

THE SAXON BARROW AT GALLY HILLS, BANSTEAD DOWN, SURREY

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SUMMARY

The excavation of one of the group of four barrows on Banstead Downs, known as The Gally Hills, was completed in 1972. The primary burial was that of a Saxon warrior of considerable stature, buried with full military regalia. Fragments of textiles and footwear have been retrieved from the lower end of the burial. The scraped up barrow which had been erected over the primary grave was later used as the site of a gallows, occasioning considerable disturbance to the primary burial. The site of the gallows, it is believed, is the factor responsible for the total removal of the upper half of the Saxon burial, together with the additional interment of at least five bodies in the periphery of the barrow which appear by their condition to have been victims of hanging. Later disturbance was confined to an 18th century pit on the side of the monument, of unknown origin, and to considerable modern destruction caused by earth removal.

INTRODUCTION

During May 1972, one of the four Gally Hills barrows on Banstead Downs was excavated on behalf of the Surrey Archaeological Society. The barrow had suffered extensive damage in recent years and human remains had been accidentally uncovered. Excavation therefore became essential to salvage any remaining evidence.

The barrow excavated is to be identified with one of the four described by L. V. Grinsell, specifically Gally Hills number 3, Lat. 51° 19' 55", Long. 0° 12' 20", OS Sheet 170, 250607 (Grinsell 1934, 43). It lies on the west side of the Burgh Heath to Sutton road (A217) 1 km north of its junction with B280 at Banstead cross roads, 3½ km south of the centre of Sutton. Of the other three barrows in this group, only one, Grinsell's number 2, was noted to be intact. The remaining two were badly mutilated. There has previously been no information about the type or date of any of the group, since no scientific excavation has been conducted here before.

As early as 1898, this group of barrows was noted to be suffering damage, particularly during the construction of the local golf course: 'On Banstead Down, there were formerly four small round barrows. In 1898... one of them had recently been destroyed by members of the Golf Club, but... one other appeared to have been opened some time previously' (Johnson and Wright 1906, 68).

It was on account of similar damage that the present excavation was necessary.

DESCRIPTION OF THE SITE BEFORE EXCAVATION

The remains of the barrow lay in an area of thick scrubland. According to Grinsell, when he saw it it had been 42 ft (12.8 m) in diameter, 5 ft (1.5 m) high and covered with gorse (Grinsell 1934, 43). Recently, it had suffered extensive damage. A large part of the northern end and central area of the barrow had been removed to bedrock to obtain topsoil, leaving only one third of the barrow intact. The robbed barrow now presented a horseshoe shaped feature. Within a few months prior to excavation, a small rectangular pit,

20 cm deep, had been dug within this robbed area, under-cutting slightly the middle of the upstanding section of the remainder of the barrow. This robbing would appear to have been more deliberate than the other. What now remained of the barrow was a low mound, 9.5 m from north to south and 5 m west to east, with a maximum height above the natural chalk of 1 m. The barrow had at one time undoubtedly been oval, with its longest diameter from west to east, probably reaching about 15 m.

THE EXCAVATION

The aim of the excavation was threefold:

(i) to reconstruct the method of building used in the barrow, including any peripheral features such as a ring ditch; (ii) to obtain any information about secondary or satellite burials which may still have been preserved in the remaining part of the barrow; (iii) to investigate the style and date of the primary burial if any evidence still remained.

For the purpose of the excavation, the barrow was divided into a number of Areas (see Fig. 1). All the sections in these areas confirmed by their stratigraphy the make-up of the barrow (see Fig. 2).

Overlying the whole barrow surface was a grey/black well-rooted modern topsoil, Layer 1, to a variable depth which never exceeded 20 cm. Within this soil, traces of chalk were periodically noted. Below this, and forming the basic mound of the barrow, was a fine reddish brown sandy loam, colour 5YR 4/4 (Munsell 1971), Layer 2. Except in one particular place, neither chalk nor flint was included in this layer. This mound had been heaped up over a deliberately laid 'floor' of broken flint nodules, Layer 3, covering the area of the barrow beneath Layer 2 to a uniform depth of 10 cm. Extensions to Areas 1 and 2 beyond the limits of the mound showed clearly that this 'floor' terminated at the circumference of the mound (See Fig 1). They also showed that there had been no ditch or bank surrounding the barrow.

Underlying the flint floor was a layer of the same sandy loam that made up the body of the barrow. This, Layer 4, covered the natural chalk, never exceeding 20 cm in depth despite the uneven nature of the chalk surface, the result no doubt of natural solution channels. Layer 4 was thus thought to be the natural pre-barrow topsoil of the Downs. However, this covering terminated at the edges of the barrow mound as did the flint floor above it. The chalk in the area around the barrow was covered instead with a layer of semi-decayed chalk and loam mixed together, currently the sub-soil of the barrow environs beneath the same grey/black topsoil as Layer 1 (see Pl. I).

Tertiary Features

A pit had been cut down from the surface of the mound on its north side (Areas 2 and 4, Fig. 1). It was roughly rectangular and passed through the body of the barrow, the flint floor and the lower sandy loam of Layer 4, continuing into the natural chalk for a further 40 cm. The backfilling of this pit was uniformly of the sandy loam mixed with broken pieces of chalk. It contained disarticulated fragments of human bone both cranial and post-cranial.

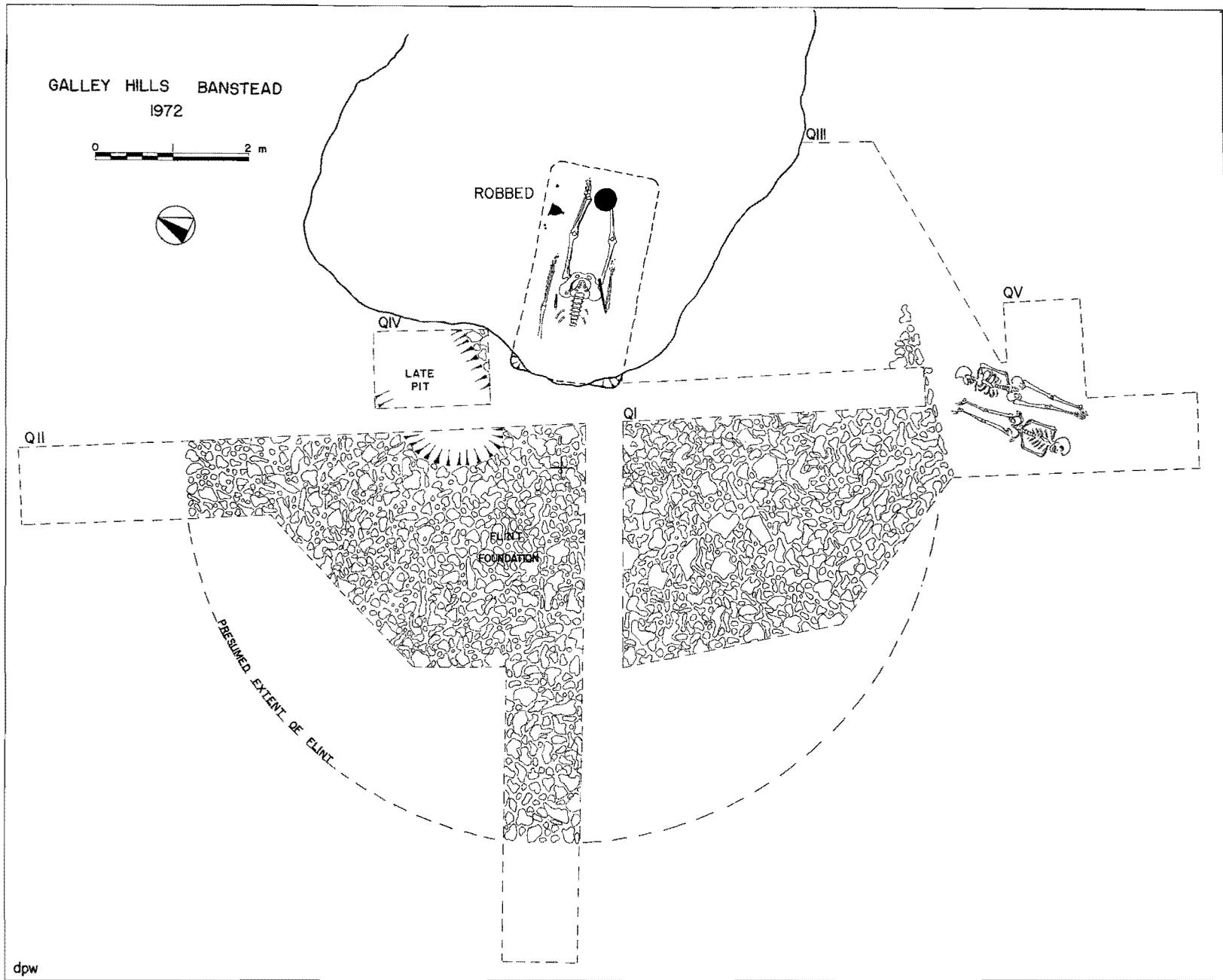


Fig. 1. Plan of barrow and excavation

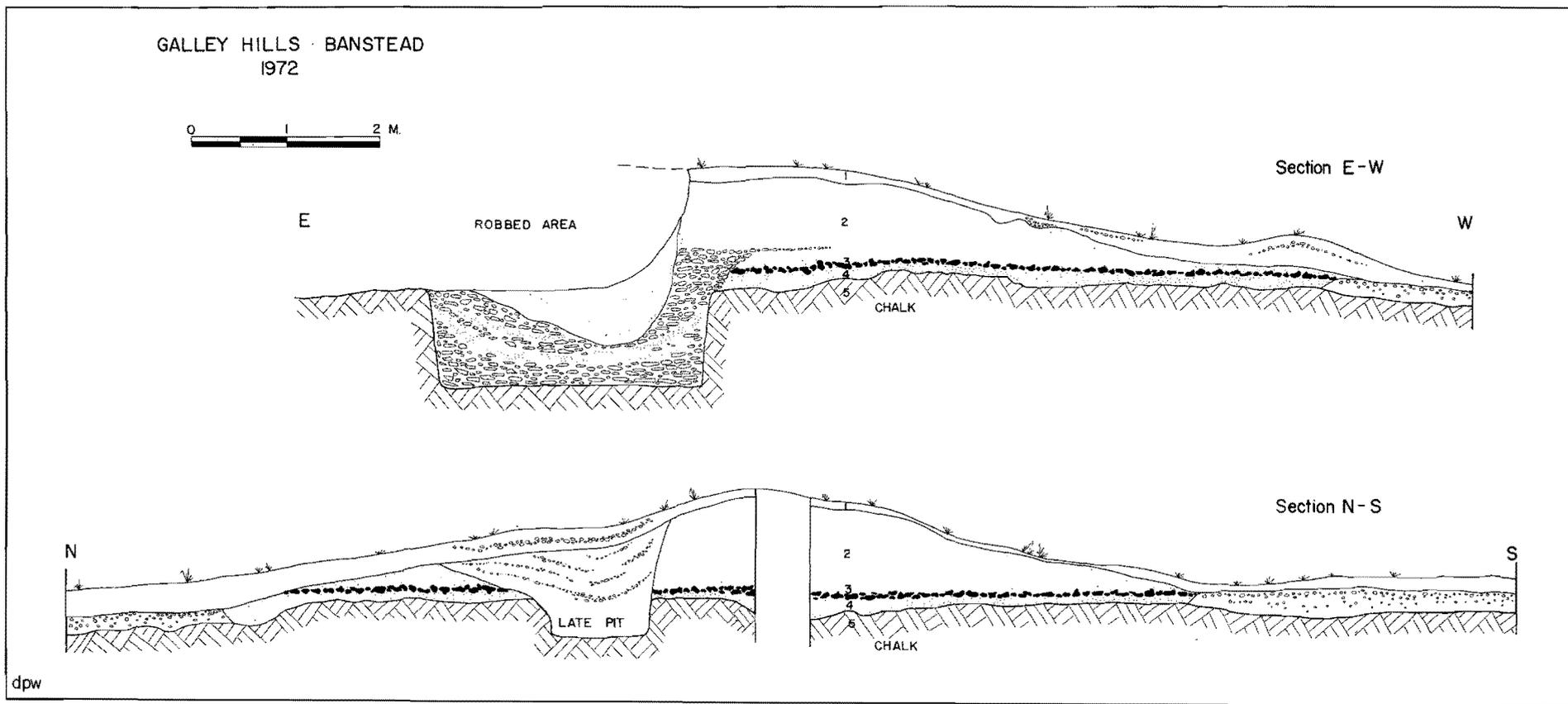


Fig. 2. Sections

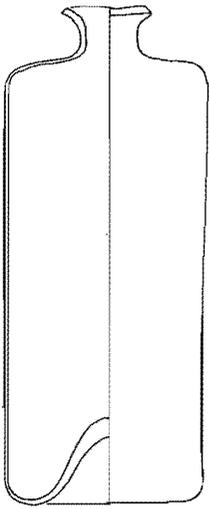


Fig. 3. 18th century glass bottle. Scale: $\frac{1}{2}$.

Scattered through the fill, particularly near the bottom, were many splinters of glass, together with part of a clay pipe stem.

Leaving the discussion of the bone remains until later (p. 64) it is possible to assign a date to this pit although its function is more obscure. When reconstructed, the slivers of clear glass imperfectly represented a hand blown glass bottle, cylindrical in shape with an indented base and narrow neck some 13.5 cm in height (Fig. 3). The bottle most probably is a 'mixtures bottle' dating from the 17th-18th century, on analogy with those at the Wellcome Institute for the History of Medicine (Crellin and Scott 1970, 132-153). W. A. Thorpe (1937) states that clear glass was first used for smaller pharmacy bottles in the mid-18th century. The balance of evidence therefore would suggest an 18th-century date for the bottle.

The pipe stem supports this date. Although the bowl is missing, I. C. Walker (1967, 90) maintains that the stem bore is equally diagnostic of date. Judging by the bore in this case, $\frac{5}{64}$ in (2 mm), a mid-18th century date would again be indicated.

It is extremely difficult to imagine what might have provoked the digging of this pit. It is eccentric to the centre of the barrow which probably rules out deliberate or systematic robbing of the barrow for antiquities. As will be shown later, the appearance of fragments of bone in the pit is incidental to its construction. It is hard to see the pit as a digging for topsoil or chalk, simply because of its shape and its depth of 40 cm below the chalk surface. The contamination which the pit has caused within the barrow is very localised, and it appears to have had no effect upon the earlier remains.

Secondary Features

A number of secondary burials were found both within the barrow and in its immediate periphery. Five can be positively identified, in varying states of preservation; more may at one time have been present.

On the southern periphery of the barrow, two skeletons were found intact in the extensions to Area 1 (see Pl. III). They had been placed adjacent to the mound but not actually within it. Both had been placed in an extended position in shallow graves 20 cm below the modern surface and on the natural chalk, covered with a layer of decayed chalk sub-

soil. They had both been buried in a north-south position, the eastern body with its head to the north, the other with its head to the south. The skeletons were in fair condition, and, with certain exceptions, they were fully articulated. They had both been buried in the same attitude, the hands unusually crossed at the wrists underneath (behind) the back. Both necks appeared to have suffered dislocation of the cervical vertebrae, but it was not possible to establish with certainty whether this was pre- or post-mortem (see Pl. V). The eastern skeleton, the larger of the two, was male; to judge from the severe attrition of the molars, he was well into middle age. The sternum was distinctly enlarged and distorted, attributable to periostitis in the region of the sternum and upper rib cage. The condition is suggestive of an infection of this region following a wound, but as it had healed, this was not the cause of death. The skull had also sustained post-mortem damage about the frontal and right facial area, the reasons for which became obvious with the excavation of the western skeleton, upon whose right tibia the missing fragments were found, presumably part of the back filling of that body.

The implication of the evidence would seem to be that the western skeleton was buried some time after the eastern, the skull of which was damaged when the second grave was dug. The second body was more lightweight, though probably still male. Once again, the molars were fully abraded, suggesting an older person. The proximity of the two skeletons and their similar posture and condition implies that they were buried within a relatively short period of time.

Other skeletal remains were found within the barrow. In the south-east area disarticulated remains were uncovered. They comprised the vault of a skull with detached facial bones, and a single humerus. These remains had apparently been disturbed during the removal of earth from the barrow in recent years and subsequently reinterred for safe keeping. Other parts of the post-cranial skeleton had been discarded at that time. As the disturbance was so thorough, little can be learnt of the original burial.

Near the centre of the barrow, two more secondary burials were discovered, the one totally disturbed by the interment of the other. The latter burial was intact, though in a decayed condition. The body was that of a male; the third molars had erupted, but little wear had taken place, suggesting a young adult. The burial was 40 cm below the surface in an extended position, having been placed almost north to south, the head to the south. The torso was hardly detectable, and the lower limbs had been severed by the cutting of the pit in the northern area of the barrow mentioned above.

In the fill above this skeleton were fragments of another, comprising two parts of the same mandible, found a metre apart. Near the head of the complete skeleton was an articulated radius and ulna. As the other four secondaries and also the primary when discovered had either mandibles or radii and ulnae, or both, intact, then these remains must represent a fifth secondary burial. Seemingly therefore, a body had been buried just below the surface near the centre of the barrow, but the digging of a second grave in the same spot totally disturbed the earlier burial, the remains of which became scattered in the backfilling of this later burial. Sometime still later, probably in the mid-18th century, the digging of the pit in the northern area of the barrow not only disturbed the

lower limbs of the later of the two burials, but also added the once more disturbed fragments of the earlier burial, hence the mixture of skeletal material in the pit fill. On a somewhat gruesome note, the presence of the articulated lower arm bones from the earlier burial might suggest that only a short time had elapsed between the two interments as the body had only partially decomposed. It is believed that all the secondary burials, the three intact burials, all buried north-south, and the remaining two which were probably buried almost at the same time and therefore for the same reason, were gallows victims. The dislocated necks and tied wrists of the pair of bodies beside the mound would support this. According to Grinsell, the name 'Gally Hills' was derived from the word 'Gallows' and thus was once a place of execution (Grinsell 1953, 66). Bawtree (1928, 15), describing Banstead Downs, also refers to the tradition of a gibbet on the Gally Hills. In his work on English place names, Reaney (1960, 158) illustrates more generally that the name 'Galley Hills' must derive from 'gallows hill' and thus must indicate that such an instrument had once been in the vicinity. There are other barrows in Britain associated with gallows, such as Galley Law in Derbyshire, Gallow Hill, Yorkshire, Gallow Howe at Castleton, Yorkshire and Galley Hill, Streatly, Bedfordshire. Further, it is generally accepted that hanged criminals, like suicides, could not be buried in consecrated ground as they had incurred automatic damnation and were therefore buried in known pagan burial grounds such as barrows.

The name 'Galley Hills' for these particular barrows is used in Camden's *Britannia* (Ed. Gough 1789, Vol. 1, 178), indicating that it was in use at least from the beginning of the 17th century. Final proof of a gallows on this spot comes from a 16th century map of the area showing three tumuli on Banstead Downs and giving the name 'Galows Hylle'. They lie adjacent to the land of 'Johs Codyngton' and 'Chayhum Downs'. The map is dated to the 1530s, but it must be before 1538 as Nonsuch Palace is not shown (PRO MP 1 68 no. 6). Some time before this therefore, a gallows was in use here, and the bodies, when cut down, were buried within the mound at its foot. The Gally Hills barrow is not the only mound where secondary burials of this kind have been noted. Similar burials were found at Roche Court Down, Winterslow, Wiltshire (Tildesley 1930, 568). Some thirty burials, hands apparently tied behind their backs, were discovered during the excavation of Barrow 5 of the Five Knolls group at Dunstable, Bedfordshire (Matthews 1963, 83). In this report Sir Mortimer Wheeler and Dr J. Morris developed the idea that the barrow might have served as the site of the local 'folk-moot' where taxes were paid and justice meted out.

Primary Features

The primary burial had been placed in a grave which lay predominantly in the area of the barrow that had been recently robbed. Owing to the depth of the grave below the natural chalk, the burial was found intact. However, the position of the grave and the removal of the barrow covering has resulted in the stratigraphy of the barrow above the primary burial being all but lost, which means that the post-constructional disturbance seen around the primary burial cannot now be fully assessed.

The primary burial had been placed in a rectangular pit 2.5 m by 1 m, and cut 1 m into the natural chalk. Over this filled grave the barrow itself had been

raised. In this respect, it is paralleled by the Farthingdown burial (Flower 1874, 111) and Barrow 2 at Broken Cross, Laverstock (Musty 1969, 101). The pit had been filled with the excavated broken chalk which had in it thin scatterings of the reddish brown sandy loam. The chalk filling extended upwards above the level of the natural chalk for some 50 cm to form a mound, although this mound was completely covered by the body of the barrow. The flint floor, which extended uniformly beneath the remainder of the barrow, was not present over the primary burial. Since the chalk backfilling formed a mound 50 cm above the natural chalk and the flint floor never exceeded 20 cm above the natural chalk, it can be deduced that in the area over the primary grave the flint floor was either cut through when the grave was dug or that it was never laid (see Pl. II).

The single primary burial had been laid out in a fully extended position at the base of the grave pit, west to east with its feet to the east. At the west end, the skull, scapulae, clavicles, most of the ribs, the cervical vertebrae and the upper nine thoracic vertebrae were completely missing. The remainder of the skeleton from the waist down, together with both arms and hands, was in good condition, clearly articulated and undisturbed (see Pl. VI). The bones were noted to be heavy and somewhat mineralised, representing the remains of a person of considerable stature. The lower part of the body was accompanied by a small iron knife on the left side, a split socketed iron spear head on the right hip bone and higher in the fill, alongside the left leg but against the side of the grave, were an iron shield boss, two dome-headed rivets and a single pin iron buckle, all trappings of a shield (Fig. 1, Pl. IV).

Over the feet of the skeleton had been placed a bronze hanging bowl. Three escutcheons, none in position, were recovered from the area around the bowl. Around the rim of the bowl, string was clearly visible and other organic remains were to be seen inside the bowl. The whole vessel had collapsed due to the pressure of earth above it, so that the rim and the base were now in the same horizontal plane, the sides having decayed. What remained of the bowl had taken up the contours of the foot bones over which it lay; nevertheless, between the bowl and the foot bones were found quantities of textiles and other organic substances (Pl. VII).

DISCUSSION

The Primary Burial

The remarkable absence of the upper half of the skeleton can only be explained by later robbing or disturbance. It is not possible that the body had already been mutilated to this degree when it was interred since, not only had the grave been dug to accommodate the whole skeleton, but there was no sign of any hacking or cutting on the remaining bones. Further, the arms could hardly still have been 'articulated' with the lower limbs if no real connections had originally existed with the lower torso. The body must then have been whole upon burial.

In seeking an alternative explanation, one is forced to conclude that the primary burial was either robbed or disturbed after interment. Perhaps the most singular fact of such disturbance is that it was only partial, which could be explained either by deliberately dif-

ferential robbing, or by completely arbitrary disturbance.

If the robbing is to be seen as deliberately selective, then this might imply prior knowledge on the part of the robbers of the existence of perhaps a valuable helmet or decorated sword near the head end of the burial as well as implying that the remainder of the goods were of no value. This would rule out 18th or 19th century barrow robbers, since they would have exposed the whole grave and looted all its goods once the grave had been discovered. The necessary prior knowledge of the geography of the burial might suggest that the robbers were the grave diggers themselves, and certainly such robbing would have to take place within living memory of the interment.

On the other hand, the apparently arbitrary nature of the total removal of those bones that are missing from the primary burial makes deliberate robbing unlikely. The skeleton is not merely disturbed; those parts that are missing were removed completely. This does not really accord with the robbing of artefacts. The alternative explanation is that the removal of such selected parts of the body was accidental and uncaring, with no attention being paid to the remainder of the body. This might well have occurred in the digging of a deep pit from the surface, some six feet in all, to accommodate the post of a gallows during erection. In view of the lack of clear evidence, caused by the robbing of the centre of the barrow, it is to this latter interpretation that we incline.

Method of Construction of the Barrow

Owing to the abnormal destruction of the barrow which has all but isolated the primary burial in an unstratified context, it is extremely difficult to be precise about the exact construction of the barrow. The following interpretation is suggested on the best evidence available.

It would seem that the barrow was a 'scraped up' barrow, utilising the local topsoil of the area as the basic raw material. The sequence of events can be reconstructed as follows:- A layer of gathered flint nodules was laid upon the natural sandy soil above the chalk to mark the area of the mound when completed. This oval of flints would have had a rectangular space in the centre where the primary pit was to be dug. The burial pit was then dug in this area, removing first the red sandy loam and then the chalk from the metre deep grave. The debris from this working would no doubt have been piled around the digging, the red sandy loam first, then the excavated chalk on top. When backfilled, the chalk would have expanded in volume by a maximum factor of 1.75 to 1, since it would now be broken up, a phenomenon quantified in the Overton Down experiment (Ashbee and Cornwall 1961, 133). In fact the increase at Gally Hills was little over 1.5 to 1. The increase explains the pile of chalk in the centre of the barrow, not as a cairn since the sides of the pile lean outwards, but as the fill of the pit deepened by the presence of the red sandy loam and the flint floor below. It also explains an area of chalk inside the barrow body at the height of the chalk pile, which can now be seen as trampled chalk from the grave digging (see Pl. II).

Once the burial procedure had been completed and the pit backfilled, then all the red sandy loam from the vicinity of the barrow was scraped up over the

flint floor to the total height of the barrow, leaving the surrounding chalk exposed, divested of its covering. This allowed the chalk around the barrow to decay quite quickly and thus explains why the soil beneath the barrow is the intact red sandy loam, whereas the covering in the periphery of the barrow is now decayed chalk mixed with modern grey/black topsoil. As a check upon this interpretation, undisturbed parts of the Downs in this region were examined and found to be covered with the same red sandy loam.

Medical Report on the Primary Burial

All that remained of the primary skeleton were the two lower limbs, the pelvis, the lumbar and three of the thoracic vertebrae together with two or three disarticulated ribs. Also preserved, but not attached, were both humeri, and the bones of both forearms and hands. These were in a position where they would have lain down by the sides of the body and were once obviously articulated with it. The bones have been examined visually and have been submitted to X-ray examination. We are most indebted to Mr Abraham Lutton, FRCS and Mr David James of the Westminster Hospital, London for their comments. What follows is a summary of their findings.

No full dimensions can be given for the body, since the head and shoulders were missing. A few of the relevant primary measurements are given here according to the Brothwell system (Brothwell 1963, 85f.).

Femora maxima: Length (Fel₁) Right 53.0 cm
Left 53.0 cm

Tibiae maxima: Length (Til₁) Right 41.3 cm Left
41.8 cm

An estimation of the height of the deceased based upon the femur and tibia lengths combined would give a reliable estimate of about 1.9 m (6 ft 4 ins).

The skeleton is that of a male 'in prime condition' probably in the late twenties, and certainly no older than the early thirties. Not only were the lower limbs unusually long, but the whole remnant of the skeleton was proportionately large. The frame would suggest a person both tall and heavily built. The muscular attachments indicate once powerful leg, thigh, arm and back muscles and presume considerable physical exertion. No arthritis or other disease was present in the bones examined, and no cause of death can be given.

One peculiarity noted was a difference in width and weight between the right and the left side. The extra size of the left side is not due to any wasting of the right, but to its own enlargement. The left tibia is the stronger of the two, the left medial condyle being markedly larger than the right. (Max. diameter anterior-posterior:- Left 3.7 cm Right 3.0 cm) The femoral condyles are accordingly sized, and the lesser trochanter of the left femur again is larger than the right. Both hip bones have pronounced muscular attachments, but the left again is heavier than the right. A possible explanation for this persistent asymmetry might be that, at least in the lower limbs, the left side was dominant.

On both femora, the *linea aspora* for the attachment of the adductor muscles of the thigh is considerably enlarged, that is, where the tendons of origin have become ossified. This complaint, rare today, was until recently quite common among those that rode

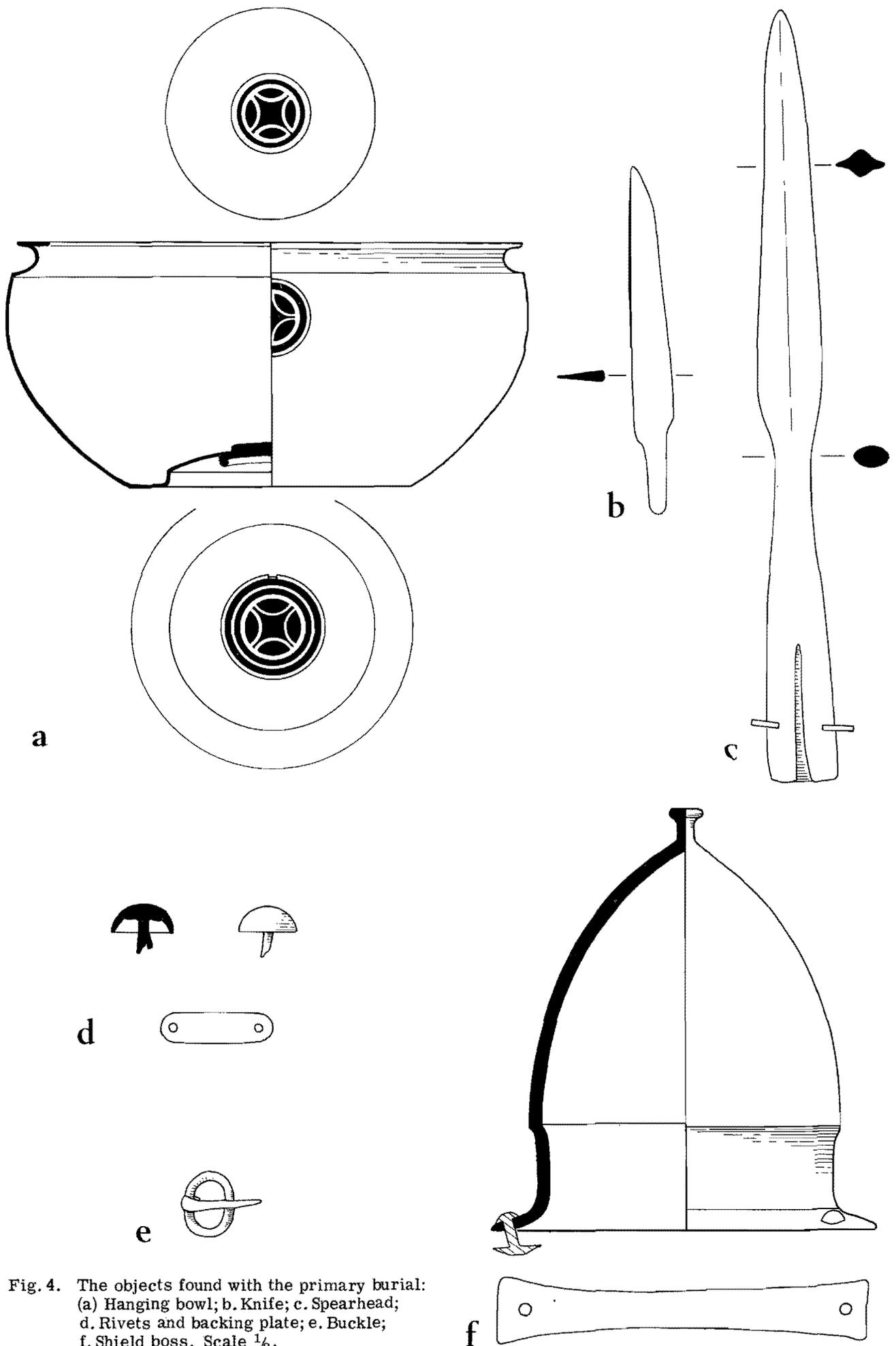


Fig. 4. The objects found with the primary burial: (a) Hanging bowl; b. Knife; c. Spearhead; d. Rivets and backing plate; e. Buckle; f. Shield boss. Scale $\frac{1}{2}$.

frequently on horseback, having to grip the horse with the knees and therefore enlarging these muscles accordingly. The condition is sufficiently specific to be given the term 'Rider's Bone' in Gray's *Anatomy* (1946, 648).

The overall impression of the primary burial is that of a person of considerable might and stature, perhaps a champion of his day. This gigantic appearance suggested by the remains is not unknown in Saxon times. At Farthingdown, four miles south-east of Banstead, the primary burial was said to be 6ft 5 ins (1.95 m) tall, with a femur-tibia measurement of 3 ft 2 ins (96.5 cm), which compares with the Gally Hills man at 94.8 cm (3 ft 1½ ins) for the same measurement (Flower 1874, 110).

The Objects (Fig. 4.)

The objects have been analysed and conserved by the British Museum Research Laboratory (RL File No. 3289).

Knife. The iron knife, 13.5 cm in length, is typical of the Saxon period and is known sometimes as a 'saxandrus' (De Bayne 1893, 28). The position of the knife implies that it hung on the left side, possibly from a belt. No trace of a belt or belt buckle, or of a handle to the knife, was found (Fig. 4: b).

Spearhead. The iron spearhead is of the split socketed type, which again is typically Saxon (De Bayne 1893, 20). The spearhead was 30.1 cm long with a maximum width of 2.2 cm. The blade was flattened, with a circular waist, below which was a circular hollow split socket with two opposed rivets.

Fragments of wood, apparently too mineralised for identification, were noted inside the socket. From its position, the spearhead indicates that the spear had been relatively short and had been laid diagonally across the lower limbs of the body. There was no sign of a terminal or ferrule. The shape would best accord with Swanton's Type C2 spearhead, which, he points out, is common in later Saxon graves, particularly the more elaborate graves of the 7th century. This would agree with the current dating of the Banstead barrow (Swanton 1974, 10). (Fig. 4: c)

Shield Fittings. The shield that had been buried alongside the left leg of the body had itself disappeared, leaving the fittings, the umbo, rivets and buckle, high in the grave fill. The shield boss (umbo) is a tall iron cone surmounted by a button. The wall of the boss curved downwards in a convex section. The lower section of the profile is carinated and slightly constricted towards the base, ending in an everted flange by which the boss had been attached to the shield with five rivets. The diameter of the boss is 15.0 cm and its height 16.3 cm. A flat unflanged grip had been fixed to the boss across two of these rivets, therefore it had not been set across the diameter of the boss but eccentric to it. The boss was of the sugar loaf, *zuckerhut*, type described by Miss Evison (1963, 38). It most resembles the one found at Lowbury Hill, Berkshire (Atkinson 1916, Pl. IV-VI), though a similar boss was also found near Banstead at Quelland, East Ewell, in 1962 (Lowther 1963, 294). (Fig. 4: f and Pl. IV)

Accompanying the boss on the west side at a distance of 15 cm were two dome-headed rivets (2.4 × 1.0 cm)

with a single backing plate (Fig. 4: d). The rivets had been set 3.3 cm apart. Slight traces of copper were noticed inside one of the rivets, which might imply that they had once been overlaid, as mentioned by De Bayne (1893, 32). Minute traces of wood, were noted still adhering to the shafts of the rivets. On the east side of the boss some 30 cm away was a single pin iron buckle (2.5 × 1.8 cm, pin 3 cm). (Fig. 4: e). The buckle is presumed to be part of the shield fittings. From the position of these objects, the shield must have been resting on the side of the grave in an upright position.

Hanging Bowl. After partial reconstruction, the hanging bowl was found to be 19.6 cm in diameter and 9.5 cm high (Fig. 4: a and Pls. VII and VIII). The rim was folded over, below which was a concave recess. The whole rim type is similar to Type 8 in Fowler's typology (Fowler 1968, Fig. 70). The body of the bowl was uniformly convex from rim to base, and the base was indented. The bowl was probably buried in reasonable condition, although it might have been quite old at the time. Since interment, it had suffered considerable decay, leaving only the rim and the base complete. No handles or rings were found and no fixing marks for them were noted; it seems that the Banstead bowl was without rings.

Three escutcheons had originally been fixed to the bowl but had fallen off. The largest of the three, 4 cm in diameter, and surrounded by a penannular ring was fitted underneath the bowl in the centre of the indented base. A second escutcheon, 3 cm in diameter, clearly had fitted inside the bowl in the centre of the base. The third, again 3 cm in diameter, had been fixed to the outside wall of the bowl just below the rim. A fourth escutcheon had at one time been fixed on the outside of the bowl directly opposite this third escutcheon; it had been lost before the bowl was buried, which might imply that the bowl was old before it was interred.

The three escutcheons that remain had all been made to the same design. Unlike the usual complex multiple curvilinear designs, the Banstead escutcheons are simpler. Each has a ring of enamel around the circumference, in the case of the largest, two rings. Within this is an enamelled circle divided by part-circles into four lobes forming a concave-sided cross. The enamelling of these *cloisonnés* is red, within which, according to radiographs, there are a number of fragments of a white, decayed material thought probably to be sections of millifiore glass rodding which had been floated into the enamel. The escutcheons are not easily paralleled, but the bowl shape, when reconstructed, most closely resembles the Winchester bowl, or the bowl found with a sugar-loaf shield boss at Lowbury Hill, Berkshire (Atkinson 1916, 15-23) (Pl. VIII).

The bowl had been noted to contain a number of decomposed fruits, together with traces of textile and string. Beneath the bowl, fragments of garments and of leather were found. These organic materials undoubtedly owe their preservation in this area of the burial to their proximity to the decaying bronze of the bowl, a well attested chemical phenomenon (Partington 1939, 786; Massey 1973, 3, 6). One might compare this state of preservation of the organic material to that of the Anglo-Saxon cemetery at Finglesham, Kent (Chadwick 1958, 36).

The leather and textiles are fully described by Miss Elisabeth Crowfoot in Appendix 1, of which the

following is a brief summary. The body had been buried in a pair of soft leather boots; over these, the legs had been covered with a plain woven fabric, above which was a twill cloak with a pile of unspun wool. The bowl had been covered with a linen cloth, tied onto the rim of the bowl with flaxen string.

Inside the bowl, the decomposed fruits have been identified as *Malus* spp., probably *Malus silvestris*, the crab apple, which is the indigenous wild apple. Crab apples were also thought to have been placed in the hanging bowl at the Broken Cross Barrow, Laverstock, Wiltshire (Musty 1969, 109).

Dating

The dating is considered in three parts—the date of the construction of the barrow; the date of the primary burial if different; and the date or dates of the secondary burials.

The possibility that the date of the construction of the barrow might be earlier than that of the primary burial has been a matter of discussion in other barrows of the period (Musty 1969, 111). The design of the Banstead barrow does not immediately bring to mind any specific Saxon construction, but a Saxon date for the building of the barrow is strongly favoured for two reasons. First, the backfilling of a manifestly Saxon primary burial was tongued back into the body of the barrow as the section indicates. Secondly, a well stratified sherd was discovered in the body of the barrow at the base of Layer 2. This sherd must have been incorporated into the barrow when the earth was initially heaped up. The sherd is from a dish or bowl, diameter 15.2 cm, having an everted lip with a seating groove on the upper surface. The fabric is grey and sandy. It is a Roman sherd, dated to the late 1st-early 2nd century AD. As the barrow is certainly not Roman, then a Saxon date would be perfectly acceptable for the construction of the barrow.

The date of the primary burial can be estimated with some certainty from the shield boss. Miss Evison (1963, 66) has exhaustively shown that these bosses of the sugar loaf type appear only late in the Saxon period, post AD 650. The rivets which accompany the boss are invariably domed (unlike the earlier disc-headed form) and they tend to occur in pairs, as at Banstead, instead of the multiple rivets of earlier periods (Evison 1963, 62). It is to the last few decades of the seventh century, therefore, or possibly to the beginning of the eighth, that the Gally Hills Barrow is to be assigned, both in construction and primary interment.

The dating of the secondary burials is not quite so clear. As the three intact skeletons were buried in the same way, in shallow graves in a north-south direction with no grave goods, both they and the other two disturbed burials are thought to be gallows victims of more or less the same date. The north-south direction is unlike the frequent direction of Saxon burials in the area, which are predominantly though not exclusively, east to west, as with the primary burial at Gally Hills. It may be that for these convicted and hanged individuals the unholiness of unconsecrated ground was heightened by the profane position in which they were buried. It is considered that all these secondary burials are post-Saxon.

Further evidence of this conclusion is given by the location of the intact secondary burial near to the centre of the mound. This burial, while not entirely

overlying the primary grave, is so placed that the disturbance at the western end of the grave must have taken place before it was interred. Since the disturbance is seen as post-Saxon, then the secondary burials will also be post-Saxon. It is unlikely that they are later than the mid-16th century, since the nearest public gallows known at that time was at Ewell. The Banstead Common gallows at 'Galows Hylle' must by then have ceased to function (see p. 64). By elimination therefore, the secondary burials must date to a period between the post-conquest and the mid-16th century, when they were interred within the shadow of the gallows itself.

The human remains and the conserved finds are to be displayed at Bourne Hall Museum, Ewell, Surrey.

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APPENDIX 1. THE TEXTILES AND LEATHER

by ELISABETH CROWFOOT

The very interesting remains of textile and leather from this burial all owe their preservation to the proximity of the bronze hanging bowl. Remains are present on both feet but clearest on the right foot which was bent inwards so that the whole of its inner side was protected by the bowl; they continue for some way up the right tibia. Against the inside of the heel bones, across the right instep, and at the lower end of the tibia, are pieces from the leather footwear. Above these, between them and the bronze, are layers of two different fine woollen textiles (T. 1 and T. 2); from inside the bowl, and near the right tibia, are tiny fragments, mostly replaced, of a linen cloth (T. 3), and a flax string (T. 4) has been tied round the rim.

The Footwear

Very thin deteriorated fragments of leather lie against the bones in all the areas protected by bronze-

impregnated textile, continuing for a distance of *c.* 13 cm up the right tibia, and rather better pieces are preserved on the heel and ankle bones, which give some indication of the type of footwear worn. Against the inner side of each heel-bone (*os calcis*) is a piece of leather with a row of eyelets, *c.* 1 cm from centre to centre, along the forward edge, lying just below the ankle in a slanting line pointing towards the toes, and possibly continuing as far down as the sole. While the position in both cases at first suggests a side seam on the upper, the eyelets must have been made for a leather thong. Seams on Anglo-Saxon shoes from Sutton Hoo are very finely stitched with spun thread, and J. H. Thornton notes that the stitching on uppers from all shoes so far examined by him from Roman to Tudor times in England, including Anglo-Saxon examples from Winchester and Oxford, has been fairly fine, though coarse thonging is often used to unite sole to upper (Thornton). The angle of our thonged edges makes this purpose unlikely. The height of the leather fragments up the leg bone and folds on several loose fragments, including a deep fold at the back of the right eyeletted piece, suggest a soft leather short boot, which dropped easily into creases round the ankles as the body lay.

On the right instep bone (*astragalus*), as well as thin scattered flakes of leather, there is a well preserved solid piece which could have been part of a strap fastening on the inside of the right ankle. Broken eyelets at one end show where it was fastened to the boot, and at the opposite end is a slit that may be the beginning of the buttonhole.

A number of short boots have been found in Viking and early medieval contexts. In contrast to the fine stitching on the Anglo-Saxon shoes and the boots from the Oseberg Ship, some of these have noticeably coarse seams, particularly women's boots from Middelburg, Walcheren, of which the suggested date is AD 850 (Hald 1972, Oseberg, Figs. 144-7, Middelburg, Figs. 136-140) and low boots found in two excavations at York, where a boot from the Roman fortress is placed by I. M. Stead as post 10th century (Stead 1956, 515 ff, no. 5) and K. M. Richardson suggests that 'Anglo-Danish' boots from Hungate are probably a little earlier (Richardson 1959, Fig. 22, nos. 7-10). These boots from York all show a flap in front, edged with thonging, which folded over the ankle and was fastened by a strap button on the inside of the foot. The better preserved Banstead pieces could easily come from this area of such a boot.

The Textiles

T. 1. On both heel bones, next to the leather, and on the foot end of the right tibia, are deteriorated masses of fine reddish brown wool, in which the threads of the second system show up as occasional blackish fibres. On the right instep bone an area of the fabric, 4 × 4 cm overall, is well preserved, particularly that part which lay under the leather tab, which has stained it a darker brown.

The weave is plain (repp). One system, probably the warp, very coarse, or perhaps consisting of a number of finer strands used together, with a count of only 4 threads per cm, was identified as possibly vegetable fibre (see Appendix 2). Even in their deteriorated condition these threads are 4 mm in circumference; they show no sign of spinning. They are completely hidden by the other system, fine reddish brown wool

with a noticeably lustrous surface (Appendix 2). This yarn is hard spun Z, with a count of at least 48 threads per cm, in parts possibly as high as 52.

T. 2. This fabric, which lay over T. 1 on all the bones, is a twill weave with a long pile. The best preserved area, again from the right instep, measured 5 × 4 cm overall as found, but was in three layers, one folded diagonally.

The wool again was of good quality (Appendix 2, T. 2.a), a lighter brown than T. 1. the warp spun Z, fairly hard, the weft S, rather looser, the ground weave a simple diagonal 2/2 twill with a count of 8-9/8 threads per cm. On top of this lay a mass of detached locks from the pile (P1. 2), of lustrous reddish brown wool, formed of unspun strands from a fleece (Appendix 2, T. 2. b), loosely twisted together, some S, some Z, some in pairs some in fours. When two layers of the twill were separated giving a width of *c.* 6.5 cm, after a mass of similar broken locks had been lifted off, the remains of two pile rows still in position in the weave could be clearly seen (see Pl. IX).

The paired strands of unspun wool run along the surface of the twill, passing under two warps at rather irregular intervals, varying from *c.* 1 to 1.5 cm. It is impossible from the smaller fragments preserved to tell how often the strands formed a pile tuft. In some places the interval may have been as much as 2.5 cm, since one of the strands continues unbroken after the preserved tuft from this distance onto the other side of the diagonal fold. To form the pile the strands were pulled under two wefts presumably in a loop, the next pair of strands being inserted under the same wefts to continue across the weave, leaving four paired pile strands hanging together. There are no loops among the loose threads, and they were most probably cut, though the preserved tuft on P1. 3 has a curved over tip that suggests this loop may have been left intact. Though the longest tuft preserved loose is 7 cm, most are shorter, the ones surviving in position being *c.* 4 cm (the loop) and 2.5 cm, which would give a total lock length of between 18 and 28 cm. From the tuft preserved at the lowest edge of the opened piece the pile locks seem to have been spaced alternately on consecutive rows, but the distance between the rows, 12-14 twill wefts *c.* 1.5 cm, means that the long overlapped more than one row, and the surface of the weave would have been covered in spite of the spacing of both loops and rows (see Fig. 5). On the back of the twill the passage of the pile strands under the warps can be seen in one place as a slightly thickened thread, while the preserved tuft naturally makes a noticeable lump which, under the weight of the bronze bowl, caused a hole in the fold of textile above it. Traces of pile strands can be seen running along the surface of the twill on other pieces. Though the pile locks could have been inserted by needle in the finished weave, it seems most likely that the strands were laid during weaving, being twisted and hitched up through the last two throws of weft in a loop, together with a new lock, by needle or pin-beater, all being held firmly in place when the next throw of weft was beaten up.

These two fabrics are of good quality T. 1 is unusual among Anglo-Saxon textiles. In normal practice, where a vegetable fibre is used for one system and wool for the other, the former tends to be the warp, and it seems most probable that this is so with the vegetable threads of T. 1. In Anglo-Saxon textiles, however, the warp usually has a higher count, a charac-

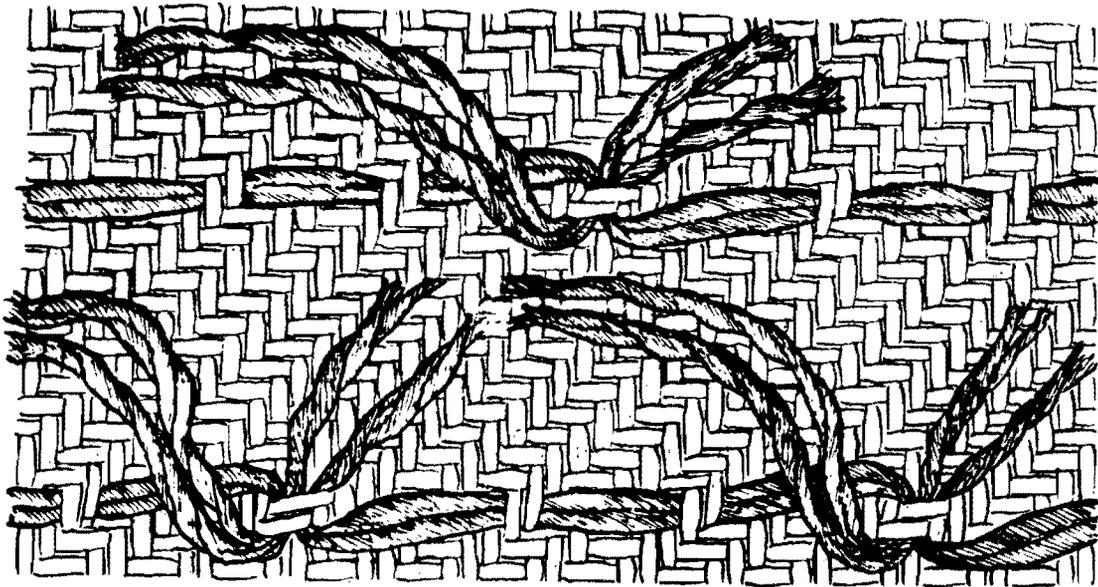


Fig. 5. Pile weave, T. 2.

teristic of all finer fabrics woven on the warp-weighted loom, and if the woollen threads of T. 1 are the weft it suggests that this fabric may be an import. A few other pieces with somewhat similar features have been recorded from two rich Anglo-Saxon burials. In the Sutton Hoo ship tiny fragments found with the shield (SH17) had warp threads of vegetable fibre, probably fine flax, wool weft, and counts from 5-6/40 to 6-7/36 per cm; replacements on iron work at floor level (SH 18) may be from the same weave, and it is possible they come from rugs of the *Killim* type, though they would be very fine for this purpose. A textile with rather similar appearance to ours from Taplow Barrow (TB 7) with S ply ?warp, fine lightly Z spun weft, and count of 9/40-44 threads per cm, has noticeably lustrous wool in the close system, though here the warp also appears to be wool. The appearance of T. 1 suggests some of the coloured wool bands on linen garments from such Near Eastern sites as Palmyra, though most of these are even finer (Pfister 1937) and the warp of T. 1 does not resemble one system of any normal ground weave, or indeed a flax thread. If, on the contrary, the wool was the warp of T. 1 it is possible that it was a warp-face band decorating some fine fabric laid over the feet, though the number of layers that seem to be present makes this less probable.

The shining red-brown wool of the pile tufts on T. 2 is strikingly like that of the pile fabric from Broomfield Barrow (B. 4) and the quality of wool in the similar weave from Sutton Hoo (SH 10) though here the colour is greyer. In both these weaves the pile is inserted in regular rows of sehna loops on a plain weave fabric (Sutton Hoo). Fragments from Birka, Sweden, 10th century AD, with a shaggy pile in red and blue, probably also have a plain weave basis, though it is impossible to tell how the pile was inserted (Geijer 1938 131-2; Pl. 37. 4). A medieval weave from Heynes, Iceland, possibly a little later, has pile inserted with a type of Spanish knot on a 2/2 twill, the strands running along the surface of the weave between the tufts as in the Banstead piece (Gudjonsson 1962, 18 ff. Fig. 5ff). In both these cases the tufts, like those of T. 2, were formed of unspun locks cut from a fleece.

The Heynes pile is described by Elsa Gudjonsson as wavy and rather lustrous, and inserted pile tufts measured 15 to 19 cm; locks cut from fleeces for comparison measured from 16 to 28 cm; which agrees with the estimated lengths of strands of T. 2.

In northern archaeological material woollen pile weaves have two general uses, for cloaks or coverlets and for caps. The position of T. 2, wrapped across the front of the man's feet as he lay in his grave, suggests a cloak. On the early mantles from Danish Bronze Age burials the irregular needle-inserted pile is obviously intended to imitate the close fur of an animal (Broholm and Hald 1940, 17-19; 28-30; 40), and the same may have been true of fragments probably from a cap at Sutton Hoo (SH 3) and the shaggy Viking cloaks from Kildonan and Jurby (Crowfoot 1948, 25-7; Fig. 1) but T. 2 and the Sutton Hoo and Broomfield Barrow lustrous piles do not pretend to imitate a fur. With their highly decorative rows of silky locks they must have been luxury cloaks, designed for beauty as well as warmth and possibly highly-coloured, as in the case of the Birka fragments.

Pile weaving for coverlets and garments has a long history both in Europe and the Near East, varying in style and material with climate and weaving skill. By the date of the Danish Bronze Age caps and cloaks ancient Egyptian linen pile fabrics are already showing a variety of looped techniques (Winlock 1942, Pl. 37; Reisner 1923, Pl. 301). In the early centuries AD there are woollen rugs with stripes and bands of pile from Near Eastern Roman sites such as Dura-Europos (Pfister and Bellinger 1945, nos. 223-33; Kendrick 1920, nos 6-10, 23-40) and the highly patterned decorations on Coptic tunics and mantles. But in view of the fame of the later Northern pile cloaks, the *Villosa-mantels* of the Vikings with which Agnes Geijer connects her coloured pile from Birka (Geijer 1938, 131) and the Icelandic *Vararfeldir*, one of the main exports from early medieval Iceland, it seems more than probable that the Anglo-Saxon luxury pile weaves were woven in the north. Elsa Gudjonsson's description of the *Vararfeldir*, with evenly spaced rows of locks across the width which were brushed to one side to lie vertically in horizontal rows when the

mantle was worn, describes the likely appearance of T. 2, though its locks lay closer together than the minimum thirteen locks on a width of 102.4 cm of the Icelandic legal specification (Gudjonsson 1962, 68-9).

T. 3. From the bronze bowl (possibly inside it) a fragment of textile has been preserved measuring 3.5 × 2 cm, a linen plain weave, Z spun in both systems with noticeably uneven thread, count 15/14 threads per cm. The weave is rather open, but this may be due to deterioration, as the same fabric, replaced in fine folds in fragments of the bronze, is fairly close and even. Another scrap, 1 cm × 0.3 cm, adheres to a lump of mixed textile and leather, and fragments, the largest 1.2 × 1.3 cm, are with the leg bones. The linen cloth was probably tied over the mouth of the bowl, hanging down far enough at the sides to touch the other textiles, or possibly completely wrapping the bowl. This practise was common where bowls were used for cremation burials, but has also been found where they are present as here in inhumations.

T. 3 is very similar in weave and count to the plain weave flax fabric used to wrap a bowl in Grave 204 at Finglesham, Kent, a bowl in the adjoining grave being wrapped in fine linen twill (Chadwick 1958). Rather finer flax plain weaves were found with or round cremation bowls at Brightwell Heath, Martlesham, Suffolk (count 22/16), Sutton Hoo, mound 4, 1938 excavations (26/15) and Snape, Suffolk (22/15, 19/16); cloth is also mentioned in accounts of bowls from Lovedon Hill and Manton Common in Lincolnshire (Davidson and Webster 1967, 10-16, 37-9).

T. 4. Two fragments, described as coming from under the rim of the bowl, must have been part of the string tying down the cloth covering. They measure 20 cm and 19 cm long, circumference c. 8 mm, a Z ply string of two coarse threads each made up of 16-20 flax yarns, twisted together S; of these yarns a few are Z spun, but most S. Here and there bunches of thread stick out, as if extra threads were added to the string as it was twisted. This string is unusual in an Anglo-Saxon context, being formed largely from S spun yarns. All flax threads so far analysed from Anglo-Saxon goods are Z spun. However, the natural twist of flax is S, and in the case of a string like this, where the insertion of extra threads suggests that short lengths were twisted by hand, it is perhaps not necessary to say that the yarns must have come from an S spinning area like Egypt, though a piece of string might have been re-used that had come tied round imported goods.

APPENDIX 2. FIBRE IDENTIFICATION OF SAMPLES FROM BANSTEAD DOWN

1. Animal Fibres

Fibres from T. 1 (warp and weft), and T. 2 (weave and pile threads) were submitted to H. M. Appleyard, F.T.I., for identification, who reported as follows:

Most of these fibres are comparatively well preserved, the exceptions being T. 1 (b) and (c).

T. 1 (a) ?Weft. These are mostly fine wool fibres, there are however a few coarser than the rest and some of these have fragmental medullae. They are

non-pigmented but stained brown, there does not appear to be any sign of dye. Although some of the fibres are badly degraded, on others the scale pattern is reasonably clear and typical of fine wool fibres.

T. 1 (b) and (c) ?Warp. These are very badly degraded and break up easily when mounted; some were mounted in clove oil in an attempt to clear them and show more detail. Some of the fragments have slight evidence of a cellular structure, some are also branched. The evidence indicates that they are of vegetable origin.

T. 2 (a) Twill These are not pigmented; the scale pattern is faint, but is a smooth waved mosaic which is typical of wool.

T. 2 (b) Pile Although some fibres are degraded, on others the scale pattern is quite clear and is very much like that seen on our present day English lustre wools such as the Leicester and Lincoln breeds. There is no pigment; a few of the coarser fibres have fragmental medullae. Quite a number of fibre tips were found and this suggests that the fibres are what we would now term 'lambswool'. It is interesting to note that the fibres are all arranged in the same direction, i.e. with the tips all at one end, thus they would appear to be from a lock of fleece wool. I could not find any root ends, so presumably the fibres must have been shorn rather than plucked, or 'rooed' to use the Shetland term. It looks as if a lock of wool could have been split into several strands, then twisted together.

2. Vegetable Fibres

In view of H. M. Appleyard's suggestion of vegetable fibre for T. 1. ?Warp, samples were submitted to Drs. D. F. Cutler and M. Y. Stant at the Jodrell Laboratory, Royal Botanic Gardens, Kew. After first examination they reported:

'This does not suggest any recognizable vegetable fibre. It is partly broken down. We wonder if it could be some animal hair other than wool'.

After examination of a second sample, they reported: 'Although superficially the ultimates of the fibres do resemble in appearance those of a vegetable fibre, we are unable to express any definite opinion as to their origin'

Of threads from T. 3 Dr. Cutler wrote: 'These threads from the plain weave agree in structure with flax fibres, *Linum usitatissimum* L.'

The string, T4, had previously been examined by the Government Chemist's Laboratory of the Department of Trade and Industry, and described as of flax.

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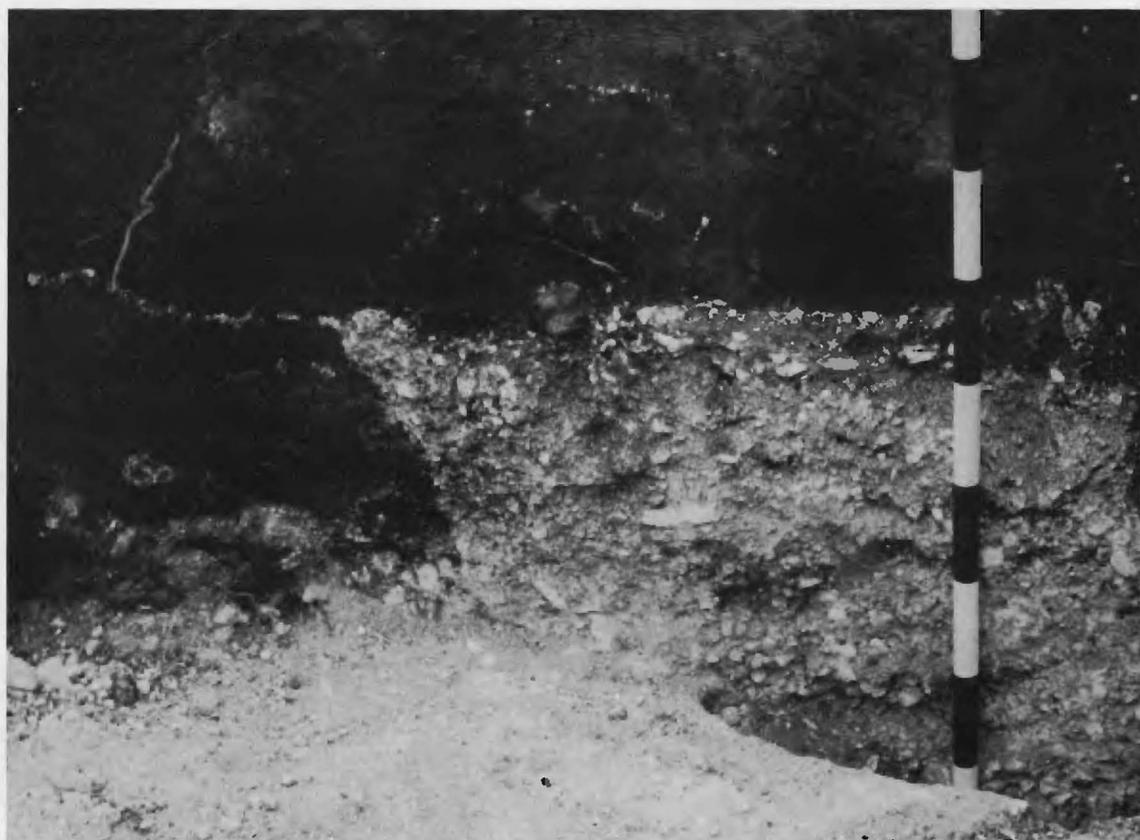
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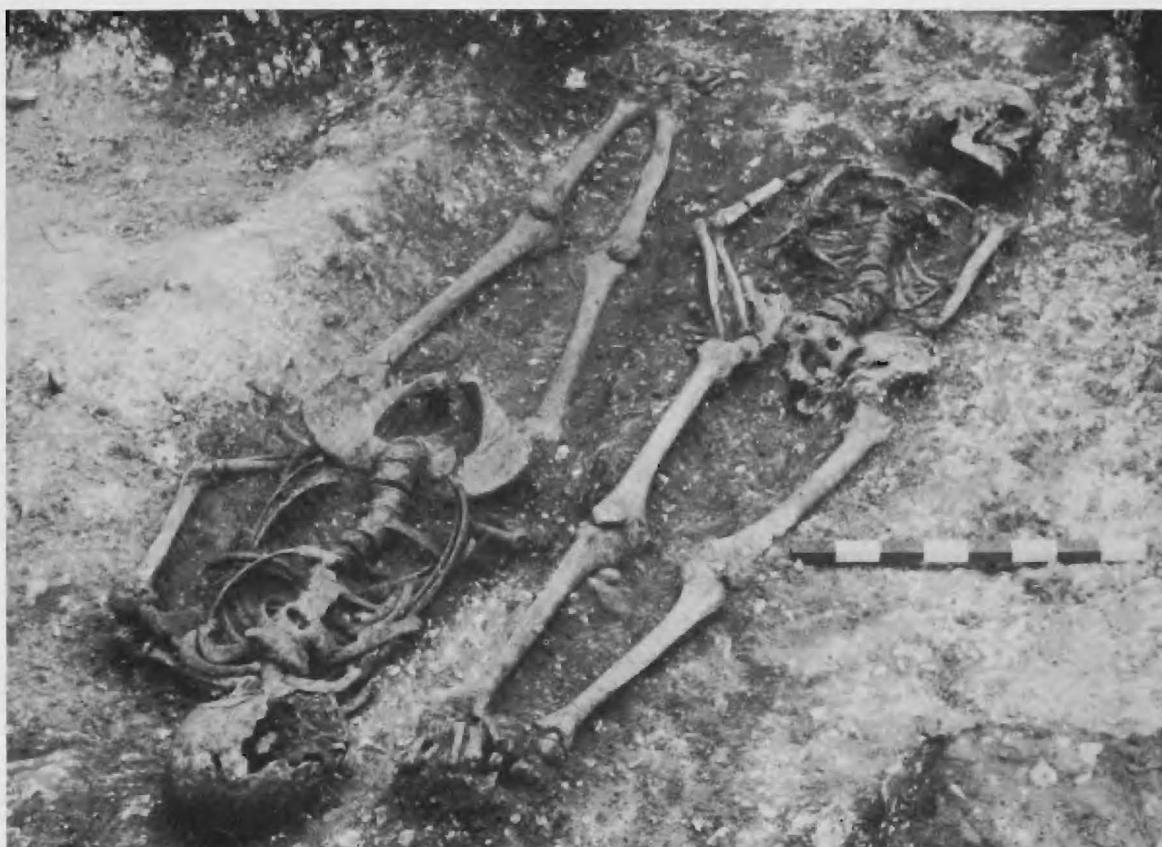
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Pl. I. Area 2 during excavation. The flint 'floor' is on the right of the excavated area. On the left, a portion has been removed during excavation. The 18th century pit may be noted cutting into the chalk.



Pl. II. What remains of the stratigraphy of the backfilling of the primary burial, showing the heaped chalk, well above the flint 'floor' (left) and extending as a trample (middle left) into the body of the barrow.



Pl. III. Two of the secondary burials in the periphery of the barrow on the south side. The hands must have been tied behind the back (Scale: 5 cm.)



Pl. IV. The sugar loaf shield boss as found, with dome-headed studs on the left-hand side. (Scale: 5 cm.)



Pl. V. The western of the two secondary burials. The cervical vertebrae have been dislocated, possibly through death by hanging. (Scale: 5 cm.)



Pl. VI. The primary burial: iron knife by the left thighbone, iron spearhead on the right lower arm; shield fittings high in the left fill and the hanging bowl over the feet. (Scale: 5 cm.)



Pl. VII. Detail of the hanging bowl as found: crab apple remains can be seen inside the bowl. Remnants of flax string were noted alongside the right-hand rim and textiles were preserved beneath and to the left of the bowl. (Scale in cm. and ins.)



Pl. VIII. The hanging bowl after reconstruction.



Pl. IX. Fragments of the cloak which overlay the feet, showing the hanks of unspun wool looped into the woven fabric.