worshipful Company of Goldsmiths, and Winchester City Museums.

<sup>5</sup> K. E. Qualmann, 'The Oram's Arbour Enclosure and the Western Suburb', *Winchester Excavations since 1972. Vol. 1*, (forthcoming).

<sup>6</sup> M. Biddle, 'Excavations at Winchester, 1967', *Antiq. J.*, XLVIII ii (1968), 251-57.

<sup>7</sup> M. Biddle, 'Excavations at Winchester, 1971', *Antiq. J.*, LV ii (1975), 98-100.

<sup>8</sup> Such evidence as there is will be presented in K. E. Qualmann, 'Gazetteer', in M. Biddle (ed.), *Pre Roman and Roman Winchester* (Winchester Studies 3 Part 1, forthcoming).

<sup>9</sup> Graves from Ashley Terrace are briefly reported in M. Biddle, 'Excavations at Winchester, 1964', *Antiq. J.*, XLV ii (1965), 231-33; for Oram's Arbour, see Biddle, *op. cit.* in note 6, 256. The remaining four sites will be described in Qualmann, *op. cit.* in note 5.

<sup>10</sup> M. Biddle (ed.), *Winchester in the Early Middle Ages* (Winchester Studies 1, Oxford, 1976), 237 and 264.

<sup>11</sup> D. Keene, *A Survey of Medieval Winchester* (Winchester Studies 2, in press).

<sup>12</sup> *Ibid.*, and Biddle (ed.), *op. cit.* in note 10, 455. Much of the succeeding two paragraphs relies on this source, 260-65 and 455, 458-59.

<sup>13</sup> A small excavation located the precise site of St Anastasius', and pointed to the possibility of a pre-12th-century origin for both the church and the suburban defences: K. E. Qualmann, 'St. Paul's Church', in J. Collis, *Winchester Excavations Vol. II. 1949-60* (Winchester, 1978), 265-79.

<sup>14</sup> From sites at Crowder Terrace, just off the Romsey Road, the Sussex Street site, and possibly from the site of Station Road alongside the railway line: Qualmann, *op. cit.* in note 5.

<sup>15</sup> The chalk-tempered wares appear alongside the 'late-Saxon sandy ware' noted by M. Biddle and J. Collis in *Medieval Archaeol.*, xxii (1978), 133-35, as of 9th-/10th-century date, but their precise relationship is not at present certain. See also note 18 below.

<sup>16</sup> Evidence for an outer ditch was found in excavations adjacent to the northern defences in City Road in 1971: Biddle, *op. cit.* in note 7, 120-21. The lip of a possible inner ditch was located in a trial trench excavated by the Winchester Archaeology Office near the site of the North Gate in 1979.

<sup>17</sup> The full site context is Sussex Street 1976 (SXS'76), preliminary phase (PPII) 30, layer 269, feature 53.

<sup>18</sup> R. Hodges, 'The pottery', in P. Holdsworth, *Excavations at Melbourne Street, Southampton, 1971-76* (Council for British Archaeology, Research Report No 33, London, 1980), 40 and 54-55.

<sup>19</sup> Information supplied by C. Matthews, who will discuss this pottery more fully in Qualmann, *op. cit.* in note 5.

<sup>20</sup> Identified by Mr Francis J. Green at the Department of Archaeology, University of Southampton.

<sup>21</sup> I am grateful to Dr David Cutler at the Jodrell Laboratory, Kew, for arranging for these identifications to be made, and for commenting on the plant remains.

<sup>22</sup> Identified by Dr Carole Keepax at the Ancient Monuments Laboratory of the Department of the Environment.

<sup>23</sup> The substance was identified by electron micrography. I am grateful to Dr R. Reid of the University of Leeds for undertaking this work.

<sup>24</sup> See W. A. Oddy *et al.*, below, for a discussion of this and some of the following technical points.

<sup>25</sup> We are grateful to Professor P. Lasko for originally suggesting this.

<sup>26</sup> By Peter Smith Ltd., of Kingston-on-Thames.

<sup>27</sup> For reliquaries, see W. M. Conway, 'Portable reliquaries of the early medieval period', *Proc. Soc. Antiq. London*, xxxi (1918-19), 218-40; J. Braun, *Die Reliquiare des Christlichen kultes und ihre entwicklung* (Freiburg, 1940); P. Lasko, *Arts Sacra 800-1200* (Harmondsworth, 1972).

<sup>28</sup> See e.g. H. Mayr-Harting, *The Coming of Christianity to Anglo-Saxon England* (London, 1972), 47-48, 180; C. Thomas, *The early Christian archaeology of North Britain* (Oxford, 1971), chapter 5.

<sup>29</sup> *Bede's Ecclesiastical History of the English People*, ed. B. Colgrave and R. A. B. Mynors (Oxford, 1969), Book v, chapter XX, page 531.

<sup>30</sup> Cuthbert's letter to Cuthwin on the death of Bede: see L. Sherley-Price, *Bede: a history of the English church and people* (Harmondsworth, 1955), 20.

<sup>31</sup> Bede, *op. cit.* in note 29, i, XVIII, 59.

<sup>32</sup> P. J. Geary, *Furta Sacra: Thefts of relics in the central Middle Ages* (Princeton, 1978), 25.

<sup>33</sup> D. Douglas and G. W. Greenaway (eds), *English Historical Documents, Vol. II, 1042-1189* (London, 1953), 225. For Irish and Scottish examples of this practice, see A. Mahr, 'The Early Christian epoch', in J. Raftery, *Christian Art in Early Ireland*, II (Dublin, 1941), 47.

<sup>34</sup> Conway, *op. cit.* in note 27, 223.

<sup>35</sup> Description in P. Bouffard, *Saint-Maurice d'Agaune: Tresor de l'Abbaye* (Geneva, 1974), 77-79. Photographs also in e.g. V. H. Elbern, *Das erste Jahrtausend*, III (Düsseldorf, 1962-64), taf. 292. I am very grateful to M. le Chanoine J.-M. Theurillat for showing me the treasures at Saint Maurice.

<sup>36</sup> Photograph in J. Hubert, J. Porcher and W. F. Volbach, *Europe in the Dark Ages* (London, 1969), pl. 312. I should like to thank the assistant curator, Mme Joubert, for her help when I visited the museum.

<sup>37</sup> Photograph in H. Fillitz, 'Neue Forschungen zu den Reichskleinodien', *Österreichischer Zeitschrift für Kunst und Denkmalpflege*, xii (1958), fig. 106.

<sup>38</sup> M. Rosenberg, *Zellenschmelz, III: die Frühdenkmäler* (Frankfurt, 1922), fig. 110.

<sup>39</sup> Lasko, *op. cit.* in note 27, 11. For photographs of the back and front, *ibid.*, pls. 7 and 8.

<sup>40</sup> 'tabula lignea in modum altaris facta ex duobus lignis clavis argenteis conjuncta': Symeonis Monachi *Opera Omnia: Historia Regum*, ed. T. Arnold (Rolls Series, LXXV, ii, 1885), 33.

<sup>41</sup> 'Utrum vero reliquiae in ea posita fuerunt, vel qua de causa cum eo in terra posita sit, ignoratur': *ibid.*

<sup>42</sup> P. Hunter Blair, 'Some observations on the *Historia Regum* attributed to Symeon of Durham', in N. K. Chadwick (ed.), *Celt and Saxon* (London, 1974), 89; I owe this reference to R. N. Bailey, *Viking Age sculpture in Northern England* (London, 1980), 141: Bailey considers 'there is no reason to doubt that such an object was actually found'.

<sup>43</sup> M. Prou et E. Chartraire, 'Authentiques de reliques conservées au trésor de la cathédrale de Sens', *Mémoires de la Société Nationale des Antiquaires de France*, tome LIX (6ème ser., tome IX) (Paris, 1900), 129-72. The Stephanusbursa had an early 12th-century seal of Worms Cathedral accompanying the only relic surviving inside it, another way of proving authenticity: H. Fillitz, *Die Schatzkammer in Wien* (Wien and München, 1964), 141.

<sup>44</sup> The dust from St Chad's tomb could heal the sick: Bede, *op. cit.* in note 29, iv, III, 347.

<sup>45</sup> Some of the soil stained with the martyr's blood was traditionally kept in the Stephanusbursa: Lasko, *op. cit.* in note 27, 39.

<sup>46</sup> Some of St Cuthbert's hair performed a miracle while on its way to a monastery which had requested it for the casket of relics there: Bede, *op. cit.* in note 29, iv, XXXII, 449.

<sup>47</sup> Mayr-Harting, *op. cit.* in note 28, 48.

<sup>48</sup> MS. London, B. L. Cotton Nero D. IV, fol. 25v. See J. J. G. Alexander, *Insular Manuscripts 6th to the 9th century* (London, 1978), 28.

<sup>49</sup> e.g. Lindisfarne Gospels fol. 111: *ibid.*, pl. 32.

<sup>50</sup> e.g. The Book of Cerne, MS. Cambridge, Univ. Lib., Ll. 1. 10, fol. 2v: *ibid.*, pl. 312.

- <sup>51</sup> c.g. in the Durham Cassiodorus, MS. Durham, Cath. Lib., B. II. 30, fol. 81v: *ibid.*, pl. 74.
- <sup>52</sup> cf. the circles behind David in the Durham Cassiodorus, *ibid.*, pls. 74, 75.
- <sup>53</sup> MS. Florence, Bibl. Medicea-Laurenziana, Amiatinus I, fol. 796v: *ibid.*, pl. 26.
- <sup>54</sup> MS. Dublin, Trinity Coll. Lib., A. I. 6 (58), fol. 32v: *ibid.*, pl. 243.
- <sup>55</sup> c.g. MS. Trier, Domschatz Codex 61, fol. lv: *ibid.*, pl. 114; MS. Poitiers, Municipal Library 17: Hubert *et al.*, op. cit. in note 36, pl. 211.
- <sup>56</sup> Discussed by Bailey, op. cit. in note 42, 149.
- <sup>57</sup> c.g. MS. Autun, Bibl. Mun., 4, fol. 8r: Hubert *et al.*, op. cit. in note 36, pl. 192.
- <sup>58</sup> Loc. cit. in note 55.
- <sup>59</sup> C. Hohler, 'The stole and maniple: b) the iconography', in C. F. Battiscombe (ed.), *The Relics of St Cuthbert* (Oxford, 1956), 408.
- <sup>60</sup> c.g. St John in the Codex Aureus, MS. Stockholm, Royal Lib, A. 135, fol. 150v: Alexander, op. cit. in note 48, pl. 147.
- <sup>61</sup> c.g. the wall-painting fragment recently excavated at the site of the New Minster, Winchester: R. Deshman 'Anglo-Saxon art after Alfred', *The Art Bulletin*, LVI (1974), pl. 43.
- <sup>62</sup> *Ibid.*, 195.
- <sup>63</sup> c.g. loc. cit. in notes 50 and 60.
- <sup>64</sup> MS. London, B. L., Cotton Galba A. XVIII, fol. 21: Deshman, op. cit. in note 61, Pl. 2.
- <sup>65</sup> MS. London, B. L., Cotton Vespasian A. I, fol. 30v: Alexander, op. cit. in note 48, pl. 146.
- <sup>66</sup> Op. cit. in note 50, fol. 2v and pl. 312.
- <sup>67</sup> c.g. Alexander, op. cit. in note 48, pls. 33, 127, 139, 172, 271.
- <sup>68</sup> Fillitz, op. cit. in note 37.
- <sup>69</sup> c.g. R. Cramp, 'Anglo-Saxon sculpture of the Reform period', in D. Parsons (ed.), *Tenth-Century Studies* (London and Chichester, 1975), fig. 19; Deshman, op. cit. in note 61, 195.
- <sup>70</sup> D. R. Howlett, 'The iconography of the Alfred Jewel', *Oxoniensia*, xxxix (1974), 46.
- <sup>71</sup> F. Wormald, 'The "Winchester School" before St Aethelwold', in P. Clemoes and K. Hughes (eds), *England before the Conquest* (Cambridge, 1971), 307.
- <sup>72</sup> Cramp, op. cit. in note 69, 193.
- <sup>73</sup> c.g. at Constantinople and Philippi; A. Grabar, *Byzantium from the death of Theodosius to the rise of Islam* (London, 1966), pls. 310-14.
- <sup>74</sup> Marquise de Maillé, *Les cryptes de Jouarre* (Paris, 1971), fig. 37.
- <sup>75</sup> V. H. Elbern, 'Neue Aspekte frühmittelalterlicher Skulptur in Gallien', *Kolloquium über frühmittelalterliche Skulptur*, II (1970), 23; J. Hubert, J. Porcher and W. F. Volbach, *Carolingian Art* (London, 1970), 28 and pl. 24.
- <sup>76</sup> c.g. MS. Trier, Domschatz Codex 61, fol. 13v: E. H. Zimmerman, *Vorkarolingische Miniaturen*, IV (Berlin, 1916), taf. 273.
- <sup>77</sup> c.g. MS. London, B. L., Harley 2788: W. Köhler, *Die Karolingischen Miniaturen*, II, *Die Hofschule Karls des Grossen* (Berlin, 1958), taf. 45.
- <sup>78</sup> c.g. Lasko, op. cit. in note 27, pl. 67; D. Gaboît-Chopin, *Ivoires du Moyen Age* (Fribourg, 1978), pls. 86, 87.
- <sup>79</sup> MS. London, B. L., Add. 49598, fols. 25, 56v, 15v: E. Temple, *Anglo-Saxon Manuscripts 900-1066* (London, 1976), pls. 85, 86, 90.
- <sup>80</sup> MS. Cambridge, Corpus Christi College 183, fol. 1v: *ibid.*, pl. 29. (A comparable roundel in a Winchester manuscript of the same date is an addition of c. 1000: *ibid.*, pl. 28).
- <sup>81</sup> Op. cit. in note 53, fol. VII and pl. 25.
- <sup>82</sup> MS. Rome, Vatican, Bibl. Apostolica, Vat. Reg. lat. 316, fol. 4r. Hubert *et al.*, op. cit. in note 36, pl. 189.
- <sup>83</sup> c.g. of c. 800 in the Bodleian Library, Oxford: Lasko, op. cit. in note 27, pl. 28; and of the 10th century in the Bibliothèque Nationale, Paris: A. Goldschmidt, *Die elfenbeinskulpturen aus der zeit der Karolingischen und Sächsischen Kaiser, VIII.-XI. Jahrhundert, Band I* (Berlin/Oxford, 1969 repr), taf. xvii, no. 38.
- <sup>84</sup> c.g. Zimmerman, op. cit. in note 76, taf. 282, 286, 295a, 315b.
- <sup>85</sup> Deshman, op. cit. in note 61, pl. 42.
- <sup>86</sup> Op. cit. in note 80, fols. 1v and 6: *ibid.*, pls. 29 and 18.
- <sup>87</sup> Goldschmidt, op. cit. in note 83, taf. LXIV.
- <sup>88</sup> Hubert *et al.*, op. cit. in note 75, pl. 30.
- <sup>89</sup> Cramp, op. cit. in note 69, 189 and fig. 19j.
- <sup>90</sup> c.g. the back of the Alfred Jewel: *ibid.*, fig. 19c.
- <sup>91</sup> MS. Paris, Bibl. Nat., Lat. 1: W. Köhler, *Die Karolingischen Miniaturen*, I, *Die schule von Tours* (Berlin, 1930-33), taf. 87c.
- <sup>92</sup> MS. Rome, Vatican, Bibl. Apostolica, Barberini Lat. 570, fol. 124v: Alexander, op. cit. in note 48, pl. 177.
- <sup>93</sup> Loc. cit. in note 88.
- <sup>94</sup> MS. Paris, Bibl. Nat., Nouv. acq. lat. 1203: Köhler, op. cit. in note 77, taf. 5a.
- <sup>95</sup> MS. Berlin, Staatsbibliothek, Theol. lat., fol. 83: Hubert *et al.*, op. cit. in note 75, pl. 154.
- <sup>96</sup> c.g. Alexander, op. cit. in note 48, pls. 12, 33, 83, 146, 172.
- <sup>97</sup> MS. Oxford, Bodl. Lib., Hatton 20, fol. 41v: Deshman, op. cit. in note 61, pl. 39.
- <sup>98</sup> Battiscombe (ed.), op. cit. in note 59, pls. xxx, 3: xxxi, I: xxxiv.
- <sup>99</sup> Loc. cit. in note 86.
- <sup>100</sup> The tree-stem in the lower zone of the bowl is the closest parallel: G. Haseloff, *Der Tassilokelch* (Munich, 1951), fig. 5.
- <sup>101</sup> Cramp, op. cit. in note 69, fig. 19h.

- <sup>102</sup> O. Homburger, *Die Anfänge der Malschule von Winchester im X. Jahrhundert* (Leipzig, 1912): id., 'L'art Carolingien de Metz et "l'école de Winchester"', in O. Pächt (ed.), *Essais en l'honneur de Jean Porcher* (Gazette des Beaux Arts, Paris, 1963), 35-46.
- <sup>103</sup> R. I. Page, *An Introduction to English Runes* (London, 1973), 166; E. Okasha, *Hand-list of Anglo-Saxon Non-Runic Inscriptions* (Cambridge, 1971), no. 93.
- <sup>104</sup> J. Taralon, 'Note technique sur le coffret de Mortain', *Les Monuments Historiques de la France*, 4 (1958), 83-93. M. l'Abbé E. Nollais kindly arranged for me to study the *coffret* in Mortain.
- <sup>105</sup> C. A. R. Radford, 'The portable altar of St Cuthbert', in C. F. Battiscombe (ed.), *The Relics of St Cuthbert* (Oxford, 1956), 326-35.
- <sup>106</sup> Ibid., 334.
- <sup>107</sup> Okasha, op. cit. in note 103, no. 35, p. 70.
- <sup>108</sup> R. N. Bailey, 'The Anglo-Saxon metalwork from Hexham', in D. P. Kirby (ed.), *Saint Wilfrid at Hexham* (Newcastle upon Tyne, 1974), 155.
- <sup>109</sup> Ibid., 157-58.
- <sup>110</sup> Dom J.-M. Berland showed me the reliquary at the Abbaye, and I am very grateful to him for his help and interest. For a photograph, see Hubert *et al.*, op. cit. in note 36, pl. 311.
- <sup>111</sup> See above, note 35.
- <sup>112</sup> These include the Andenne and Coire (Chur) reliquaries, for which Elbern, op. cit. in note 35, prefers origins in Maasland and Switzerland respectively: vol. III, taf. 280b and 285.
- <sup>113</sup> Lasko, op. cit. in note 27, 11 and pl. 8; Hubert *et al.*, op. cit. in note 75, pl. 193.
- <sup>114</sup> Lasko, op. cit. in note 27, 39; Hubert *et al.*, op. cit. in note 75, pl. 325.
- <sup>115</sup> F. Volbach, 'Das Ellwanger Reliquienkästchen', in V. Burr (ed.), *Ellwangen 764-1964* (Ellwangen, 1964), 767-74. For photograph, see Hubert *et al.*, op. cit. in note 75, pl. 240.
- <sup>116</sup> Lasko, op. cit. in note 27, pl. 55.
- <sup>117</sup> Radford, op. cit. in note 105, fig. 3.
- <sup>118</sup> Kindly shown to me at Sion Cathedral by the Doyen du Chapitre, M. Bayard. Photographs in Hubert *et al.*, op. cit. in note 36, pl. 315, and Lasko, op. cit. in note 27, pl. 10.
- <sup>119</sup> Bouffard, op. cit. in note 35, 77-79.
- <sup>120</sup> A. Mahr, *Christian Art in early Ireland, Vol. I*. (Dublin, 1932), pls. 9, 10, 16, 17 etc.
- <sup>121</sup> E. Bakka, 'Some English decorated metal objects found in Norwegian Viking graves', *Årbok for Universitetet i Bergen*, no. 1 (1963).
- <sup>122</sup> D. M. Wilson, 'Objects of silver', in P. Wade-Martins, *Excavations in North Elmham Park, 1967-72* (East Anglian Archaeology Report No. 9, Gressenhall, 1980), 505-06. Wilson gives references here to other relevant objects, e.g. the Rupertus cross at Salzburg.
- <sup>123</sup> D. M. Wilson, 'Tenth-century metalwork', in D. Parsons (ed.), *Tenth-Century Studies* (Leicester, 1975), 203.
- <sup>124</sup> M. Dolley, 'The nummular brooch from Sulgrave', in P. Clemons and K. Hughes (eds), *England before the Conquest*, (Cambridge, 1971), 335.
- <sup>125</sup> To be published by Professor Dolley in M. Biddle and S. V. Keene (eds), *Winchester Studies*, Vol. 7 part 2.
- <sup>126</sup> Howlett, op. cit. in note 70.
- <sup>127</sup> Photographs in T. D. Kendrick, *Anglo-Saxon art to A.D. 900* (London, 1938), pl. LXXXI.
- <sup>128</sup> Ibid., 182 and pl. LXXVII. I was reminded of the identification of this figure as Christ by Mr Dominic Tweddle.
- <sup>129</sup> *The Anglo-Saxon Chronicle*, ed. D. Whitelock (London, 1961), 50, s.a. 883.
- <sup>130</sup> J. Taralon, *Les Trésors des églises de France* (Librairie Hachette, Paris, 1966), 53.
- <sup>131</sup> P. Grierson, 'Grimbald of St. Bertin's', *English History Review*, CCXX (1940), 556-57; *Liber Vitae, Register of Martyrology of New Minster and Hyde Abbey, Winchester*, ed. W. de Gray Birch (Hants. Record Soc., Winchester, 1892), 92.
- <sup>132</sup> Birch (ed.), *ibid.*, 147-51, 158; see also Biddle (ed.), op. cit. in note 10, 320 n.6.
- <sup>133</sup> Biddle (ed.), op. cit. in note 10, 460.
- <sup>134</sup> Ibid., 316.
- <sup>135</sup> Birch (ed.), op. cit. in note 131, 162.
- <sup>136</sup> Biddle (ed.), op. cit. in note 10, 319.
- <sup>137</sup> Ibid., 316.
- <sup>138</sup> *Willelmi Malmesbiriensis Monachi: De Gestis Pontificum Anglorum*, ed. N. E. S. A. Hamilton (Rolls Series, 1870), 389. 'Levato metallo' is the phrase used.
- <sup>139</sup> Ibid., 390: 'Fastigium cristallinum rex Aethelwulf apposuit scrinio, in quo nomen ejus litteris aureis est legere. Sunt qui dicant venerandas reliquias per eum levatas; sed nos cum ad locum venerimus, magis tritam opinionem persequemur'. The crystal with its gold lettering makes an interesting parallel to the Alfred Jewel.
- <sup>140</sup> L. H. Loomis, 'The holy relics of Charlemagne and King Athelstan: the lances of Longinus and St Mauricius', *Speculum*, xxv (Oct. 1950), 437-56.
- <sup>141</sup> D. M. Wilson, *Catalogue of the Anglo-Saxon Ornamental Metalwork, 700-1110, in the British Museum* (London, 1964), no. 31.
- <sup>142</sup> Ibid., no. 90.
- <sup>143</sup> e.g. R. Cramp, 'The Anglian tradition in the 9th century', in J. Lang (ed.), *Anglo-Saxon and Viking Age Sculpture and its context* (British Archaeological Reports No. 49, Oxford, 1978), 1-20.
- <sup>144</sup> Wilson, op. cit. in note 141, nos. 16, 31, 67-74; D. A. Hinton, 'Late Saxon treasure and bullion', in D. Hill (ed.), *Ethelred the Unready* (British Archaeological Reports No. 59, Oxford, 1978), 150-53.



<sup>145</sup> Homburger, op. cit. in note 102.

<sup>146</sup> On the cover of a manuscript with inscriptions 'Eadgifu Regina' and 'Aethelstan rex angulsaxonum et mercianorum' were added to it, in Anglo-Saxon letters: Goldschmidt, op. cit. in note 83, no. 87. I am grateful to Dr Richard Gem for this reference.

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