

## ROOF COVERINGS

The detail at G shows a left-handed verge. The narrow curved purpose-made verge tile shown is necessary at each course to balance the roof and present the same appearance at both verges. Alternatively, purpose-made double "roll" verge tiles are used; as these can be hung on and nailed to the tiling battens, in addition to being bedded, they are preferred to that shown at G where the narrow verge tiles are bedded only. One of the two verges at a gable will be as shown at H, and the other on the opposite slope will be finished with purpose-made tiles; the thickness of the pointing should, of course, be the same at both verges.

ABUTMENT DETAILS.—Formerly, when purpose-made verge pantiles were not available (and therefore symmetrical treatment at the verges was not possible unless the verge tiles on one slope at each gable were cut and the rolls removed), it was a common practice to finish gable walls with low thin parapets as shown at D, Fig. 45. A brick-on-edge coping, surmounting a double plain tile creasing which oversailed a cement fillet splayed down to the pantiles, was provided. Sometimes the parapet was only  $4\frac{1}{2}$ -in. thick. Whilst this provided a pleasing appearance the construction was not sound, as water was liable to penetrate the wall, as indicated by the thick broken arrows.

Sounder construction, presenting the same external appearance, is shown at B, where the cavity of the gable wall extends to the tile creasing. An isometric sketch of this detail is shown at E. This also illustrates a satisfactory treatment of the roof at a chimney stack. Galleting is shown at the ridge and at the three channels of the pantiles intercepted by the stack. Cut plain tiles are bedded on the latter galleting and continued up the slope where the upper end is covered by the ridge tile. A neat mortar fillet is formed over these cut tiles and at the ridge intersection. This sketch also shows the groundwork described on p. 114 in connection with the detail at H.

An alternative detail, showing a cavity wall finished with a stone coping, is given at A. This also shows a cement fillet, neatly splayed or rounded off, covering the intersection between the tiles (and the ridge) and the wall.

In the above abutment details, cement fillets have been shown at the intersections. It is advisable to add a 5 per cent. waterproofer (see p. 27, Vol. II) to the mortar. Whilst these fillets present a satisfactory appearance when associated with pantiles, mortar is a very unreliable material for this purpose, as the fillets have a tendency to crack and fall away. They therefore require occasional attention, and the making good of any defects, if water is to be excluded.

Undoubtedly the provision of lead flashings at abutments, in lieu of mortar fillets, is the soundest practice. But, as already pointed out, leadwork does not harmonize with tiles in general because of its colour and texture. The section at C shows, as an alternative to the cement fillet at A, a lead apron flashing which is dressed over the tiles.

HIP DETAILS.—The cutting of pantiles is both difficult and expensive, and therefore intersections resulting from hips, valleys, dormers, etc., should be avoided or reduced to a minimum.

The detail at K, Fig. 45, shows an elevation of a portion of the roof illustrated at K and L, Fig. 44. The hip is of half-round tiles bedded on the pantiles on adjacent slopes which have been cut to form an open mitre up the line of the hip. Conical hip tiles are also employed.

VALLEY DETAILS.—A typical valley is shown at J, Fig. 45. The lead forming the gutter is dressed over the valley board and up each slope, where it is either turned over at the edge, as shown on the left, or dressed over a tilting fillet as indicated on the right (see p. 148, Vol. I). A layer of flat plain tiles is laid up the slope at each side, butt-jointed in mortar at their ends, and the cut pantiles are bedded on them. Pieces of tile may be embedded in this bedding to form tile insets. The roofing felt is brought over the plain tiles as shown. The somewhat unusual appearance of the pantiles is due to the vertical section being taken normal to the line of the valley.

Purpose-made valley tiles, slightly curved or V-shaped in cross-section, are now available. Lead is not required when these are employed, the roofing felt being continued over the valley board, and the valley tiles, laid with a 3-in. lap, are nailed to the board. The cut pantiles are bedded on the sides of the valley tiles. A very satisfactory appearance results.

Pantiles, being comparatively big units, are best suited for covering large roofs requiring a bold and simple treatment. Those of best quality, especially if hand-made, are used in first-class work, whilst pantiles of inferior quality are suitable for roofs of farm and similar buildings where an inexpensive covering is desired.

## ITALIAN OR ROMAN TILING

This is illustrated in Fig. 46.

The various forms of this class of tiling include (a) Old Roman, (b) Single Roman and (c) Double Roman.

(a) OLD ROMAN TILING.—This is also known as *Basilican tiling*, and, more commonly, as *Italian tiling*. It is another example of single-lap tiling. The tiles, which are hand-made, consist of flat *under* tiles (abbreviated to *unders*), which alternate with convex curved *over* or *top* tiles (or *overs*).

An under is shown at B. It is flat, tapered, with upturned edges or flanges at the sides, and is provided with two nail holes. Its length is  $15\frac{1}{2}$ -in., its width varies from  $9\frac{1}{4}$  to  $9\frac{1}{2}$ -in. at the tail and  $10\frac{3}{4}$  to 11-in. at the head, and it is  $\frac{1}{2}$  to  $\frac{5}{8}$ -in. thick. Some are provided with two transverse grooves near the head; these capillary grooves are effective in minimizing updrift. The end views of the head and tail show that the flanges are tapered, with a slight increase in depth towards the head.

An over (see A) is also  $15\frac{1}{2}$ -in. long, tapered on plan, half-round at the tail, slightly less in height at the head, and is provided with one nail hole. As shown, the tile may be slightly shouldered to allow it to clear the unders in the course above at the head lap.