UNSTRATIFIED—THETFORD AND IPSWICH WARE

Fig. 75, *a*; and Plate XLII, almost complete cooking pot waster grooved inside and out.

Fig. 75, *b* and *c*; and Plate XLII, two small grooved cooking pots with flat bases.

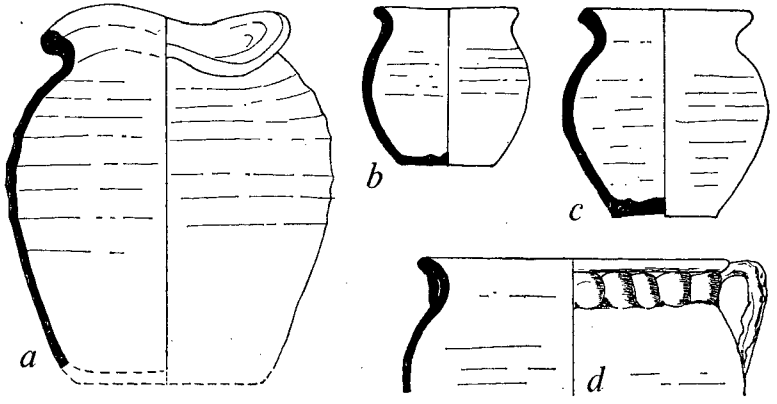

FIG. 75.—Pottery found by workmen. (¼).
a and *d*, Thetford ware; *b* and *c* Ipswich ware.

Fig. 75, *d*, spouted pitcher or storage vessel with applied thumbed band on the neck and small strap handle. This could not have had three handles since there is sufficient of the rim remaining to show that this is not possible.

MAGNETIC SURVEY AND DATING

by M. J. Aitken, M.A., D.PHIL., F.S.A.

A. Proton Magnetometer Survey

The magnetic location technique is essentially for sites away from modern habitation and activity; consequently the Cox Lane site was embarked upon with the foreknowledge of likely failure, and undertaken only because of the importance of the site from the archaeological and archaeomagnetic points of view. In the event, the magnetic hazards were far worse than ever anticipated. For instance, it was not realised in advance that Ipswich still retained an electric tram service, and the short notice (48 hours) at which the Oxford Archaeological Research Laboratory responded to the call for a survey did not allow the usually thorough enquiries. However, the trams did not operate on Sunday mornings, so that for a few hours it was possible to make proton magnetometer measurements.

Even then the area surveyed had to be restricted to about 50 ft. by 50 ft. This was because of the presence on the site of heavy excavating machinery and steel and iron materials awaiting use in the construction of the new buildings; the magnetic disturbance from this steel and iron was so great as to make proton magnetometer measurements impossible over most of the site, and to make it difficult to distinguish the weaker archaeological anomalies over the remainder. In addition the surface of the ground was irregular and thick mud.

Under these conditions it was highly satisfying to detect magnetically a disturbance in the ground which on investigation yielded the only coin found on the site. As regards the pottery kilns, No. II had already been destroyed, No. I had been revealed and was under examination, and Nos. III, IV and V lay outside the area in which magnetic measurements were possible.

B. Kiln Samples for Magnetic Dating (Archaeomagnetism)

Of the five kilns on the site, only one (No. I, Thetford ware) was available to the Laboratory for sampling. This had been partially cut into by a mechanical excavator and lay in the north face of a 15-20 ft. cliff made by the excavator. Subsequent to exposure a heavy concrete beam had fallen on to the kiln, thus raising the possibility that some movement of the structure had occurred. Such movement would be most likely to be a tilting down of that part of the kiln nearest the cliff edge and in order to check this possibility many samples were taken (24 in all), spanning the whole width of the kiln in the north-south direction. No significant variations in angle of dip were found, and it is therefore assumed that the concrete beam caused no disturbance.

After removal to the Laboratory, the 24 orientated samples were subjected to a storage procedure in order to check for possible viscous components in the remanent magnetizations of any samples. None of importance were found. The average direction of the magnetization in 23 samples was:—

Declination (D) = 24.7°E, Dip (I) = 67.0°.

The Fisher Index at the 95% level of confidence was 1.3°. The overall spread of declination was 15° (between 15°E and 33°E) and the spread of dips was 11° (between 61° and 72°). By comparison with other structures sampled, the result is regarded as having above average reliability.

Comparative data for this result is:—

Torksey kiln (?1000–1200): D = 22°E, I = 64°.
Christ Church hearth (?900–1050): D = 29°E, I = 67°.

On magnetic grounds it is most likely that the Ipswich Kiln I lies midway between these two structures, but within the 95% limit of confidence it is just possible for it to be contemporary with either.

Comment

The archaeomagnetic data obtained was of great value in itself in indicating (it was sampled before Torksey and Christ Church) the large Easterly Declination in the period concerned. If better dated structures in this period can be found for archaeomagnetic sampling, then it will be possible to ascribe a date to Ipswich I (as well as to Torksey and Christ Church), perhaps to ±20 years.

The same would apply to the other four kilns on the site, had it been possible to sample them. This would have put Ipswich ware and Thetford ware in chronological relation, with perhaps an indication of the duration of each. These other four kilns represent therefore a regrettable lost opportunity for archaeomagnetic dating in this period and for extending our knowledge of the past behaviour of the earth's magnetic field in general.

THE HUMAN SKELETON

by CALVIN WELLS, F.R.A.I., PH.D., M.R.C.S., L.R.C.P.

General Observations

The remains are those of a male aged 32 ±5. The skeleton is almost complete and well preserved. The skull is mesocranial with a Cranial Index of 75.1. All teeth were present at death except the mandibular left first molar which was lost during life. Dental caries is absent but attrition is heavy and the teeth are encrusted with tartar. Stature can be calculated to be about 1,692 mm. (5 ft. 6½ ins.).

The bones of the skeleton as a whole are lightly built but substantial muscle attachments have been developed throughout the body. A general impression is given of a lithe physique with strong muscles.

Physical type

It is not possible on physical characteristics to assign this individual to any specific period. He could be duplicated, apart from personal idiosyncrasies, among the modern population of Suffolk. Certain features of the Iron Age–Romano-British transition period are found but on balance the skeletal characters point most strongly to a Late Saxon or Early Mediaeval time—especially the latter.