

SLATING

Other examples of head nailing are shown in Figs. 36, 37 and 38. The detail D in the latter figure gives a good example of the lower courses of slates having an inadequate fall due to the flat sprockets. Provided the window could be kept lower, a sounder job would result if the feet of the spars were continued and a small tilting fillet used instead of the sprockets.

**DIMINISHING COURSED WORK** (see G and M, Fig. 69).—As explained on pp. 133 and 136, the random slates are sorted and laid in graded courses diminishing from a maximum at the eaves to a minimum at the ridge. The slates in each course are of the same length, but the width may vary (see G). As the *lap is the same throughout*, it follows that the gauge decreases from the eaves upwards. The gauge for head-nailed slates is found by the rule stated at M, i.e.,  $\frac{\text{mean length of slate and slate above} - (\text{lap} + 1\text{-in.})}{2}$ . An application

is given in the section at M, which shows a uniform lap of  $2\frac{1}{2}$ -in. (which is adequate for a pitch of  $50^\circ$ ) and the length of the successive upper courses to be 18, 17, 16 and 15-in. ; the gauges of the 18 and 17-in. courses are 7 and  $6\frac{1}{2}$ -in.

$$\frac{16'' + 15'' - (2\frac{1}{2}'' + 1'')}{2} = 6''$$

respectively as shown, and that of the 16-in. course =  $\frac{16'' + 15'' - (2\frac{1}{2}'' + 1'')}{2} = 6''$ .

The gauge for centre-nailed slates, as in ordinary slating, is  $\frac{1}{2}$ -in. more. Whilst the above example is a simple illustration, it should be pointed out that the reduction in length is excessive and very large slates would be required at the eaves of a large roof if a more gradual reduction was not made ; sometimes the courses are diminished at every second course. Westmorland slates are usually laid with graduated courses and a very attractive appearance results. The slate ridge is described on p. 137 ; a sawn stone ridge or a hog-back tile ridge (provided it was of a suitable colour) would be more pleasing in appearance.

**PROCEDURE IN SLATING A ROOF.**—The following is the normal sequence of operations in slating the roof of a building which is assumed to be detached and has gabled walls :—

The metal eaves gutters are fixed immediately after the woodwork at the eaves has been completed ; the battens are fixed at the gauge apart, commencing from the eaves ; stacks of slates having been placed at suitable intervals up the roof by the labourer, the slater proceeds to fix them, commencing at one end of the eaves and gradually spreading longitudinally and up the roof until the ridge is reached ; the opposite slope is covered in a similar manner ; the ridge tiles are bedded, jointed and pointed horizontally and in true alignment, with exception of the end pieces and those against chimney-stacks, which are given a slight tilt upwards, as previously explained. If hips are required, the specially cut hip slates will have been dressed to the correct shape and size and these are the first to be fixed in each course ; if the hips are to be cut and mitred, the lead soakers (prepared by the plumber) are fixed by the slater as the slating proceeds ; if hip tiles are required, these are fixed in correct alignment, commencing at the eaves and neatly mitring with the ridge tiles. If the verges are as shown at N, Fig. 69, the undercloaks are firmly bedded in cement mortar before the battens are fixed. Finally, the gutters are cleaned out and the underside of the roof is torched. Of course, if untearable felt is to be fixed in lieu of torching, this is done before the battens are fixed.

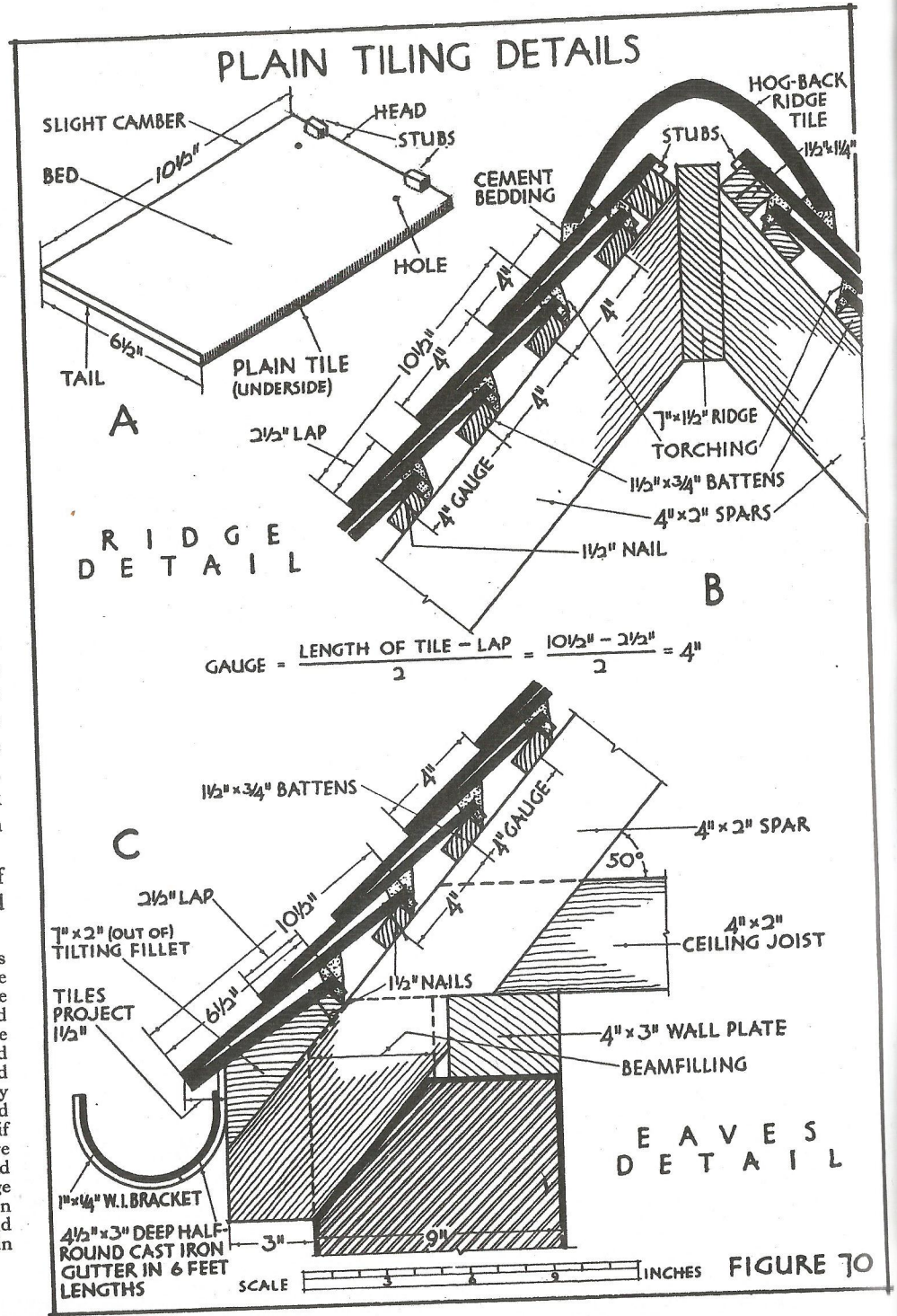


FIGURE 70