A Pottery Louver from Great Easton, Essex

By G. C. DUNNING

EXCAVATIONS were conducted by Mr. and Mrs. J. E. Sellers in 1964 and 1965 at the site of what was probably a manor house at Great Easton, three miles north-west of Dunmow. Evidence was found of a building of timber and daub with a tiled roof, provided with a central hearth and a baking oven; it was therefore identified as a kitchen. The destruction-layer of this building contained mortar and burnt daub, and nibbed roofing-tiles. An associated layer a short distance from the kitchen also contained nibbed tiles and many pieces of the louver. Pottery found elsewhere in the excavation dates this type of tile, and consequently the louver, *c.* 1300 or soon after.[1]

DESCRIPTION (FIGS. 26–27 and PL II, A, B)

The louver is made of light-red sandy ware, grey in the core, and fired very hard. The fabric contains a few pieces of crushed flint. The inside surface is brick-red, grading to grey on one side of the louver; the change in colour results from the firing, and is not due to smoke staining while the louver was in use. The outside is also red and is almost entirely covered by a creamy yellow slip, which extends from the top down to the flange below the lower tier of apertures. The slip also covers the inside of the baffle-plates of the apertures in the upper tier, but it does not occur inside the canopies of the lower tier. Glaze, clear yellow with a few spots of green, is present very sparingly in the hollow above the upper frilled band.

The structure is barrel-shaped, divided into two tiers each with five apertures of different shapes in the two tiers, and it is surmounted by a domed top. It measures $27\frac{1}{2}$ in. in total height, $14\frac{1}{2}$ in. in greatest diameter, and $11\frac{1}{4}$ in. in diameter at the base. The extreme width between the ends of the canopies in the lower tier is 21 in. The domed top finishes in a hollow knob of biconical shape, $3\frac{1}{2}$ in. in diameter, with a small flat top grooved near the summit.

The upper tier, 6 in. deep, is limited above and below by projecting frilled bands. In this tier are five large triangular apertures, spaced equally round the circumference and occupying the whole height of the tier. It is certain that five apertures are present and not four, as seemed likely before the restoration; joins exist between three adjacent apertures, forming more than half the circum-

[1] For interim reports see *Trans. Essex Archaeol. Soc.*, 3 ser., 1 (1965), 265, *Med. Archaeol.*, IX (1965), 188, and *infra*, p. 190. Mr. and Mrs. Sellers kindly gave permission for the louver to be studied and published in advance of their full excavation report. It was skilfully restored in the Conservation Laboratory of the Institute of Archaeology, University of London, by Miss Priscilla Berridge and Miss Raymonde Ludovici, who also supplied the photographs. The louver is now in the Saffron Walden Museum, where the finds from the excavation will eventually go.

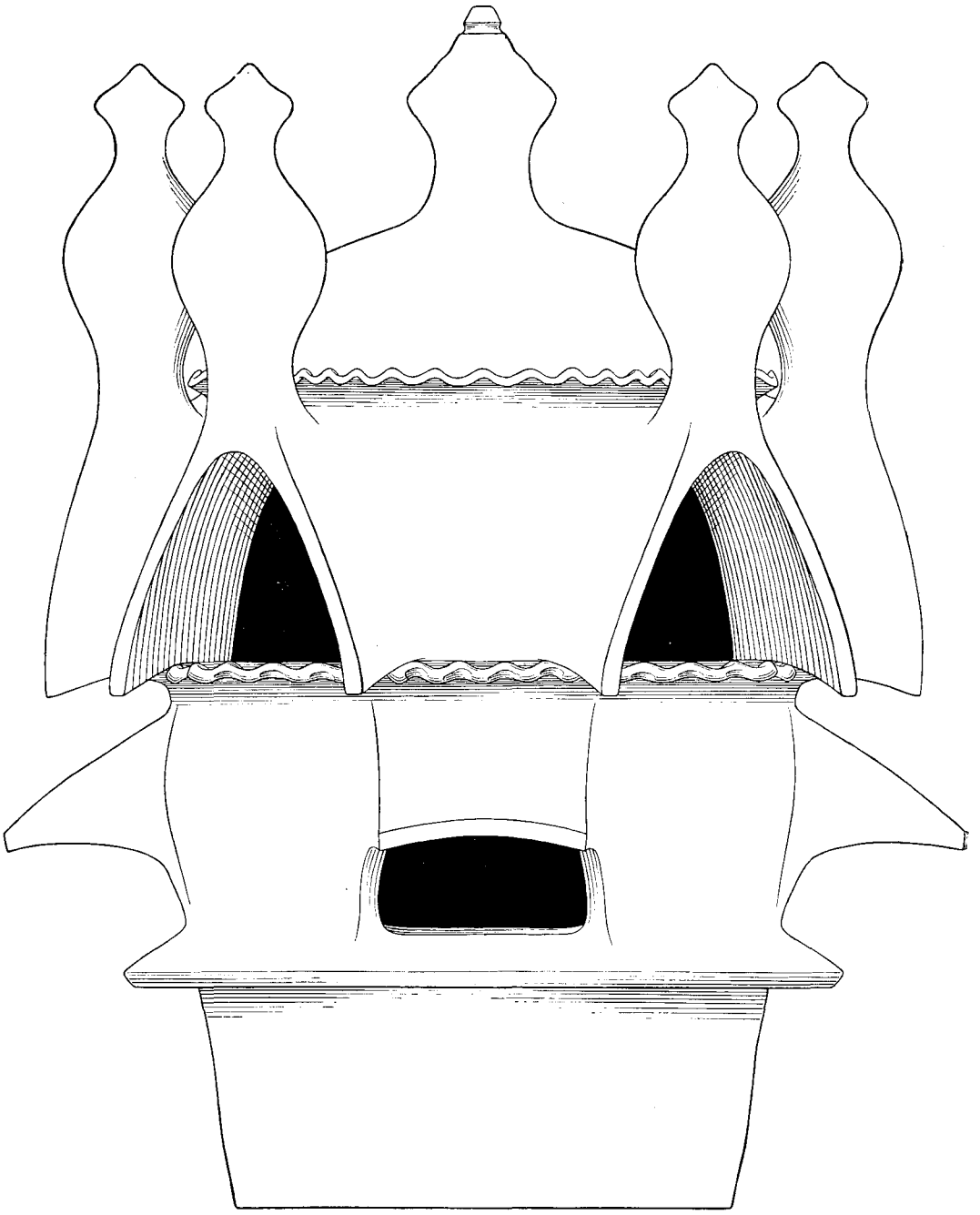

FIG. 26
LOUVER FROM GREAT EASTON, ESSEX. Sc. ¼

ference at this level. The apertures are about 5 in. high and 5 in. wide at the base. Each opening has a baffle-plate projecting about $3\frac{1}{2}$ in. beyond the side, which extends round the top and down both sides, but not along the base of the aperture. At the summit each baffle-plate is surmounted by a hollow finial about 9 in. high, composed of two stages, a lower ovoid part $3\frac{1}{2}$ in. in diameter and an upper biconical knob 2 in. in diameter.

The lower tier, also 6 in. deep, is limited below by a downward-sloping plain flange, projecting $1\frac{3}{4}$ in. beyond the side. This tier also has five apertures, spaced between those in the upper tier. These apertures are rectangular, about $4\frac{1}{2}$ in. high and $4\frac{3}{4}$ in. wide. Each opening has a canopy or hood, $4\frac{3}{4}$ in. wide, across the slightly cambered top, and projecting about 4 in. beyond the side. The canopies are provided with curved side-pieces which extend to the base of the aperture. The front edge of each canopy is cut into a curve.

The lowest part of the louver, 5 in. deep below the flange, is roughly finished and the outside is trimmed by a knife or tool. The base is flat, about $\frac{1}{2}$ in. wide underneath but irregular in width (0·4 to 0·6 in.); it is thickened on the inner side, where it is also knife-trimmed.

TECHNIQUE

The method of making this exceptionally large and complex louver is worth considering. First the base and lower part would be thrown on the wheel, and then the side heightened by two successive zones as far as the level of the upper frilled band. The domed top would be added separately and formed by collaring, that is, pressing the clay inwards gently until the narrow apex was produced. Next the positions for the apertures would be marked out, and the openings cut in the side by a knife.

Structural joins visible at broken edges show that the baffle-plates and canopies were made separately and then added to the louver. Each baffle-plate was a strip of clay about 15 in. long and $3\frac{1}{2}$ in. wide, which was bent at an acute angle at the middle, and then one long edge was pressed against the margins of the aperture. A hole about 1 in. across was made at the top of the plate to facilitate the fixing of the knob finial here. The clay round the edge of the hole was pushed upwards and added to, forming a tube 1 to $1\frac{1}{2}$ in. long over which the lower end of the finial was fitted in an overlapping and secure join.

The canopies were made in a different way by cutting out strips of clay $4\frac{3}{4}$ in. wide by 5 in. long. One short edge of the strip was fixed across the top of the aperture, and the two long edges formed the sides of the canopy. The side-pieces supporting the canopy are not separate, but were the flaps made by cutting the aperture down the middle. These flaps were turned outwards and lengthened, and each then fixed along the upper edge to the sides of the canopy. The canopy was then given a slight convexity by pressing its inside surface with the fingers, and finally its front edge and the side-pieces were trimmed into curves by a knife.

To complete the louver the two frilled bands and the heavy flange were added; these mask the structural joins in the side of the louver.

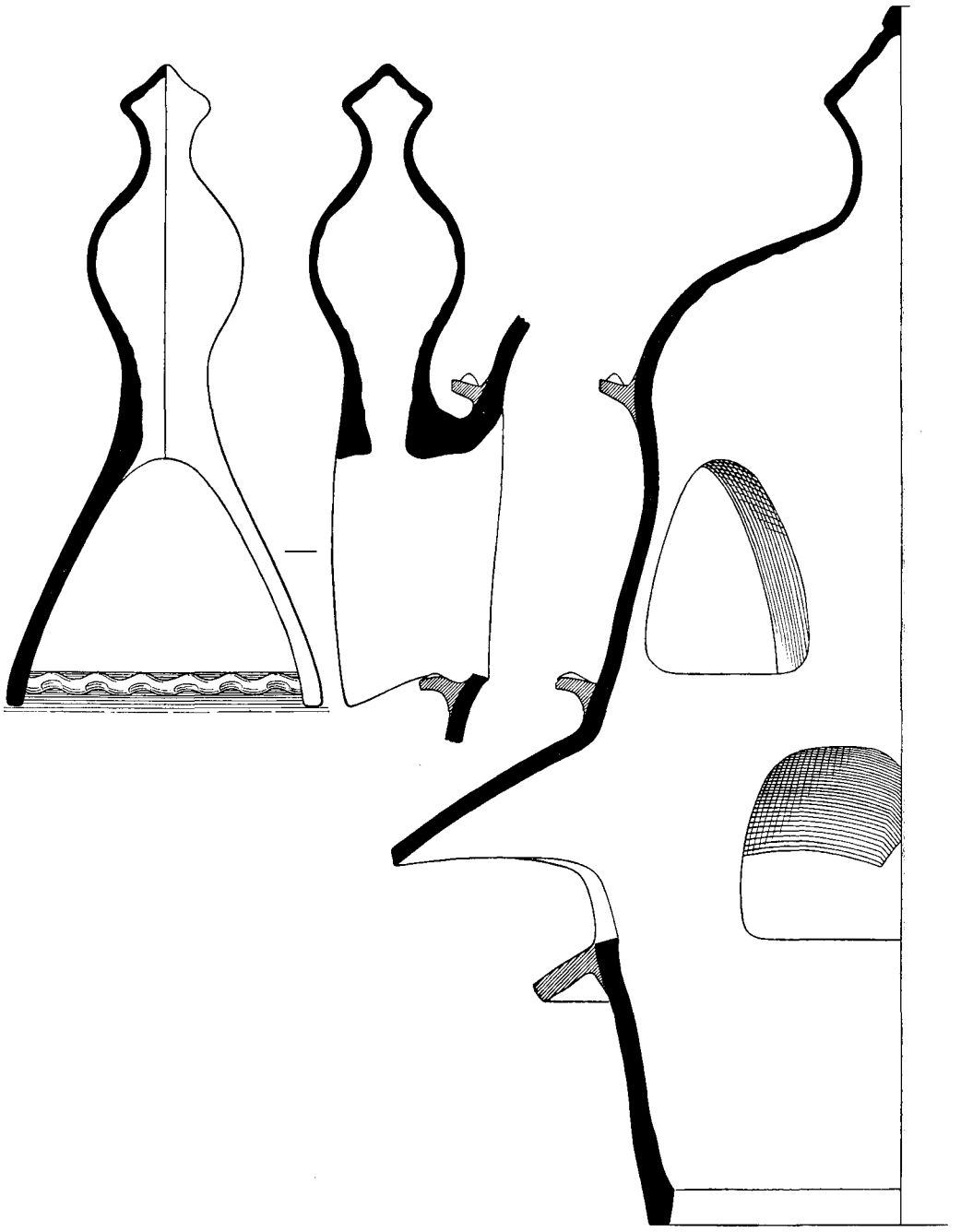

FIG. 27
GREAT EASTON, ESSEX
Sections of louver, apertures and finials (pp. 74, 76). Sc. ¼

DISCUSSION

In several respects the Great Easton louver is the most remarkable of this class of roof fitting yet known. It belongs to type 1, a separate structure fitted over a hole left in the roof, and designed for the purpose of ventilation, or for the escape of smoke or steam-laden air. It holds the record for size, being half as high again as any other louver of this type.

The method of fixing the louver is shown by the flange. A small platform on the roof had a hole 14 in. in diameter into which the louver was lowered until it rested on the flange. This method has been noticed once before, on the flanged base of a large louver, 21 in. in diameter, found at Canterbury, which has holes for pegs to secure it. There is not enough left of the flange on the Great Easton louver to show if it also was pegged.

The ten apertures in the louver are of shapes (triangular and rectangular) already familiar on louvers, but in size these are larger than usual. The baffle-plates at the top and sides of the apertures in the upper tier occur on several louvers of type 1, for instance at the manor of the More, near Rickmansworth,[2] Warmington, Warwicks.,[3] Canterbury, London and Bristol.[4] On the other hand, the canopies above the apertures in the lower tier appear here for the first time on a louver certainly of this type. Hitherto they have been recorded only on louvers of type 2, which are attached to the top and sides of ridge-tiles and in consequence are smaller than type 1.

The most elaborate louver of type 2 provided with canopies is that from Goosegate, Nottingham;[5] this has four tiers of apertures, of which twenty-four are canopied and only four (in the lowest tier) have baffle-plates. Other examples of louvers with canopies are known from Winchester,[6] Southampton and Rye, and this feature seems to have originated on louvers of type 2 in southern England. However, nearly all the other canopies are simply ledges across the top of the apertures, and only a few are curved even part of the way down the sides of the opening. The canopies on the Great Easton louver are thus the most elaborate, as regards both the broad and slightly cambered top with sharp margins and the curved side-pieces extending down to the base of the aperture. These precisely-made features give the canopies an architectural appearance, as though they simulate the projecting hoods of fire-places supported on corbels.

The number of apertures in a louver varies considerably. The louvers at Winchester and Southampton have only two or three at the same level; one found recently at Ely has four large triangular apertures; and another at Rye had six, also of this shape. The Great Easton louver, with ten apertures in two tiers of five in each, is matched by part of a louver of type 1 from Stonar, Kent, which had circular apertures in two zones, six in the lower and four in the upper. The record is held by the Nottingham louver mentioned above, with twenty-eight

[2] *Archaeol. J.*, CXVI (1959), 176, fig. 16.
[3] *Ibid.*, p. 177, fig. 17.
[4] *Trans. Bristol and Glos. Archaeol. Soc.*, LXXIX (1960), 280, fig. 8, 13.
[5] *Trans. Thoroton Soc.*, LXVI (1962), 20.
[6] Barry Cunliffe, *Winchester Excavations 1949–1960*, 1 (1964), 160, fig. 45, 4.

apertures arranged in four tiers. Because of the wide range in the number of apertures it is very difficult to reconstruct a louver from fragments only.

The really novel features of the Great Easton louver are the finials on the domed top and above the baffle-plates in the upper tier. There are only two

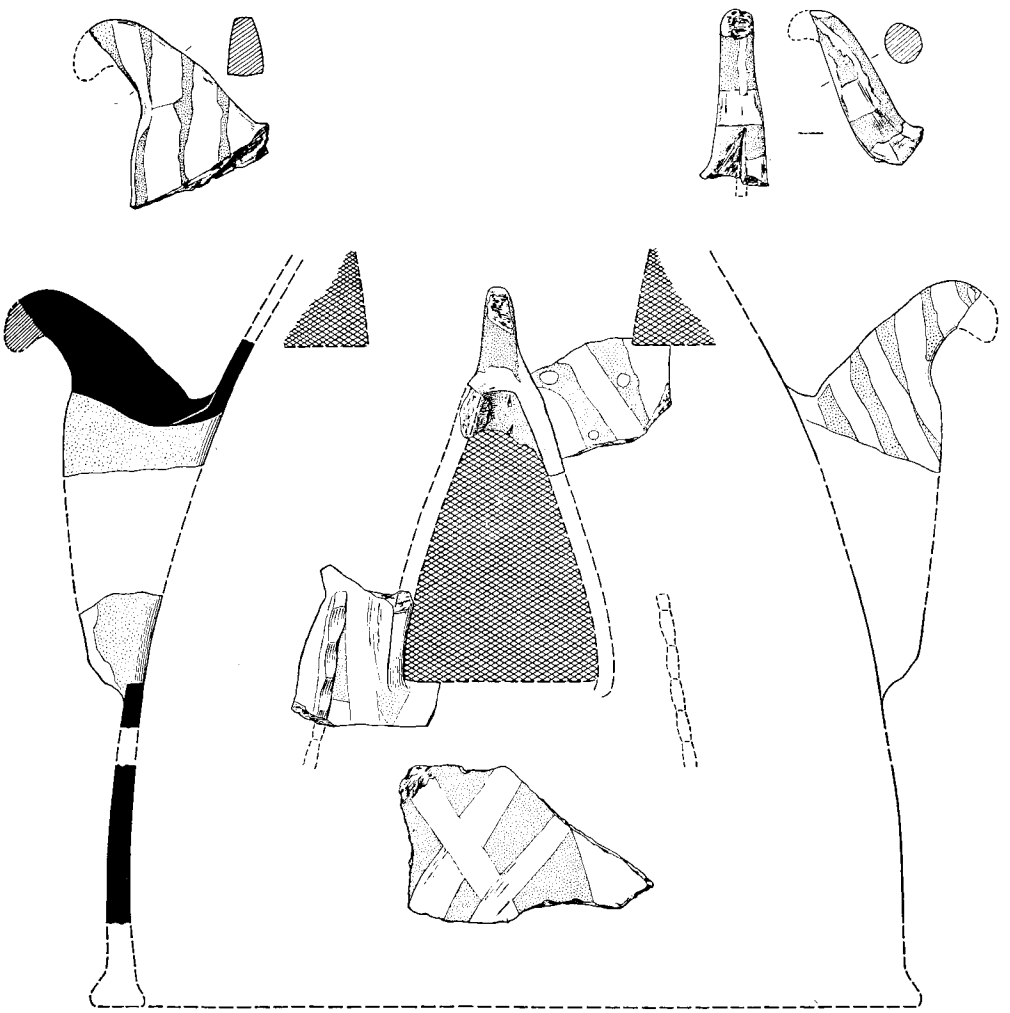

FIG. 28
THE MORE, NEAR RICKMANSWORTH, HERTS.
Reconstruction of louver (p. 79 f.). Sc. ¼

parallels for finials on a louver, though in type these differ from the present ones. The spur finials from the manor of the More,[7] originally thought to be attached to the ends of the ridge-tiles, have been re-examined as a result of the find at Great Easton, and it is now certain that they surmounted the baffle-plates on the louver

7 *Ob. cit.* in note 2, p. 175, fig. 15.

from this site. The drawing of the louver from the More has therefore been adjusted, and is here republished (FIG. 28). The louver found at Ely[7a] has a small domed top on which are three horn-like processes surrounding a central spike. On the Great Easton louver, therefore, the elaboration is carried a stage further, for the finials occupy both the positions on the other louvers.

The finials on the Great Easton louver are derived from two distinct types of roof finials, which belong to different regions of the country. The biconical knob on the dome is about the same size as knob finials known in some numbers in the east Midlands and in East Anglia, for instance at Leicester and Nottingham, several from the current excavations at King's Lynn, and at Great Yarmouth. Examples also come from three sites in east Kent.

The ovoid finials with small knob terminals on the baffle-plates have a quite different origin. They are miniature versions of large finials made in two stages, the upper much smaller than the lower, which are limited to southern England. These two-stage finials have been found at Portsmouth and Salisbury,[8] and at Winchester there is an interesting example of a louver of type 2 based on this form.

The Great Easton louver is thus outstanding for its great size, for the scale and shape of its apertures, and for the addition of finials as decorative elements on its upper part. In creating this louver the potter drew on various sources for its features, some regional in East Anglia and others derived from southern England. He combined the huge mass of the louver and its functional parts with subsidiary decorative finials based on other types of roof fittings. These adjuncts give an air of lightness and fantasy to the whole structure. Mounted on the roof, the louver would be most imposing and have an almost oriental look, like a domed mosque flanked by minarets.

Although the purpose of the Great Easton structure as a roof ventilator is perhaps sufficiently clear from its design, this identification does not rest on archaeological evidence alone. An item in building accounts mentions that in 1363 four earthen pots (*oll' lut'*) were bought for the smoke-vent (*fumerell'*) of the barn or grange at Hadleigh Castle, Essex, and four others for the smoke-vent of the king's hall in Rayleigh Park, Essex, at the high rate of 1s. 2d. each.[9] This reference provides information on three points. First, that pottery structures served as ventilators in the 14th century; secondly, that they were used in sets of four on large or important buildings; and thirdly, that they were set up on buildings of different type, either for ventilation or for the escape of smoke.

[7a] *Proc. Cambridge Antiq. Soc.*, forthcoming.

[8] *Salisbury Museum 1860–1960*, fig. 56.

[9] L. F. Salzman, *Building in England down to 1540* (1952), pp. 100, 221–2. For the rebuilding of Hadleigh *c.* 1360–70 see *The History of the King's Works* (ed. H. M. Colvin, 1963), II, 662–5.