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2,198,316

WALL AND CEILING CONSTRUCTION

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Fig. 1.

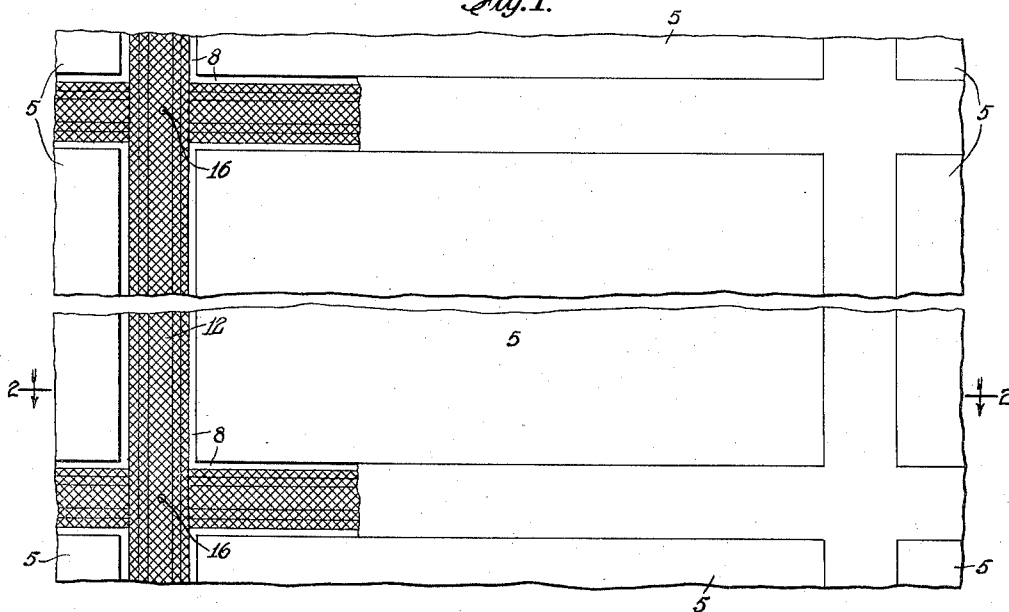


Fig. 2.

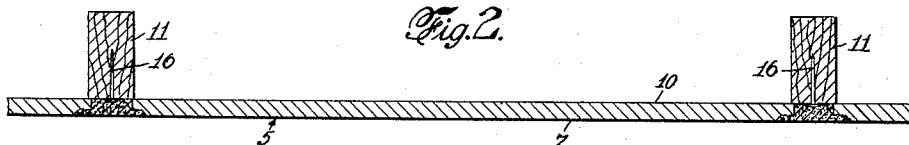


Fig. 3.

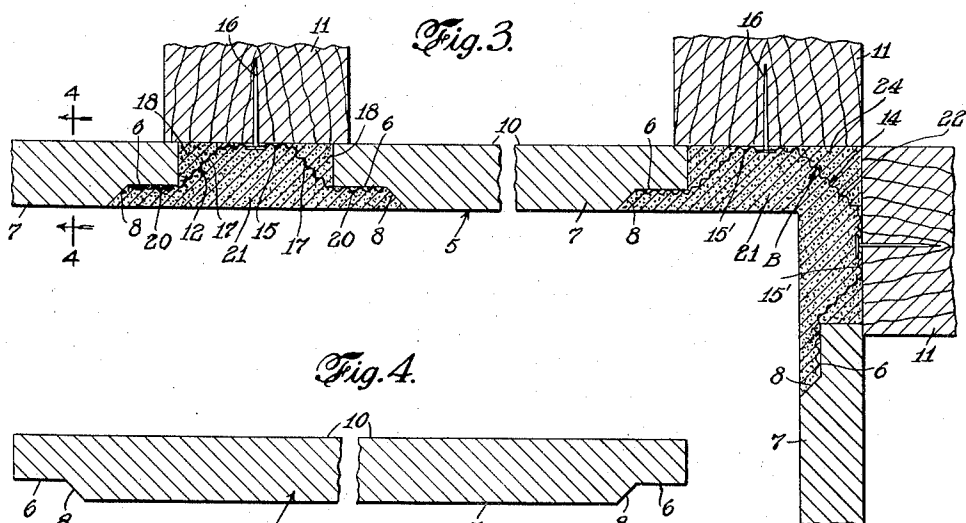
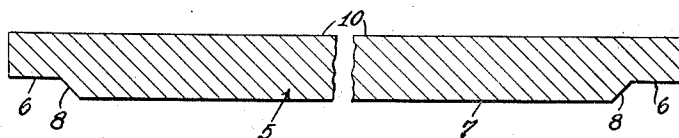


Fig. 4.



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WALL AND CEILING CONSTRUCTION

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4 Claims. (Cl. 72-16)

This invention relates to wall and ceiling construction of the type composed of so-called panel boards, which are made of various materials or compositions of materials and are supported in wall or ceiling-forming positions by attaching them to such conventional backing or structural members as studs, joists, and the like.

Important objects of the present invention are to generally improve wall and ceiling constructions of the type wherein panel boards are employed; to facilitate fastening the panel boards securely in wall or ceiling-forming positions; and to make it easily possible to lend a neat finish to the wall or ceiling along all lines of jointure between adjacent panel boards.

Other objects and advantages of the invention will become apparent from the following description when taken in connection with the accompanying drawing, in which—

Fig. 1 is a fragmental view illustrating in elevation a wall or ceiling constructed in accordance with the present invention; Fig. 2 is a sectional view taken on line 2—2 of Fig. 1; Fig. 3 is a sectional view, enlarged with reference to the scale of Fig. 1 illustrating the present invention as embodied in a pair of meeting walls, and Fig. 4 is a sectional view of a panel board, the section being taken on line 4—4 of Fig. 3.

In providing a wall or ceiling construction according to the present invention, a plurality of panel boards 5 are employed, which panel boards may be preformed from various materials or compositions of materials such for example as plaster, fibre, and equivalents thereof. These panel boards 5 may be of standardized dimensions and are so shaped in section as to present a plurality of marginal ledges 6 which are disposed rearwardly of the plane of the wall-forming face 7 of the respective panel boards. As will be readily understood from the drawing, particular reference being had to Figs. 3 and 4, the wall-forming face 7 of each panel board is disposed in a plane parallel to and spaced from the plane of the ledges 6, between which planes the panel board is bevelled as shown at 8. Further regarding the cross-sectional contour of the panel boards, it is to be especially noted that each of them is so formed, as will be readily understood from Figs. 3 and 4, that their opposite ends and sides are disposed in planes perpendicular to the plane of the wall-forming face 7 as well as the plane of the opposite or rear face 10 of the panel board.

According to the present invention, the panel boards 5 are secured in wall or ceiling-forming

positions by attaching them to conventional backing or structural members 11 such as studs, joists and the like, the margins of the respective panel boards being disposed in an overlapping relation to the backing members as shown most clearly in Figs. 2 and 3, leaving a substantial space between adjacent panel boards to accommodate the fastening devices or anchor strips 12 and 14, the former of which is particularly adapted for use intermediate adjacent panels in a straight wall or ceiling construction, and the latter of which is particularly adapted for use intermediate the end panel boards of a pair of meeting walls, such, for example, as two side walls or one side wall and a ceiling.

Referring particularly to the fastening device 12, it will be observed that such device in its entirety is made of expanded metal and is so shaped as to provide a base 15 adapted to abut against the backing member 11, to which it is securely fastened as by a series of nails 16. The base 15 and its associated wing-like gussets 17 collectively constitute a channel structure, the side walls (i. e. wing-like gussets 17) of which are inclined outwardly and form with the backing member 11 and the adjacent panel boards a pair of relatively large pockets 18, the function of which will hereinafter more clearly appear. As shown most clearly in Fig. 3, the wing-like gussets 17 are provided at their outer ends with a pair of panel-board engaging flanges 20 which impinge on the ledges 6 of adjacent panel boards, the force of impingement, and hence the clamping action of the flanges 20, being due to the inherent tension set up in the fastening devices when they are nailed or otherwise secured to the backing members 11 and being of sufficient intensity to effectively retain the panel boards in wall or ceiling-forming positions against such backing members. As will be understood from Fig. 1, the fastening devices 12 at opposite ends or sides of the panel boards of a given row or series of such boards may be of uninterrupted lengths throughout the linear extent of that row or series of panel boards, whereas the remaining fastening devices employed in connection with the panel boards of that series or row may be cut to lengths corresponding to the distance between the longer or "full length" fastening devices.

According to the present invention, it is easily possible to lend a neat finish to the wall or ceiling along all lines of jointure between adjacent panel boards 5 by there applying a filler, such as a suitable plaster 21 which flows readily through the mesh or openings in the wing-like gussets 17 of

the fastening devices 12 and into the pockets 18 where it upon setting or hardening serves to effectively key or anchor the remaining material in sealing position flush with the wall-forming

5 faces 7 of adjacent panel boards.

As to the fastening device 14, wherein parts similar to those already described in connection with the fastening device 12 are indicated by primed reference characters, it is believed unnecessary to elaborate on the details of construction or the function of the device other than to point out that the base B includes a pair of base portions 15', connected together by an intermediate web 22 which forms with the structural

10 members 11 a relatively large pocket 24, the function of which, like that of the pockets 18 and 18' is to receive a portion of the plaster 21 or similar material as it is applied along the line of jointure between the end panel boards of two meeting

20 walls or of one wall and a ceiling in order to lend a neat corner finish at such line of jointure.

Although only one modification, namely, the modified form of fastening device for use intermediate the end panel boards of two meeting

25 walls or of one wall and a ceiling is herein shown and described, it will be understood that various other changes may be resorted to without departing from the spirit of the invention or the scope of the following claims.

30 What is claimed is:

1. In a wall or ceiling construction, a backing member, a plurality of panel boards arranged in a spaced meeting relation and having their margins overlying said backing member, a fastening device secured to said backing member intermediate said panel boards and including a base attached to said backing member, a pair of perforated wing-like gussets extending outwardly from said base and forming with said backing

40 member and with said panel boards a pair of relatively large pockets, a pair of panel-board engaging flanges carried by said wing-like gussets and impinging on adjacent panel boards, and a filler overlying said base, said gussets, and said

45 panel-board engaging flanges, and a similar filler confined within said pockets and in union with the first-mentioned filler.

2. In a wall or ceiling construction, a backing member, a plurality of panel boards having marginal ledges disposed rearwardly of the plane of the wall-forming faces of such boards, said panel boards being arranged in a spaced meeting relation and having their margins overlying said backing member, a fastening device secured to said backing member intermediate said panel

50 boards and including a base attached to said

backing member, a pair of perforated wing-like gussets extending outwardly from said base and forming with said backing member and with said panel boards a pair of relatively large pockets, a pair of panel-board engaging flanges carried by said wing-like gussets and impinging on said ledges of adjacent panel boards, and a filler overlying said base, said gussets, and said panel-board engaging flanges, and a similar filler confined within said pockets and in union with the first-mentioned filler.

3. In a wall or ceiling construction, backing members, a plurality of panel boards arranged in a spaced meeting relation and having their margins overlying said backing members, a fastening device secured to said backing members intermediate said panel boards and comprising a base including a pair of base portions, a perforated web connecting said base portions and forming with said backing members a relatively large pocket, a pair of perforated wing-like gussets extending outwardly from said base and forming with said backing members and with said panel boards a pair of relatively large pockets, a pair of panel-board engaging flanges carried by said wing-like gussets and impinging on adjacent panel boards, and a filler overlying said base portions, said web, said gussets and said panel-board engaging flanges, and a similar filler confined within said pockets and in union with the first-mentioned filler.

4. In a wall or ceiling construction, backing members, a plurality of panel boards having marginal ledges disposed rearwardly of the planes of the wall-forming faces of such boards, said panel boards being arranged in a spaced meeting relation and having their margins overlying said backing members, a fastening device secured to said backing members intermediate said panel boards and comprising a base including a pair of base portions, a perforated web connecting said base portions and forming with said backing members a relatively large pocket, a pair of perforated wing-like gussets extending outwardly from said base and forming with said backing members and with said panel boards a pair of relatively large pockets, a pair of panel-board engaging flanges carried by said wing-like gussets and impinging on said ledges of adjacent panel boards, and a filler overlying said base portions, said web, said gussets and said panel-board engaging flanges, and a similar filler confined within said pockets and in union with the first-mentioned filler.

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