

FIG. 60

ANGLO-SAXON BRONZE BOAR FROM GUILDEN MORDEN, CAMBS. Sc. 1:1

Derbyshire. A full examination of the latter was published by Dr R. Bruce-Mitford,<sup>9</sup> and after the removal of iron encrustation it can be seen that it is of similar shape to the boar from Guilden Morden. It has its back and front legs joined, and a long elongated snout thrust well forward. Even the stance of the body is the same. It is possible that the Guilden Morden boar is also from a helmet, as the pin and socket in its legs may suggest. It would then be another example of the well-known Germanic tradition, evidenced by various references in *Beowulf*, of boar figurines as helmet crests.

JENNIFER FOSTER

#### CHAMBER GRAVE FROM SPONG HILL, NORTH ELMHAM, NORFOLK (FIGS. 61-4)

During excavation in 1976 at this Anglo-Saxon cemetery an inhumation contained in a wooden structure was discovered. This was felt to be of sufficient interest to be published in advance of the main excavation report.

Inhumation No. 31, was on the NE. of the cemetery, away from the main area of cremation burials, but close to other inhumations grouped along the northern edge of the cemetery.<sup>10</sup> Another inhumation, No. 32, lay beside No. 31, within a circular ditch, some 10 m. in outside diameter (FIG. 61). It is not yet clear whether this ditch was annular of penannular, since part of it lay outside the area available for excavation in 1976.<sup>11</sup> There was an oval pit or posthole between the two graves, beyond their W. ends. Both posthole and ditch now appear shallow, dug some 30 to 40 cm. only into the subsoil;

<sup>9</sup> R. Bruce-Mitford, *Aspects of Anglo-Saxon Archaeology* (London, 1974), 236-42.

<sup>10</sup> Complete plan will be published in final report, *East Anglian Archaeol.* (forthcoming).

<sup>11</sup> Excavation in 1977 showed it to be annular.

but even now there is at least as great a depth of topsoil above this, and much of these features may have been lost through erosion of the hilltop. The ditch was not visible in aerial photographs; so other similar features also not visible as cropmarks may exist.

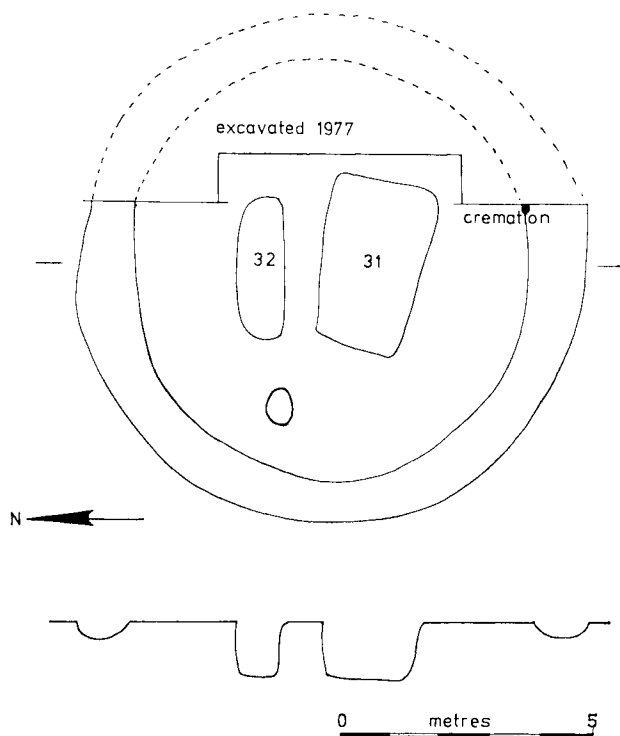


FIG. 61

#### SPONG HILL, NORFOLK, PLAN AND SECTION OF INHUMATIONS 31 and 32

The ring ditch cut another ditch, possibly of Saxon date, and also one certainly Saxon inhumation which contained only a bronze binding. One cremation, contained in a small plain pot, had been buried on top of the ring ditch. The pair of inhumations within the ditch have a similar orientation, WNW. and ESE. and appear to occupy the area as a pair, rather than one having a central position and the other being secondary: they may therefore be assumed to have been contemporary.

Inhumation No. 32 was similar to other inhumations so far excavated at Spong Hill. It consisted of an oblong pit, 2.9 m. by 1 m., dug 80 to 90 cm. into the subsoil. At the bottom were traces of a narrow coffin, a spearhead, knife, iron buckle and bronze strapend, but no human bone. Bone survives rarely in inhumations at Spong Hill, usually only in contact with metal.

#### DESCRIPTION OF CHAMBER GRAVE

Inhumation No. 31 had a rectangular pit twice as wide as any other grave pit so far found, 3.4 m. by 2 m. dug 1 m. below the surface of the subsoil. Within the pit was a rectangular wooden structure, the wood of which remained as either dense black staining with some traces of woodgrain, or as a more amorphous grey brown soil overlying the black deposits. From these traces it was possible to recover the form of a large box or chamber (FIGS. 62-3).

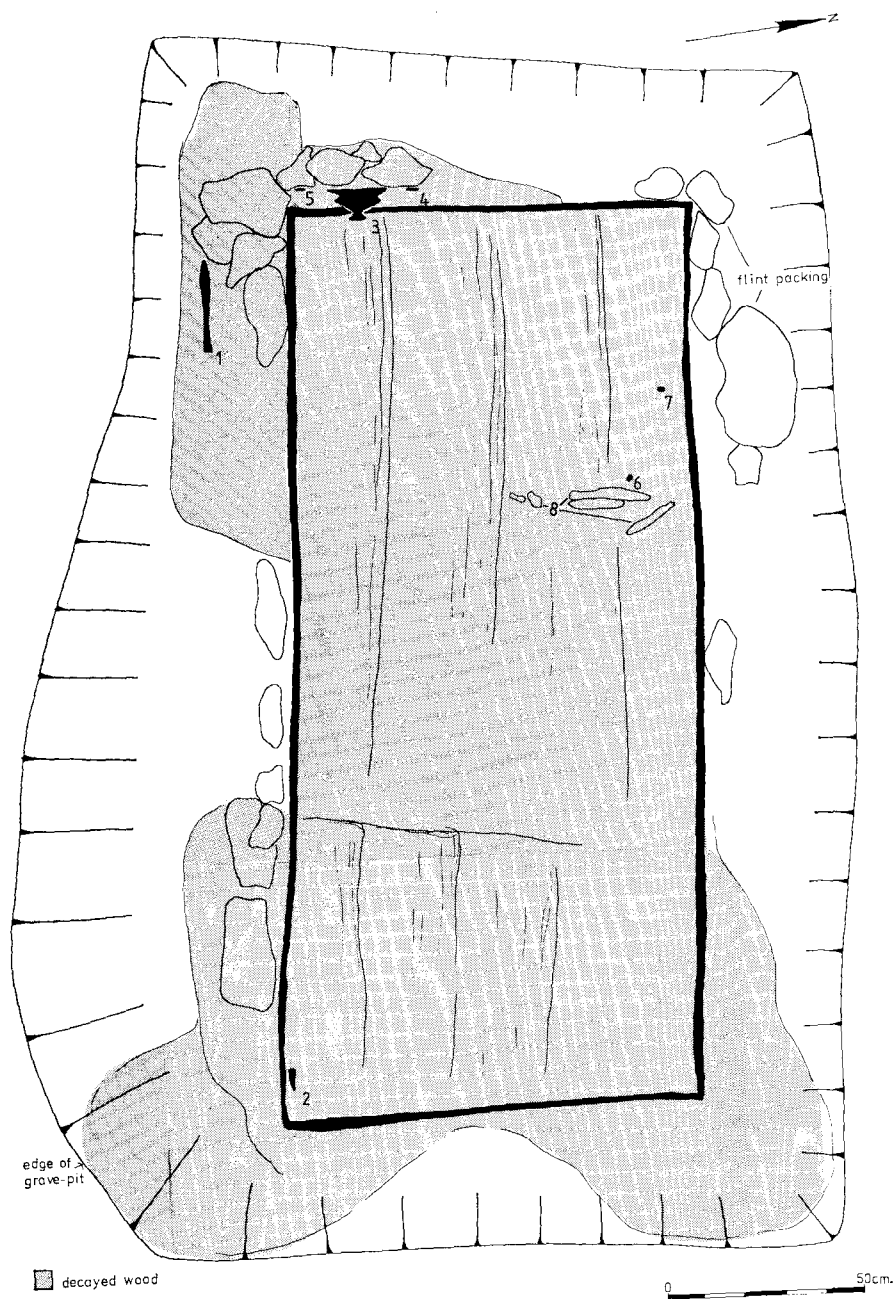


FIG. 62

SPONG HILL, NORFOLK, GRAVE PLAN OF INHUMATION 31

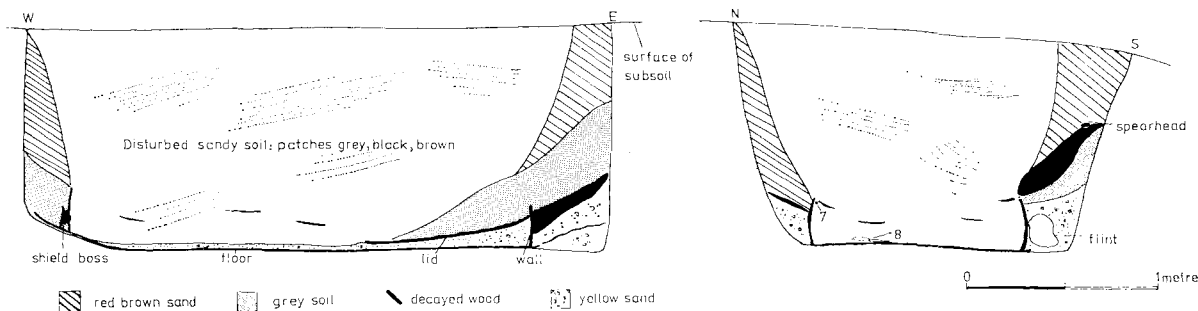


FIG. 63

## SPONG HILL, NORFOLK, SECTIONS OF INHUMATION 31

The floor had been made from planks laid lengthwise along the bottom of the pit, extending almost to the sides. On top of this the walls had been built some 20 to 30 cm. inside the pit (FIG. 63). There were no traces of iron nails or clamps at the corners, and these may have been jointed or fastened by wooden pegs. The flint packing between the box and the pit might have been sufficient support, but the corners appeared to be neat, precise angles, which is perhaps unlikely to have been the case had they been simply wedged in position. The walls remained in some places to a height of 40 cm., but mostly could be traced only for about 20 cm. above the floor. The construction of the walls was not clear but in some places it appeared more likely that they had been built from lengthwise planks than from short upright staves. Since hardly more than a thin skin, a compressed residue of the wood, remained, no accurate estimate can be given of the original thickness of either floor or walls.

Within the E. end of the chamber was a second layer of decayed wood above the floor, separated by a thin layer of clean sand: this may be part of a collapsed lid. Further deposits of wood outside and inside the chamber at a level corresponding to the surviving top of the walls may be remains of either lid or sides. A thick v-shaped deposit outside the E. end of the chamber can be best interpreted as the end of the lid, which would then have extended beyond the sides and would have collapsed into what must have been still a partial void. Along the S. edge, outside and above the chamber, was a thick layer of decayed wood also, perhaps, partly explicable as the remains of a lid.

Clean reddish sand occupied the spaces between the wooden sides and the pit, both beneath and above the traces of the lid or collapsed sides. A thin layer of clean sand also overlay the floor. The middle of the pit, corresponding to the interior of the chamber, contained mixed grey and brown soil, with some black patches. In this mixed soil a few Roman pot sherds and a fragment of glass were found. At the top of the wall, near to the NW. corner, was a small iron clamp or rivet, and decayed animal teeth lay at the same level near the S. edge of the chamber. In the SW. corner above the thick wood deposit was a spearhead. At floor level outside the E. end of the chamber was a shield boss with two appliqué. Inside, the only complete object was a spear ferrule, found in the SE. corner. Otherwise, along the N. edge there were fragments of iron, perhaps broken blades, covered with a white substance which may be decayed leather.<sup>12</sup> There was also a small broken piece of decorated silvered bronze, attached to decayed wood or leather.

## INTERPRETATION

There are two possible interpretations: either the grave is intact, or it was robbed in antiquity. If intact, the central disturbed fill must be explained as topsoil collapsed into

<sup>12</sup> At present in course of treatment at Norwich Castle Museum.

the middle when the lid of the chamber rotted and fell in. The shield and spear then would be the only complete gravegoods. The alternative explanation is more convincing. In the first place, the central fill is very unlike the fill of all other inhumations so far found on the site which all, including No. 32, contain an homogeneous red-brown sandy fill, often hardly distinguishable from the surrounding natural. Although part of the fill might well have been derived from topsoil and so be darker, one would expect this to overly a level of clean sand covering the whole of the pit, and not to have vertical edges. It is also odd to find in an inhumation small fragments of objects. It seems clear that a secondary pit has been dug through the originally backfilled sand, and that the grave has been robbed.

The robbing must have happened at a time when the exact position of the grave was still known for the robber pit to correspond so precisely with the inside of the chamber. Even if the grave had been marked by a barrow, this presumably would have occupied all the space within the ring ditch, the centre of which lies between the two graves and not directly over the chamber. Later robbers attracted by a mound would have dug between No. 31 and No. 32. It is also likely that the objects were removed from what was still at least partly an empty space, since if it had been necessary to dig them out of surrounding soil more would probably have been missed or broken, and the floor on which they lay would not have remained intact. This suggests that the wood had not then yet decayed. The thick deposit along the S. edge may be the remains of several planks from the lid, heaped to one side. In that case the spear must have been found but put to one side and not taken. The shield, because it had not been inside, was missed. Robbery soon after burial seems most likely, which would indicate that the burial was known to be rich and so worth robbing.

#### DISCUSSION

##### *Ring ditches*

Ring ditches may not always have been discovered in earlier excavations, especially if insubstantial, or having a diameter too large to be contained within the probably limited area opened around the grave. Information on this subject is therefore incomplete. It is not clear that barrows and ring ditches can be equated: not all barrows need have been surrounded by ditches and, conversely, not all ring ditches need have contained mounds.

Small ring ditches, 6 to 7 m. in diameter, are known from Kent and from East Anglia. The Kent examples are generally late, probably belonging to the later 7th century.<sup>13</sup> Most are penannular rather than annular, and some show signs of palisading.<sup>14</sup> These may have been the foundations of small structures or fenced enclosures rather than the limits of barrows. None surrounds graves of any outstanding wealth, but this is thought to be because later graves contained fewer gravegoods, and the occupants are still regarded as having had some status. Such graves tend to lie towards the edges of cemeteries.

Similar small ring ditches, though without palisading, were found at Morningthorpe, Norfolk.<sup>15</sup> These also surrounded graves without remarkable contents: one contained a pot and a knife, another two pots.<sup>16</sup> Processing and analysis of the Morningthorpe material has not yet reached a stage where conclusions may be reached as to the

<sup>13</sup> A. C. Hogarth, 'Structural features in Anglo-Saxon graves', *Archaeol. Jnl.*, cxxx (1973), 104-19; S. C. Hawkes, 'The dating and social significance of the burials in the Polhill cemetery', in B. Philp (ed.), *Excavations in West Kent 1960-1970* (Dover, 1973), 186-201.

<sup>14</sup> Hogarth, *op. cit.* in note 13, 113.

<sup>15</sup> Information A. Rogerson, Norfolk Archaeological Unit.

<sup>16</sup> Unpublished material from Morningthorpe and Bergh Apton cemeteries is now being processed at Norwich Castle Museum, and I am grateful to Miss Barbara Green, Keeper of Archaeology, for permission to examine and refer to these finds.

date or significance of the ring ditches, but a superficial examination suggests that most of the material belongs to the 6th century. A much earlier, late Roman, grave at Kelvedon, Essex, had a ring ditch of similar size.<sup>17</sup> Graves which may be more comparable to the Spong Hill one have been found at Orsett, Essex, where four ring ditches of approximately 9 m. diameter were visible as cropmarks and two have been excavated. Each contained a central grave whose contents appear to indicate a Saxon date, although there does not seem to be an associated cemetery.<sup>18</sup>

Ring ditches are known on the continent from 6th and 7th-century contexts in the Rhineland and in S. Germany.<sup>19</sup> A 6th-century weapon grave from Liebenau was surrounded by a ring ditch.<sup>20</sup> The closest parallels to the Spong Hill grave are unfortunately remote geographically, since they were found in a Swiss cemetery at Basel-Bernerring, where not only were there three graves surrounded by ring ditches of approximately 10 m. diameter, but these were chambered graves.<sup>21</sup>

### *Chambers*

Chambers within graves must be distinguished from coffins — which they may have contained. Coffins have been recorded often as dark outlines within pagan Saxon graves, and recently at Mucking, Essex,<sup>22</sup> and at Spong Hill itself. There are, however, no clear records of chamber graves from England, although this is probably the result of the disappearance of wood in many soils, and of failure in early excavations to discover or record such traces as did exist. Descriptions of the rich burials at Taplow, Bucks., Broomfield, Essex, and Asthall, Oxon., do in fact suggest that these were contained in wooden structures. At Broomfield the description of the grave included walls “covered with a thin layer of soot or charcoal” and “logs of birchwood forming a floor below the bronze pan”,<sup>23</sup> while at Taplow there were signs of wooden planks above and below the body.<sup>24</sup> The suggestion that the Broomfield burial may have been “half-burnt” is probably mistaken, since the “charcoal” may well have been blackened decayed wood. All wood so far found in inhumations at Spong Hill, which includes coffin outlines, a spearshaft and part of a shield board, was a dense black residue, without charcoal or ash. The “charred timbers” observed at Asthall could possibly have been burnt, since this was a cremation.<sup>25</sup> This would imply that the deposit had been burnt *in situ*, a practice not otherwise recorded in England.

On the continent chamber graves are fairly widespread during the 6th and early 7th centuries,<sup>26</sup> and there are also later Viking examples.<sup>27</sup> The best known grave from the earlier period is that from Morken, in the Rhineland, coin-dated to *c.* 600, which belonged to a Frankish prince or noble.<sup>28</sup> This consisted of a rectangular chamber containing at one side a coffin, in which were smaller pieces of equipment and clothing, while larger objects were arranged in the remainder of the chamber. This arrangement

<sup>17</sup> K. and W. Rodwell, ‘Kelvedon’, *Current Archaeol.*, v, i (1975), 28.

<sup>18</sup> I am grateful to both J. Hedges, Essex County Archaeologist, and J. Shepherd, Cambridge, for information concerning the Orsett ring ditches.

<sup>19</sup> M. Martin, *Das Fränkische Gräberfeld von Basel-Bernerring* (Basel, 1976), 25–7, Abb. 1.

<sup>20</sup> A. Genrich, ‘Stratigraphie und sozialhistorische Bedeutung einer Kreisgrabenbestattung der späten Völkerwanderungszeit von Liebenau, Kreis Nienburg in Niedersachsen’, *Probleme der Küstenforschung im südlichen Nordseegebiet*, Band ix (1970), 91–100.

<sup>21</sup> *Op. cit.* in note 19.

<sup>22</sup> M. U. and T. Jones, ‘The cropmark sites at Mucking, Essex, England’, in R. Bruce-Mitford (ed.), *Recent Archaeological Excavations in Europe* (London, 1976), 1976.

<sup>23</sup> A. Meaney, *A Gazetteer of Early Anglo-Saxon Burial Sites* (London, 1964), 85.

<sup>24</sup> *Ibid.*, 59.

<sup>25</sup> E. T. Leeds, ‘An Anglo-Saxon cremation burial of the seventh century in Asthall Barrow, Oxfordshire’, *Antiq. Jnl.*, iv (1924), 113–26.

<sup>26</sup> *Op. cit.* in note 19, 22–25.

<sup>27</sup> e.g. H. Jankuhn, *Haithabu, Ein Handelsplatz der Wikingerzeit* (1963), 137.

<sup>28</sup> K. Böhner, ‘Das Grab eines fränkischen Herren aus Morken im Rheinland’, *Führer d. Rhein. Landesmuseum Bonn*, iv (1959).

is repeated amongst other chamber graves, the body usually lying along the N. side of a grave oriented W. and E., the S. half being occupied by more substantial grave-goods. There are both male and female burials, usually comparatively rich, which are generally assumed by continental scholars to belong to persons of rank and wealth.<sup>29</sup>

Some cemeteries contained numbers of such burials. At Köln-Mungersdorf there were at least seven, probably eleven, all but three robbed in antiquity. One had a recognizable floor.<sup>30</sup> At Basel-Bernerring, in addition to the three within ring ditches, almost half of the thirty-seven adult and six child burials were in chambered graves. This included all the males with weapons, and in general all the richer burials from the cemetery.<sup>31</sup> This may represent either a wealthy community, or a burying place for only part of the population. One of the structures survived sufficiently for a reconstruction to be possible:<sup>32</sup> there were long sides formed from vertical planks, with ends of horizontal pieces and a lid of transverse pieces; lid supports were set into the sides of the pit, a detail for which there was no evidence at Spong Hill. Most recorded structures have no iron nails or clamps and must have been jointed or pegged at the corners.

### *Grave-goods*

The pieces of iron and the bronze fragment may have been part of a strap or buckle fitting. The spearhead should probably be assigned to Swanton's group C2, medium-sized leaf-shaped blades, since there is really no trace of an angle.<sup>33</sup> This is a long-lived type, current throughout the pagan period but seldom found in East Anglia, although there are one or two recent finds from Norfolk.<sup>34</sup>

The shield boss was found lying between the two appliquéés, which were on opposite sides at a distance of 12 cm. from the edge of the flange. Traces of wood showed the grain lying along the length of the fish, and transversely across the grip. Grip and boss, however, had fallen apart, so that it is not clear whether the shield had been put upright or upside down. The fish may then have been arranged to point upwards or downwards, most probably downwards as they were found (FIG. 64). The wood was almost certainly lime. There was no evidence for the original diameter of the shield.

The boss is of the relatively early low cone variety, in use predominantly during the 6th century.<sup>35</sup> The grip is also a usual type, interesting chiefly for its wood and leather binding. This has also been noticed at Morningthorpe, and at Westgarth Gardens, Bury St Edmunds.<sup>36</sup> An example from Mucking has been published.<sup>37</sup>

The appliquéés are more interesting, for their naturalism is unusual amongst pagan Saxon metalwork. The shape of the snout, the position of eye and mouth, and the arrangement of the tail fins are those of pike, but are very close to the fin pattern of another fish, the zander. The latter has been introduced into England only recently, but is native to E. France, Germany and S. Scandinavia.<sup>38</sup> It is just possible that the craftsman was a recent immigrant designing fish to a familiar shape. Or the owner of the shield might have belonged to a clan whose ancestral continental emblem had been the zander, now partly transmuted into the English pike. Either fish would be a suitable warrior emblem, both being aggressive carnivores.

<sup>29</sup> Often described as *Adels-* or *Fürsten-gräber*.

<sup>30</sup> F. Fremersdorf, 'Das frankische Reihengräberfeld Köln-Mungersdorf', *Germanische Denkmäler der Völkerwanderungszeit*, VI (1955).

<sup>31</sup> Op. cit. in note 19, 27.

<sup>32</sup> Ibid., Abb. 9.

<sup>33</sup> M. J. Swanton, *The Spearheads of the Anglo-Saxon Settlements* (London, 1974), fig. 11.

<sup>34</sup> There is at least one from Bergh Apton and one from Swaffham, the latter published in C. M. Hills and P. Wade-Martins, 'The Anglo-Saxon cemetery at the Paddocks, Swaffham', *East Anglian Archaeol. Report*, II (1976), fig. 10, 19A.

<sup>35</sup> V. I. Evison, 'Sugar-loaf shield bosses', *Antiq. Jnl.*, xxxiii (1963), 39 and fig. 1.

<sup>36</sup> Information on S. E. West, Suffolk County Archaeologist.

<sup>37</sup> Op. cit. in note 22, fig. 61.

<sup>38</sup> The discussion of the identity of the fish is based on information supplied by Andrew Jones.

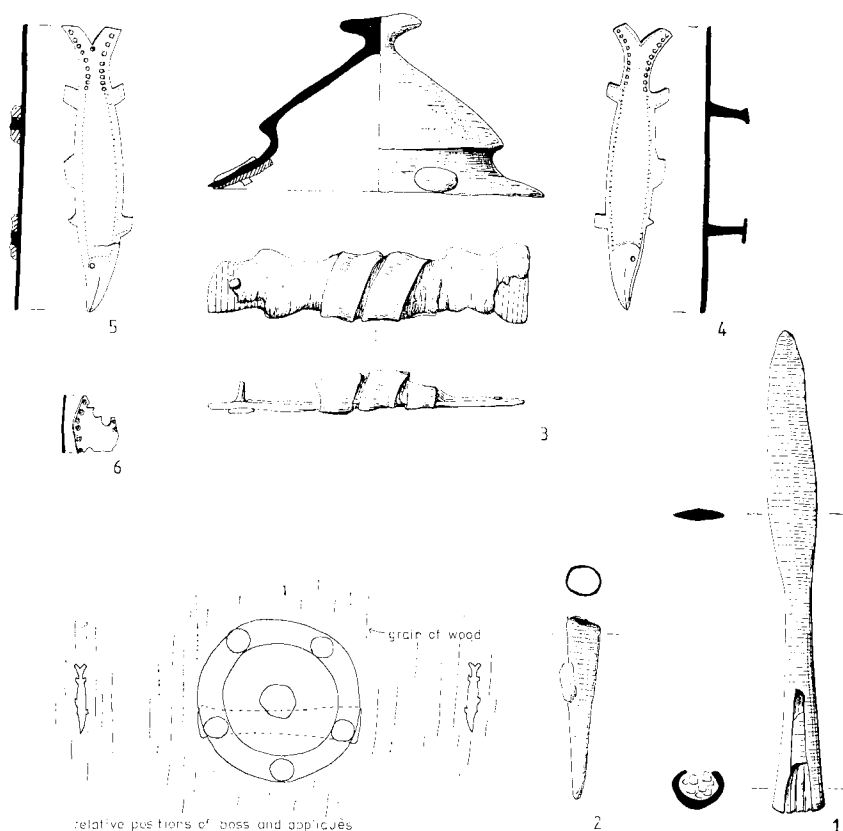


FIG. 64  
SPONG HILL, NORFOLK, GRAVEGOODS FROM INHUMATION 31

DESCRIPTION OF GRAVEGOODS (FIG. 64)

1. *Iron Spearhead* Narrow leaf-shaped blade, split socket still containing remains of wood. Length 25.8 cm.
2. *Iron spear ferrule* Length 10 cm.
3. *Iron shield boss and grip* Boss has low slightly convex dome rising to disc-topped spike, concave waist and wide flange with five disc-topped rivets. Traces of wood survive on underside of flange. Diam. 18 cm. Grip is flat strip of iron, splayed at ends, with remains of pieces of wood bound to iron by strips of leather. Length 17 cm.
4. *Bronze gilt appliqué* in form of fish. Two rivets extend from back. Upper surface entirely gilt. Faint incised lines define outline, back of head and mouth. Small punched dots further outline middle of body and there are larger punched circles around tail and forming eye. Length 7.5 cm.
5. *Bronze gilt appliqué* Pair to No. 4, differing only in slight detail of shape of tail and fins, also surface damaged.
6. *Bronze sheet fragment, silvered* Punched circle decoration broken.
7. *Iron clamp or rivet* (not illustrated).
8. *Iron fragments* (not illustrated).

Fish are not a common motif on pagan Saxon metalwork. There are some Kentish pieces, for instance a brooch from Westbere,<sup>39</sup> buckles from Faversham,<sup>40</sup> and Crundale,<sup>41</sup> and fittings from Eastry.<sup>42</sup> A buckle from Foxton, Cambs., was said by Fox to be decorated with a pike in relief,<sup>43</sup> but unfortunately this was not illustrated and its present location is not known. Fish appliques from Kempston, Beds., and Kenninghall, Norfolk, have recently been discussed by Kennett.<sup>44</sup> To these should be added another, found in the Thames near Barnes, Surrey, which is similar to the Kenninghall piece.<sup>45</sup> These three are larger and less realistic than the Spong Hill fish. Associations are recorded only for the Kempston applique; they were a spearhead and other shield fittings. A bronze fish from Warren Hill, Suffolk, may have been found in a female grave,<sup>46</sup> and has rivets too small to have attached it securely to a shield. At Bidford-on-Avon, Warwicks., an elaborate boss was decorated with five pairs of heads, fastened to the flange.<sup>47</sup> These have been described as boar's heads, with Irish affinities,<sup>48</sup> but may be thought to have a rather fish-like appearance.

Shield appliques in general are not common. Kennett mentions birds as well as fish, including the most famous example from Sutton Hoo, Suffolk. There are two other relevant examples. At Bergh Apton, Norfolk, the Saxon cemetery included one grave which contained shield appliques.<sup>49</sup> These are bronze, gilt and silvered, a curious combination of a naturalistic dog's body with a stylized beaked head. The associated boss is rather taller and narrower than the Spong Hill boss, and may be of a slightly later date. At Mucking a pair of appliques were found in a grave which also contained a sword, spear, and decorated bucket.<sup>50</sup> This is the closest parallel to the Spong Hill shield. The boss is of the same general shape, although it has a bronze gilt disc set on the spike, decorated in Style I. The appliques are of about the same size and thickness as the Spong Hill pair and, like them, have punched decoration outlining the main parts of the objects which are also gilded. They each have two pairs of fin-like extensions, but cannot really be described as fish. The silvered extensions at the ends are the main variation from the techniques of the Spong Hill fish. Other types of decoration on shields are more commonly found, especially silvered or bronze rivets on the flange, extra iron discs or studs and decorated discs on top of the spike. These last seem unusually to be decorated in Style I, like the Mucking disc,<sup>51</sup> and in general appliques and discs seem to have a 6th century context.

The rarity of swords has long been noticed in pagan Saxon cemeteries: shields are certainly found more frequently but are perhaps not so common as is sometimes implied. At Spong Hill the numbers are too small to be significant: three of the thirty-nine graves with shields, six with spears. These proportions are however repeated at Morningthorpe, where of more than 300 graves fifty-nine contained spears but only twenty-nine shields. At Bergh Apton there were fourteen spears and six shields from sixty-three graves.

<sup>39</sup> R. F. Jessup, 'An Anglo-Saxon cemetery at Westbere, Kent', *Antiq. Jnl.*, xxvi (1946), 15.

<sup>40</sup> N. Åberg, *The Anglo-Saxons in England* (Cambridge, 1926), fig. 227.

<sup>41</sup> *Ibid.*, fig. 222.

<sup>42</sup> G. Baldwin Brown, *The Arts in Early England*, iii (London, 1915), pl. xxiv, 2-3.

<sup>43</sup> C. Fox, *The Archaeology of the Cambridge Region* (Cambridge, 1923), 259.

<sup>44</sup> D. Kennett, 'Some decorative aspects of the Anglo-Saxon shield', *Beds. Archaeol. Jnl.*, ix (1974), 55-70.

<sup>45</sup> I am grateful to Mrs L. Webster for permission to examine the Barnes applique and the other appliques now in the British Museum.

<sup>46</sup> *Victoria County History of Suffolk* (London, 1911), 342.

<sup>47</sup> J. Humphreys, et al., 'An Anglo-Saxon cemetery at Bidford on Avon, Warwickshire', *Archaeologia*, lxxiv (1925), pl. vii, fig. 2, p. 276.

<sup>48</sup> *Op. cit.* in note 40, 167.

<sup>49</sup> *East Anglian Archaeol.* (forthcoming).

<sup>50</sup> *Op. cit.* in note 22, fig. 61, p. 184.

<sup>51</sup> There are several from the Midlands, including the one from Bidford on Avon already mentioned and others from Barton Seagrave, Northants, and Cottesmore, Leics. An example from Barrington, Cambs., with disintegrated Style I decoration is now in the Cambridge Museum of Archaeology and Ethnography, accession No. Z19474. I am grateful to Miss M. Cra'ster for permission to examine this boss.

A more widely-ranging study of shields from different areas might produce a different result, and it is always possible that in incomplete cemetery excavations misleading proportions of types of object have been recovered.<sup>52</sup> It does seem, however, that in Norfolk only a few people could afford to be buried with a shield, which may have been a mark of relative status. A decorated shield, correspondingly, might indicate even greater rank or wealth. It is interesting in this context that the Mucking appliquéés were found in a wealthy grave and that the Bidford boss was associated with an imported bronze bowl, although the Kempston and Bergh Apton graves cannot be described as especially rich.

#### CONCLUSIONS

The Spong Hill chamber grave clearly contained a person of some local importance. This is indicated by the elaborate construction of the grave itself, by its probably originally rich contents, and by parallels elsewhere. Horizontal and vertical stratigraphy indicate that it is relatively late at Spong Hill, which need not indicate a date much beyond the middle of the 6th century according to material found so far. The shield is also likely to have been made in the 6th century. Chamber graves and ring ditches further S. seem to have been somewhat later, but there are 6th-century continental parallels, and the English evidence for this type of grave is not very great. It is difficult to give a more precise date than the second half of the 6th century.

CATHERINE HILLS

#### NOTE ON WOOD ATTACHED TO APPLIQUÉS By ANDREW JONES

Many of the characters normally used in wood identification had disappeared with the passage of time. Almost all evidence of medullary rays had vanished in transverse sections. However, it was possible to determine that the wood was diffuse with large angular vessels occurring in clusters, these were scattered fairly evenly through the section. Tangential longitudinal sections demonstrated that most rays had left no visible trace of their form. After many T/L/S's had been scrutinized, one did produce convincing evidence that at last some of the rays were multiseriate. All these features are consistent with the structure of Lime (*Tilia* sp.) wood.

#### A CUP-MOUNT FROM BROUGHAM, CUMBRIA (PL. xv, A)

The church of St Ninian, formerly called Ninekirks, occupies an isolated site on the N. side of the parish of Brougham (NY 559299). Most of the present structure dates to a rebuilding in 1660 by Lady Anne Clifford.<sup>53</sup> During October 1846 the burial vault of the Brougham family was being repaired within the chancel and in the course of this work several skeletons were disinterred, one of which was accompanied by the gilt mount shown in PL. xv, A. The mount itself has now disappeared but its ornament is of such interest that it merits re-publication.

#### DISCOVERY AND LATER HISTORY

There are two sources which describe the discovery. The first is the account published by William Brougham, which is based upon a paper given to the Archaeological Institute.<sup>54</sup> It is accompanied by an engraving produced by O. Jewitt and a note signed by A(lfred) W(ay). This report can be supplemented by information taken from the

<sup>52</sup> Westgarth gardens has a higher proportion of thirteen shields to fifteen spears from sixty-six graves. At Mucking the two cemeteries differed: ten shields were found in the sixty graves of cemetery 1, but only six in the 153 graves of cemetery 2. Figures have not been published for spearheads. (Op. cit. in note 22, 178-9.)

<sup>53</sup> For plan and description see *Royal Commission on Historical Monuments: Westmorland* (London, 1936), 54-6.

<sup>54</sup> William Brougham, The tombs of the de Brougham family, *Archaeol. Jnl.*, iv (1847), 59-68. Other accounts of this paper will be found in *The Gentleman's Magazine*, xxvi (1846), 632-3 and *The Carlisle Patriot*, 27 November 1846. Both of these versions concentrate on the skeleton with crossed legs and fail to mention the mount.