# The Cemetery Site at Beacon Hill, near Lewknor, Oxon. 1972 (M40 Site 12): An Inventory of the Inhumations and a Re-appraisal

# By R. A. Chambers

#### INTRODUCTION

THE cemetery at Beacon Hill (SU 722972) was excavated in 1972 as part of the M40 motorway rescue programme. Since the publication of the excavation report<sup>1</sup> radio-carbon dating of the skeletal remains from Graves 33 and 14 has indicated that the cemetery was in use in the mid-late Saxon period.

#### GENERAL INFORMATION<sup>2</sup>

This report is divided into two separate parts. The Grave Inventory lists the archaeological details of each grave and the pathology of the skeletal remains is described in the following section, The Human Bones, by Mary Harman.

In the Grave Inventory (below) the orientation of each extended body (with the exception of Grave 8, an inverted crouch burial) has been calculated from the longitudinal axis of the grave, e.g. 270° (magnetic) represents a W.-E. orientation. Every extended body was buried with its head to the west. The grave pit depths have been measured from the top of the chalk subsoil since 0·3-0·4 m. of soil had already been stripped from the site. The fill of each grave was a homogeneous mixture of broken chalk and topsoil which had become compacted and extremely difficult to excavate. The pottery from the grave fills occurred as small sherds and Mr. C. J. Young dated all the pottery to the Romano-British period around the 4th century A.D. The unusual graves have been discussed in the excavation report.<sup>3</sup> In this index D<sub>I</sub> is the drainage ditch on the north-east side of the motorway which first revealed the cemetery.

### GRAVE INVENTORY

(An asterisk indicates that there was residual pottery in the fill of the grave.)

1 253°; 0.45 m. deep. Supine adult, head and shoulders intact as far as could be discerned after disturbance from the mechanical excavation of D1. The lower half of the body remained undisturbed by D1 but was immediately robbed4 leaving only the leg bones which lay parallel and straight.

2 250°; 0.75 m. deep. Supine adult, knee area intact. The east end of the grave was cut by D1, destroying the feet. The skeleton was destroyed from above the knees by the later Grave 27.

<sup>1</sup> R. A. Chambers, 'A Cemetery site at Beacon Hill, near Lewknor 1972', Oxoniensia, xxxvIII (1973),

138–45. \*\* Ibid., 140, for the drainage ditch D2, read the drainage ditch D1 as in Fig. 1; and for 4 major root disturbances F2–F4 and F9 read 3 major root disturbances F3, F4 and F9.

4 Throughout this inventory *robbing* refers to the indiscriminate and unauthorized removal of skeletal material from unexcavated graves by unidentified persons.

3 & 4 Two numbers assigned to either end of Grave 18 which had been bisected by D1.5 5 245°; 0.20 m. deep. This grave appeared to have been almost obliterated by an adult burial, Grave 19. Of Grave 5 a leg bone and patella6 lying to the south side, adjacent to the adult rib cage of Grave 19 showed in section in the side of D1. This may indicate that the bones from Grave 5 were laid around the edge of the later burial as in Grave 11. This grave pit was robbed before excavation could commence.

6 263°; 0.45 m. deep. The centre of this grave was removed by D1. The remaining western portion contained an adult skull, the eastern end contained the humerus and femur of an infant, suggesting an infant burial (6b) disturbed by the digging of an adult

7 265°; 0.3 m. deep. Supine child (skeleton 7a); the fragmentary skeletal remains had been destroyed above the knees by D1. An adult jaw bone was found in the grave fill

8\* Circular pit 1 m. deep7 from the topsoil surface and 0.9 m. diam. Adult inverted crouch burial. The legs and body lay in a horizontal doubled up position, head bent down vertically over the knees.

9 240°; 0.15 m. deep. Supine skeleton 5 ft 5 in. long from head to heels, head against

the west end of the grave pit, arms by sides, legs parallel and straight.

10\* 265°; 0.45 m. deep. Supine adult, the head turned onto the right shoulder, the right hand rested on the stomach, the left arm crossed over the chest and the legs parallel

and straight.

- 11\* 255°. Various pelvic and other adult bones were found to the west end of the upper fill of Grave 31. There were arm and leg bones along the north and south edges and an adult skull to the very east end. Below this reinterred skeleton lay the later Grave 31. An ox tooth in the fill.
- 12 252°; 0.35 m. deep. Supine adult, head turned to left hand side, left hand over the pelvic girdle, right arm crossed over the left, the hand over the left pelvis. Legs parallel and straight.

13\* 255°; 0.25 m. deep. Supine child, skeleton decayed.
14 250°; 0.5 m. deep. Supine adult, the head lay turned hard onto the right shoulder as the grave pit was slightly too short to accommodate the body. Upper arms at sides, the legs together, parallel and straight.

This grave pit had disturbed an earlier grave, No. 35, of which only the skull remained in its undisturbed fill suggesting that the earlier grave had been re-used on purpose.

A radiocarbon date for the bone from Grave 14 gave a date of 820 A.D. +70 yrs. (uncorrected). Harwell ref., HAR-506.

15\* 255°; 0.3 m. deep. Supine infant; except for the head and legs the skeleton had

decomposed.

16\* 243°; 0.3 m. deep. Supine adult, skull missing, cervical vertebrae decayed to traces only. The spine lay in two intact halves by a sideways dislocation of one vertebra width. The left upper arm bore cuts inflicted by a sharp instrument. The legs were robbed out. Two sheep teeth in the fill.

17 267°; 0.25 m. deep. Supine child, only skull and leg bone fragments remained undecomposed. This grave cut into the side of an earlier grave (No. 26) but did not dis-

turb the body.

18\* 256°; 0.35 m. deep. Supine adult, presumed a complete skeleton, skull robbed out, legs bowed and feet crossed left over right. The lower half of the rib cage to the upper half of the thigh bones was destroyed by D1.

19\* 244°; 0.2 m. deep. Supine adult, lower chest downwards removed by D1, rest

robbed out.

20\* 235°; 0.3 m. deep. Supine adult, head upright, left arm to side, right hand over pelvic girdle, legs straight and parallel. The grave appears to have been dug longer than

7 Ibid., 140, FOR I in. deep READ I m. deep.

<sup>5</sup> Ibid., 140, FOR of the 39 graves, 38 contained . . . READ of the 37 graves, 36 contained . . . 6 Ibid., 142, thought to be the bones of a young person prior to the specialist's report.

was necessary and in consequence the bottom had been finished off leaving a shallow,

rough step beyond the feet.

21\* 252°; 0.5 m. deep. Supine adult. The grave pit was too short for the incumbent and the south-west corner of the pit had been hollowed out to provide a space into which the head had been crammed. The cervical vertebrae had entered the base of the skull during decomposition. Left arm at side, right hand over pelvic girdle, legs straight and parallel with both feet pointing inwards, toes crossed left over right.

22\* 252°; 0.5 m. deep. Supine adult, head upright, face crushed, right hand over

abdomen, left hand by side; legs straight and parallel.

23 250°; 0.6 m. deep. Supine adult, skull twisted to right hand side, arms by sides, legs straight and parallel.

24\* 237°; 0.5 m. deep. Supine adult, head upright, left hand over left thigh, right arm

by side, legs straight and parallel.

25\* 260°; 0.4 m. deep. Supine adult, head turned onto right side, right arm by side,

left arm with hand over abdomen, legs straight and parallel.

26\* 267°; 0.4 m. deep. Supine child, bone partially decomposed. Head resting on left shoulder, arms by sides, fingers over pelvis, legs straight and parallel. An unidentifiable iron object was found in the lower fill, but it might have been either residual or a burial relic.

27 250°; 0.5 m. deep. The west end of Grave 2 had been emptied for the first metre of its length and a supine child interred. Skeleton complete but in an advanced state of decay. Head upright, skull broken along suture lines, the lower jaw and back of skull displaced slightly south of the calva and face, both hands over the abdomen, legs straight and parallel.

28\* 250°; 0.35 m. deep. Supine adult, head upright, skull crushed, lower jaw crushed, upper jaw and cervical vertebrae missing. The upper half of the skeleton was badly decomposed. A short iron knife<sup>8</sup> was found in the lower fill. Whether this was residual

or a burial item was not clear.

29\* 245°; 0.6 m. deep. Supine adult, head removed by D1, arms by sides, feet beyond the limit of the excavation.

30 245°; 0.6 m. deep. Supine adult, head removed by D1, arms by sides, legs straight, lower legs beyond the limit of the excavation.

31\* 255°; 0.65 m. deep. Supine adult, head turned onto right shoulder, both hands over the pelvic girdle, legs together, parallel and straight.

32\* 255°; 0.4 m. deep. Supine adult; the skeleton had been robbed out from above

the knees, legs parallel and straight.

33\* 245°; 0·4 m. deep. Supine female adult, head turned to right, arms at sides, legs parallel and straight. Across the left breast lay the decayed remains of a neo-natal infant, 0·3 m. long. Two bone fragments, the second metacarpal of the right hand and a possible human rib fragment were found; the former lay close behind the skull cap, the latter lying 0·2 m. west of the neck. They appeared to be residual. Horse tooth in the fill. A radiocarbon date for the bone from this grave provided a date of 860 A.D. ±90 yrs. (uncorrected). Harwell ref.: HAR-507.

34 235°; 0.4 m. deep. Robbed. Presumed a supine adult, head west. A short iron

knife9 was later handed in from this grave.

 $35~250^{\circ}$ ; 0.75~m. deep. Supine adult, below the skull the body had been destroyed by Grave 14.

36 240°; 0.6 m. deep. Robbed. Presumed supine adult. 37 217°; 0.4 m. deep. Robbed. Presumed supine adult.

38 260°; 0·3 m. deep. Robbed. Presumed supine adult. 39 250°; 0·7 m. deep. Robbed. Presumed supine adult.

<sup>8</sup> Ibid., Fig. 2 (1).9 Ibid., Fig. 2 (2).

THE HUMAN BONES. By MARY HARMAN

All the skeletal material retrieved was examined. Most of the bones were in good condition though some skeletons were poorly preserved, and most of the skulls and some of the post-cranial bones were broken. It has not yet been possible to glue the fragments or measure any of the skulls. It is to be hoped that should there be a further, larger excavation of this cemetery, the small sample of skeletons considered in this report would be re-examined and included in any detailed analysis of the population.

Where possible the sex of adult individuals has been assessed from the size of the bones and the relevant features of the skull and pelvic girdle; the age from the state of epiphyseal fusion and tooth eruption, and degree of wear on the teeth; and the height from the regression formulae of Trotter and Gleser. In the following list of skeletons the portion of each skeleton available for study is indicated by numbers allotted to different parts of

the body:

Skull: 1, Mandible: 2, Vertebrae and ribs: 3, Pectoral girdle: 4, Arms: 5, Pelvis: 6, Legs: 7, Hands and feet: 8. The dental formula is also given in the following form:

Upper teeth
right 8 7 6 5 4 3 2 1 1 2 3 4 5 6 7 8 left
side 8 7 6 5 4 3 2 1 1 2 3 4 5 6 7 8 side
Lower teeth

X = Loss A.M.

B = Loss P.M.

NP = Not developed
C = Caries
A = Abscess

E = Pulp exposure
U = Unerupting
O = Erupting
- Jaw missing

 Male. 25-35 years. 5 ft. 9‡ in. Present: 1, 2, 7. 2. Adult. Present: 7. 6. a. Adult.

Present: Parts of pelvis, parts of femora. b. 4–7 years.

Present : Humerus, femur.

7. a. 4-7 years. Present: 7. b. 35-45 years. Present: 2.

9. 14–16 years. Present: 1, 2, 3, 4, 5, 6, 7, 8.

 Female. 30-40 years. 5 ft. 6 in. Present: 1, 2, 4, 5, 6, 7, 8. Pathology: A slight bump on the medial aspect of the left fibula is probably associated with periostitis on the lateral aspect of the left tibia shaft, and on the proximal end of the fibula shaft.

11. Male. 20–25 years. 5 ft. 8½ in. Present: 1, 2, 4, 5, 6, 7, 8,.

12. Female. 25–30 years. 5 ft. 4½ in. Present: 1, 2, 3, 4, 5, 6, 7, 8.

13. 2-6 months.

Present: 1, 2, 5, femur, tibia.

<sup>10</sup> D. R. Brothwell, Digging up Bones (1965), 59, 60, 69, 102.

15. 2-4 years? Present: 1, 7.

16. Male. Adult. 5 ft. 91 in. Present: 3, 4, 5, 6.

17. Juvenile.

Present: 1, 7, fragmentary.

18. Male. Adult. Present: 3, 7.

19. Adult.

Present: Right knee.

20. Male? 20-25 years. Present: 1, 2, 3, 4, 5, 6, 7, 8.

21. Male. 30-35 years. 5 ft. 11 in. Present: 1, 2, 3, 4, 5, 6, 7, 8.

8	7	6	5	4	3	2	I	1	2	3	4	5	6	7	8
			5					1			4				
	A	A								A					
1	×	6	1	1	3	2	1	1	2	3	4	5	X	×	×
8	7	6 c A	5	4	3	2	I						6		

22. Female. Over 25 years. 4 ft. 101 in. Present: 1, 2, 3, 4, 5, 6, 7, 8.

Maxilla missing.

Totally endentulous mandible.

23. Male. 25-35 years. 5 ft. 101 in. Present: 1, 2, 3, 4, 5, 6, 7, 8.

A

Pathology : Periostitis occurs at the distal ends of both radii and ulnae, on the posterior surfaces of the femora, and on both tibiae and fibulae, on which it extends over most of the

diaphyseal surfaces, and is particularly severe on the right tibia and fibula.

From the radiograph it there is a well marked circumferential lamellar periosteal reaction of the shafts of the tibiae and fibulae. As it is so extensive it is unlikely to be due to a localized disease such as varicositis or ulceration. It is not dense enough to be due to subperiosteal haemorrhage and this leaves the possibilities of perioarteritis nodosa and a hypertrophic pulmonary osteoarthropathy to be considered.

24. Female. 25-30 years. 5 ft. 13 in. Present: 1, 2, 3, 4, 5, 6, 7, 8.

25. Male. 20-25 years. 5 ft. 7½ in. Present: 1, 2, 3, 4, 5, 6, 7, 8.

26. 8-9 years. Present: 1, 2, 3, 4, 5, 6, 7, 8.

27. c. 9 years. Present: 1, 2, 5, femur.

Pathology: There is a spongy mass of bone on the exterior surfaces of both parietals, near the sagittal suture. The growth, which extends about 3 mm. above the normal surface of the bone at its greatest thickness, seems to be bounded partly by the temporal line. Severe

<sup>11</sup> I would like to thank Miss T. Molleson of the British Museum of Natural History for radiographing the pathological bones and Dr. J. L. Price of Guildford for his comments on the radiographs.

orbital osteoporosis is also present, and in the left ear, a hole from the surface of the bone involves both the external auditory meatus and a large cavity lying within and just above the mastoid process.

No convincing abnormality in bone texture is seen on the radiographs.

28. Female. 17-22 years. 5 ft. 13 in.	-76-432/ 1234-67-
Present: 1, 2, 4, 5, 6, 7, 8.	8 7 6 5 4 3 2 / 1 2 3 4 5 / 7 8
29. Male? Adult. 5 ft. 5 in. Present : 6, 7.	8 7 6 5 4 3 / / 1 2 3 4 5 6 7 8
30. Male 20-25 years, 5 ft. 24 in.	0 0

Accompanying this skeleton was the skeleton of a neo-natal infant; the two may belong together and represent the remains of a child dying at birth or soon after, and the mother who may have died in childbirth or from post-natal complications.

The sample is too small to permit many observations. Both sexes, and persons of all ages are represented, indicating that this was probably the cemetery of a civilian settlement. Few people survived beyond the age of 35 years.

Dental health was generally fairly good, though a number of people over the age of

30 had lost teeth, and were suffering from caries and dental abscesses.

No signs of osteo-arthritis were noted though a number of otherwise virtually complete skeletons had some or all of the vertebrae missing. There were few other examples of injury or disease affecting the bone; one woman with an injury to the left lower leg, one man with severe periostitis at the wrists and on the legs, and a child of about 9 years, suffering from a periosteal infection of the sagittal area, and an infected mastoid, which may have been the cause of death.

# Two Unstratified Skeletons

Below are the pathological reports prepared by Mr. E. Edwards on two skeletons removed from the cemetery by a member of the public without permission and only recently recovered. These came from the 'robbed' graves 34, 36, 37, 38 or 39.

The dentition was incomplete with 5 teeth being absent. The missing teeth were due both to A.M. and P.M. loss. Attrition was only slight. This indicated that the individual was in the 17-25 age group. Tooth wear and position indicated that maloclusion existed during life. Alveolar resorption was in evidence and indicated the presence of chronic periodontal disease due to poor oral hygiene.

Sex determination was based mainly upon cranial characteristics, using the incom-

plete pelvis as a secondary reference.

Disease was evident from erosion of the mastoid processes. This can be a common site for P.M. erosion but in this case it is felt that the exposed internal structure of the mastoid indicated the presence of pus and infection during life, but there was no sign of suppuration into the cranial cavity. Apart from this there was no other evidence of pathology.

B. Male. 30+ years. 6 ft. 0 in.-6 ft. 2 in.

Dentition missing.

Poorly preserved, fragmented and exhibiting P.M. deformation.

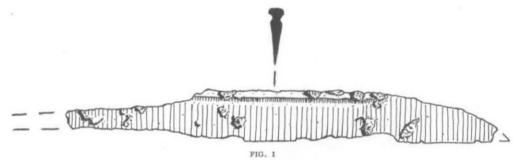
Virtually no osteometric analysis possible, but reassembly of a broken femur allowed an approximate calculation of height to be made. Age estimation was based on examination

of epiphyseal areas.

An examination of the spinal skeleton evidenced osteophytotic excrescences of bone developing on the corpora vertebralia of the lumbar and sacral regions. The vertebrae showed a general osteoporotic condition, but caution has to be exercised here due to the possibility that this was due to decomposition. The corpora vertebralia showed on the disc contact surfaces certain changes that have been diagnosed as due to osteochondrosis intervertebralia, a condition that may be associated with developing spondylosis. This conclusion was made after comparison with Danish bones exhibiting the same changes. This osteochondrosis was only in its mild and initial stages.

## THE TWO IRON KNIVES. By DAVID BROWN

The knife from Grave 34 is in good condition (FIG. 1), and can be well matched by dated examples found elsewhere.



Iron knife from Grave 34, Beacon Hill, Lewknor. (Scale 1).

The edge of the blade is straight; the back is parallel to the edge for two thirds of its length and then curves gradually towards the point; there is a fairly well-defined step between the back of the blade and the tang. This shape and these features are typical of many of the knives found in 7th-century cemeteries, to though not generally in earlier ones. They are also typical of most of the knives from Sutton Courtenay and Shakenoak.

A particular feature of this knife is the grooves along the back edge. These grooves, one on each side of the blade, run along the straight part of the back, but do not follow round the curve towards the tip. This feature occurs on a small proportion of the knives of this type; for example it occurs twice amongst the 20 odd knives from Shakenoak. It

does not occur on earlier knives of other types.

There is no doubt about dating the introduction of this sort of knife to the seventh century. Lack of evidence makes it less easy to say how much longer it remained popular. There are several generally similar knives from Maxey<sup>14</sup> and one of these has the characteristic grooves, but perhaps more significant is a very similar knife from the late Saxon settlement at Eaton Socon,<sup>15</sup> also with the characteristic grooves. Maxey is mid-Saxon, but

Polhill, S. C. Hawkes in B. Philp, Excavations in West Kent, 1960–1970 (1974), 199.

13 Archaeologia, LXXIII (1924), 147–92; LXXVI (1927), 59–80; XCII (1947), 79–93; D. Brown in A. C. C. Brodribb et al., Excavations at Shakenoak III (1972), 86–112.

<sup>&</sup>lt;sup>12</sup> For example, Snell's Corner, Horndean, Proc. Hants Field Club, xix (1957), 117-70; Holborough, Kent, Arch. Cant., Lxx (1956); A. L. Meaney, S. C. Hawkes, Two Anglo-Saxon Cemeteries at Winnall (1970), 43-4; Polhill, S. C. Hawkes in B. Philp, Excavations in West Kent, 1960-1970 (1974), 199.

Med. Arch., VIII (1964), 60, Fig. 16.
 Proc. Camb. Ant. Soc., LXVIII (1965), 65–6.

Eaton Socon is more precisely dated oth- to 11th- or 12th-century. On this evidence it seems reasonable to conclude that knives of this sort remained in use till the 9th

century at least, and possibly later.

This dating may be compared with that of the larger seaxes which have the same characteristic grooves. Examples occur in 7th-century cemeteries, as for example at Shudy Camps, grave 61, and St. Neots. 16 The later examples with grooves are such inlaid and elaborately decorated pieces as those from the Hurbuck hoard and from Sittingbourne, dated to the oth-10th centuries.17

The knife from Grave 28 is in less good condition. Ignoring the break in the middle of the blade, the edge seems to be quite straight, but is at an unusual angle to both the back of the knife and the direction of the tang. It seems possible that the knife is a very worn down fragment of a larger one. As it survives, it has no obvious parallels. In cross section the blade is thin and triangular, without grooves.

#### A REAPPRAISAL OF THE EVIDENCE

The skeletal remains from two graves, Nos. 14 and 33, both returned radiocarbon dates in the oth century A.D. These two graves were selected because they lay well apart from each other 18 and clearly did not belong to a single grave group in which the burials may have taken place within a short time of each other. However, as Philip Rahtz has kindly pointed out, the 'hardwater effect' may have influenced the reliability of the radio-carbon results and these two oth-century dates can at present only indicate a mid-late Saxon period cemetery.19

In the previous report<sup>20</sup> the suggested late or immediately post-Roman date must now be disregarded. David Brown's assessment of the style of one of the iron knives as indicative of the mid-late Saxon period strengthens further the redating of this cemetery. The knife from Grave No. 34 has been redrawn (Fig. 1), as the

illustration in Oxoniensia (1973) proved misleading.

The two knives apart, archaeological dating of the burials is difficult. The only irregular burial was the inverted crouch burial, Grave 8. Crouch burials are not unique in post-Roman contexts and of three found in the cemetery at Cannington, Somerset, one was later than a grave with a radiocarbon date centering on the mid-

7th century.21

It is now generally accepted that there was a movement in various parts of 7th-century England towards the abandonment of old burial grounds in favour of new ones. If the Beacon Hill cemetery and the Saxon pagan cemeteries at Knapp Hill<sup>22</sup> and Adwell Cop<sup>23</sup> all served dwellers within the boundaries of Lewknor, then it may be that the Beacon Hill cemetery came into being at the abandonment of one or both of the two pagan cemeteries. The latest burials, if known, at Beacon Hill might indicate the date at which the cemetery was abandoned in favour of the churchyard in the centre of the present village, some 0.9 km. away.24

18 See the previous report for the plan.

24 Oxoniensia, XXXVIII (1973), 147, Fig. 1.

<sup>&</sup>lt;sup>16</sup> T. C. Lethbridge, A Cemetery at Shudy Camps (1936), 7, 19, 32.
<sup>17</sup> D. M. Wilson, Anglo Saxon Ornamental Metalwork (1964), Nos. 22 and 36.

<sup>19</sup> Philip Rahtz, pers. comm. 20 R. A. Chambers, 'A Gemetery Site at Beacon Hill, near Lewknor', Oxoniensia, xxxviii (1973), 145.

<sup>21</sup> Philip Rahtz, pers. comm.

<sup>23</sup> Oxoniensia, XXIV (1959), 100-1. 23 D. A. Hinton, 'Anglo-Saxon Burials at Postcombe, Lewknor: M.40 Site 7', Oxoniensia, XXXVIII (1973),

In the past few years the discovery of Saxon settlements on the high, exposed chalk downs at Chalton (Hants)<sup>25</sup> and on the Trent Valley gravel at Catholme,<sup>26</sup> has shown the difficulty of locating the settlements which these late cemeteries served. The high ground of the Chiltern escarpment may well have been settled during the Dark Ages. The unusually high amount of Romano-British pottery within the grave fills suggests the existence of a Roman settlement nearby, probably accompanied by woodland clearance of the area, which may have assisted later settlement. The cemetery at Beacon Hill may well belong to an adjacent mid-late Saxon settlement, at present undetected, perhaps sited close to, although probably not actually along, the Upper Icknield Way. This route was probably maintained, for it was to be specifically mentioned in a later document. It is not of course certain that this refers to the upper rather than the lower track, but the ridgeway probably offered the better path. The long, steep climb from Lewknor to Beacon Hill adds further to the suggestion that Beacon Hill may never have been used by the inhabitants of the site of the modern village centre as a burial place.

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Medieval Archaeology, xvi (1972), 1-12 and 13-32.
 Current Archaeology, No. 49 (March 1975), 53.