

"out of winding or twist." This is tested by placing straight-edges on the drafts and sighting through as indicated by broken lines at J. Any adjustment is made by the removal of the necessary amount of stone where required. Drafts G and H are then formed and the whole of the superfluous stone between the drafts removed by means of the pitching tool (1), punch (6) or point (9). After continuous furrows have been formed across the face with the point or punch, the ridges may be removed by the claw chisel (20) and mallet; the chisel is worked parallel to the furrows, the teeth preventing the formation of holes. Diagonal drafts (K), in addition to the marginal drafts, are necessary for working a true face on a large stone. The adjacent surfaces may be dressed in a similar manner, the square (26) being used to ensure that the adjacent surfaces are square and also for marking any necessary lines.

The terms *plain work* or *plain face* are applied to the labour on a stone to form a true face. *Half plain work* describes a similar but rougher dressing, such as is only necessary for beds and joints where the appearance is not material.

Surface Finishes.—The finishes which may be given to the *face* (exposed surface) of a stone are many and varied, but those applied to surfaces of the *beds* (upper and lower surfaces), *joints* (ends) and *back* of the stone are more limited, as the essential requirements are reasonably smooth and square surfaces to permit of mortar joints of the required thickness.

The finish varies with the stone and the class of work for which it is required. Thus for *rubble work* of the *random rubble, uncoursed* class (see Fig. 20), very little labour is expended on the stones, whereas certain other finishes are both elaborate and costly. Stone which is roughly shaped and dressed is known as *quarry-dressed* stone.

QUARRY DRESSING¹.—Stone quarried in many districts is walled in its rough state. In certain quarries the stone lies in thin beds and splitting is all that may be necessary to fit the blocks for walling on account of their natural smooth faces and flatness of bed. Such smooth-faced stone is known as *self-faced*. Other stone may require a small amount of labour expended upon it. Examples of such finishes are *hammer-dressed* and *straight-cut*.

Hammer-dressed.—This is also known as *hammer-faced, quarry-faced, quarry-pitched* and *rustic-faced* and its appearance somewhat resembles that shown at L, Fig. 19. The face is roughly shaped by means of the mash hammer (27, Fig. 19) which is used to remove the larger raised portions of stone and to bring it to the required shape. The blocks are sometimes squared, the beds and joints being dressed back some 3 or 4-in. from the face (see plan in Fig. 22). This is done by using the square to mark the boundaries and working the pitching tool along them, each blow on the tool removing a piece of stone. This enables the stones to be fitted more closely together to give reasonably uniform thick joints.

¹ Quarry-dressed stone has been used extensively in the construction of houses, especially in Yorkshire.

Straight-cut.—This is applied to the faces of small blocks of stone used for *squared rubble* (Fig. 22) and *regular coursed rubble* (Fig. 22). The larger blocks are split at right angles to the natural bed (see p. 38) into smaller blocks and it is this split surface which provides the face, the slightly uneven texture being very effective. These small blocks are quickly squared by applying the mash hammer along the edges to remove the superfluous stone, followed by the punch.¹

ELABORATE DRESSING.—The following are some of the finishes which are worked by hand on squared stones: Boasted, punched, picked, tooled, furrowed, rock-faced, scabbled, combed, vermiculated and reticulated.

Boasted or Drowed (see M, Fig. 19).—A true face is first formed as described on p. 35. The face is then boasted or finished with the hammer and boaster (5) by forming a series of 1½ to 2-in. wide bands of more or less parallel tool marks which cover the whole surface. These marks may be either horizontal (see 2), vertical (3) or at an angle of 45° (4) as required, and in making them the boaster is moved in the direction of the band at each stroke. This is a common finish which is applied to relatively inexpensive work, and it is also an intermediate dressing which is subsequently tooled, fluted, etc. (see below).

Punched, Broached or Stugged (see N, Fig. 19).—Depressions are formed on the rough surface with the punch (6). It may take the form of a series of parallel ridges and hollows (7), or the punch may be held almost vertically and driven in to form hollows at about 1-in. apart (8). It is used especially on the lower portions of large buildings.

Picked, Pecked or Dabbed (see O, Fig. 19).—This is similar to but finer than punched work, the small pits being formed by the point (9). Fine dressing is sometimes called *close-picked* or *sparrow-picked*. It is used for quoins and occasionally for general faced work.

Tooled or Batted (see P, Fig. 19).—The face is first boasted to bring it to a regular surface, after which a series of continuous and parallel horizontal (10) or vertical (11) or diagonal (12) fine chisel lines are formed with the batting or broad tool (21) which is caused to move in the direction of its *edge*. It is usual to specify the number of lines per inch, the number varying from 8 to 10, depending upon the hardness of the stone and the degree of fineness required. This is a common dressing for ashlar work (see p. 45). Note the difference in the appearance between boasted and tooled work; in the former the marks are flat and not continuous, whereas in tooled work the lines are deeper and are continuous.

Furrowed or Fluted (see Q, Fig. 19).—The surface is first boasted and then rubbed (see p. 35); ¼ to ⅜-in. wide flutes (see section XX) are then carefully formed by a gouge (13) either vertically (14) or horizontally (15). Lines showing the arrises of the flutes are lightly scored and these serve as a guide to the mason as he works the gouge along each. This finish is

¹ This dressing is very popular in Yorkshire (thus most of the buildings in Huddersfield are faced with straight-cut stone) as the hard local sandstone is particularly suited to receive this finish.