

indicated, a vertical section of the complete window is set up. The sash is inclined to the required maximum opening position (this varies from 10° to 20° to the horizontal) and the inner and outer beads are drawn. A line ("3") is drawn through the centre of the pivot joining the points "1" and "2," which are 1/2-in. above and below the beads, and two short lines are drawn at right angles to it and across the width of the frame beads to give the cuts. With the centre of the pivot as centre, the arcs indicated by broken lines are drawn to give the corresponding points for the splay-cuts on the sash beads. The 1/2-in. clearance between each of the points "1" and "2" and the sash beads permits of the removal of the sash when required.

The underside of the head of the frame is slightly splayed (about 1/4-in.), and the top bead and the top of the sash are made to conform to it, to allow the sash when opened to clear the frame.

HARDWARE.—The window fittings consist of pivots, eyelets, cleats, catches and patent ventilating gearing.

Sash Pivots or Centres.—Of the various forms, that shown at M, Fig. 62, consists of a brass, malleable iron or gunmetal pin or stub mounted on a plate, screwed to the inner face of the sash, and this engages in a metal socket the plate

of which is screwed to the inner face of the frame. One pair of fittings is required per sash.

The sash pivot shown at P consists of a pin or stub plate and a slotted plate or socket. A pair of these fittings is fixed to the edges of the sash and frame. The pin plate may be fixed either to the frame or the sash. If the former, each socket plate must be screwed to the edge of the sash with the open end of the slot downwards (not as shown at P) and inwards; a groove for each fitting must also be formed along each inner bead attached to the sash and continued to the slot of the socket plate (see broken lines at J); when inserting the sash from the inside, the ends of the pivots are engaged in the bottom of the grooves, the sash is pushed downwards and outwards until the slots on the socket plates have been reached. Alternately, each pin and socket plate may be screwed to the sash and frame respectively; when this is done, the socket plate is fixed with the open end of the slot uppermost (as shown at P) and the groove is formed in the frame. These pivots are not so readily fixed as the type at M, and if the sash is partially open, it can be easily removed from the outside.

The patent type shown at Q is an improvement on the above centres. This consists of a gunmetal screw bolt or pivot with three plates T, U and V. A hole

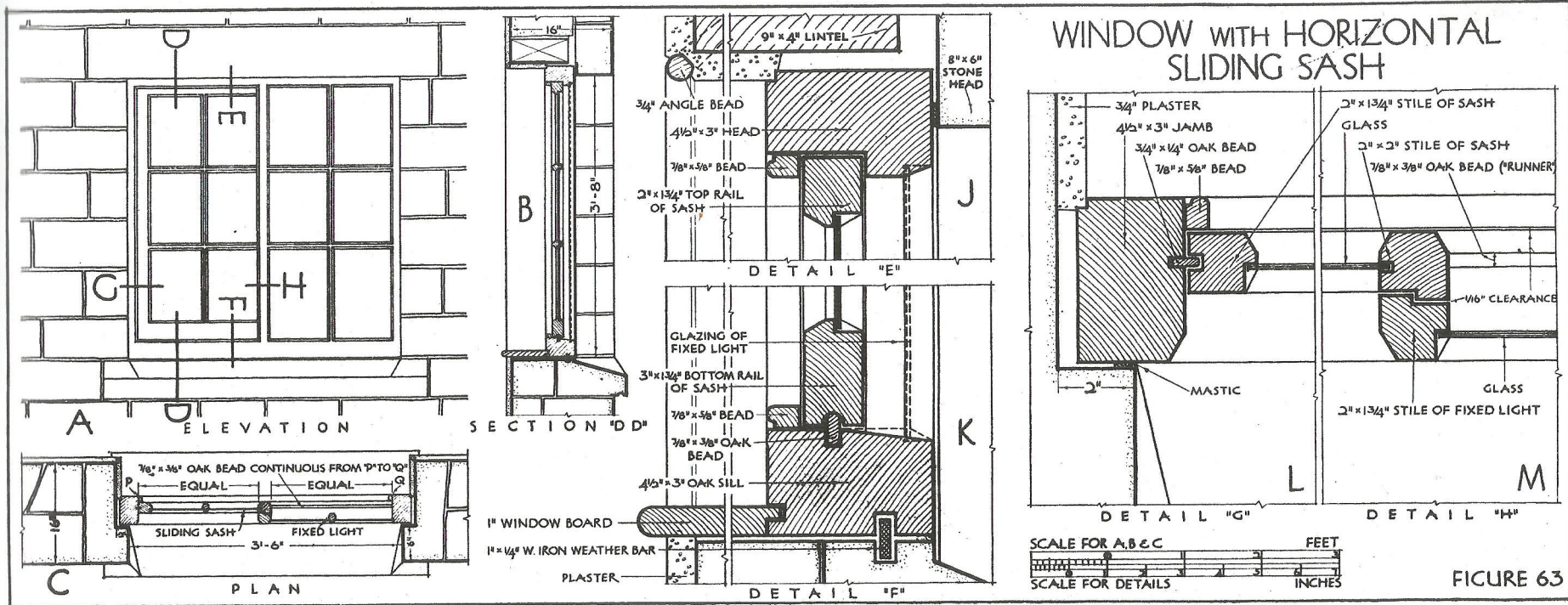


FIGURE 63