

A ROMAN BURIAL

from Armagh Road, Old Ford

(February 1972)

HARVEY SHELDON

with a report on the skeletal remains by

W. J. OWEN

DURING THE DIGGING of a Metropolitan Water Board trench along the east side of Armagh Road, a stone obstruction was encountered. Attempts to dislodge the obstacle showed that it was part of a lid covering a skeleton enclosed in a stone coffin (see Fig. 1, No. 10)¹. The grave lay approximately 125 metres north of the Roman London - Colchester road.² As the burial would have been largely disturbed by the laying of the water pipe, it was decided to remove the skeleton for anatomical study.

Examination showed that the coffin had been carved out of a single block of oolitic limestone. The top of the lid, which was some 220cms long by 75cms wide, lay about 80cms below the modern road surface. It was ridged along the centre, where the depth was 15cms compared to 10cms at the sides. Apart from the modern break, there was one crack which was apparently of ancient date (see Fig. 2). The coffin walls were approximately 10cms thick and 50cms high externally. They enclosed a chamber 50cms wide by 190cms long and 40cms deep.

Removal of the lid showed that the body had been laid on its back in an extended position with the head to the west and the feet to the east (see Fig. 3) the hands met over the pelvis, and near to the right side was an iron key-like object.³ White-coloured calcium carbonate in a semi-liquid state underlay the body.

Lying in the calcium carbonate, near to the head were two pins, one of bone (Fig. 4a) and the other of jet (Fig. 4b); the latter had been finely carved and turned on a lathe. They had possibly been used to dress the hair. The only other object found in the coffin was a sherd of pottery, seemingly freshly broken at the time of deposit, which underlay the right foot.

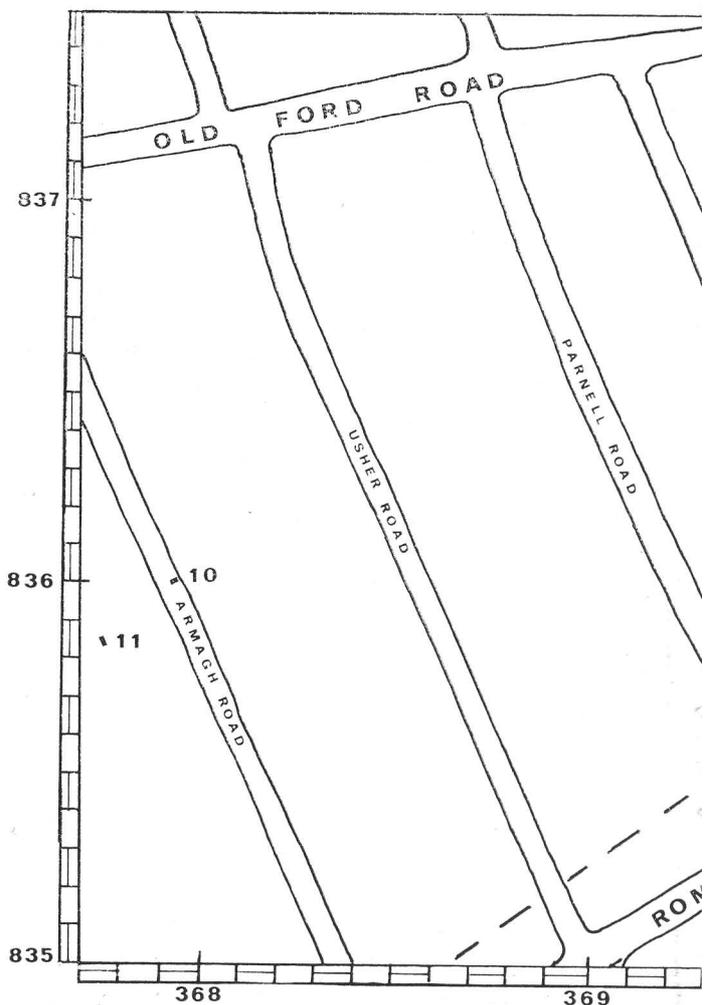
The coffin had been placed in a pit cut down into the natural sand. From the fill of the pit, above the

1 Outside No. 114 Armagh Road (TQ 36790 83600).

2 The Water Board trench later cut across the road.

3 The object is undergoing treatment at the Institute of Archaeology, Department of Conservation.

Fig. 1. An area plan showing five burials (Nos. 7-11) at Old Ford, London to Colchester and three sites (A, B and C) where the Roman road was found.



coffin, was a coin dating either from the late 3rd or 4th century A.D.⁴ A late Roman date in the inhumation would fit well with other evidence concerning the use of lime gypsum and calcium carbonate in burials⁵ and with our knowledge of the local settlement.

Dr. W. J. Owen of the Anatomy Department, Guys Hospital Medical School examined the skeleton and has contributed the following report:—

An Anatomical and Medical Report⁶

A complete human skeleton was found and was in good condition except for damage to the skull where the upper jaw, the lower part of left orbit and nasal bones were deficient and to some of the thoracic

vertebrae which were fragmentary.

Age at death

The age at death was estimated to be between 25 and 30 years of age. The wisdom teeth (third molars) were erupted, growth had ceased as judged by the disappearance of all cartilaginous growth plates in the long bones and base of the skull; these processes are normally completed by twenty-two years of age. T. W. Todd in 1920⁷ pointed out that the estimation of age at death of a human skeleton could be most accurately determined by examination of the pelvic bone at the site of junction of the two pelvic bones (the symphysis pubis). On account of the character of the ridging and the bony irregularity in this region (it tends to become smoother with advancing age) an estimate of 25 to 30 years was made.

While in the 20th century death at the age of, say, 27 years would be considered premature, from the extensive survey carried out by R. Warwick on the Trentholme Cemetery, York⁸, it is seen that 50 per cent of these people (most of whom are considered to be Romano-British) died between the ages of twenty and forty years of age. Furthermore from the Trentholme series it would appear that the expectation of life of female was less than that of male, which again contrasts with present-day trends, but was possibly associated with childbirth.

Sexing the skeleton

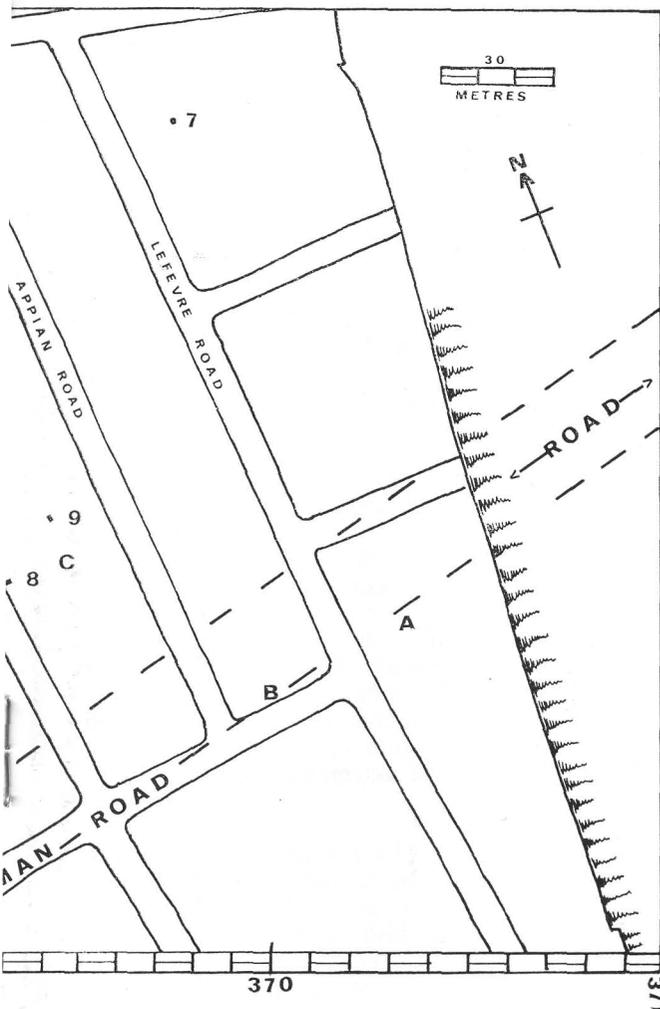
The sex of the skeleton was judged to be female principally on the basis of the pelvic bones. It is possible to sex a skeleton in about 90 per cent of cases and the most valuable criteria used are the typical characteristics of the female pelvis denoting its adaptation for childbirth, i.e. the large circumference of the bony pelvic ring compared to the small hip socket (acetabular) diameter and also wide bony arches and angles made by the pelvic bones (subpubic arch and greater sciatic notch). Corroborating this, the small superciliary ridges on the forehead and the sharp upper margin of the orbit testify to the femininity of the skeleton.

Assessment of Stature

In order to assess the stature the formulae of Trotter and Gleser⁹ (1952) were used in relating

- 4 The coin which was very corroded, was identified by M. J. Hammerson.
- 5 See H. G. Ramm in "Soldier and Civilian in Roman York" for a list of Gypsum Burials in Britain. These include two, dated to the 4th century, which contained jet ornaments.
- 6 W. M. Krogman "Human Skeleton in Forensic Medicine" (1962), Thomas Springfield, Illinois.
- 7 T. W. Todd "Age changes in the pubic bone", *American Journal of Physical Anatomy* (1920) 3 (3) 285-334.
- 8 R. Warwick "Report on skeletal remains", *The Romano-British Cemetery, Trentholme Drive, York* (1968).

Ford, together with the line of the Roman road from
aces of the Romano-British settlement have been found.



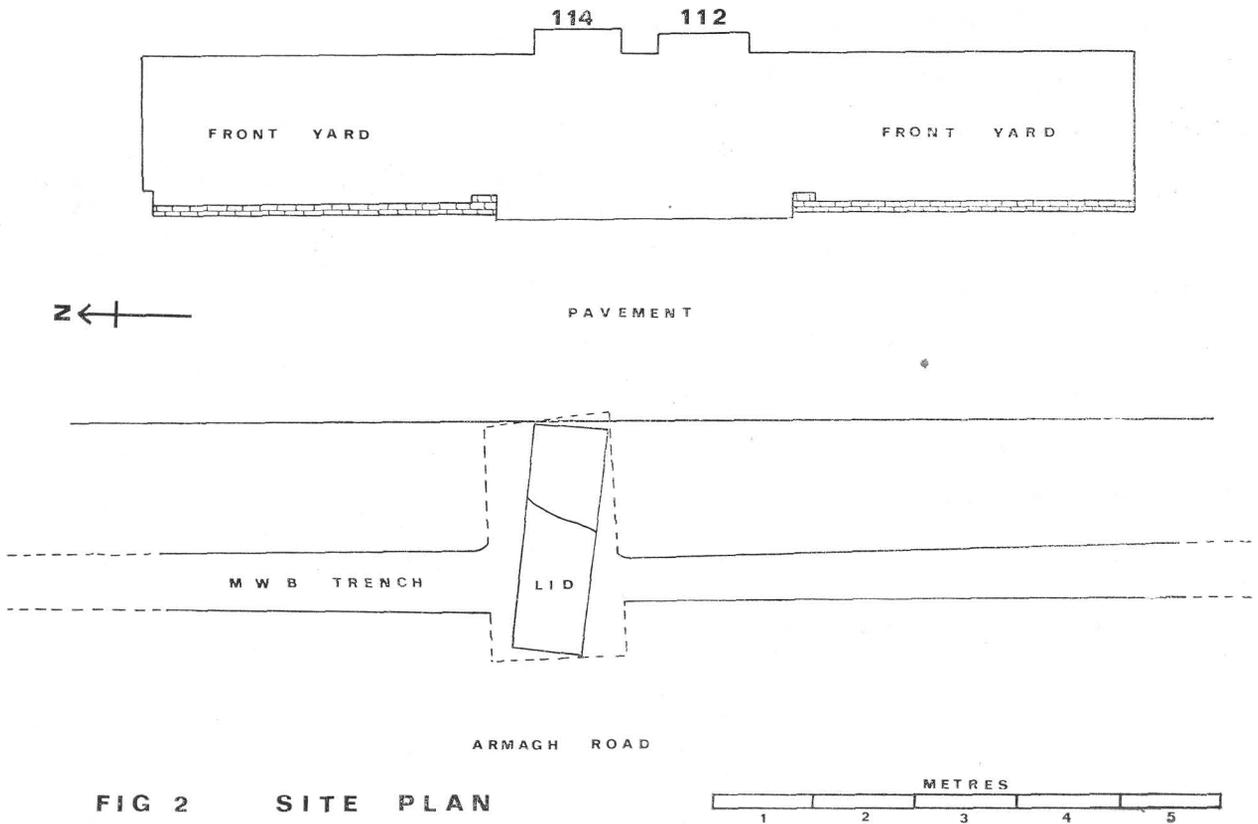


FIG 2 SITE PLAN

height to the length of isolated long bones. Three separate formulae using fibula, radius and femur gave the height as 165cm, 165cm and 164cm. The height is thus estimated as 5ft. 5ins. The mean height of the sixty or so Romano-British female skeletons in the Trentholme series was 5ft. 1in. as compared to present-day mean female height of 5ft. 0in. In this light a Romano-British female of 5ft. 5in. would appear well towards the upper limit of the height range. The mean Trentholme male height was 5ft. 7in. compared to mean present-day male height of 5ft. 8in.

Mensuration

There were two areas of special interest: the cephalic index and the Right Humerus.

Cephalic index equals

$$\frac{\text{Breadth of skull}}{\text{Length of skull}} \times 100$$

and in this individual was 73 per cent. The cephalic index of the Trentholme series varied from 68 per

9 M. Trotter and G. C. Cleser. Estimation of Stature from long bones of American whites and Negroes *American Journal of Physical Anatomy* (1952), n.s. 10 (4) 463-514).

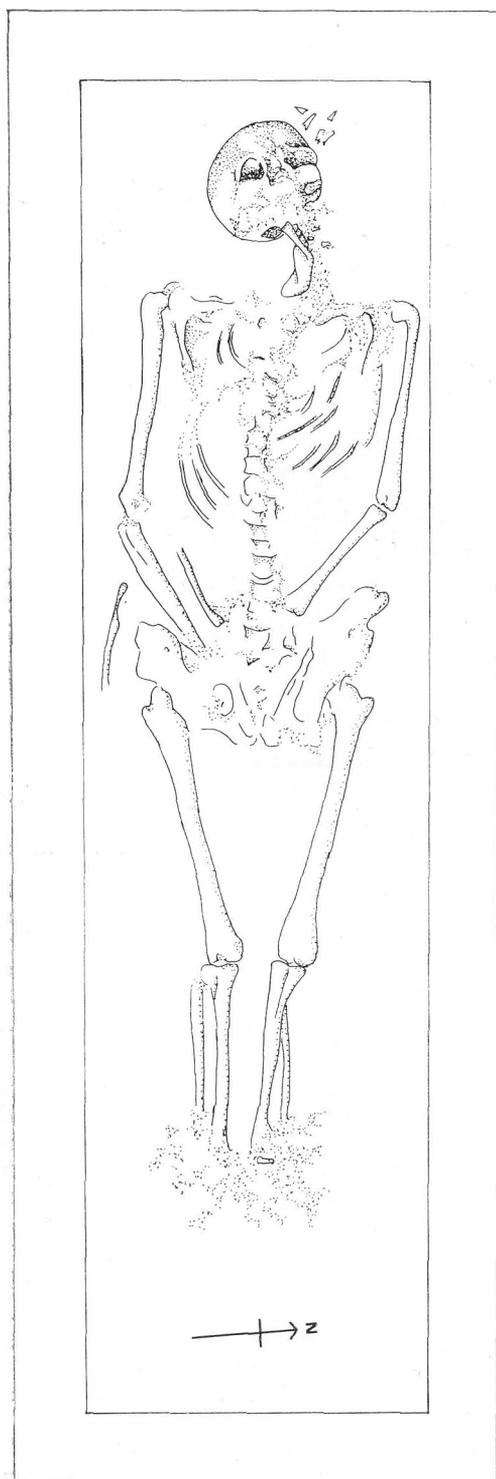
cent (long-headed dolicocephalic) to 86 per cent (short head brachycephalics) with females averaging 76 per cent. Cranial indices in a single skull are not considered very important because even in a one population there are always individual skulls at extremes of range. Therefore without a statistically significant number of skulls it is impossible to extrapolate about racial affinities on the basis of cranial indices.

The right humerus was 15mm longer than the left humerus. The possibility that this resulted from a fracture at an earlier age was dispelled by the absence of any external evidence on the bone of any such fracture. Neither could this be correlated with right handedness. This probably represents congenital shortening of the humerus which was unlikely to have hindered the function of the arm. It is not usual to find this type of asymmetry in skeletons.

Non metric observations

The skull viewed in lateral profile presented a well marked posterior bulge (occipital bun) which was noted by Warwick as characteristic of the Trentholme Romano-British. The typical long low cranium was also noted. The muscular markings on the humeri and radii were very prominent and

Fig. 3. The skeleton as found in the coffin.



indicates a great deal of strenuous muscular activity. An extra facet on the tibia is sometimes found in female skeletons of primitive people, and it is said to result from frequent squatting at the water source. No such facet was seen in this skeleton.

Considerable dental wear was seen particularly on the lower molar teeth with flattening of the cusps and exposure of the dentine. This was in keeping with the findings of Cooke and Rowbotham¹⁰ in the Trentholme series and contrasts markedly with the amount of attrition which would be expected in a modern 30-year-old female. This excessive dental wear probably resulted from a particularly fibrous and gritty diet.

Pathological findings

The long bones of the lower limb showed striking evidence of osteomalacia with marked bowing of the tibia and fibula. Osteomalacia is a malnutritional disease of bone associated with a lack of calcium, vitamin D and sunshine, and in this country currently is mainly seen amongst poor immigrant children in North Britain. This finding is indeed rather surprising in the Romano-British as there is little evidence from other sources of malnutrition.

A large dental cavity was found in the posterior aspect of the first molar tooth. This was not found on the biting (occlusal) aspect of the tooth. It would be very unlikely if examination of a present-day 30-year-old, who had received no dental treatment revealed only one dental cavity, and the low incidence of caries in this dentition correlates with the low incidence (4.5 per cent) found in the Trentholme series. Cooke and Rowbotham put forward two explanations.

(1) the absence of refined carbohydrates which nowadays are held partly responsible for the large amount of dental caries,

(2) the wearing down of the teeth of the Romano-British by tough fibrous diet would smooth out any irregularities or pits on the biting surfaces, leading to stagnation of food and caries.

No evidence was found of any osteoarthritis (wear and tear changes around the joints), as might be expected in someone who had led an arduous life; it was certainly seen to a large degree in the Trentholme series. Neither was there any evidence of any bony injury or skeletal clue as to the cause of death, although the latter is hardly surprising as most fatal illnesses leave no bony marker of their existence.

Conclusion

From all this emerges a rather paradoxical picture of a 25 to 30-year-old Romano-British female who

10 C. Cooke and T. C. Rowbotham, "Dental report". *The Romano-British Cemetery, Trentholme Drive, York* (1968).

was about 5ft. 5in. tall and judged to be fairly wealthy from her elaborate burial and tall stature. On the other hand, this woman appears to have led a muscularly active life, and also to have suffered from a degree of malnutrition.

The Armagh Road burial is but one of a number dating to the Roman period found in the vicinity of Old Ford. At least six were recovered in the mid-19th century during the first modern development of the area. They came to light in the cutting made for the North London Railway and in the excavations for the houses which spread across land previously used for agriculture. They occurred on both sides of the London - Colchester road but are not shown in Fig. 1 as they lie to the south and to the east of that map¹¹.

The current re-development had led to a renewal of discovery. In 1969 during development east of Parnell Road the staff of John Laing Construction

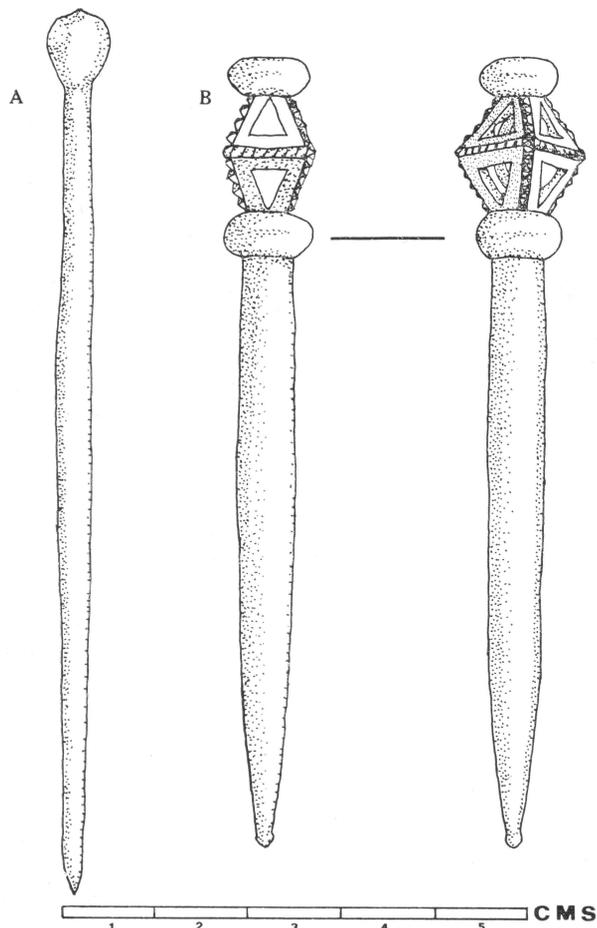


Fig. 4. The two pins found close to the head of the body—the left-hand one is made of bone and the right hand of jet.

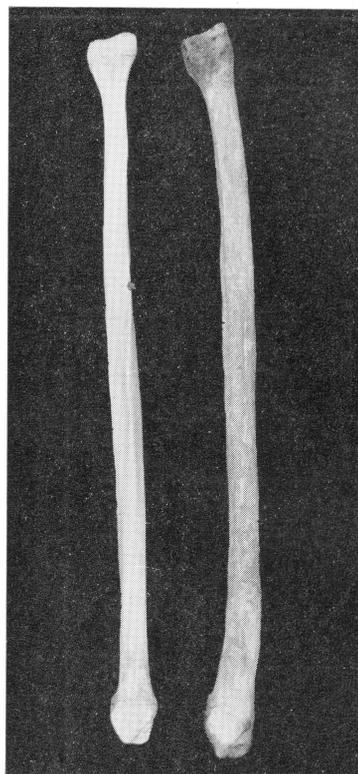


Fig. 5. Note the bowing of the Armagh Road fibula (right) indicating a degree of malnutrition.

(Photo: K. Fitzpatrick)

found a cremation probably of 1st century date (Area Plan 7) and an inhumation contained in a stone coffin (Area Plan No. 8)¹². The latter lay approximately 140 metres east of the Armagh Road burial. A further inhumation was found some 20 metres north-east of No. 8 during October 1970, in a machine dug section (Area Plan 9)¹³.

On May 18th 1972 another stone coffin was disturbed in building operations on the Beale Road development (Area Plan 11). The coffin, which was orientated north-south lay 25 metres south-west of the one in Armagh Road and contained two skeletons. One of these had been displaced to make room for the second. The coffin had been laid into another grave which contained a further skeleton, nails sug-

11 They are shown on the location plan in "Excavations at Lefevre Road, Old Ford, E.3", 1969-70 *Trans London and Middlesex Archaeol. Soc.* 23 (1971) 63.

12 7 at TQ 3697 8372, 8 at TQ 3693 8360. Information from Roy Canham, London Museum.

13 TQ 3694 8361. A report of this burial by Dr. J. Dussek, the Department of Anatomy, Guys Hospital Medical School should appear in *Trans London and Middlesex Archaeol. Soc.* for 1972, along with a report on the 1971 work at Old Ford.

gested that the original burial had been in a wooden coffin.¹⁴

It is probable that the burials relate to the Roman settlement which seems to have stretched west back from the Ford along the highway. It has been identified by excavations at Lefevre Road (Area Plan A), Appian Road (Area Plan B) and Parnell Road (Area Plan C).

Hopefully the study of the physical remains, should they occur in quantity, will give us information as to the physical characteristics of the local population, not available from examination of the occupation areas alone.

Acknowledgements

The Armagh Road burial was excavated during the 1972 season of work in Old Ford by a team, the full-time members of which were Eric Ferretti, Bernard Johnson, Irene Schwab and John Earp. Irene Schwab drew the site plan, the plan of the skeleton, and the pins. John Earp drew the area plan and was responsible for the site photography. We would like to thank Fred Goddard and the rest of the construction gang for their help, and for holding up work for a day while the excavation proceeded. Thanks are also due to Professor R. Warwick, Department of Anatomy, Guys Hospital Medical School, and Dr. A. Missen, Department of Pathology, for their preliminary examination of the

14 The skeletons are being studied by Dr. Owen.

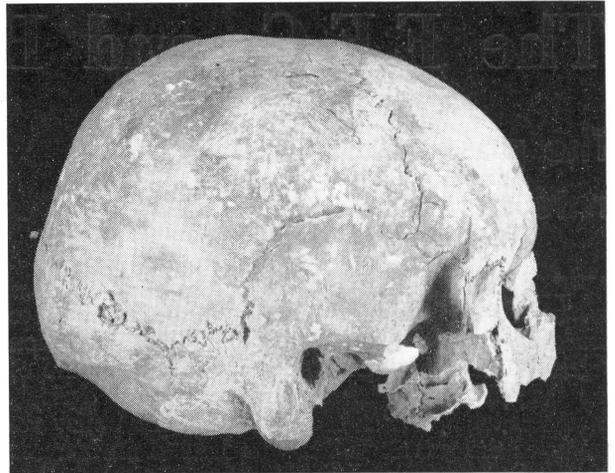


Fig. 6. The bun at the back of the skull was also noted as characteristic of the Trentholme Romano-British. (Photo: K. Fitzpatrick)

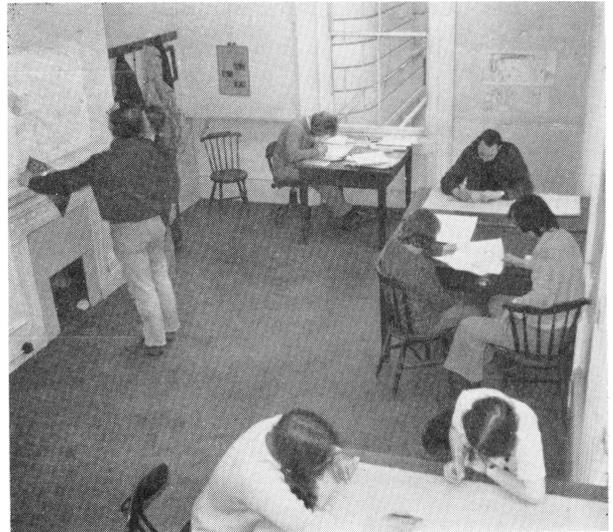
bones. The skeletal remains shown were photographed by Mr. K. Fitzpatrick of the above Department of Anatomy.

The Old Ford excavations, which are being carried out for the London and Middlesex Archaeological Society, are financed by grants from the Department of the Environment.

Suite of Offices for S.A.E.C.

THE SOUTHWARK Archaeological Excavation Committee has at last found offices at Montague Chambers by London Bridge. These premises, together with accommodation for storage, washing of finds and conservation, have been generously provided, as a contribution to Southwark archaeology, by the proprietors of Hay's Wharf Ltd. The offices should help greatly with the essential (but often under capitalised) aspects of the research, planning, processing, and report writing.

Excavations in Southwark are currently taking place at Montague Close (directed by Graham Dawson, weekends), and Borough High Street (directed by Harvey Sheldon, full-time). A high proportion of the digging and processing is undertaken by members of the Southwark and Lambeth Archaeological Society and other part-time volunteers. Much of the responsibility at Borough High Street (and previously at Toppings Wharf) rests with the full-time supervisors (Eric Ferretti, Bernard Johnson and Irene Schwab) and with the photographer and equipment organiser (John Earp). The full-time group is also carrying out work on the M23/25 motorways, for the Surrey Archaeological Society and at Old Ford, for the London and Middlesex Archaeological Society. Articles on these other activities appears elsewhere in this issue.



Work in progress in one of the rooms at Montague Chambers.

(Photo: John Earp)