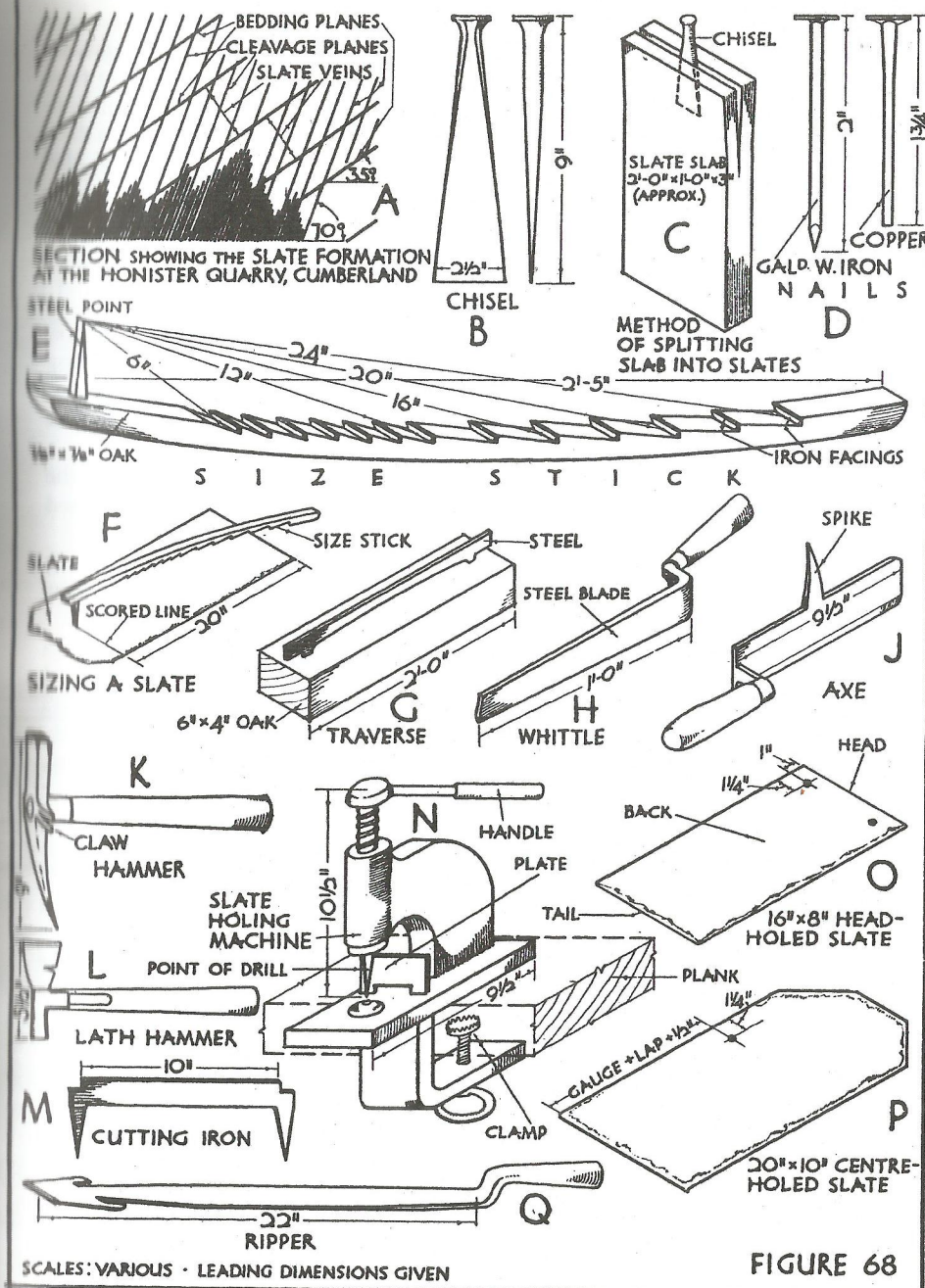


TOOLS & PREPARATION OF SLATES



to give its maximum size with the minimum waste, and the slates are afterwards sorted into sizes.

SIZES.—Slates are produced in a large number of sizes ; some of the larger quarries supply over twenty sizes and the Bangor slates can be obtained in no less than thirty-two standard sizes varying from 24-in. by 14-in. to 8-in. by 8-in. Common sizes are 24-in. by 12-in., 20-in. by 10-in., 18-in. by 9-in. and 16-in. by 8-in. ; larger and special sizes can be obtained at additional cost.

The Westmorland, Cumberland and North Lancashire slates are generally produced in what are termed " random sizes."

Random slates are from 12 to 24-in. long and are proportionate in width, the average width being half its length ; these are " sized " after being dressed, *i.e.*, sorted into sizes 24 to 20-in., 20 to 18-in. and 18 to 12-in. long. These slates are usually laid in regular *diminishing courses* (see p. 136) for which mixed sizes are required.

Peggies are small-sized randoms ; they are 9 to 12-in. long (" best peggies ") and 6 to 10-in. long (" second peggies "), with proportionate widths.

In addition to classifying slates according to size, they are divided into three or more grades known as " qualities," *i.e.*, " firsts " (or " bests "), " seconds " and " thirds." As a rule, these terms refer to thickness only and not to value, for, in certain quarries, " best " slates are cheaper than " seconds." Each of these qualities are divided into maximum and minimum thicknesses ; " seconds " are thicker than " firsts," and " thirds " are thicker than " seconds."

Tally slates are Welsh slates which range in size from 24-in. by 14-in. to 12-in. by 8-in. and are sold by " count," *i.e.*, per thousand of 1,000 slates. *Ton slates* are those which are sold by weight (per ton) and include 12-in. by 6-in., 11-in. by 7-in. and 10-in. by 8-in. Welsh slates, in addition to the whole of the " random slates produced in Cumberland, Westmorland, Lancashire, Cornwall and certain of the Welsh quarries. *Queen slates* are Welsh slates which are from 24 to 36-in. (increasing by 2-in.) long and are sold by weight.¹

CHARACTERISTICS.—A good slate should be hard, tough and durable, of rough texture, ring bell-like when struck, not split when holed or dressed, practically non-absorbent and of a satisfactory colour. Those which feel greasy are generally of inferior quality and any showing white patches or marcasite (iron pyrites) decay readily, especially if subjected to a smoky atmosphere ; patches of lime also adversely affect durability.

When left immersed in water to half its height for twelve hours, the water-line on the slate should not be more than 1/8-in. above the level of the water in the vessel. In slates of poor quality, the water is readily absorbed and rises several inches up the slate ; such slates are easily destroyed by frost action (due to the absorbed water freezing and disintegrating the slate). If a dry slate is kept in water which is kept boiling for forty-eight hours, its increase in weight should not exceed 0.3 per cent., and if a specimen of slate is immersed for ten

¹ The practice of using the following terms when specifying slates SHOULD BE DISCOURAGED as, with few exceptions, they are not now used in the trade, *i.e.*, " smalls " (12-in. by 6-in.), " doubles " (13-in. by 7-in.), " ladies " (16-in. by 8-in. or 16-in. by 10-in.), " countesses " (20-in. by 10-in.), " duchesses " (24-in. by 12-in.), etc.