

The Tower is a very large building indeed. But although it must have been built for the Crown, presumably under the oversight of the Conqueror's man here, the first Geoffrey de Mandeville, and under the direction of Bishop Gundulf of Rochester, we can find even grander schemes put up by mere barons. The great western halls at the Tower are a good deal shorter, inside, than William FitzOsbern's hall-keep of about 1070 at Chepstow (Fig. 2). The great thickness of the walls of the Tower and its plan, both, we may suspect, due to early changes from the original plan, are also found at Colchester Castle. Which is earlier, or are they both the result of copying the other's successive alterations. The bold and simple layout and the stepped-in buttresses are best parallel in England in the small Essex church of Copford near Colchester (Fig. 2), which must have been built by London craftsmen for their Bishop as the private chapel of one of his residences. The fine early wall- and vault-paintings here give some idea of the decorations that parts of the Tower may have had.

Other details, such as the deep parallel-sided window embrasures and the broad clasped buttresses of the north- and south-west corners are best matched in Poitou, as in the keep at Chauvigny, (Vienne) (Fig. 2). William "of Poitiers", the Conqueror's own chaplain and biographer provides one link with Poitou, although he was actually a Norman who had studied in Poitou for some time. Another court connexion was the younger Montgomery, whose English barony was at Lancaster, but who was known as Roger "of Poitou" from his wife's estates there. A west French master-builder may well have had a hand in one of the building-campaigns at the Tower³. A more exotic

link with Byzantine castle-design in the Holy Land has been suggested, and indeed Bishop Gundulf's tour there as a young man is well attested from several sources. Or do the shallow arcaded window-surrounds of the storey below the top bear a closer resemblance to Ottonian practice?

We cannot take everything too seriously. The chapel windows are all Salvin's work of 1858-9. The great sloping plinth, which was taken off and redone in 1955-6, was the design in 1896 of the Works Surveyor of the day, ignorant and unscholarly John Taylor, who was knighted for rebuilding the main southern curtain-wall and the Lanthorn Tower in the wrong place.

The Tower, whatever its date, tells us of naked power and bullying, a pleasant change among all the greed and self-indulgence displayed by office-blocks in the City. Indeed, it presents to the City its most powerful aspect, the magnificently dignified and symmetrical west front, not its more confused and misbegotten back and sides. It tells us little of the Conqueror's own character, but is rather a symbol of him, put up by his deputies to overawe the largest and most unruly city of his realm. There is no evidence that he ever spent a night there. It was modestly equipped for court-functions, with six latrines and four fireplaces (one of them still blocked behind Parma's portrait) to its 8 large rooms, chapel and two undercrofts. Far more important than any internal function, its main purpose was to dominate and threaten.

3. M. Bouard (ed.), *Chateau Gaillard*, vol. vi (1973) 52, fig. 2, type B.

Letters

ARCHAEOLOGICAL PAY AND CONDITIONS

THE RECENT REPORT of the LAMAS Survey on full-time employment in archaeology in Greater London (Gromaticus, Vol. 3, No. 8) pinpoints many serious problems, and offers a few suggestions for the improvement of job opportunities.

The Working Party's main finding was the dissatisfaction of the majority of archaeologists working in the London area (over the period of the Survey, 1976/7) with their salaries and contracts of employment. Their solution is the introduction of common salary scales and open-ended contracts of employment; this is like treating the symptoms of a disease rather than its underlying cause. The dissatisfaction and low morale of the young archaeologists who took part in the survey arises from their realisation of the lack of career opportunities if they wish to remain in archaeology in London. By all means introduce common salary scales and more enlightened contracts of employment, but take this opportunity to integrate them into a career structure.

All credit must go to LAMAS for setting up the Work-

ing Party; no time should be lost in setting up a stronger one with a brief for introducing a proper career structure as speedily as possible. This Working Party would need to involve the DoE, Museum of London and local societies as well as representatives of the archaeologists themselves, and must have power to act.

The LAMAS group compared their sample of young archaeologists with librarians and teachers of a similar age for comparison of conditions of employment. However, in regard to career opportunities, a closer parallel can be drawn between young archaeologists and junior hospital doctors. Both careers involve a long period of practical training on entering the profession (all doctors must be graduates before they receive their clinical training, but there is no intention to restrict entry into professional archaeology to graduates, although the LAMAS report clearly shows that the majority of entrants will be graduates).

Both careers demand academic ability and interests, and are heavily oriented towards problem-solving (generally referred to as "research"). Both are heavily over-subscribed

and promotion through the career structure is generally highly competitive.

In hospital medicine, the practice is for young trainees to move through a succession of graded clinical training posts once they have finished their initial academic training, starting with Junior House Officer posts lasting one to two years. The level would be analogous to on-site training in archaeology. Intermediate training and initial specialist training in hospital medicine is received in a succession of Senior H.O./Junior Registrar posts. These posts are rotating — that is they are of fixed length (3 to 5 years) and not tied to individuals, thus providing the maximum possible number of training opportunities. The proposal of the Working Party to introduce open-ended contracts could in fact be counter-productive at this level and could result in movement in these posts being blocked for a whole generation.

We know that the funding of archaeology in Greater London is chaotic and desperately low, and that no long-term financial planning is possible under the present system of grant aiding by Central Government, but despite this every effort should be made to introduce a career structure into the archaeological coverage of Greater London without delay.

Recent experience has shown that the area of archaeological expertise which is most under-represented is post-excavation work, and it is in this area that there is most potential for introducing intermediate training posts on a rotation basis. These posts could be set up and supervision of standards maintained by a central committee as in hospital medicine.

The advantage of this scheme is its flexibility — the number of training posts may be contracted or expanded as the archaeological need arises. For example, the archaeological needs of Greater London in 20 years time will probably not be the same as at present.

This system also means that posts could be designated within the existing "structure" in Greater London, i.e. within the existing archaeological units, possibly the local societies, and could possibly be expanded into University or Museum Departments or even into the Planning Departments of the Greater London and London Borough authorities. If and when the nature of the archaeological coverage of Greater London is agreed upon and implemented, the posts thus available could be integrated into the career structure.

At present there are some slightly hopeful signs; like the collaboration between the Institute of Archaeology, the DoE laboratories and the Museum of London, which has led to the establishment of a few (desperately few) posts in environmental archaeology in Greater London.

The real archaeological need at present is however for the expansion of the number of intermediate and advanced rotating training posts in post-excavation work, preparation of site reports and long-term research into improving post-excavation methods.

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FROZEN TOMBS

IN HER ACCOUNT of the Scythian tombs exhibition at the British Museum (Vol. 3, No. 9) it was regrettable that Betsey Kentish did not avail herself of the opportunity to explain why the human bodies, portions of which were exhibited, were in a remarkable state of preservation (this opportunity having been lost by the organisers of the Exhibition). Rightly, the unique micro-climatological conditions responsible for the exceptional survival of organic materials were emphasised but what may be true for wood, fur, leather, felt or silk should not be applied uncritically

to human tissue, which is inherently more susceptible to loss by putrefaction. Much has been made of the preservative powers of deep-freezing (witness the recovery of the carcasses of mammoths in the Siberian zones contiguous to that concerned) but the principle is ill-understood and freezing alone has rarely led to the preservation of intact mammalian corpses in antiquity. Because of the finite time required for complete freezing of the inhumed bodies, the low temperature alone cannot account for the recovery of the intact cadavers from the tombs of the Altai Mountains. Instead a combination of factors, some of them deliberate, appear to have been involved and most were obvious to the excavator¹:

(i) evisceration (with the concomitant removal of micro-organisms of intestinal origin, involved in the initial stages of the putrefactive process) as in Egyptian mummification and other embalming rites,

(ii) replacement of the organs removed (sometimes also the brain and some of the muscles) by a relatively inert stuffing of grass or horse-hair,

(iii) infusion of common salt into the tissues, (resisting decay by prevention of the growth of the bacteria responsible),

(iv) storage in a tree-trunk coffin, (with probable saturation with tannic acid from the bark—the preservative principle operative in Bronze Age burial mounds, and Iron Age bogs of Denmark, especially²),

(v) the fortuitous refrigeration itself.

This fortunate combination of events resulted in the recoverability of ancient human tissue, permitting the retrieval of information concerning the cultural practices of these nomadic peoples. Thus, the evidence for tattooing and scalping has survived. True preservation by freezing appears to have occurred among the horse burials associated with the tombs. Although the latter were not intact, sufficient remained to show the presence of grain, rather than grass, in the stomach revealing that they had been tended carefully instead of being put out to graze³.

I have written at some length because I feel that observations such as these have important implications for all human material recovered by excavation, (soft-tissue representation not being unknown in burials from the British Isles).

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1 S. I. Rudenko *Frozen Tombs of Siberia* (London: 1970).

2 P. V. Glob *The Bog People* (London: 1971).

3 E. D. Phillips *The Royal Hordes* (London: 1965).

METRICATION

I FOUND THE WINTER 1978 number an eminently readable and informative issue: in particular I would like to congratulate the authors of the Milk Street report on the clarity of their contribution. This, I think, on reflection, is to some extent due to their presentation of all measurements in Imperial terms as well as the now commonly used metric units. To anyone not schooled in metrics (and I am well outside that age bracket), to interpret say 30 cm, involves a mental hiccup while the information is digested, which interrupts the easy flow of reading and assimilation, whereas "about a foot" is clear enough (and accurate enough for general reading) to be taken in one's stride. In a recent and otherwise excellent publication, I found it completely off-putting to have areas presented solely in terms of "ares", which to me and I am sure to others, present no mental image at all. Use of metric units is no doubt desirable for the accurate final record,

and perhaps for international reading and comparison, but for easy reading I found the Milk Street presentation most acceptable and would suggest its adoption for future reports. I do not think it is the business of the *LA* to further the ambitions of the Metrication Board Quango; the aim should be to suit as many of the readers as

possible, and this, to my mind, is one way of doing it.

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Excavation Round-Up 1978 (continued from page 264)

follow up chance finds of Romano British and Iron Age date discovered between 1974 and 1977 (*L.A.* 3, No. 6,162) in the Cemetery proper. No features were discovered, nor any Roman cremations, but Mesolithic flints and tools, and pottery ranging from Iron Age to modern were found.

TOWER HAMLETS

Tower Hill. TQ 337 805. Inner London Archaeological Unit. (D. Whipp). An extended excavation and site-watching programme was carried out on a GLC subway scheme on behalf of the D.O.E. A 6 m (20ft.) stretch of the Roman wall revealed surviving to a maximum height of 1 m (3ft 3in). The wall was faced with squared blocks of Kentish Ragstone. At ground level there was a plinth course of large sandstone blocks with a chamfered edge. Behind the wall was the remains of the earth rampart, stretching at least 9 m (30ft.) back. Inside the wall was found the foundations of a stone turret which had been partially excavated in 1936. The Roman ground level did not survive within the tower. W.C.

WALTHAM FOREST

57-59a Church Road, Leyton. TQ 376 867. Passmore Edwards Museum. (P. Greenwood). Excavation revealed below a medieval ploughsoil the butt end of a flat-bottomed enclosure ditch superceded by a number of discontinuous field boundary ditches. A series of large pits showing evidence for intense burning were also found. Apart from some residual Iron Age material the excavated remains date to the late 3rd and 4th c. A.D.

WANDSWORTH

38 Felsham Road, Putney. TQ 239 735. Wandsworth Historical Society. (N. Farrant). Continuing work shows that both the ditches of the Roman road (Round-Up 1977) terminate part way across the site; this and other evidence suggests a crossroads—of a system of centuriation? There are ditches relating to two earlier Roman periods. W.C.

Spring Passage, Putney. TQ 237 759. W.H.S. (N. Farrant). Investigation of flood defence work in the Passage produced four Roman sherds (three joining). Their size and condition indicates that they are not field scatter. The location is on the supposed earliest Roman approach to the Thames.

WESTMINSTER

Cromwell Green, SW1. TQ 302 795. Inner London Archaeological Unit. (P. Mills). Two trenches were cut, prior to landscaping of the site, and a number of prehistoric (possibly late Iron Age) gullies and postholes were identified. Roman and possibly Saxon watercourses were recorded, but although some late medieval drains were found, most of the medieval deposits had been removed in the 19th c.

ESSEX

Essex House, Waltham Abbey. TL 382 005. Waltham Abbey Historical Society. (P. J. Huggins). Small excavation behind Essex House, S. of the Market Place, to see if Romano British occupation, expected to concentrate under

Market Place, extended southwards. Stray R.B. material found, and medieval and post-medieval evidence including plough marks in the natural clay turning E-W at right angles to Sewardstone Street.

Abbey Mead, Waltham Abbey. TL 382 007. Passmore Edwards Museum. (P. Wilkinson). Excavation on this scheduled site has exposed the corners of two medieval buildings of probable 13th and late 15th c., and industrial area represented by mortar floors and deep rectangular pits possibly associated with the Abbey brewhouse and part of the Abbey water supply system. The Saxon-Norman period is represented by an iron-working area, various pits, ditches and wells and one stone wall-footing for a building lying outside the area of excavation.

KENT

Hextable House, Hextable, Kent. TQ 515 700. Crayford Manor House Historical and Archaeological Society. (E. O. Thomas). Excavations on the site of Hextable House (demolished 1946) have uncovered evidence of Tudor construction with major 17th c. development and 19th and 20th c. additions. W.C.

SURREY

Bridge Head, Market Place, Staines. TQ 033 716. Staines Archaeological Unit. (K. Crouch). Building work revealed remains of 18th c. stone footings. Beneath this and alongside, sealed beneath silt deposits, parallel rows of wooden posts with evidence of cross beams joining the two rows. Associated pottery is 12th-13th c. Small fragments of an 11th c. structure were also found, sealed beneath a second silt layer, dividing this from the above-mentioned structure.

Runnymede Bridge, Egham. TQ 019 719. Surrey Archaeological Unit. (D. Longley and S. Needham). Work on the construction of the M25 bridge over the River Thames revealed archaeological material. Salvage work recorded an apparent Neolithic brushwood structure with associated finds, including two stone axes, and also part of a line of Late Bronze Age piles. Subsequent excavation revealed more of the Neolithic levels covered by about 1½m of material deposited by the river forming a bank on which a Late Bronze Age site, presumably associated with that excavated in 1976, was discovered. The site lay alongside the river and the river bank was fronted by a double row of timber piles. Various pits and post-holes were excavated and a considerable amount of domestic rubbish, including part of a third antler cheek piece, was recovered. The major importance of the site will undoubtedly lie with the vast amount of 'environmental' material which had been excellently preserved under waterlogged conditions. Detailed analysis of this evidence is being undertaken under the general guidance of the Ancient Monuments Laboratory and is likely to prove of outstanding importance. W.C.

Glebe Meadow, Ewell. TQ 221 628. Nonsuch Antiquarian Society. (R. Birch). Excavation on S side of Stane Street. The only Roman features found were an open air hearth constructed over a pit, and a rubbish pit. There were also formless patterns of flint patches and post-holes of unknown date. An intaglio of early 3rd c. A.D. date was found. W.C.