in detailed at T, Fig. 39. Whilst some of the close grained sandstones can be finely carved, the limestone class is generally most suited for this purpose.

The architrave of the entrance D, Fig. 38, is detailed at D, Fig. 39. Note that its outer members are returned on the plinth block, which latter must, of course, have an adequate projection to receive it. The head of this architrave (like that at E, G and H, Fig. 38) is formed of three stones with secret joggle joints (see D, Fig. 25, Vol. I). An additional feature may be provided either at U or v in the form of brackets or consoles similar to, but much shorter than, that detailed in Fig. 42 and placed below an increased projecting cornice.

The entrance at E, Fig. 38, has a wide architrave which is detailed at E, Fig. 39. The broad outer flat band is continued to form the upper member of the plinth. The shadow produced at the deep sinking emphasizes the rather bold curved member.

The detail of the architrave at F and G, Fig. 38, is shown at F, Fig. 39. The prominent moulded member is effective, but see the note below regarding protection of projecting masonry. It will be observed that the stonework courses with the brickwork.

Principal doors of buildings of importance are frequently of bronze. The door, with pediment and entablature, shown at F and G is an example. Consideration of bronze details is deferred to the Advanced Course. Briefly, the bronze of the entablature and pilaster is of  $\frac{1}{4}$ -in. thick cast bronze, and, for best work, the external face of the door is formed with  $\frac{1}{4}$ -in. thick bronze cast in the form of panels, and an  $\frac{1}{4}$ -in. thick sheet bronze backing; the door is 2-in. thick, with a space between the facing and backing.

An example of a very wide architrave is shown at H, Fig. 38, and detailed at G, Fig. 39.

The necessary lead covering of cornices has been purposely omitted in order to make the stone details as clear as possible. It cannot be too strongly emphasized that all projecting stone members should be protected as shown in Fig. 74, Vol. I. This is especially necessary in smoke-laden districts (see p. 97). Thus, for example, in addition to the cornice shown at B and C, Fig. 38, the upper surface of the horizontal corona should be given a very slight weathering and be covered with lead. The value of the drip and throating should also be appreciated (see Fig. 43 and p. 115). The modern tendency of omitting projecting courses, such as cornices, string courses and sills—with their drips and throatings—has resulted in many recent buildings becoming horribly disfigured within a very short time after erection. Such disfigurement is very pronounced at door and window openings which have been finished simply with wide, plain but slightly projecting bands or fillets. Referring again to some of the entrances illustrated in Fig. 38 and detailed in Fig. 39, it is seen that certain of the details should be slightly modified unless protection by string courses, porticoes, etc., is afforded. Thus, for example, a small throat could with advantage be formed at E (see broken lines at x) and F (y to be widened to allow for the small throat), Fig. 39.

Additional doorways are shown in Fig. 44, and, as already pointed out, these door dressings can also be applied to windows.

Six examples of the stone treatment at windows are illustrated in Fig. 40 and detailed in Fig. 41.

The opening at A, Fig. 40, accommodates a pair of metal casements (see

Fig. 28, Vol. III) and a hopper light. The elongated channelled bed joints, detailed at A, Fig. 41, are an effective contrast to the adjacent plain jointing.

II3

The double-hung sashed window shown at C and D, Fig. 40, has a stone segmental head backed with a two-ringed rough brick arch, and the architrave consists of alternate moulded and projecting plain blocks. This is detailed at C, Fig. 41.

The opening at G, Fig. 40, shows an entablature. Traditional proportions are indicated. Two alternative details are shown at L and M, Fig. 41.

The metal casement in a wood frame (see Fig. 28, Vol. III) shown at J. and L, Fig. 40, is detailed at D, Fig. 41. The latter figure also shows two alternative details of the window sill at J and K.

The openings at M and O, Fig. 40, are detailed at E and G, Fig. 41.

An elevation and vertical section of a double-hung sashed window are shown at J and K, Fig. 42. The stone dressings include an entablature with consoles or brackets. The latter are often elaborately enriched with carving and usually take the form of a scroll (resembling a partially unrolled scroll of parchment) or volute. Detail A shows the side view of a console and one of several methods of constructing a scroll is there shown and explained at H. The elevation is shown at B and the architrave is detailed at N. An application of consoles to an entrance is illustrated at H, Fig. 44.

## CORNICES

Several cornices are illustrated in Fig. 43 as alternatives to those shown in Vol. I.

The plan and elevation of a classic (Corinthian) entablature are shown at A and B, Fig. 43. Many important modern buildings have been completed with entablatures of proportions which conform very closely to those indicated in this traditional example.<sup>2</sup> Students should study these proportions very closely and be guided by them when designing stonework for upper features of buildings and dressings at door and window openings.

The cornice may be provided with a gutter as shown by broken lines at A, or be similar to that at N, or it may be weathered in the more usual manner as shown at L. The outlet from the gutter, such as a lead branch pipe, would be connected to a rain-water pipe fixed in an inconspicuous position; in order to avoid mutilation of the stonework, the outlet sometimes takes the form of a swan-neck bend connected to an internal rain-water pipe. Enrichment, in the form of a carved bedmould, cymatium (occasionally), modillions (in the form of horizontal scrolls) and sunk panels (often rose-shaped and therefore known as roses), may be provided.

The sections at F, G, H and J show cornices having a small projection. They could also be used as string courses. The section and elevation at G show a

<sup>1</sup> These are further illustrated in Vol. IV.

<sup>2</sup> The proportions of a classic entablature are based upon the diameter of a column just above its base. Details of an order, comprising columns, entablature, etc., are given in Vol. IV.