

# Rescue excavations on an early Saxon cemetery site and a later (probably late Saxon) execution site at the former Goblin Works, Ashtead, near Leatherhead

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*Rescue excavations in advance of redevelopment of the former Goblin Works, Ashtead, as the headquarters of Esso Petroleum PLC revealed at least 33 inhumation burials. Amongst those that could be examined properly, 13 were burials in the pagan Saxon tradition, probably of 7th century date, accompanied by grave goods including iron spearheads, a Panther Cowrie shell and a glass, shell and amethyst bead necklace. At least six and possibly ten or more were interments of people executed, probably in the late Saxon period.*

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## Preface and acknowledgements

The former Goblin Works occupied an elevated position on the North Downs overlooking Leatherhead. Before the works were built in the 1920s, the Clay-with-flints capping over the chalk downs supported predominantly grassland. Earlier usage of this type of land is by no means certain, but it probably alternated periodically between pasture and arable land and even, perhaps, occasionally reverted to scrub (Macphail & Scaife 1987).

The site first attracted attention in 1927 when excavations for a water main uncovered mutilated and dismembered bodies in a pit at a depth of approximately 2m (6–8ft) which Lowther guessed to be Saxon. In 1974 ground levelling uncovered human bones and a Saxon spearhead (see below item 19, fig 5). When in 1984 proposals were made to redevelop the site an arrangement was made with the then would-be developers, Crest Homes, to open a trial trench. The only area readily available was in the garden of the Gate House (fig 1), between the sites of the previous finds. Nothing was found and it was therefore decided that, while an interest should be maintained, any further work would have to await events. The site was subsequently acquired by Esso for their administrative headquarters. As part of their preliminary works, a series of boreholes was sunk, one of which (fig 2, S4) produced bones which were submitted to the police pathologist for identification. A notice of this in the local press led Leslie le Mottee to pursue the matter further and eventually acquire the bones and have them identified as human. Even while this was taking place, excavations for a new electricity transformer revealed a human skeleton. Esso's Clerk of Works, Gordon Davies, called in the archaeological section of Surrey County Council, and this burial, together with a further one and parts of a third, were excavated by Martin O'Connell and the author.

It was by then clear that larger scale work was required, and this took place between 23 September and 30 October 1985, with the wholehearted cooperation and generous financial support of Esso, and subsequently of their contractors Higgs & Hill. Thanks are also due to John Sylvester and John Newey of Esso. Mention must also be made of the hard and good work of the almost entirely voluntary labour force, which included members of the Leatherhead and District, and Mayford History Societies, and amongst whom Chris Watkins, Leslie le Mottee, Ernest Crosland, Bob Graham and David Webb deserve especial mention.

For assistance and advice in preparing the report I should like to thank the following: Julia Arthur (Guildford Museum) for assistance with the finds; David Bird and David Hill for access to unpublished research which considerably aided preparation of the discussion of the execution cemetery. The illustrations are the work of the main author, except for figs 3–5, drawn by David Williams, and pl 23, photographed by the Ancient Monuments Laboratory, English Heritage.

## The excavations

Once the discoveries had been made in the borehole and transformer work, it seemed essential that a substantial area should be tested. The only efficient way to do this was to strip the topsoil by mechanical excavator, accepting the risk of damage to shallow burials. In most cases of damage the skull only was affected as this was normally higher than the rest of the body. After topsoil removal the site was cleared and areas of disturbance to the natural chalk defined. These were rapidly excavated until either they were finished or human bone was revealed; in the latter case the aim was to expose the body as fully as possible within about two man-days' work. The skeleton was then photographed, but not drawn (except for key points on the general plan), before lifting.

Detailed catalogues of the individual burials and other features are presented in microfiche only (M2 to M35). The main points with regard to the burials are summarised in table 1. Amongst the other features 103 is of interest because of its size and shape which might be suitable for a gallows tree (see below; cf Gray-Hill 1937), while 112 is a problem because its general appearance was that of a grave cut, but no body was found within. A few features cut into the chalk were very irregular in plan and profile and have been regarded as due to clearance of bushes or trees at some unknown date (see fig 2).

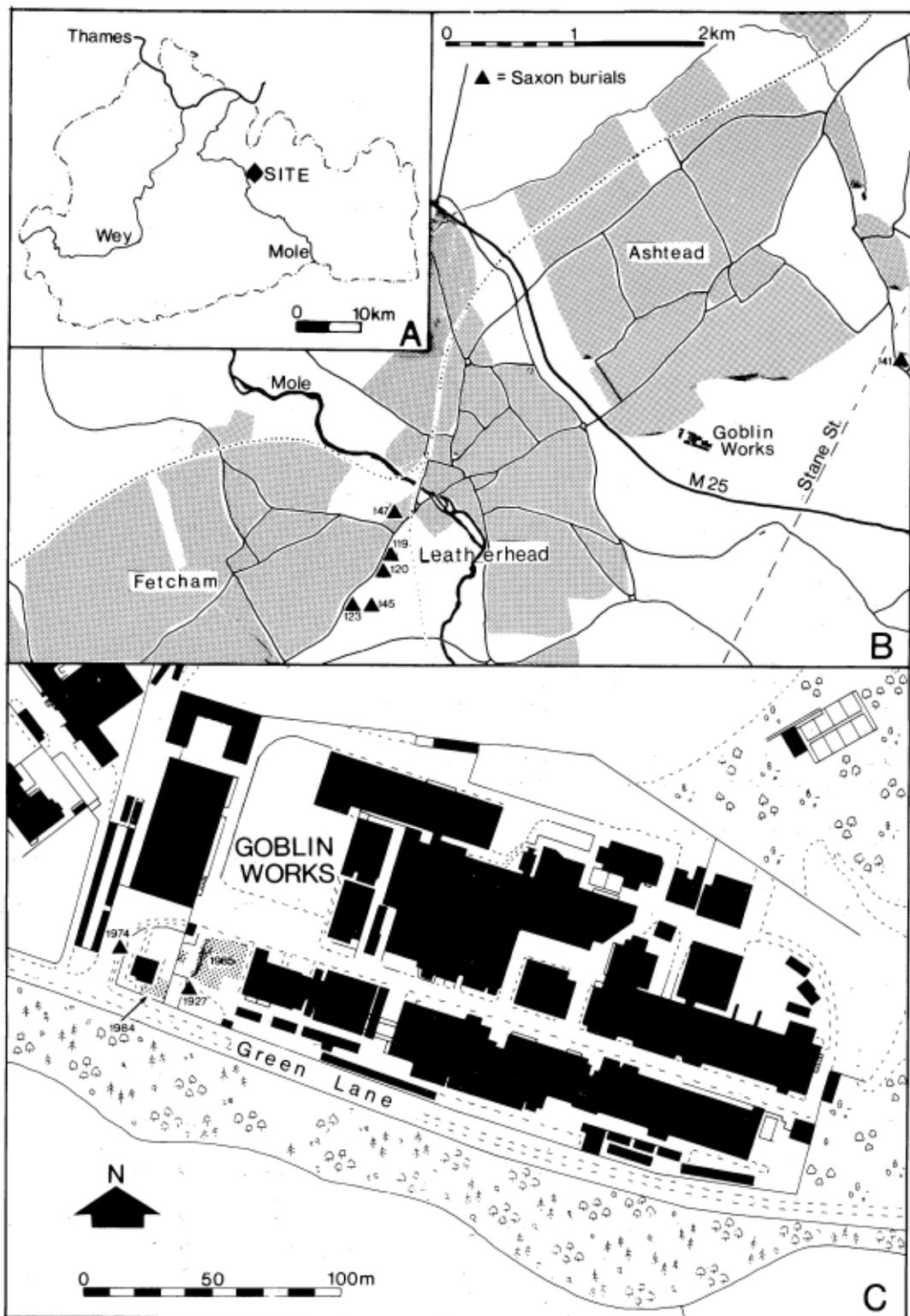


Fig 1. Goblin Works, Ashted. Location of the excavations showing the now demolished Goblin Works. The numbers next to the Saxon burial symbols are Surrey County Council Antiquity numbers: 119, 120, 123 and 145 represent discoveries at various dates which probably all belong to the 6th–7th century cemetery at Hawks Hill (Smith 1907); 147 represents a 5th–6th century cemetery at Watersmeat (Cotton 1933); 141 represents a burial of uncertain date, but possibly Saxon, found close to the meeting place of Cophorne hundred at Nutshambles. Green Lane marks the boundary between Ashted (to the north) and Leatherhead parish

Number <sup>1</sup>	Age <sup>2</sup>	Sex <sup>2</sup>	Stature <sup>2</sup>	Grave <sup>3</sup>	Ori-entation <sup>4</sup>	Position <sup>5</sup>	Disturb-ance	Finds	Plate <sup>6</sup>	Other notes	Date
S2	25-35	Female	1.72m	A	254°	On R. side	None	None	3	Slots at either end of grave for head and tail boards	Pagan
S4	15-25	Male	-	A	268°	On L. side	Some	14, 18	4	Many bones completely decayed away	Pagan
S7	6-8	-	-	A	256°	On L. side	None	None	6		Pagan
S13	45+	Female	-	A	252°	Supine	Little	None	12		Pagan
S14	6-8	-	-	A	269°	Supine	Little	15	13		Pagan
S15	15-25	Male	1.72m	A	261°	Supine	None	1, 2, 5, 7	14		Pagan
S17	4-6	-	-	A	240°	?Supine	Little	None	15	Most bones had completely decayed away	Pagan
S19	35-45	Male	1.76m	A	244°	On R. side	Little	8	16	Hands were placed as if to grasp a wooden staff	Pagan
S23	45+	Male	1.71m	A	252°	On R. side	None	9	18	Some bones missing without evidence of cause	Pagan
S24	45+	Male	1.74m	A	253°	?Supine	Much	3, 6, 10	19	Second World War bomb had damaged torso	Pagan
S25	25-35	?Female	-	A	240°	On R. side	Much	? 4	20	Most bones had completely decayed away	Pagan
S26	4-6	-	-	A	255°	?	None	None	21	North-south, Fe object (13) from grave fill (105) may belong	Pagan
S28	45+	Male	1.83m	A	157°	On R. side	None	? 13	22		Pagan
S1	Adult	-	-	C	208°	Supine	Much	None	2	Could be classified as ? Execution	Uncertain
S3	Adult	-	-	?	-	?	?	None		Head probably to west, but otherwise unexcavated	Uncertain
S20	15-25	Male	1.78m	A	254°	Supine	Little	None	17		Uncertain
S22	35-45	Female	1.52m	B	236°	Supine	Some	None	17		Uncertain
S30	Adult	-	-	A?	-	?	Much	None		Part only observed in builders trench	Uncertain
S10	35-45	Male	1.67m	A	227°	Supine	Little	None	9	Squashed into under-sized shallow grave	?Execution
S12	25-35	Male	1.76m	C	178°	Supine	Little	None	11	Legs only excavated	?Execution
S27	Adult	-	-	B	179°	?Supine	None	None		Legs only excavated	?Execution
S29	15-25	-	-	A	163°	?Supine	None	None		Legs only excavated	?Execution
S6	45+	Male	-	B	180°	Supine	Much	None	5	Skull between legs; L. hand behind back	Execution
S8	25-35	Male	1.70m	B	163°	Supine	Some	None	7	Head face down; hands behind back	Execution
S9	35-45	Male	1.73m	B	219°	Supine	Little	None	8	Hands behind back	Execution
S11	25-35	?Male	-	C	202°	Pronc	Much	None	10	Hands behind back	Execution
S18	45+	Male	-	C	190°	Pronc	Much	?	10	Head detached from body; remains of leather belt	Execution
S21	25-35	Male	1.75m	B	166°	Supine	Little	None	7	Hands behind back	Execution

## Notes:

1 Burial numbers S5, S16, S31, S32 and S33 are omitted as little more than their bare existence is known (see M2-M33)

2 For details of age, sex and stature see M39-M43; for details of finds see figs 3-5 and M35-M38.

3 A = clear grave cut; B = ill-defined grave cut; C = no grave cut observed.

4 Orientation is measured clockwise from the north. The head was always approximately north or west.

5 This is a broad classification; for the details see M2-M33.

6 Almost all appear on fig 2 and pl 1 and only additional illustrations are listed here.

## TABLE 1. CLASSIFIED SUMMARY OF ARTICULATED BURIALS

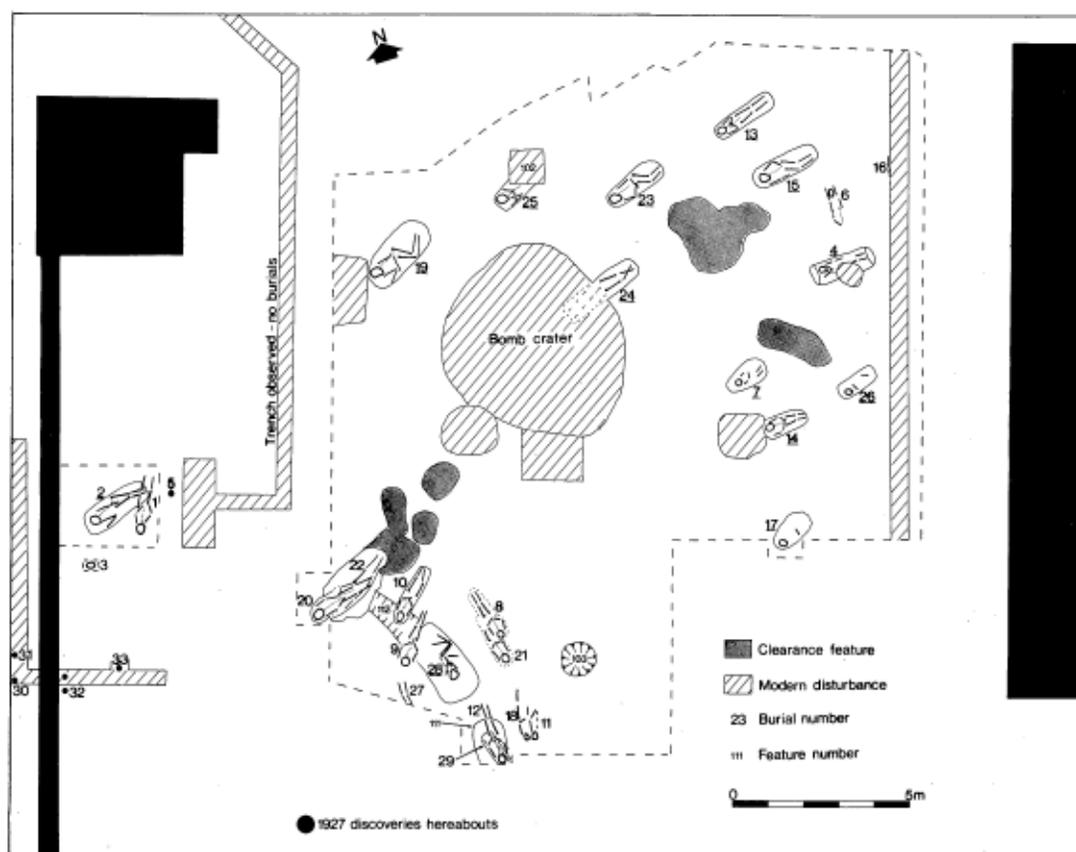


Fig 2. Goblin Works, Ashtead. The 1985 excavation. The number of burials which are certainly pagan are underlined

### The human remains by Tony Waldron

The human remains from this site were a mixture of pagan burials, bodies of uncertain date which had been executed, or probably executed, a number whose provenance was uncertain and a small number of bones associated with other contexts. In all, there was a total of at least 36 bodies from the site. (Note that this excludes one which was still in the custody of the police surgeon at the time the others were examined.)

#### GENERAL CONDITION OF THE BONES

The site had been disturbed at various times and had been damaged by bombs during the second world war. Thus many of the skeletons were incomplete and in most the surface of the bones was eroded. In addition, several had post-mortem breaks.

#### METHODS OF EXAMINATION

The age and sex of each of the skeletons was determined where possible using standard anthropological methods (WEA 1980). A definite sex could be given when the pelvis or the skull was sufficiently intact since their morphology is distinct between the sexes. In cases where other criteria had to be relied on, such as some long bone measurements, a probable sex was assigned.

Methods used to age adult skeletons are accepted as being rather unreliable once the epiphyses

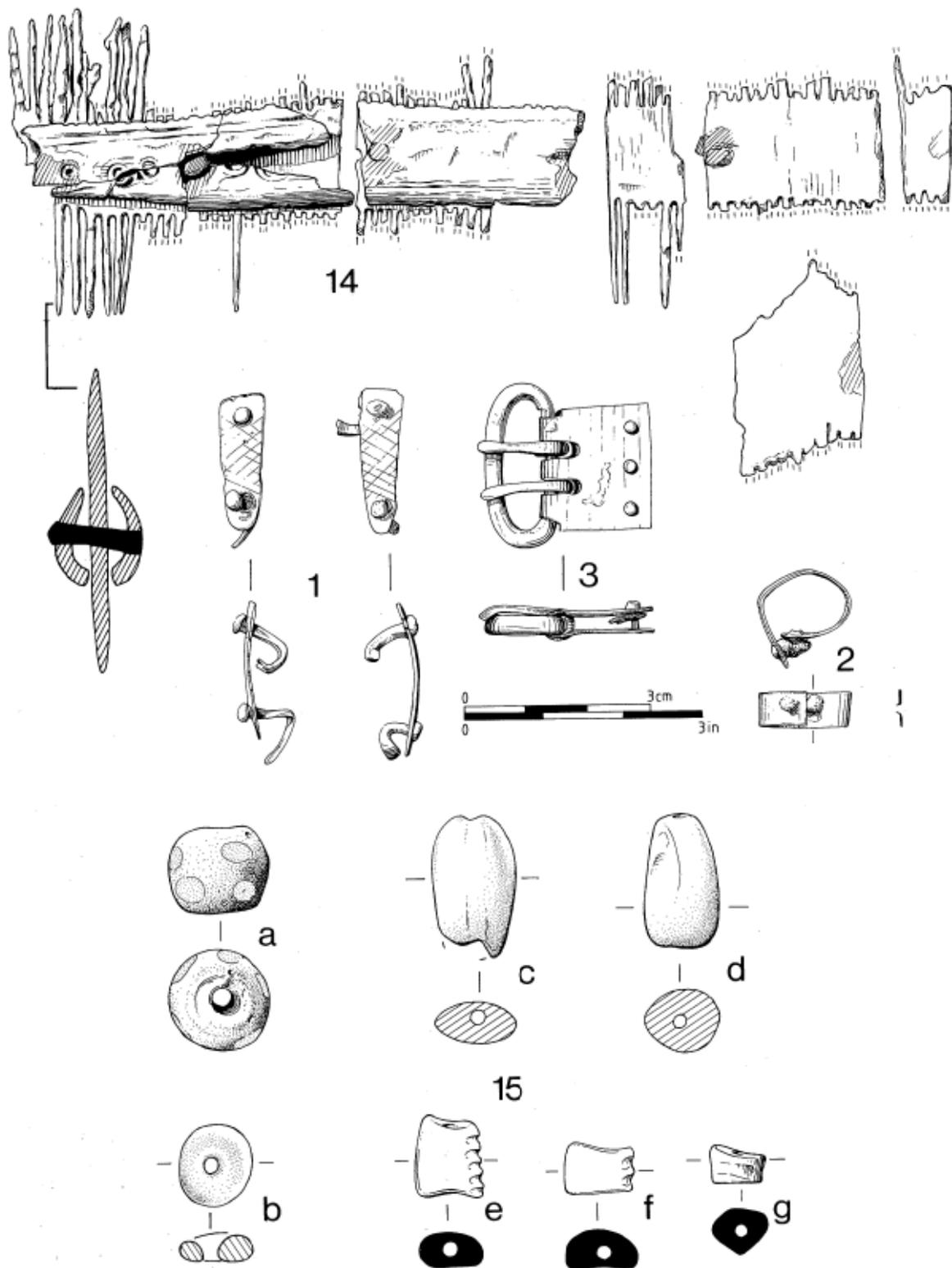


Fig 3. Goblin Works, Ashtead. Finds (scale 1:1). They are: 1, 2 – fastenings of copper alloy from S15; 3 – copper alloy buckle from S24; 14 – bone comb from S4; 15 – beads from S14 (a, blue glass with red polka dots; b, green glass; c, d, amethysts; e, f, g, cowrie shell)

have fused and reliance has to be placed on factors such as tooth wear (Miles 1963) or the morphology of the pubic symphysis. In juvenile skeletons a more accurate indication of age can be obtained from the state of dental eruption (Brothwell 1981). For the purpose of this report I have put the ages of the adults into ten-year bands but the ages of the juveniles are more precisely defined.

The heights of the adults were calculated using the regression equations published by Trotter in 1970. The equations estimate height from the maximum length of the principal long bones and each estimate has a standard error term which indicates the range within which the true height is most likely to lie. For example, for males, the height calculated from the combined lengths of the femur and tibia has a standard error of 2.99cm. Thus, if the height of a skeleton is calculated to be 170cm, the true height most probably lies somewhere between 167.01 and 172.99cm (that is,  $170 \pm$  the standard error). The standard error terms differ for each bone and when calculating heights, the measurement with the lowest error term was always used.

#### DEMOGRAPHY OF THE GROUPS

Since the skeletons from the site were not from a single population the demography will be described for each of the sub-groups separately. (A complete catalogue of the skeletons is given on M44-M48.)

*Sex:* Of the 13 known pagan burials, six were male, two female, one probably female and the remaining four were children aged between four and eight (see table 2a). Of the 13 burials of uncertain provenance, one was male, two female, one probably female and the remainder were of undetermined sex although they were all adult (see table 2b). The six executed skeletons were all male and so were two of the four possible executions; the remaining two in the latter group could not be sexed but they were adults (see tables 2c-d).

*Age:* The ages of the skeletons are also shown in table 2(a-d). Four of the adult pagans were 45 years of age or more at death whereas those in the executed and probably executed groups appeared to be rather younger at death; four were aged between 25 and 35 and there was one youngster who was only between 15 and 25 when he was executed. The numbers involved, however, are so small, that not too much should be read into these comparisons.

*Height:* Only six of the pagan skeletons could be assigned a height. The one female was 1.72m in height (5ft 7½in) whilst the five males ranged in height from 1.71-1.83m (5ft 7½in-6ft 0in). This female was somewhat above the average height of modern women (1.66m) and the males at the site also tended to be tall by comparison with the present day male population; the average male height today is 1.74m. Again, the numbers are too small to know whether this is a true reflection of the general height of the population from which these skeletons were derived or whether it is a statistical anomaly. The executed skeletons were rather shorter than the pagans, ranging in height from 1.67-1.76m (5ft 5½in-5ft 9½in). All the data for height are shown in table 3.

#### DENTAL HEALTH

On the assumption that there were the remains of 32 adults at the site, a total of 1024 (32×32) teeth has to be accounted for. In fact, there was evidence for substantially less than half this number. Four hundred and six teeth were present with 32 empty sockets from which teeth had been lost post-mortem, 10 third molars were unerupted and 14 teeth had been lost during life; a total of 462 or 45.1% of the expected number. This low proportion reflects the rather poor overall state of preservation. The state of the teeth and jaws, however, was generally unremarkable. There was only one instance of dental caries (inh 10); this skeleton had also lost some teeth during life as had three others (inhs 13, 23 and cont 100), presumably as the result of tooth or gum disease.

The skeleton with dental caries also had heterotopic maxillary canines. Both abnormal teeth were placed high up and their roots protruded into the nasal cavity on either side. Heterotopic teeth are usually but not invariably super-numerary (Ortner & Putschar 1981). In the present case it was impossible to tell, however, because the maxilla was damaged and the anterior teeth were lost and the sockets were not present.

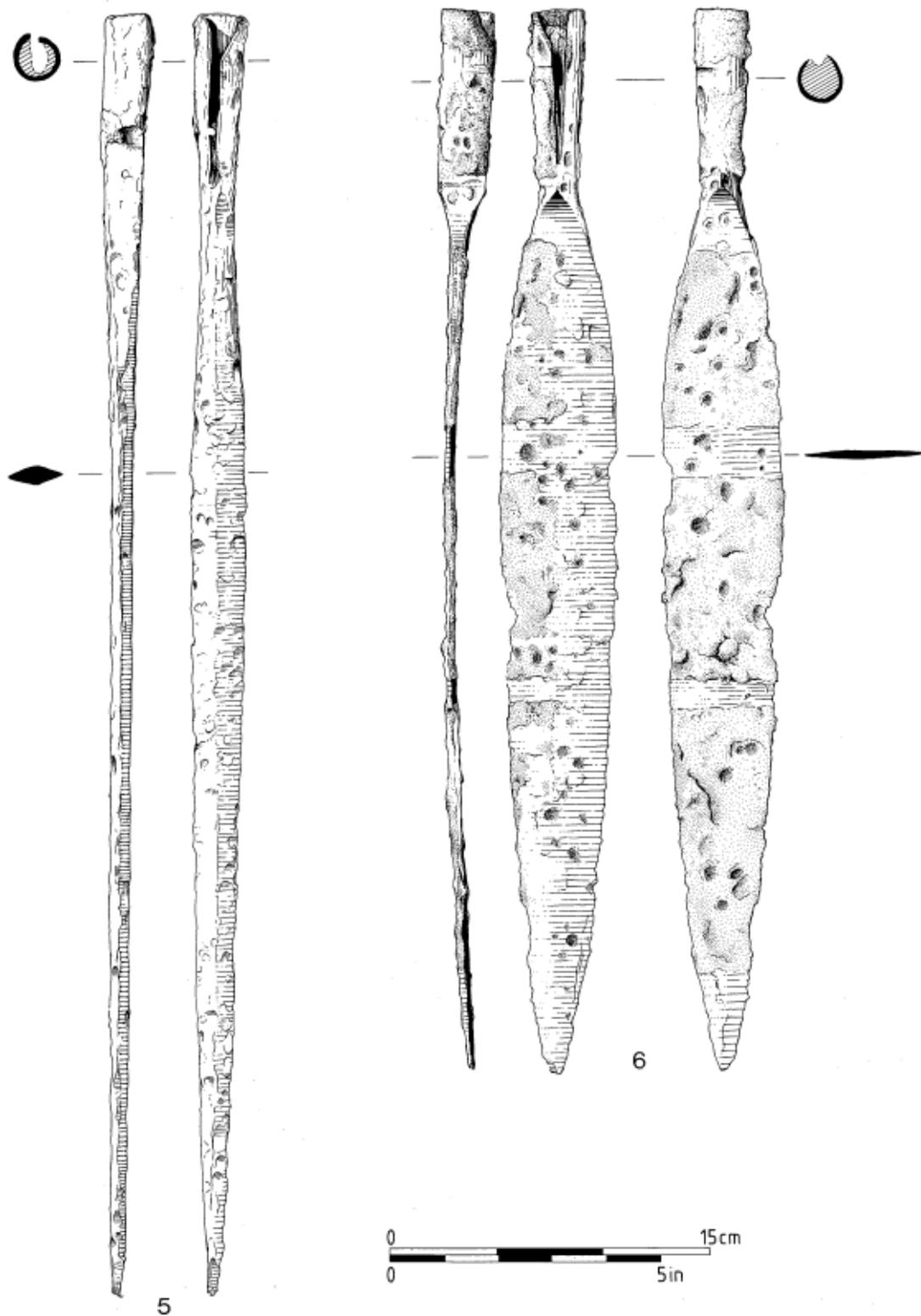


Fig 4. Goblin Works, Ashtead. Iron spearheads (scale 1:3). They are: 5 - from S15; 6 - from S24. Note the differential corrosion, perhaps suggesting the original presence of a scabbard with more substantial bindings at intervals

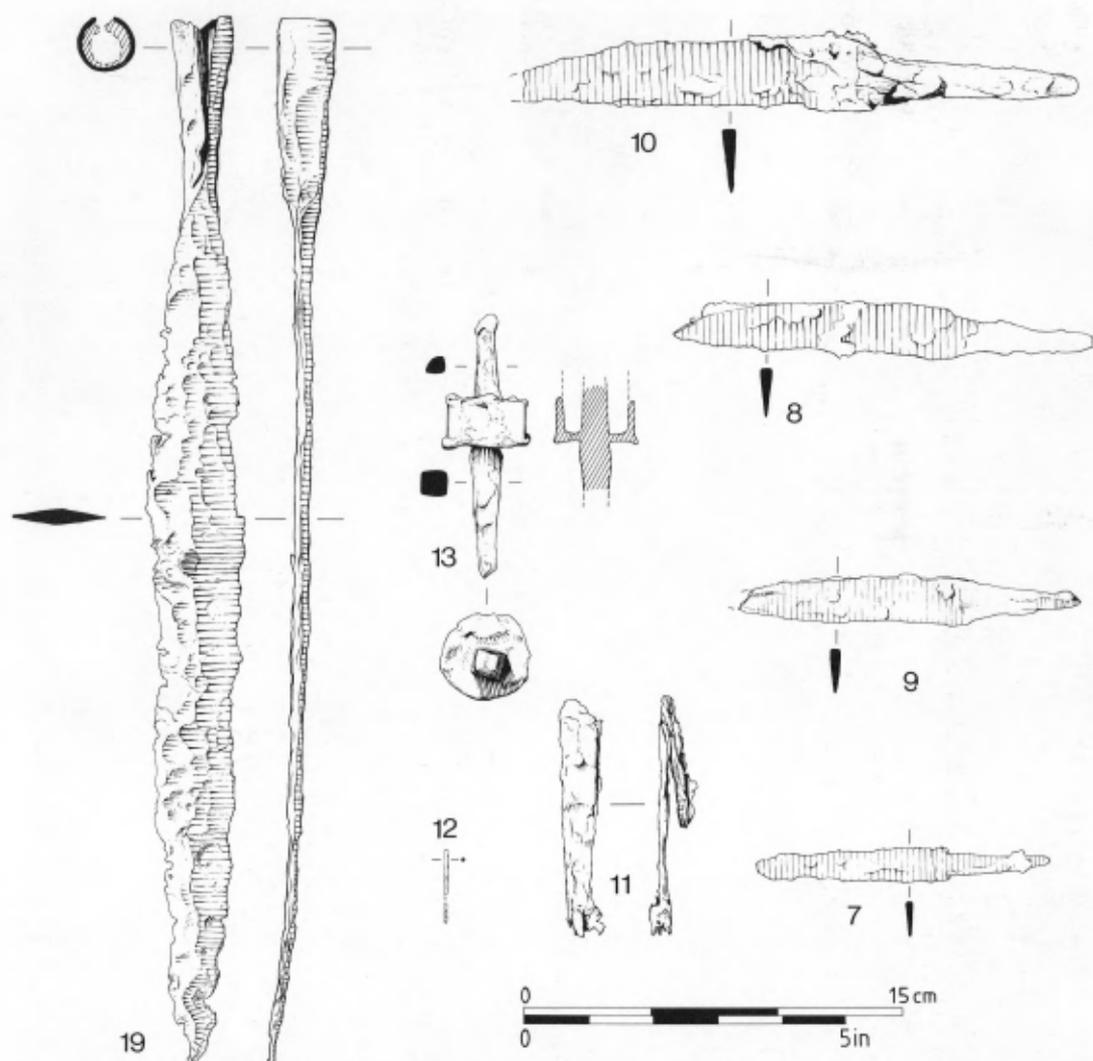


Fig 5. Goblin Works, Ashtead. Iron objects (scale 1:3). They are: 7 (from S15), 8 (from S14), 9 (from S23), 10 (from S24) – knife blades; 11 – uncertain purpose from S15; 12 – pin from S15; 13 – ‘ferrule’ (see M37) from S28; 19 – spearhead found in 1974

#### PATHOLOGY

Pathological changes of varying degrees of severity were found in 11 of the inhumations and in two of the other contexts (the full catalogue appears in M44–M47). There were two instances of osteoarthritis (inh 13 and cont 105) both affecting the spine; in 105 there was also evidence for osteoarthritis at the acromio-clavicular and the sterno-clavicular joints. In addition, inh 13 had degenerative disc disease in the cervical spine as did two other skeletons (inhs 8 and 28). Skeleton 8 also had degenerative disc disease in the interspace between the fifth lumbar vertebra and the first sacral segment. None of these findings is remarkable since they occur commonly in skeletons from all archaeological sites.

*Spondylosis and other lumbo-sacral abnormalities:* Spondylosis is a condition in which the neural arch of one of the lumbar vertebrae (usually the fifth) becomes detached from the rest of the bone. The cause of this abnormality is not known although there is some evidence that it is due to trauma to



Pl 1. Goblin Works, Ashhead. General view of the excavations, looking west. The ranging rods are in 0.5m divisions and aligned north-south



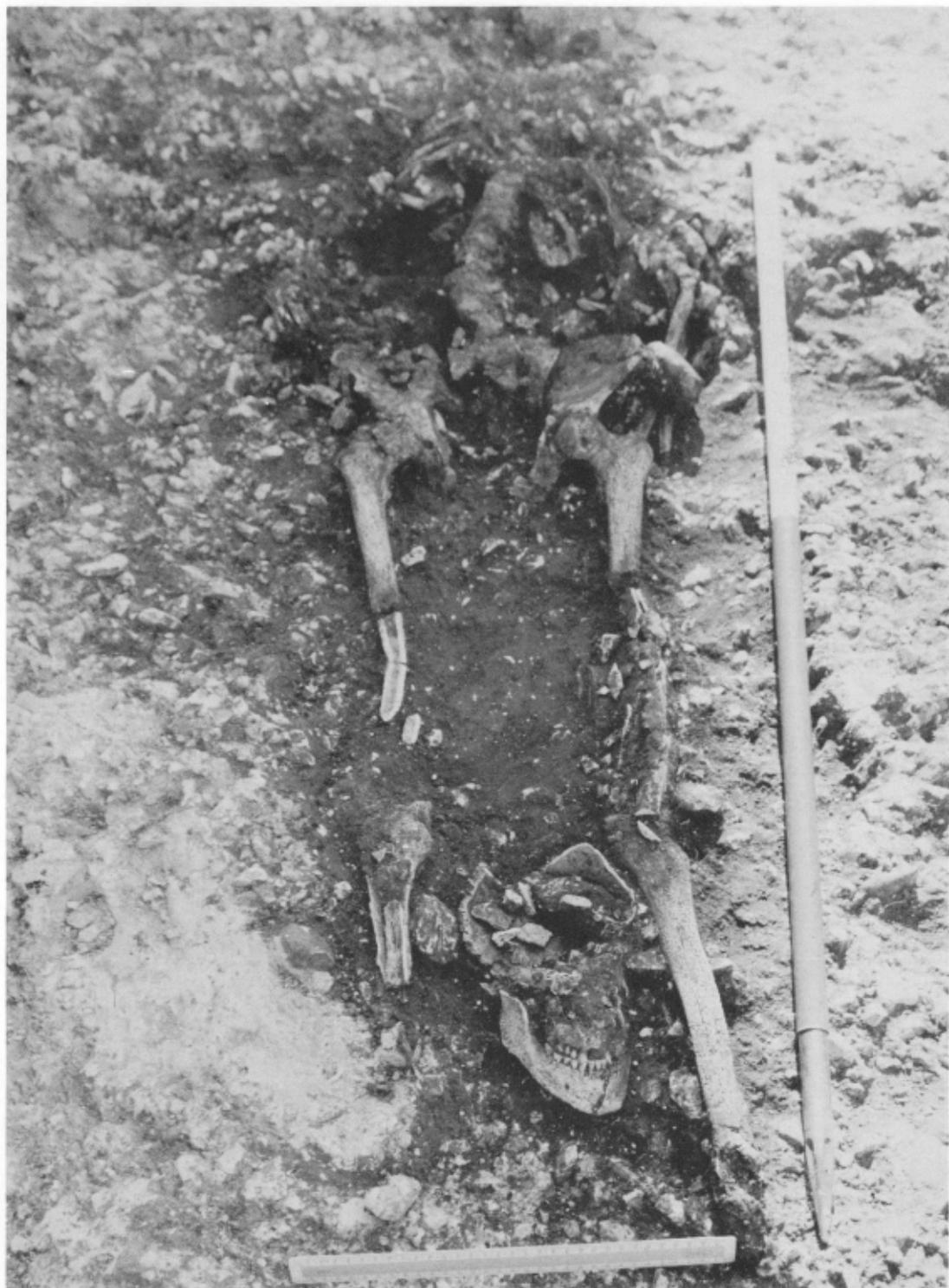
Pl 3. Goblin Works, Ashtead. S2. The brick covered electric cable had not disturbed the body. (Looking west, scale in 0.5m divisions)



Pl 2. Goblin Works, Ashtead. S1. (Looking south, scale in 0.5m divisions)



Pl 4. Goblin Works, Ashted. S4. A cowrie shell (18) and bone comb (14) are just visible either side of the left arm. (Looking west, scale in 0.5m divisions)



Pl 5. Goblin Works, Ashtead. S6. Note the head placed between the legs. (Looking south, scale in 0.5m divisions)



Pl 6. Goblin Works, Ashtead. S7. (Looking west, scale in 0.5m divisions)

the spine during childhood (Wiltse *et al* 1975). In one of the two cases here (inh 20) the break in the neural arch had occurred only on the left, something which is relatively uncommon (Roche & Rowe 1951). The lesion in this skeleton was associated with degenerative disc disease between L5 and S1 which may have been partially or completely due to the defect in the lumbar vertebra. In the second case (inh 18) the defect was complete and had apparently caused no other abnormalities.

There was one case here of *spina bifida occulta* (inh 9). The laminae of the fifth lumbar vertebra were unfused and although only the first two segments of the sacrum were present – and damaged – they were almost certainly also unfused. There were no other abnormalities in this skeleton which

was virtually complete. This condition is benign and the individual would have been unaware of it during his lifetime.

#### POSSIBLE POLIOMYELITIS

Skeleton 10 has already been mentioned in the context of its heterotopic teeth. The right tibia of this skeleton and the right ankle joint were also abnormal. The tibia was shorter and more gracile than the left as the following measurements (in mm) show:

	Left	Right
Total length (TiL1)	350	330*
AP diameter (TiD1)	35	33
ML diameter (TiD2)	23	23
Width of proximal epiphysis (TiE1)	70	59
* estimated length		

None of the other bones showed any disparity in length. The right talus was fused to the tibia and in addition, the superior joint surface of the calcaneum and the reciprocal inferior surface of the talus were abnormal in shape and had some new bone around their margins.

It is possible that the shortening of the tibia is a post-paralytic phenomenon, perhaps resulting from poliomyelitis. The abnormalities in the ankle joint may be secondary to trauma or to an infection. Certainly this individual would have been incapacitated to some extent by the condition of his leg and would have walked with a pronounced limp.

#### TRAUMA

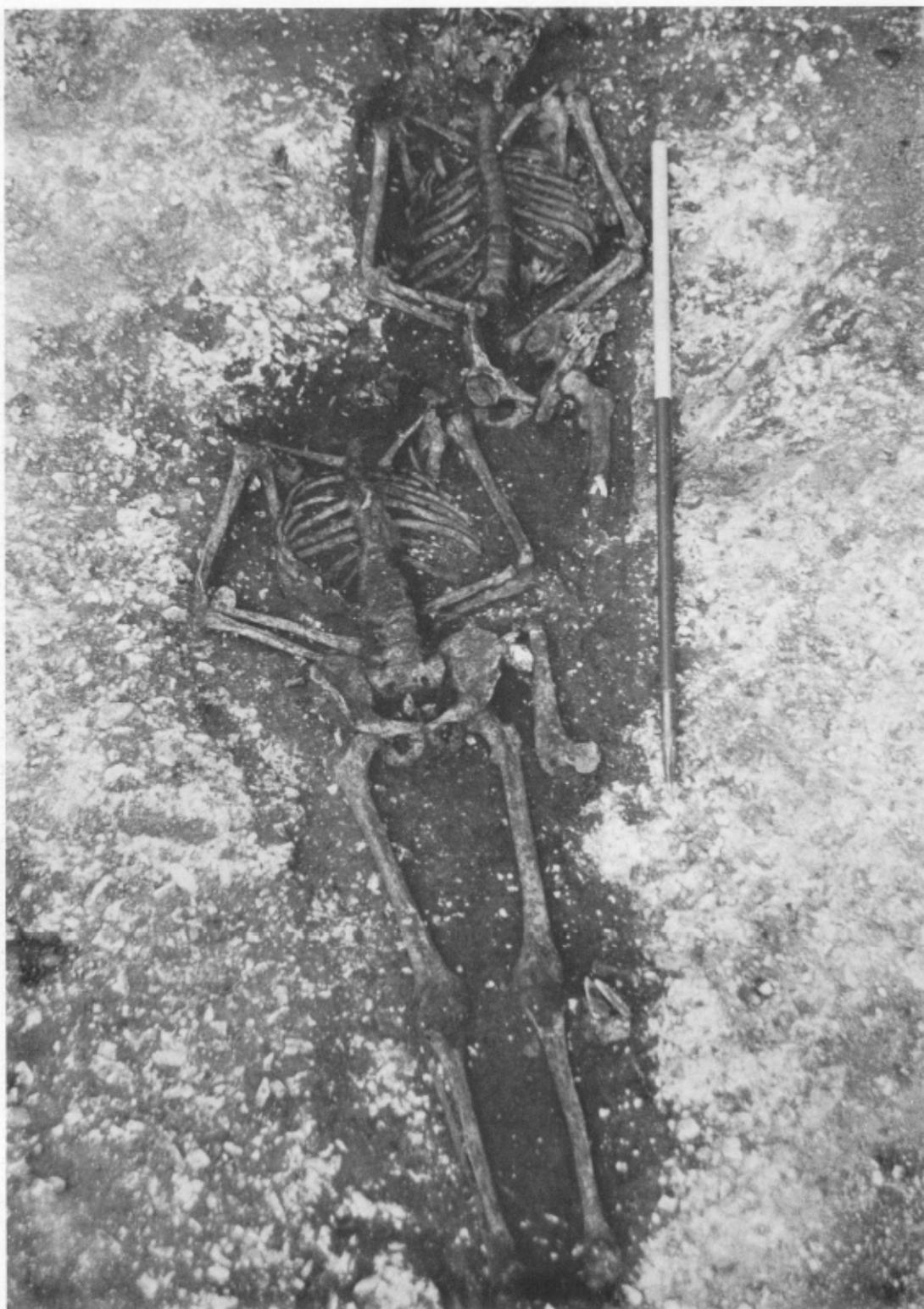
Two of the skeletons (inhs 21 and 28) had fractured clavicles, one left and one right respectively. Both had healed well although not in perfect alignment, and in inh 21 healing had been accompanied by some shortening. There were no other fractures nor any other evidence of trauma. Skeleton 6 had almost certainly been decapitated but I could find no signs of this on the cervical vertebrae of the skull because of their poor state of preservation

#### *Comment*

The most interesting feature of this group of skeletons was the presence of some individuals who had apparently been executed. Bodies of executed criminals are not uncommon (see Harman *et al* 1981; Poulton 1987) and the usual evidence for their execution (where decapitation has not obviously taken place) is finding the skeleton with the arms behind the back as though tied. The presumption is that the individuals with tied hands had been hanged. There are usually no skeletal signs of trauma although there are occasional references to disarticulated necks and Keith (in Lowther 1931, 46) refers to a skull which 'shows rupture of its base - a lesion which is found in death by hanging - with a long drop'. Unfortunately Keith does not appear to have given any further details about this skeleton and it (and the others from the site) are no longer extant.

Normally one would not expect to find much in the way of trauma in those who had been hanged, especially with a running noose as was the practice until comparatively recently. Hanging with a running noose cuts off the arterial blood supply to the brain by occluding the carotid arteries and also interferes with breathing by compressing the vagus nerves in the neck. There is usually no disarticulation of the neck nor is any bony damage caused. The skulls and upper cervical vertebrae from some of the executed skeletons were unwashed when I examined them and I was able to look carefully at the disposition of the vertebrae and in none was there any suggestion of dislocation or trauma.

One sign of violent death which may be present, however, is flexion of the fingers. During the examination of two apparently hanged skeletons from one of the Galley Hills barrows on Banstead Down in Surrey (Barfoot & Price-Williams 1974) we were able to see that, in both cases, the fingers



Pl 7. Goblin Works, Ashted. S8 (foreground) and S21. Note the hands behind the back in both cases. (Looking south, scale in 0.5m divisions)



Pl 9. Goblin Works, Ashread. S10. (Looking south-west, scale in 0.5m divisions)



Pl 8. Goblin Works, Ashread. S9. Note the hands behind the back. (Looking south, scale in 0.5m divisions)



Pl 10. Goblin Works, Ashtread, S11 (left) and S18. Note that these are both prone burials, with the skull of S18 separated from the body. (Looking south, scale in 0.5m divisions)



Pl 11. Goblin Works, Ashtread, S12. Note the bones from an earlier burial around the upper part of the body. (Looking south, scale in 0.5m divisions)



Pl 13. Goblin Works, Ashstead, S14. The beads (15) are hidden under the chin.  
(Looking west, scale in 0.5m divisions)



Pl 12. Goblin Works, Ashstead, S13. (Looking west, scale in 0.5m divisions)



Pl 14. Goblin Works, Ashted. S15. Note the spearhead (5) running from the waist to the collar-bone parallel with the right arm



Pl 16. Goblin Works, Ashtead. S19. An iron knife (8) is just visible partly beneath the left forearm. (Looking west, scale in 0.5m divisions)



Pl 15. Goblin Works, Ashtead. S17. The bones of this child have almost completely decayed. (Looking west, scale in 0.5m divisions)



Pl 18. Goblin Works, Ashtread. S23. (Looking west, scale in 0.5m divisions)



Pl 17. Goblin Works, Ashtread. S20 with parts of S22 visible below. (Looking west, scale in 0.5m divisions)



Pl 20. Goblin Works, Ashtead. S25. A roughly square modern pit (102) has cut through the lower part of the burial. (Looking west, scale in 0.5m divisions)



Pl 19. Goblin Works, Ashtead. S24. The spearhead (6) is visible beyond the articulated bones and at a lower level within the bomb crater, but still in the right relative position to the body. (Looking west, scale in 0.5m divisions)



Pl 22. Goblin Works, Ashtead. S28. (Looking west, scale in 0.5m divisions)



Pl 21. Goblin Works, Ashtead. S26. The bones of this child have almost completely decayed. (The scale is 30cm long)

were tightly flexed at the inter-phalangeal joints (Waldron & Waldron 1988). This, we considered, was an indication of a violent death when the victim was extremely fearful and struggling. We have found no other reference to this in descriptions of similar skeletons and we were able to find it because the skeletons had been removed *in situ* and taken to a museum with a substantial amount of soil still around them. In the more favourable conditions of the museum we could excavate more easily than is possible in the field and make a careful study of the position of the fingers.

Although it would be much more difficult in the field, it would be worth looking for finger flexion in other skeletons which may come to light in which the hands are thought to have been tied. In the absence of positive signs in the skull or neck, finding the fingers tightly flexed is not in itself evidence for hanging, but it is certainly an indication that the death was a violent one.

### Other finds

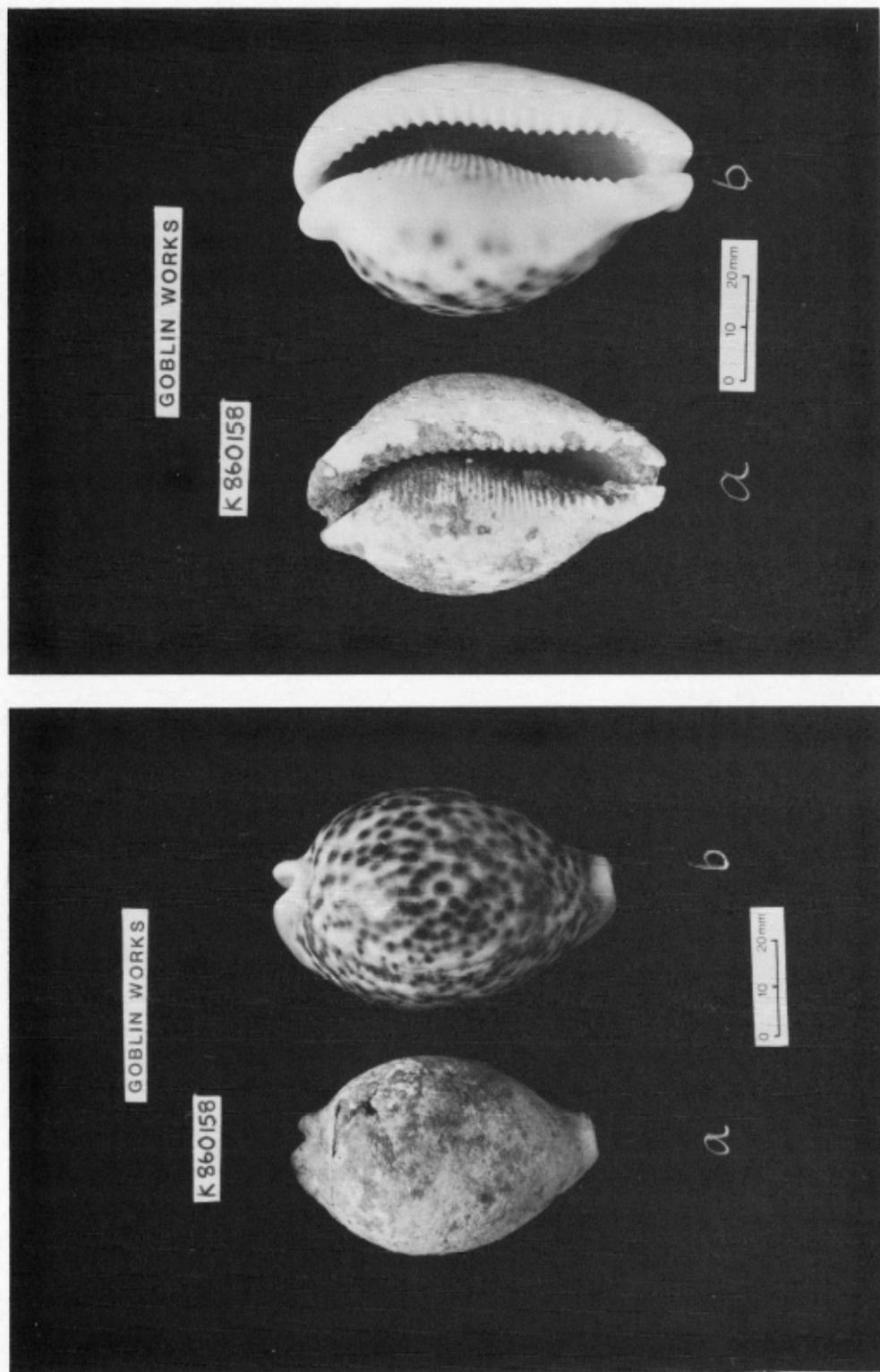
For a full catalogue of other finds see M35–M38. The main points for most finds are summarised in the captions to figs 3–5. Fuller reports on a bead necklace and a cowrie shell which were of particular interest are given in Appendices 1 and 2.

### Discussion

#### *The pagan Saxon cemetery*

It is apparent that two distinct types of burial are represented at the Goblin Works site. The earlier group is of burials in the normal pagan Saxon tradition. They were generally laid out east–west, which is the most frequent orientation for such inhumations, though the north–south alignment of S28 (fig 2) nevertheless finds plenty of parallels (compare, for example, Mitcham (Bidder & Morris 1959)). Their graves were well cut and penetrated solid chalk, and were, perhaps, originally some 80–90cm below ground level. The graves must normally have been marked at the surface (perhaps simply by a slight mound after backfilling of the grave, though S4 (pl 4) was probably marked by head and tail boards) since they are fairly evenly spaced, though not apparently laid out in the even more orderly rows observed, for example, in the recently discovered cemetery at Tadworth (Nelson 1987). The bodies were found in either a supine or a foetal position, though there is considerable variation in the position of the head, arms and legs. In some cases the competence of the gravediggers may be doubted; the position of S23 (pl 18) seems to be the result of an over-small grave, while S15 (pl 14) had his feet squashed against the end of the grave, but a gap of some 12cm at the head end. S19 (pl 16) is curious in that this man was laid out in a foetal position, although the grave was dug large enough to accommodate an extended burial.

A number of the burials had grave goods buried with them, though the absence of objects in some of the pagan burials is a normal feature of Saxon cemeteries (cf Meaney 1964, *passim*). Three of the burials – S15 (pl 14), S24 (pl 19) and the 1974 discovery – were accompanied by socketed iron spearheads, while a number of others were accompanied by iron knives. A more unusual find accompanied the male burial S4 (pl 4), which had, in addition to a double-sided bone comb, a Panther Cowrie shell with it. The type is localised to the Red Sea (see Appendix 2) and is a remarkable illustration of the distance which an object valued purely for its amuletic properties (conceivably as a charm against the ‘evil eye’) might travel (cf Meaney 1981). These properties may also explain the manufacture of three small beads from a Panther Cowrie, which formed part of a necklace worn by a six- or seven-year-old child. The necklace included also two amethysts and two glass beads, one of which, of red polka dots on a blue background, may have been manufactured in the Rhineland (see Appendix 1). The bodies were evidently clothed in some cases, as the presence of belt-buckles makes clear, and it seems certain that this was true of some or all of the other pagan burials, but that the materials were entirely organic and have decayed completely. It also seems very likely that wooden or leather artefacts were originally present. The most convincing indication of this is the way in which the hands of S19 (pl 16), S25 (pl 20) and S28 (pl 22)



Pl 23. Goblin Works, Ashstead. The Panther Cowrie: (a) the shell in grave S14, (b) a modern example

were in each case placed as if to grasp a wooden staff. A total of 14 burials from the Goblin Works cemetery may be classified as in the pagan Saxon tradition. The majority of these are grouped over the northern and eastern parts of the main excavated area, with a large gap without pagan burials between this group and S28, near the south-western edge of the dig. West of this S2 was uncovered and further west again a pagan burial with spearhead was uncovered in 1974 (fig 1). There are no grounds then for supposing that the limits of the cemetery have been defined in any direction, although observation of ground disturbance to the north and east suggests it may not have extended far in those directions, while observations of a trench dug along the line of Green Lane (fig 1) tends to support the suggestion (below) that the parish boundary marked the limit of the cemetery to the south. The number of finds with burials is very few and only the spearheads (M35–M38) and the bead necklace (Appendix 1) can be even approximately dated. For all a 7th century date seems most likely.

The most reasonable interpretation of the cemetery, despite the uncertainties indicated above, is that it was a fairly small burial ground, serving a community of, at most, a few families. No direct evidence for the site of their settlement has been uncovered, although two considerations suggest it is unlikely to be adjacent to the cemetery. Firstly, observation of groundworks in the area around revealed no trace of occupation, though the already disturbed nature of the ground and the well-known difficulties of recognising the fugitive traces of Saxon settlement in such circumstances should be borne in mind. Secondly, none of the detritus which might have been expected to spread from a nearby settlement was found in the graves. The argument can, therefore, only proceed by analogy. The most important fact is the presence of the parish boundary between Ashted (on the north side) and Leatherhead running along the old path of Green Lane/Ermine Way (fig 1B). A large literature (eg Arnold & Wardle 1981; Bonney 1966; Goodier 1984) is developing around the relationship between parish boundaries and Saxon cemeteries, with the consensus of opinion tending to the view that, at least from the 6th century, cemeteries were sited with some frequency on the edges of well-defined estates (manors) whose limits were often fossilised and preserved in the medieval ecclesiastical parishes. The problem which remains to be resolved is whether the settlements which the cemeteries served were located beside them on the boundaries, or, as the medieval villages frequently were, in a more central position to the estate, or even whether the cemetery served a number of dispersed settlements within the estate. In fact, there is very little evidence for contiguous settlements for the cemeteries sited on boundaries, though few have been sufficiently well explored for certainty. Where settlement and cemetery are found together, as at Mucking (Jones & Jones 1975) or Bishopstone (Bell 1977), they seem to belong to an early phase of Saxon settlement; conversely, settlements such as Chalton (Champion 1977) which are not earlier than the 6th century, do not seem to have adjacent cemeteries. The suggestion, then, is that a practice of locating cemeteries on boundaries away from occupation areas began after the earliest Saxon settlements had been established. This emphasis on the boundary might indicate a growing concern for the maintenance of territorial rights, or alternatively suggest that the boundaries were then newly established (as suggested by Goodier 1984; but cf Poulton 1987a, note 47). So far as the Goblin Works site is concerned the implication is that the associated settlement(s) lies at some distance in Ashted parish. Only one archaeological find is relevant to this, the discovery by Lowther (1959) of part of the rim of an urn and an iron knife, both of early Saxon date, on the site of the Roman bath-house at the Ashted villa.

This association, pregnant with possibilities, brings us to the final question with regard to the Goblin Works cemetery: How does it fit into the pattern of Saxon settlement in Surrey? This may be simply summarised (Poulton 1987a) as one of the 5th century Saxon sites – Mitcham, Beddington, Croydon – being confined to a limited area in the north and east of the county with a spread along the dip-slope of the North Downs (but apparently not beyond) during the 6th century. The Goblin Works site forms part of a notable concentration of burials towards the eastern end of the North Downs in Surrey, including the nearby cemeteries at Hawks Hill (Smith 1907) and Watersmeet (Cotton 1933; Poulton 1987a, figs 8.4 and 8.5 and note 14) (fig 1). This should probably be interpreted as newcomers fitting into or taking over an existing pattern of settlement, which would give significance to the association of Saxon finds and Roman villa at Ashted.

### The execution site

There is a very marked contrast between the pagan burials just discussed and the second group which must represent execution victims. These latter were much less consistent in orientation, though they tended to a north-south axis, and they were buried either on top of or just penetrating solid chalk, at an original depth of 50cm or less. They seem to have been unmarked at the surface since there are several cases of later burials disturbing earlier ones. In general these interments were made in a casual and careless fashion, which, at the extreme of prone (face-down) burial, found in at least two instances, may indicate a deliberate dishonouring of the dead. More important was the clear evidence for execution in a number of cases, such as S6 (pl 5) who had been decapitated, or S8 and S21 (pl 7) with their hands tied behind their backs, no doubt as a preparation for hanging (see above). There was no evidence of grave goods, and it seems likely that these people were stripped of their clothing before burial.

All the probable execution victims, except for S6, were found in the south-west part of the excavated area (fig 2), where a number of other burials, lacking clear evidence for their mode of death, are more likely to belong to this phase of the site's use than to the pagan one. Lowther's discovery of mutilated and dismembered bodies was also in the same general area. He interpreted his discovery as representing the massacre of Danes fleeing from a battle (Lowther 1951, 24). The battle he refers to was that recorded by the *Anglo-Saxon Chronicle* at *Aclea* in 851, which he considered to be Ockley, Surrey. However, the early forms of the latter name make it clear that it is not derived from an earlier *Aclea* (Gover *et al* 1934, 276). Even if the battle had taken place it could still not explain all these late burials at the Goblin Works as it is evident from the incidence of intercutting burials of this phase that interment took place on more than one occasion. Stratigraphically some of the execution victims are later than some pagan burials, but how much later is difficult to say. This apart, there is no direct dating evidence for them. (The sherds from context 103 – which might represent the hole dug for a gallows tree – were previously claimed as Saxo-Norman (Poulton 1987b, 317) but are now considered to be probably Roman (M35).)

A better guide to the probable date of the site is to be found by comparison with similar sites excavated elsewhere. One of the best examples is that excavated at Guilddown (Lowther 1931). The location of the site is closely similar to that at the Goblin Works: both occupy elevated positions on the North Downs overlooking a medieval town situated where a river cuts through the Downs (Leatherhead by the Mole, and Guildford by the Wey, respectively). More importantly the Guilddown site produced evidence of an early Saxon cemetery overlain by a large execution cemetery. The excavator was inclined to ascribe the majority of the bodies to a reputed massacre of 1036, but was aware that more than one occasion of burial was involved: most pertinently one burial was found with a coin of 1043 (Lowther 1931). This type of evidence is matched at another execution site at Stockbridge Down, Hampshire (Gray-Hill 1937) where an armpit purse produced coinage whose latest date of use is put at 1065 (Dolley 1957). This is not the place to attempt an exhaustive review of the known execution sites (for some Hampshire examples and a valuable discussion see Aldsworth 1979, 174–9), and it will be sufficient to say that wherever dating evidence is forthcoming it belongs to the late Saxon or early Norman period, and it therefore seems highly likely that the Goblin Works site belongs to the same era.

It has, furthermore, been pointed out by Aldsworth (1979) that such sites, like the present one, seem to be deliberately sited on boundaries. Clearly, therefore, the edge of a territory was thought to be the appropriate place for the execution and burial of criminals condemned to death by the increasingly ferocious late Saxon laws (cf Gray-Hill 1937, 257–8; Robertson 1925). In these circumstances it may be largely coincidence, occasioned by preference for the same type of site, which leads commonly, but not exclusively, to the re-use of pagan Saxon sites for this purpose, rather than any lingering notion of the inherent appropriateness of a pagan burial ground for criminals who, by definition, were outside the Christian faith.

**Appendix 1: The bead necklace** by Mark Reeve

The necklace (fig 3) comprised seven beads as follows:

- (i) An amethyst – drop-shaped: 12.2mm wide × 21.8mm long with 2mm perforation.
- (ii) An amethyst – drop-shaped (but broken at one end): 13.6mm wide × 22.9mm long, with 2mm perforation.
- (iii) A clear green translucent glass annular bead: 13.3mm wide × 4.9mm long, with 2mm perforation, off-centre.
- (iv) A blue opaque barrel-shaped glass bead with pairs of irregular red opaque spots on it – one missing: 16.3mm wide × 14.3mm long, with 3mm perforation.
- (v) An irregular shaped bead made of cowrie shell with oval cross-section: 11mm wide × 13mm long with 2mm perforation.
- (vi) An irregular shaped bead made of cowrie shell with sub-triangular cross-section: 7.7mm wide × 8.4mm long with 2mm perforation.
- (vii) An irregular shaped bead made of cowrie shell with sub-oval cross-section: 9.7mm wide × 5.8mm long with 2mm perforation.

The beads found in this excavation are a surprising feature. The two amethysts are quite unusual, in the context of Anglo-Saxon cemeteries in Surrey. Only three others are known, two from grave 109 and one from grave 121 at Mitcham.

Although amethysts have their origins in the Mediterranean and are known from very early times in Egypt, they are essentially a 7th century feature both in Anglo-Saxon graves, and on the Continent where they are found along the Rhine Valley. In England the main concentration of amethysts is to be found in East Kent, reflecting both the close links between the Kingdom of Kent and the Frankish Kingdom, and the dominating position of Kent with regard to relations between England and the Continent.

One of the problems with regard to Anglo-Saxon archaeology is that many of the cemeteries were excavated in the last century and that surviving records are not comprehensive. Accordingly, it is difficult to be precise about numbers of amethysts, but whereas they have been found on 24 sites in Kent and on 27 sites elsewhere, the total numbers in Kent are about 250, and in the remainder of the country about 55.

The presence of the three beads manufactured from a cowrie shell with origins in the Red Sea is particularly interesting. Examples of beads made from cowrie shells are known from grave 121 at Shudy Camps, Cambridgeshire, and from a female in a triple burial at Ducklington, Oxfordshire. These beads have been described as having been cut from the lip of a cowrie shell and incorporating unmistakable ridging (Meaney 1981) while grave 11 from Shudy Camps and a female grave at Buckland Denham, Somerset, may also have had beads made from cowrie shells in them.

However, graves E2, E3 and F2 at Marina Drive, Dunstable, Bedfordshire, are described as containing one bead and two pendants, four beads, and two beads, respectively, made of fishbone (Matthews 1963). These beads appear similar to the ones described in this report and the festoon of beads in grave E2 also included four amethysts and that in E3, one amethyst, while grave F2 contained a cowrie shell by the feet of the skeleton. Similarly at Buckland, Dover, grave 67 contained three amethyst and six shell beads and grave 75 four amethyst and one shell bead (Evison 1987). A grave at Finglesham, Kent (unpublished), contained a necklace of 17 beads, of which six were amethysts and four were very similar in appearance to the shell beads from Leatherhead.

The clear green translucent glass bead is a common type with similar beads having been found in both Mitcham and Guildown cemeteries (Bidder & Morris 1959; Lowther 1931). Other beads of this type have been found over a wide area and as far afield as Sewerby, East Yorkshire (Hirst 1985), and Spong Hill in East Anglia for example (Hills *et al* 1984). The blue opaque bead with pairs of red dots is not a common bead type. There is an identical one at Lechlade, Gloucestershire, from grave 56 and a similar one – perhaps less carefully made – from grave 639 (unpublished).

The presence of a small necklace around the neck of a child is fairly common in Anglo-Saxon

graves and generally contrasts with a larger number of beads found in adult graves which are usually hung in the form of a festoon from a pair of brooches on the shoulder or upper chest. However, by the 7th century the fashion of wearing large numbers of beads had declined.

It has been suggested that cowrie shells have an amuletic value relating to fertility, while amethysts have been worn as a protection against drunkenness. However, the greatest significance of this necklace of beads lies in the presence of the amethyst and cowrie beads. Both must be considered prestigious objects in view of their comparative scarcity and the distance from their place of origin. Some indication of their value is indicated by the fact that though one of the amethysts was damaged, it had not been discarded. This might also suggest that the amethysts are an heirloom. In any event the burial is clearly of a child of high status, particularly in the overall context of Surrey. It is perhaps worth noting that the wearers of the amethyst and fishbone beads in the Marina Drive Cemetery (Matthews 1963) are described as aged eight (E2 and 3) and 'small child' (F2).

The majority of glass beads found in Anglo-Saxon graves were probably manufactured on the Continent. Bead workshops are known from Trier in Germany and Rothulfuashem near Leiden in Holland. However, although one bead similar to the red and blue one from this site occurs at Butzov, Kr. Brandenburgland in the German Democratic Republic, they are absent from such well-published cemeteries as Krefeld-Gellep and Schretzheim (Koch 1977), and neither are they present in the Dutch and Belgian cemeteries of the period (cf Arrenhuis 1985; Reeve 1982; Tempelmann-Maczyńska 1985).

There is also evidence of monochrome beads being produced at Helgo in Sweden (Lundstrom 1976; 1981), and in the British Isles glass beads were being produced at Lagore Crannog and Garranes in Ireland and Mote of Mark and Brough of Birsay in Scotland. Without chemical analysis it is impossible to be certain of the origin of the glass beads, but there can be little doubt that the polychrome bead originated on the Continent where its pattern would present few difficulties to the glassworkers capable of far more complicated work.

## **Appendix 2: The identification of shell beads in grave S14 and a cowrie shell in grave S4 by M E Hutchinson**

The shell beads from S14 are interesting as they have been cut from the shell of a gastropod and the ridges down the side of each bead strongly suggest that this was a cowrie. An examination of various types of cowrie in the collections of the British Museum (Natural History) eliminated most species, including the Mediterranean cowrie (it is too small and the teeth round the aperture are too fine) and left as the most likely species the Panther Cowrie, *Cypraea pantherina*, or the Tiger Cowrie, *Cypraea tigris*. The Panther Cowrie is confined to the Red Sea while the Tiger Cowrie is found near the mouth of the Red Sea, down the east coast of Africa and in other places fringing the Indian Ocean. Both are shallow water shellfish and are easily found. However, a complete cowrie shell 66mm in length was found in grave S4 in the same cemetery and this has been positively identified as the Panther Cowrie by Dr J D Taylor, British Museum (Natural History). The balance of probabilities therefore would seem to suggest that the beads were cut from a Panther Cowrie (pl 23).

Although uncommon, this is not the first time that the Panther Cowrie has been found in a Saxon grave in this country. It has been found in Saxon women's graves excavated on Kingston Down and Sibertswold Down in Kent, in a grave near Wingham, also in Kent (Jackson 1917, 133) and doubtless elsewhere more recently.

*Acknowledgements:* I wish to acknowledge assistance from Martin Read (HBMC funded conservator), Robert Poulton (excavator) and John Taylor (BM (Natur Hist)) in writing this report.

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