

CARPENTRY PARTITIONS

Partitions are walls, usually relatively thin and of light construction, which are used to divide buildings into rooms, corridors and cubicles. Whilst their essential purpose is to serve as divisions, partitions may also be utilized to support the joists of floors, purlins and ceiling joists of roofs, etc., and as such are load-bearing structures.

The many materials used in the construction of partitions include (1) timber, (2) clay and terra-cotta, (3) concrete, (4) plaster, (5) asbestos-cement, (6) glass and (7) metal.

I. TIMBER PARTITIONS.—These include (a) stoothed and (b) trussed partitions.

(a) *Stoothed Partitions*.—These are also known as *stoothings*, or *stud*, *quarter* or *common partitions*. This type is illustrated in Fig. 11. It consists of vertical members called *studs* or *quarters*, which are secured to two horizontal lengths of timber, the upper being the *head* and the lower the *sill*. One or both sides may be either lathed and plastered, or covered with boarding, plywood sheets, wall boards, etc.

The studs, usually of 4-in. by 2-in. and occasionally of 3-in. by 2-in. stuff, are spaced at 14 to 16-in. centres for lathing and up to 2-ft. centres for boarding or panelling. Short lengths of studs, such as those above doors, are called *punchions*. The ends of the studs may be either stub-tenoned into the head and sill (see E and L), or housed, or, as shown at J, slotted over $1\frac{1}{2}$ or 1-in. by 1-in. fillets nailed to the head and sill. In cheap work the sill is sometimes omitted and the studs are nailed direct to the floor (see U). The studs are stiffened by *nogging pieces* or *noggings* at vertical intervals of from 3 to 4-ft. These short pieces, 4 or 3-in. by 2 or $1\frac{1}{2}$ -in., are generally fitted more or less horizontally and tightly between the studs, to which they are nailed (see O and G), or inclined as shown at Q; alternatively, the noggings may consist of pairs of 2-in. by $\frac{3}{4}$ -in. continuous pieces let in flush with the faces of the studs (see T and H). The wall studs may be packed out from the walls as shown at A, or securely plugged to the walls.

The width of the head and sill is the same as that of the studs and are preferably 3-in. thick. The former is securely nailed to the ceiling (or floor) joists and the sill is fixed to the floor. Sometimes these members have their ends built into the walls, but, apart from the difficulty in accomplishing this, it is unnecessary if they are securely fixed as described. The head and sill are shown at right angles to the floor and ceiling joists. If the partition is to be fixed parallel to the joists, it should be either placed immediately over a floor joist (or doubled joist) or, where this is not possible, on short 6-in. by 2-in. transverse bearers housed at about 3-ft. centres between the pair of joists concerned; similar 4-in. by 2-in. bearers between the joists of the ceiling or upper floor will serve as a fixing for the head.

If provision has to be made for a door, as shown at A, the door posts should be sufficiently rigid to resist the impact of the door and they should be continuous

