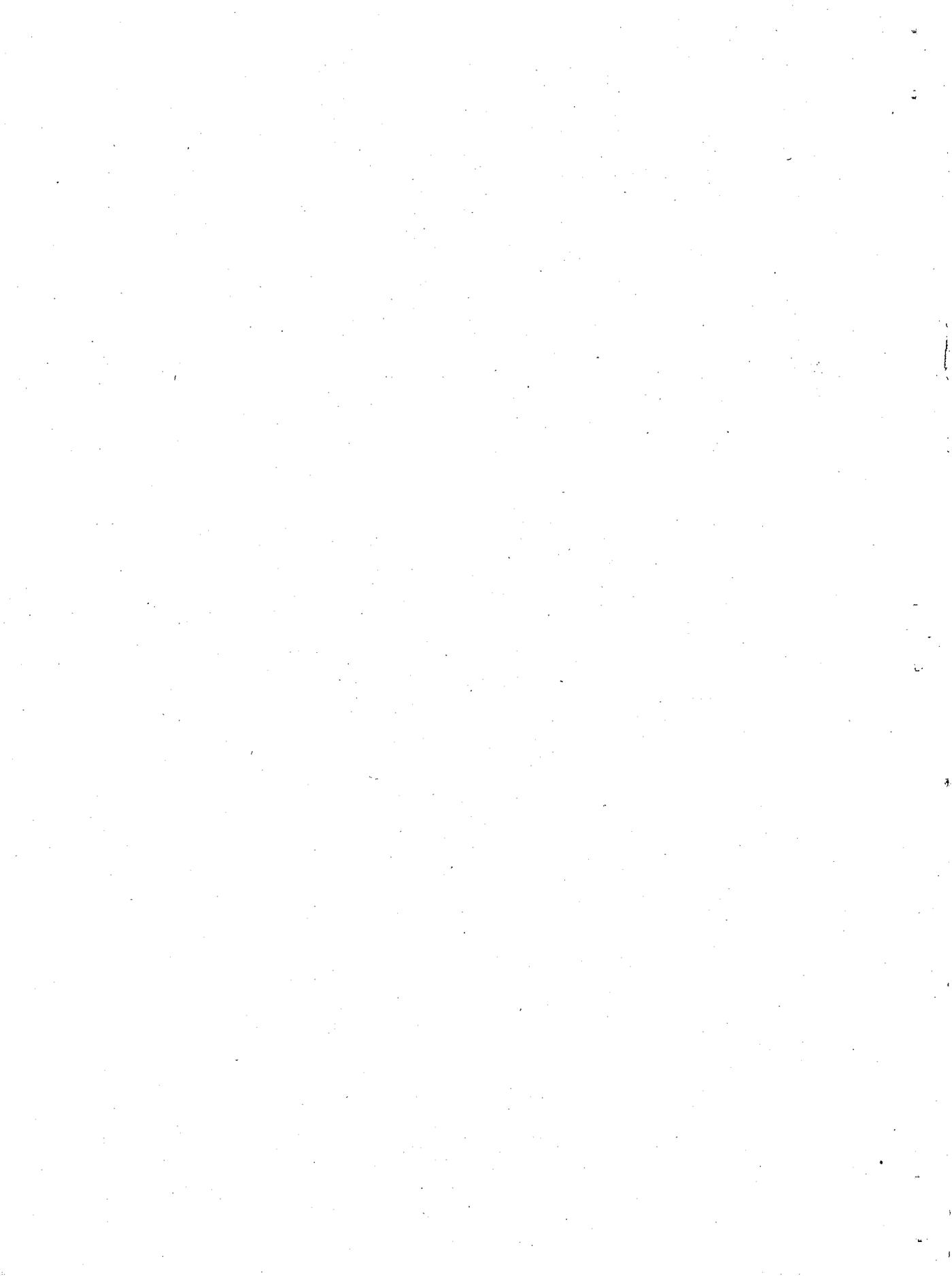


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ROMAN BURIALS FOUND AT ARBURY ROAD, CAMBRIDGE, 1952

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ON 19 August 1952 the mechanical digger operated by W. Sindall Ltd. (Builders and Contractors) struck the lid of a massive stone coffin when making a trench for the fresh-water main on the south side of Road No. 3 (Fortescue Road) of the City building-estate at Arbury Road.¹

The point at which the coffin was found lay just to the east of the hedge which followed the supposed line of the Roman road known as Mereway or Akeman Street.² Arbury Banks, Histon, a fortified site probably of late pre-Roman Iron Age date, lies half a mile away to the north-west and the remains of a Romano-British building, partially excavated by Mr M. F. Howard of the Leys School, is at a rather shorter distance to the north-north-east. When I visited the Arbury Road site on 20 August a stone coffin with a lead lining and containing the skeleton of a man (Burial 1), was lying across the line of the water-main 32 ft. east of the hedge (Pl. I). The section revealed in the trench dug for the water-main showed a disturbed area of soil to the west of a manhole and, 2 ft. below the present ground-level, what appeared to be the foundation-walls and floor of a small chalk-built structure erected over the stone coffin (Fig. 1). The upper part of a human skeleton (Burial 2) lay beneath the eastern side of the foundation-wall, the legs having already been destroyed by the mechanical digger and the foundation-wall cut away. It was later discovered that the head and thorax of another skeleton (Burial 6) lying beneath the floor of the chalk building had also been destroyed when this trench was cut. The contractors used a crane to lift the coffin, and the skull of a pony was found just below its western side, while part of the jaw of a second pony was seen protruding from the south side of the trench beneath the chalk floor. The mechanical digger then continued to cut the trench for the fresh-water main through to the line of the hedge, the pipes were laid, and the trench was partially filled in.

On 23 August a trench was dug at right angles to the pipe-trench following the long axis of the stone coffin. This showed the extent of the chalk foundations which

¹ Mr J. Dexter, Assistant Engineer, at once reported the find to the University Museum of Archaeology and Ethnology, and through the kindness of the City Engineer and the co-operation of Mr H. D. R. Ridgeon and Mr W. J. Cowell for the Contractors, the site was examined between 20 and 27 August and a rescue-dig was carried out. Mr Webster, Clerk of Works, two of the foremen, Mr A. Heffer and Mr Rooke, and the machine-driver, Mr C. Taylor, employed by the contractors, gave much assistance. Members of the Cambridge Archaeological Field Club and of the Cambridge Antiquarian Society volunteered to help and three members of the Museum Staff, Mr C. S. Lilley, Mr T. Hancock, and Mr B. Denston, provided the main labour force under my supervision.

² See *Proc. C.A.S.* vol. XLVIII, p. 11, fig. 1.

belonged to a small rectangular building $13\frac{1}{4}$ by $16\frac{1}{2}$ ft., presumably erected as a tomb-chamber over the stone coffin. It was decided to examine the part of the structure lying to the north of the main pipe-trench, and then to remove that section of it and investigate the area beneath it down to the undisturbed gravel. The part of

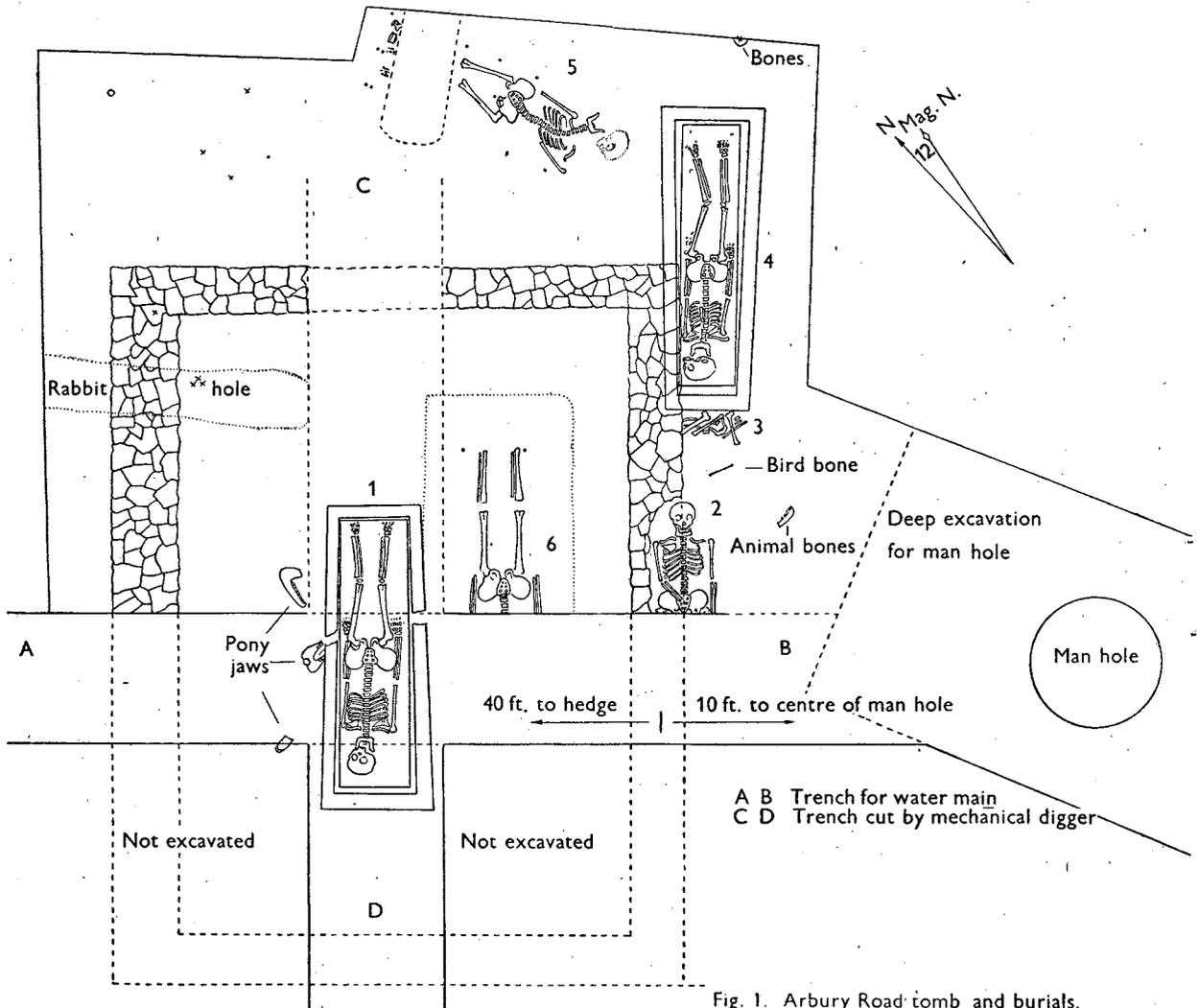


Fig. 1. Arbury Road. Tomb and burials. (Approximate scale: $1'' = 4'5''$; sherds are represented by crosses, iron nails by dots and the coin by a circle.)

the structure lying to the south of this trench was not examined and is still in the ground. When following the eastern edge of the chalk foundation-wall a second stone coffin (Burial 4, Pl. II) was found. Its lid was pinned down by this wall, a fact which suggests that it had been buried before the coffin over which the tomb had been erected. At its southern end, resting on undisturbed gravel, was a heap of human bones which, when examined, proved to be those of an almost complete skeleton

(Burial 3): these must have been shovelled out of the way when the second stone coffin was deposited. When the lid of this stone coffin was raised there was found inside it a lead lining with a lid, containing the bones of a woman. The head of the lead lining was inside the foot of the stone coffin, the presumption being that the stone coffin had been placed in the ground wrongly orientated, and that the error had been corrected by reversing the lead lining (Pl. II). To the west of this coffin and north of the chalk tomb, another skeleton was found buried in a wooden coffin of which only the iron nails remained (Burial 5, figs. 1 and 2). The skull lay within a foot of the side of the stone coffin, close enough to suggest that the wooden coffin was already in position when the stone coffin was buried. The cranium of Burial 5 was unfortunately removed, presumably by children, on Sunday, 24 August, when no work was carried out and the site could not be supervised. When work was resumed on 25 August, the upper part of skeleton 5 was seen to lie in a contorted position,

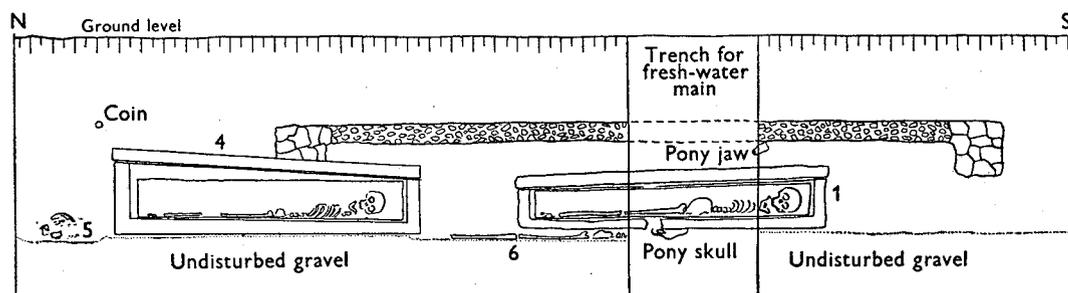


Fig. 2. Section through the long axis of the coffins. (Approximate scale: 1" = 4' 5".)

a fact which was explained when it was found that the lower leg-bones were missing and had been removed when a trench about 15 in. wide was dug obliquely across the lower part of the coffin. The purpose of this was possibly to deposit yet another burial, although no trace of one came to light. A few of the toe bones of skeleton 5 remained, and by the right foot fragments of a glass jug and of a colour-coated bowl were discovered. These had been smashed at the time that the cross-trench was dug.

When the north-eastern portion of the floor and foundation-walls of the tomb-building were removed, the lower part of a skeleton (Burial 6) was found in a grave dug into the undisturbed gravel (Fig. 1). The head and thorax of this skeleton had been destroyed when the water-main trench was cut. It had been buried in a wooden coffin of which only a few iron nails remained and was not accompanied by any grave goods. A number of fairly large chalk lumps, bricks, and roof-tiles lay over this burial beneath the chalk floor of the tomb. Burial 6 lay at a rather deeper level than did the stone coffin containing Burial 1 (Fig. 2), and, although proof is lacking, the evidence seems to me to suggest that it was already in the ground when Burial 1 was deposited and the chalk tomb erected. Apart from a few sherds and animal bones, nothing was found under the north-western part of the tomb. A rabbit-hole ran in under the floor from the direction of the hedge.

No other burials were found in the area excavated, although subsequent finds of

cremation burials close by show that this was a cemetery used over a considerable period of time. Sherds of Romano-British pottery, fragments of roof-tiles, brick, and animal bones were fairly common in the soil underlying the chalk floor of the tomb. At the northern end of the structure a thin scatter of chalk fragments extended beyond the foundation-walls on what seems to have been the ground-level when the tomb was built; and on this layer a bronze 4th-century coin, in poor condition, was found. Mr H. Mattingly kindly examined it and thought it to be a coin of Valentinian I (A.D. 364-75). A report on the skeletal remains is published as Appendix I.

THE RECTANGULAR TOMB (Figs. 1-3)

There seems to be no doubt that the rectangular chalk foundation-walls and floor are the remains of a small masonry tomb-chamber built over the stone coffin containing the skeleton of a man (Burial 1). Mr A. G. Brighton, Curator of the Sedgwick

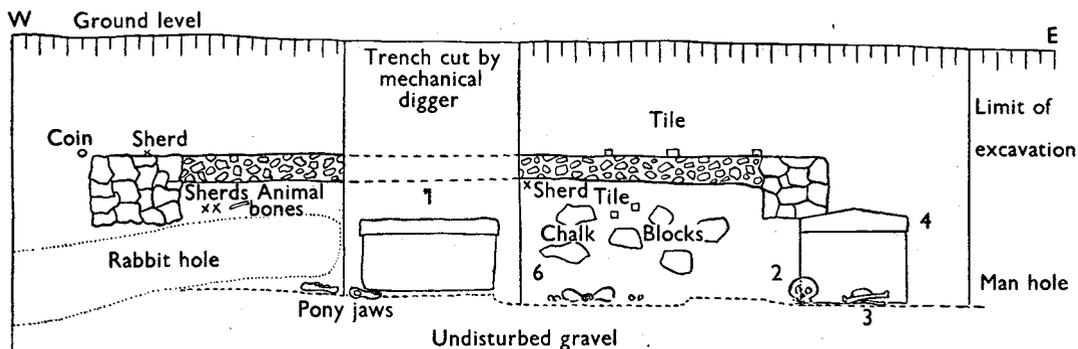


Fig. 3. Section through the short axis of the coffins. (Approximate scale: 1" = 4' 5".)

Museum, Cambridge, identified the chalk as Melbourn Rock, the nearest outcrops of which are at present found at Cherryhinton. The tomb measured 16 ft. 6 in. by 13 ft. 3 in. The foundation-walls were sunk to a depth of from 12 to 15 ins. below the old ground-level and varied in width from 12 to 18 in. They were built of fairly massive rough blocks. The floor was made of broken, rammed chalk averaging 6 in. thick. Nothing remained of the superstructure, but a number of pieces of roof-tile rested on the floor, suggesting that it had been covered by a tiled roof. It is not known whether a door existed in either of the narrow ends of the tomb, as the centre trench was cut by the mechanical digger. Such a chamber might have served for funerary banquets or for some ritual connected with the cult of the dead.

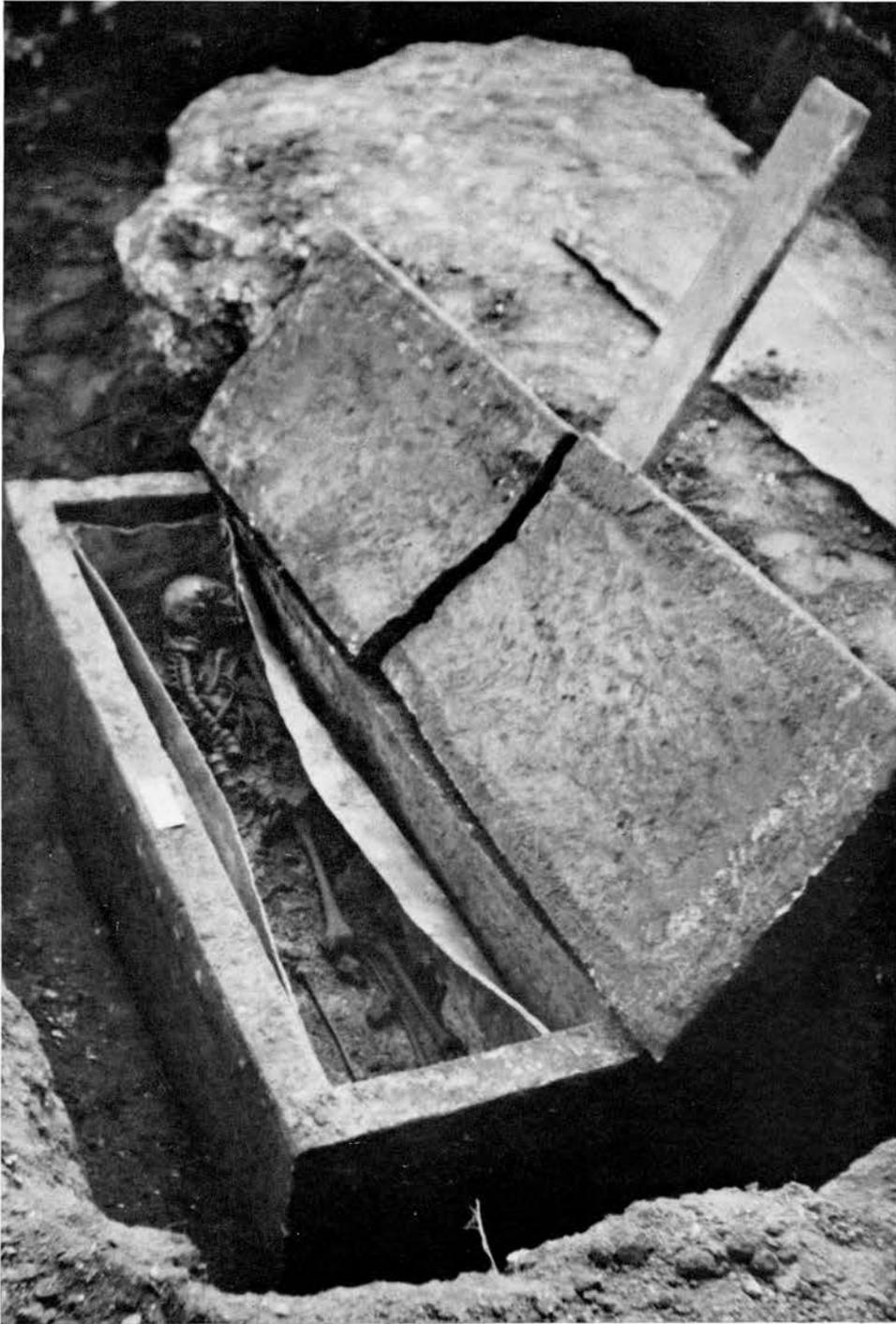
This type of burial in a sarcophagus placed not inside, but in the earth below, a tomb-chamber would appear to be unique in Roman provincial funerary architecture. The two superimposed chambers, of which the lower contained the burials, in the mausoleum at Igel, near Trier, were both above ground-level.¹ The tomb-chamber excavated at Efferen contained sarcophagi: it was not built above them.² The

¹ *Germania Romana*, vol. II, pl. XXXVI 1, 2.

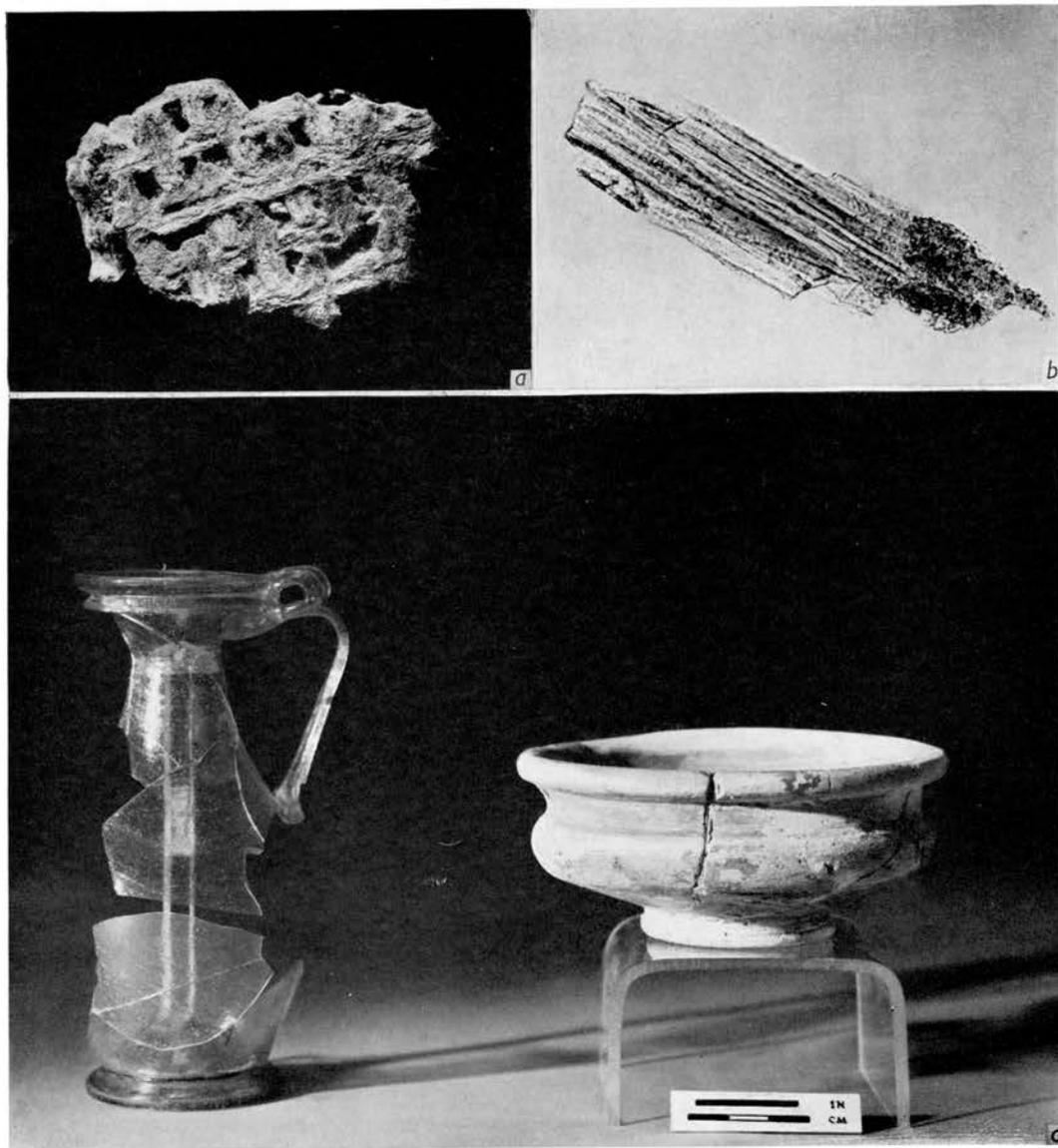
² *Ibid.* pl. XXXVI 3.



Arbury Road, Burial 1.
(Photo, Cambridge Daily News)



Arbury Road. Burial 4, looking south-west.



Arbury Road

a. Coffin no. 1: matt weave and yarns with low anti-clockwise twist.
(Photo, Cotton Industry Research Association)

b. Coffin no. 1: fibre bundle fragment separated from yarn.
(Photo, Cotton Industry Research Association)

c. Glass jug and colour-coated bowl found with Burial 5.

sarcophagi found at Keston, Kent, came to light neither in nor under the masonry tomb.¹

The stone coffin containing the remains of a woman (Burial 4) certainly bears a close relationship to the tomb. But the fact that the foundation-wall pinned down a corner of the lid of this coffin indicates that Burial 4 was already in the ground when the tomb was built. There is also the question of a possible relationship of Burials 2, 3 and 6 with the masonry tomb. I do not myself think that these had any connexion with it, but believe that they chanced to be in the ground when the site of the tomb over Burial 1, and the position of Burial 4, were selected. As to Burial 5, north of the tomb and west of Burial 4, I am of the opinion that it, too, was in the ground before the stone coffin (Burial 4) was deposited and before the tomb was built. No grave goods accompanied Burials 2, 3 or 6, and those found with Burial 5 may, or may not, be used as an indication of the date of the stone coffins, according to the interpretation preferred.

THE STONE COFFINS

Both stone coffins were made of Barnack Rag, an oolitic limestone much used until the early Middle Ages for church-building on the Fenland borders. They suggest that the family which could afford the cost of cutting and transporting such massive coffins from Northamptonshire to Cambridge enjoyed considerable wealth. Both coffins are unornamented and hewn from single blocks of stone and have separate lids.

The coffin containing Burial 1 is roughly made and had been broken in two before burial in order to make it long enough to accommodate the lead lining. The measurements are as follows:

Internal	External
Length: 5 ft. 11 in.	Length: 6 ft. 8 in.
Width at head: 2 ft.	Width at head: 2 ft. 8 in.
Width at foot: 1 ft. 7 in.	Width at foot: 2 ft. 2½ in.
Depth at head: 11 in.	Depth at head: 1 ft. 2 in.
Depth at foot: 8 in.	Depth at foot: 10½ in.

The lid consists of a very roughly hewn slab 6 ft. 11 in. long, 2 ft. 5 in. wide at the head, 2 ft. 3 in. wide at the foot and varying in thickness from 4 to 6 in. This coffin and its lead lining can now be seen in the basement of the Museum of Classical Archaeology, Little St Mary's Lane.

The coffin containing Burial 4 was very well made in contrast to the one just described and shows clearly the marks of the workman's chisel. Its measurements are as follows:

Internal	External
Length: 6 ft. 2 in.	Length: 6 ft. 11½ in.
Width at head: 1 ft. 8 in.	Width at head: 2 ft. 5 in.
Width at foot: 1 ft. 3½ in.	Width at foot: 1 ft. 10½ in.
Depth at head: 1 ft. 3½ in.	Depth at head: 1 ft. 9½ in.
Depth at foot: 11 in.	Depth at foot: 1 ft. 3½ in.

¹ *Arch.* vol. XXII, pp. 336 ff.; vol. XXXVI, p. 120.

The lid, which is broken in half, is carefully dressed with a slight centre-keel. It is 7 ft. long and 2 ft. 3 in. wide at the head and 2 ft. 1 in. wide at the foot. Its thickness is 5 in. in the centre and 4 in. at the sides.

Similar coffins have been found in the district, in the Hey Hill barrow, and at Lord's Bridge¹ and Gravel Hill Farm, Trumpington Road, Cambridge;² but none of these had lead linings.

THE LEAD LININGS

Burial 1 lay in a lead coffin covered by a lid of the same metal. It is 6 ft. 4 in. long, 19½ in. wide and 9½ in. deep at the head; 18½ in. wide and 9 in. deep at the foot. The long sides and base were cast in one sheet of lead, the ends in two separate sheets, the soldered seams showing on the inside. The lid was cast in one piece, with the edges on the long sides turned down to a depth of 1½ in.

Burial 4 was contained in a similar lead coffin measuring 5 ft. 11½ in. in length, 17 in. wide and 12½ in. deep at the head; 16 in. wide and 11 in. deep at the foot. The lid was cast in a single flat sheet of lead and has no turned-down edges. The method of constructing the body of this coffin is similar to that used for the one already described. Both lead coffins are unornamented.

Dr Eric Sweet, of the Metropolitan Police Laboratory, New Scotland Yard, kindly made a spectrographic analysis of specimens of the lead taken from each of these coffins and reports as follows:

The result was rather unexpected in that both were much purer than several specimens of eighteenth-century lead that we had analysed before at various times.

The lead from coffin 1 (Burial 1) contained faint traces—of the order of 0.01 % or less—of Zinc, Silver and Calcium and very faint traces of Cadmium, Antimony, Iron, Magnesium, Copper and Aluminium. That from coffin 2 (Burial 4) contained a trace of Tin—about 0.1 %—faint traces of Zinc, Silver and Calcium and very faint traces of Iron, Magnesium, Copper and Aluminium.

The presence of Tin in one and not in the other rather suggests that they came from different sources and were smelted at different times.

Dr Sweet's final remark is interesting since it bears out the conclusion already reached that Burial 4 was in the ground before Burial 1 was deposited and the tomb erected over it.

GRAVE-GOODS

BURIAL 1. Nothing was found within the lead coffin with Burial 1, but iridescent fragments of glass were discovered between the stone and the lead coffin at the head-end. These appear to have been part of a fluted vessel of very thin glass, possibly a bowl, which had been offered to the dead man before the lid of the stone coffin had been placed in position. Dr Harden considered that a reconstruction of this vessel was impossible on account of the very broken and decayed condition of the glass.

BURIAL 4. Apart from some fragments of textiles remaining from the shroud in which the body had been wrapped and the skeletons of a shrew and a mouse, no

¹ *Proc. C.A.S.* vol. XII (1908), pp. 273-84.

² *Com. C.A.S.* vol. II (1863), p. 289; Babington, *Ancient Cambridgeshire* (1883), pp. 36-8.

objects were found with the bones of the woman buried in this double coffin of stone and lead. Samples of the textiles were sent both to the Wool Industries Research Association and to the Cotton Industry Research Association. The former Association identified the material as animal fibre of an indeterminate type. The latter kindly made a full report as follows:

We have examined under the microscope the two samples taken from a stone coffin dated about A.D. 400 marked 'fine weave' and 'coarse weave'. The fine weave is a plain weave and the coarse weave a matt weave, i.e. plain weave with two yarns running together warpway and weftway. In both cloths the yarns have obviously been spun from fibre bundles and have a low twist which appears to be anti-clockwise. The matt weave and the twist may be seen in photo 1 (Pl. III *a*).

The identification of the fibres has presented considerable difficulty. They are completely petrified and any attempt to separate them by treatment with dilute acid or even to identify the nature of the fibre, using cellulose or lignin reagents, results in complete dissolution. We have managed however to separate the fibres from the adhering material by mechanical means and have mounted and cleared them with Lactophenol and liquid paraffin. See photo 2 (Pl. III *b*). The yarns in both samples appear to have been spun from the same type of fibre which we regret we have failed to identify. As stated, the fibres are in bundles and the ultimate fibres show none of the cross marking characteristic of Flax or Nettle. It has not been possible to measure the length of the ultimates but we have attempted to measure the diameter and have obtained a mean figure of 10μ and a range of $4-16\mu$. We cannot claim any great accuracy for these figures as only the broken pieces of ultimate fibre detached from the bundles could be measured. The figures are slightly lower than those given for Linden Bast, or Broom, which we understand were used in those early times and which have fibre bundles somewhat similar in appearance to those in question.

BURIAL 5. Near the right foot of this skeleton, which had been buried in a wooden coffin, parts of a small glass jug and of a colour-coated bowl were found (Pl. III *c*). The bowl is 10.7 cm. in diameter and 4.4 cm. high. It is made of buffish ware coated with a bright red wash, much of which has now come off. The jug is of pale greenish glass, 13.7 cm. high, 4.7 cm. in diameter at the mouth, and 5 cm. in diameter at the base. It has a wide reeded ribbon-handle, which is attached in a loop to both the upper and the lower edge of the screw top. In form it closely resembles two jugs from Colchester in the Slade Collection in the British Museum (Nos. 70, 2-24.4. and 70, 4, 2, 1.),¹ which unfortunately are not well documented, and a glass jug from a Christian burial at York.² Dr Harden suggests a late third- or fourth-century date for the Arbury Road jug, a date which would fit in well with the character of the accompanying colour-coated bowl.

BURIALS 2, 3 and 6 did not yield any grave-goods; but this may be due to the fact that 2 and 6 had been partly destroyed by the mechanical digger before they were excavated and that 3 had been disturbed in antiquity.

All the finds, unless otherwise stated, are in the University Museum of Archaeology and Ethnology, Cambridge.

¹ Thorpe, *English Glass* (1949), pp. 30-1, pl. IV *c*.

² Home, *Roman York* (1924), facing p. 190.

CONCLUSIONS

From subsequent finds of cremation-burials (see below, pp. 25-7) it is clear that this area of the Arbury Road building estate is the site of the Romano-British cemetery used by the occupants of the villas and farmsteads adjoining Akeman Street as it runs north-east beyond the limits of the Roman town of Cambridge. The most interesting feature of the site is the chalk-built tomb erected over the body of a man who had been buried in a massive stone coffin with lead lining. It also seems clear that the woman buried in the second stone coffin with lead lining was closely connected with the man and that the family as a whole possessed considerable wealth. It would further appear to be certain that the woman died before, although not necessarily many years before, the man, and the correct orientating of her body must have been a matter of considerable importance, since the lead lining had been reversed inside the stone coffin in order to achieve this end. The body of the man in Burial 1 is orientated in exactly the same way.

I think that Burials 2 and 6, which were covered by the tomb, bore no relationship to Burial 1, but chanced to be already in the ground in the part of the cemetery which was selected for it. Certainly Burial 3 was rudely displaced to make room for the stone coffin containing the woman's body (Burial 4); and it presumably had no significance for the members of her family. Obviously the Roman law prohibiting the violation of burials was not observed in this provincial cemetery.

The only burial which had any datable grave-goods is Burial 5, which also seems to me to be unconnected with the chalk tomb or with Burial 4. The glass jug and colour-coated bowl suggest a late third- or fourth-century date for it. The position of the interment with the head of its wooden coffin so close to the side of the massive stone coffin of Burial 4 would surely have created a problem for the grave diggers if the former had been deposited after the latter was in the ground. The absence of datable objects in either of the stone coffins, or on the floor of the tomb, makes the dating of the outstanding features of the cemetery difficult. The coin found to the north of the tomb on the old ground-level was probably struck under Valentinian I (A.D. 365-75). The practice of burial in stone coffins is not likely to antedate the third century. The glass vessels accompanying the Gravel Hill Farm coffin are of third- or fourth-century type; and it may well be that the Arbury Road coffins were buried at much the same time, that is, during the fourth century A.D.

I should like to thank Dr J. C. Trevor, Dr E. Sweet, the Wool Industries Research Association and the Director of the British Cotton Industry Research Association for their expert reports, and Miss Joan Liversidge for preparing this report for publication and for providing much information and valuable opinions. I am also indebted to Professor Jocelyn Toynbee, Dr D. Harden, and members of the Museum staff for their help.

APPENDIX I

THE ROMANO-BRITISH HUMAN REMAINS FROM ARBURY ROAD, CAMBRIDGE

While the thirtieth International Congress of Americanists was meeting at Cambridge in August 1952, the remains of six adults were recovered from the Arbury Road site. Two of them, belonging to a female (Eu. I. 3. 177) and a male (Eu. I. 3. 178) who were buried in lead-lined stone coffins, have the skeletons almost intact. These have been articulated by Mr C. B. Denston, Assistant in the Duckworth Laboratory, and are on view, the female (lying in her coffin) in the Clarke Hall of the University Museum of Archaeology and Ethnology and the male (mounted) in the Laboratory itself. The remaining four individuals, all adult males and apparently buried in wooden coffins, are for the most part in a fragmentary condition. They are represented by portions of the post-cranial skeleton together with, in one case (Eu. I. 3. 182) a skull, in another (Eu. I. 3. 179) a maxilla and a mandible, and in a third (Eu. I. 3. 181) a mandible alone. (The reference numbers are those given in the Laboratory.) Grateful acknowledgement is made to Dr P. V. Tobias, Senior Lecturer in Anatomy, University of the Witwatersrand, and Nuffield Dominions Senior Travelling Fellow working in the Laboratory during 1955, for much practical help in determining ages (see Boyd and Trevor, 1953, pp. 140-3) and commenting on anomalies and pathological conditions. Measurements of the crania, mandibles, and limb bones were made by Mr Denston according to the techniques described in Breitingger (1936), Trevor (1950), and Mukherjee, Rao and Trevor (1955); the last work gives the definitions of all the characters represented here by symbols. They are now provided for record and future use, since no good purpose would be served by a detailed analysis in the present report. Also to save space, only absolute values for the cranium and mandible and the mandibular angles are included, and the cephalic index alone is referred to. At an appropriate stage in a general study of the Romano-Britons, other indices can be readily found from the component dimensions, and the angles of the fundamental upper facial triangle can be determined from the lengths of its sides on a trigonometer. Statures have been reconstructed from the formulae given by Trotter and Gleser (1952, p. 498), but no correction has been made for age, which cannot be anything but approximate. Laboratory numbers and burials correspond as follows:

Burial 1 = Eu. I. 3. 178	Burial 4 = Eu. I. 3. 177
Burial 2 = Eu. I. 3. 182	Burial 5 = Eu. I. 3. 179
Burial 3 = Eu. I. 3. 181	Burial 6 = Eu. I. 3. 180.

Eu. I. 3. 177. Skeleton of female subject, probably over 40 but not over 55 years. All upper molars and right second premolar lost *ante mortem*. Full mandibular dentition present at death. Lower incisors crowded. Gross incrustation with tartar of mandibular cheek-teeth, especially on right side, as well as on lingual surfaces of incisors. Presence of extensive alveolar erosion and resorption suggests long-standing periodontitis. Unhealed fracture of distal fifth of right radius and ulna caused by blow either *post mortem* or at time of death. Supernumerary vertebra between lumbar and sacral regions, properly speaking, lumbar in character on right side and sacralized on left.

CRANIUM: C 1432; L 187; B 144; B' 96; H' 129; OH 111.5; βOH 111.5; S'_1 115; S'_2 120; S'_3 92.5; S_1 135.5; S_2 132; S_3 114; S 382; $\beta Q'$ 311; U 534; FL 36.4; FB 27.9; LB 96.5; GL 91; $G'H$ 69.5; GB 90; f 128.5; NH 49.9; NB 25.0; O_1 42.8; O_2 35.8; G'_1 43.4. MANDIBLE: W_1 120.5; C_7L 23.0; RB' 30.1; M_2P_1 31.6; ZZ 44.0; C_7C_7 96; $M \angle$ 121°; C_7L 73.5; RL 63.5; G_0G_0 96; ML 102.5; C_7H 65; M_2H 26.0; $R \angle$ 70°. FEMUR: FeL_1 405 (R), 411 (L); FeL_2 402 (R), 407 (L); FeL_3 386 (R), 390 (L); FeD_1 24.0 (R), 24.0 (L); FeD_2 30.2 (R), 30.2 (L). TIBIA: TiL_1 323 (R), 325 (L); TiL_2 324 (R), 323 (L); TiL_3 308 (R), 308 (L); TiL'_1 328 (R), 328 (L); TiL'_2 320 (R), 319 (L); TiL'_3 306 (R), 305 (L). FIBULA: FiL_1 317 (R). HUMERUS: HuL_1 298 (R), 287 (L); HuD_1 23.0 (R), 22.2 (L); HuD_2 17.1 (R), 17.3 (L). RADIUS: RaL_1 207? (R), 211 (L). ULNA: ULL_1 229 (L). RECONSTRUCTED STATURE: Mean of formulae applied to $Fe_1 (R+L)/2$, $TiL_1 (R+L)/2$, $FiL_1 (R)$, $HuL_1 (R+L)/2$, $RaL_1 (R+L)/2$, and $ULL_1 (L) = 154.8$ cm. or 5 ft. 1 in. (Burial 4.)

Eu. I. 3. 178. Skeleton of male subject, probably between 30 and 45 years. All maxillary teeth except first molars present at death. Some incrustation with tartar, especially on left side. Crowns moderately worn, apart from those of third molars. Periodontal erosions, in particular of third molars. Full mandibular dentition at death. Anterior teeth rather crowded. Fair degree of attrition, most marked on margins of right first molar. Canine, premolars, and first and second molars on left side heavily incrustated with tartar. Alveolar erosion and traces of large apical abscess opposite root of right central incisor. Whole skeleton displays tendencies towards bony overgrowth and towards calcification, notably of laryngeal and costal cartilages, one result being formation of almost complete thyroid 'bone'. Extensive fractures of and damage to distal extremities of second to fifth right metacarpals and proximal ends or first and fourth proximal phalanges, either *post mortem* or immediately preceding death. Sacrum apparently normal.

CRANIUM: C 1488; L 187; B 145; B' 94; H' 138; OH 114; βOH 113.5; S'_1 114; S'_2 114.5; S'_3 98; S_1 129; S_2 128; S_3 122; S 380; $\beta Q'$ 313; U 523; FL 36.8; FB 29.6; LB 100; GL 90?; $G'H$ 78?; GB 101; J 132; NH 56.3; NB 24.7; O_1 44.3; O_2 36.0; G'_1 47.5; G_2 40.3. MANDIBLE: W_1 122.3; C_pL 23.9; RB' 30.6; M_2P_1 29.7; H_1 38.0; ZZ 47.2; C_rC_r 99.5; $M \angle$ 116.5°; C_pL 77.5; RL 67; G_oG_o 93.5; ML 103.5; C_rH 73; M_2H 27.0; $R \angle$ 86°. FEMUR: FeL_1 463 (R), 464 (L); FeL_2 457 (R), 457 (L); FeL_3 434 (R), 433 (L); FeD_1 29.3 (R), 29.0 (L); FeD_2 34.0 (R), 34.0 (L). TIBIA: TiL_1 375 (R), 377 (L); TiL_2 372 (R), 374 (L); TiL_3 358 (R), 359 (L); TiL'_1 380 (R), 381 (L); TiL'_2 368? (R), 370? (L); TiL'_3 353 (R), 355 (L); TiD_1 37.0 (R), 37.0 (L); TiD_2 27.0 (R), 26.0 (L). FIBULA: Fil_1 372 (R). HUMERUS: HuL_1 347 (R), 338 (L); HuD_1 26.8 (R), 25.3 (L); HuD_2 21.0 (R), 20.0 (L). RADIUS: RaL_1 268 (R), 270 (L). ULNA: ULL_1 293 (R), 293 (L). RECONSTRUCTED STATURE: Mean of formulae applied to FeL_1 (R+L)/2, TiL_1 (R+L)/2, Fil_1 (R), HuL_1 (R+L)/2, RaL_1 (R+L)/2, and ULL_1 (R+L)/2 = 175.9 cm. or 5 ft. 9½ in. (Burial 1.)

Eu. I. 3. 179. Almost complete maxilla, mandible, and greater part of post-cranial skeleton of male subject, probably over 50 years. Maxillary molars, except first left, lost *ante mortem*. Central incisors and right canine missing *post mortem*. Mandibular molars and right second premolar lost *ante mortem*. Gross overcrowding of lower incisors, lateral pair being forced to erupt lingually. All teeth still present in both jaws heavily worn. Malaligned healed fracture of left clavicle. Skeleton shows marked osteo-arthritis changes in general and more particularly in vertebrae. Five lumbar but six sacral vertebrae, first coccygeal vertebrae being most likely sacralized.

MANDIBLE: W_1 110; RB' 31.0; ZZ 44.0; C_rC_r 98; $M \angle$ 121°; C_pL 72.5; RL 62; G_oG_o 99; ML 100; C_rH 64; $R \angle$ 74°. FEMUR: FeL_1 441? (R), 440? (L); FeL_2 436? (R), 435? (L); FeD_1 28.0 (R), 28.0 (L); FeD_2 28.5 (R), 28.8 (L). HUMERUS: HuL_1 333 (L); HuD_1 24.0 (R), 24.0 (L); HuD_2 19.6 (R), 19.6 (L). RADIUS: RaL_1 252 (L). RECONSTRUCTED STATURE: Mean of formulae applied to FeL_1 (R+L)/2, HuL_1 (R), and RaL_1 (L) = 171.1 cm. or 5 ft. 7½ in. (Burial 5.)

Eu. I. 3. 180. Incomplete limb bones and other fragments of post-cranial skeleton (extensively damaged by mechanical excavator before recovery) of adult male subject of indeterminate age but probably not past middle life. No sacrum.

FEMUR: FeD_1 25.0 (R), 25.0 (L); FeD_2 30.8 (R), 30.8 (L). TIBIA: TiD_1 32.5 (R), 32.0 (L). TiD_2 26.5 (R), 27.0 (L). (Burial 6.)

Eu. I. 3. 181. Mandible and greater part of post-cranial skeleton of male subject, probably over 36 but less than 50. Full dentition at death, but left central incisor and second premolar since lost. Some overcrowding of anterior teeth. Moderate attrition of crowns. Slight incrustation with tartar but no evidence of caries. Mild degree of periodontal alveolar resorption. Sacrum incomplete, but apparently normal.

MANDIBLE: W_1 125.5; C_pL 27.0; RB' 32.3; C_rC_r 100; $M \angle$ 113°; C_pL 78; RL 65.5; ML 101; C_rH 68; M_2H 27.0; $R \angle$ 77°. FEMUR: FeL_1 45.7? (L); FeL_2 45.3? (L); FeD_1 27.2 (R), 27.1 (L); FeD_2 34.0 (R), 34.0 (L). HUMERUS: HuL_1 341 (L); HuD_1 24.3 (R), 23.3 (L); HuD_2 18.2 (R), 18.0 (L). ULNA: ULL_1 171 (R). RECONSTRUCTED STATURE: Mean of formulae applied to FeL_1 (L), HuL_1 (L), and ULL_1 (R) = 173 cm. or 5 ft. 8¼ in. (Burial 3.)

Eu. I. 3. 182. Skull and fragments of post-cranial skeleton of male subject, possibly between 20 and 30, but probably between 20 and 25. Full maxillary dentition at death, but central incisors and left wisdom tooth lost *post mortem*. All mandibular teeth also present at death, but right incisors subsequently lost. Slight overcrowding. Mild degree of attrition of crowns in both jaws. No signs of pathological conditions in maxilla. Right wisdom tooth slightly carious in mandible. No sacrum.

CRANIUM: *L* 178; *B* 146; *B'* 104; *OH* 115; β *OH* 113.5; *S'*₁ 114; *S'*₂ 107.5; *S*₁ 134; *S*₂ 120; β *Q'* 317; *U* 552; *GB* 92; γ 136; *NH* 51.4; *O*₁ 44.6 (R); *O*₂ 32.6 (R); *G*₁ 44.8; *G*₂ 41.5. MANDIBLE *W*₁ 119; *C_yL* 18.7; *RB'* 28.6 (R); *M₂P₁* 28.9 (R); *H*₁ 33.6; *ZZ* 44.9; *M* \angle 109°; *C_pL* 72; *RL* 65; *G_oG_o* 94; *ML* 101; *C_rH* 64 (R); *M₂H* 27.0 (R); *R* \angle 73°. FEMUR: *FeD*₁ 23.8 (R); *FeD*₂ 33.0 (R). TIBIA: *TiD*₁ 36.2 (L); *TiD*₂ 24.0 (L). HUMERUS: *HuL*₁ 328 (L); *HuD*₁ 20.4 (L); *HuD*₂ 17.6 (L). RADIUS: *RaL*₁ 260 (L). ULNA: *ULL*₁ 278 (L). RECONSTRUCTED STATURE: Mean of formulae applied to *HuL*₁ (L), *RaL*₁ (L), and *ULL*₁ (L) 175.2 cm. or 5 ft. 9 in. (Burial 2.)

No commentary is needed on the shocking dental state of the half-dozen individuals represented. Of greater interest to odontologists, however, is the overcrowding of the anterior teeth, particularly those of the lower jaw in all five cases where the dentition could be observed. The anomalous sacra of Eu. 1. 3. 177 and Eu. 1. 3. 179, curiously enough, are not unique for Arbury Road, since of two out of four adult skeletons discovered on an allotment there in 1937, in association with Roman pottery, sacralization of the fifth lumbar vertebra occurs, principally on the right side, in one presumably male and one presumably female sacrum.¹ The tendency towards an unstable lumbo-sacral junction shown by three of the eight Romano-British sacra recovered from Arbury Road since 1937—in Eu. 1. 3. 180 and Eu. 1. 3. 182 the bone is missing—and the presence of another anomaly in a fourth may point to some degree of close relationship among their owners that would be consistent with the conditions responsible for the crowding of the front teeth. But whether or not this is familial cannot be determined.

Only two calvariae of the skulls found in 1952 are sufficiently well preserved for the capacities to be 'cubed' by a direct method (Breitinger, 1936; Tildesley and Datta-Majumdar, 1944). Of the three cephalic indices, 77.0 (Eu. 1. 1. 177), 77.5 (Eu. 1. 3. 178), and 82.0 (Eu. 1. 3. 182), the first two values would be unexceptional for Romano-Britons of either sex, and the third falls well within the male range of the Iron Age series from Maiden Castle (Morant and Goodman, 1940) now preserved in the Duckworth Laboratory. The female from Arbury Road was just under 155 cm. or 5ft. 1 in. tall in life, and the mean stature of the four males is 175.9 cm. or 5 ft. 8½ in. The last value is close to a figure recently computed for the height of sixteen male Dobuni from Frilford, Berks, based on femoral lengths, namely 172.4 cm. or 5 ft. 8 in. (Trevor, 1954), though considerably in excess of between twenty-five and thirty male Maiden Castle statures, the weighted mean of which is 167.9 cm. or 5 ft. 6 in., based on the lengths of the femora, tibiae, humeri, and radii of the right side (Trevor, unpublished—recalculated from Goodman and Morant, 1940).

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¹ These remains were taken to the Anatomy School, from which, thanks to the kindness of Professor Boyd, they have since been transferred to the Duckworth Laboratory.

