June 17, 1941. H. BRALOFF 2,245,644

BUILDING CONSTRUCTION

Filed Sept. 27, 1939 2 Sheets-Sheet 1

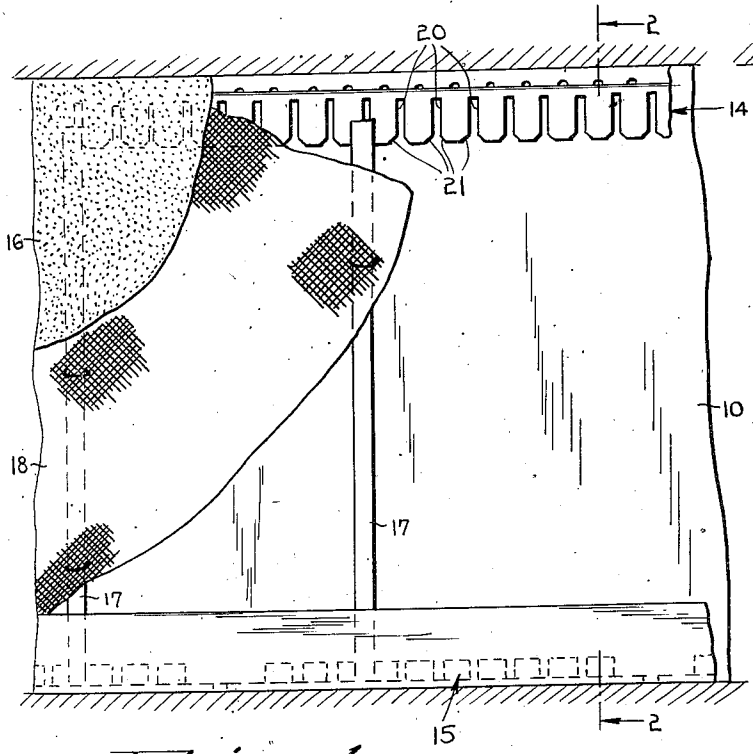


Fig. 1.

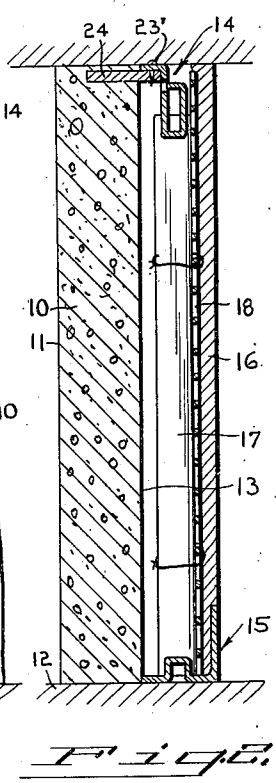


Fig. 2.

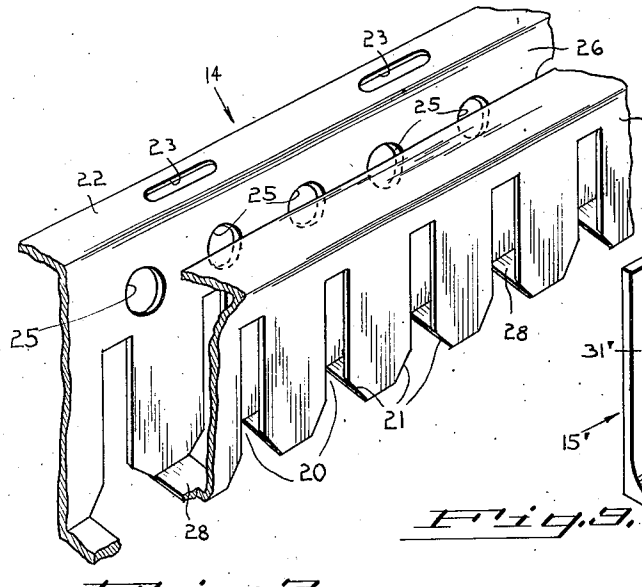


Fig. 3.

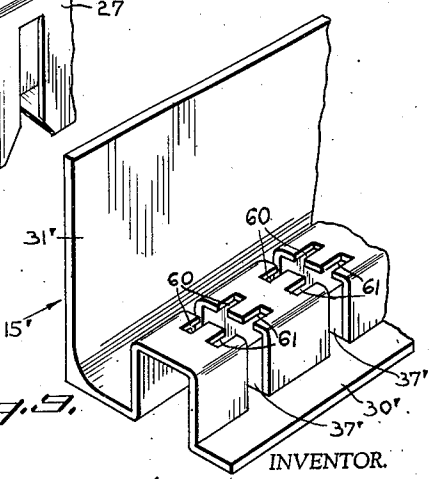


Fig. 4.

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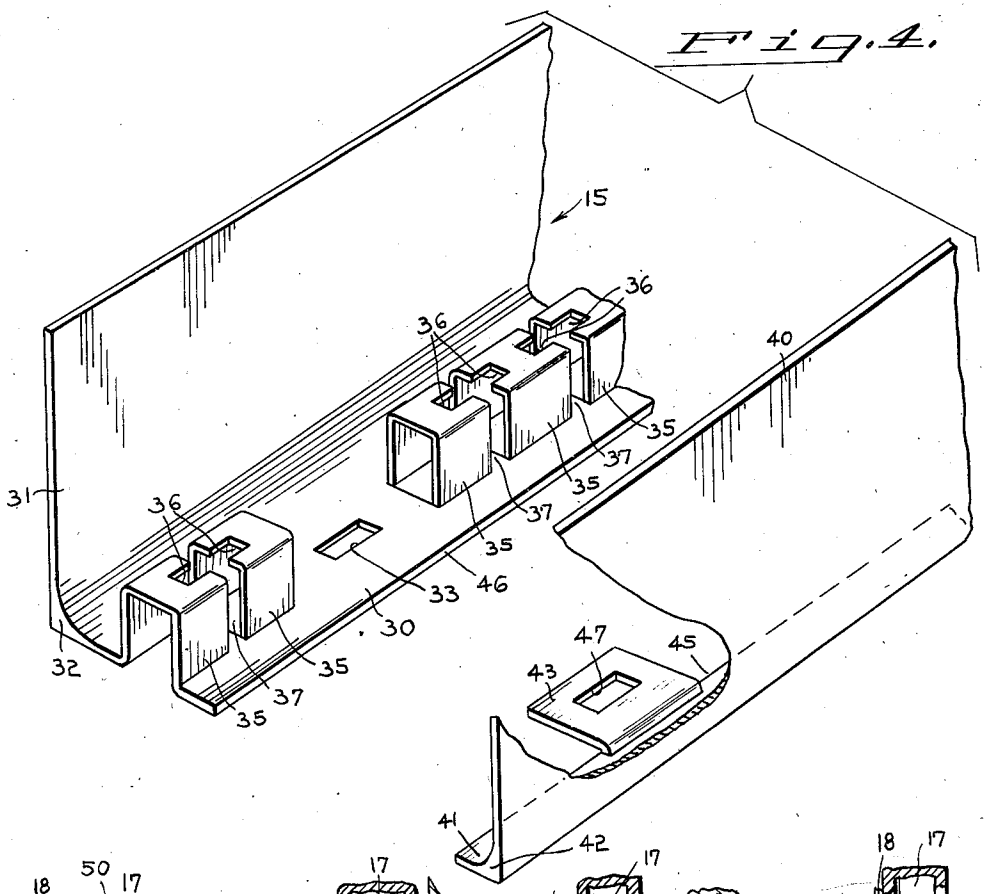
ATTORNEY.

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Fig. 4.



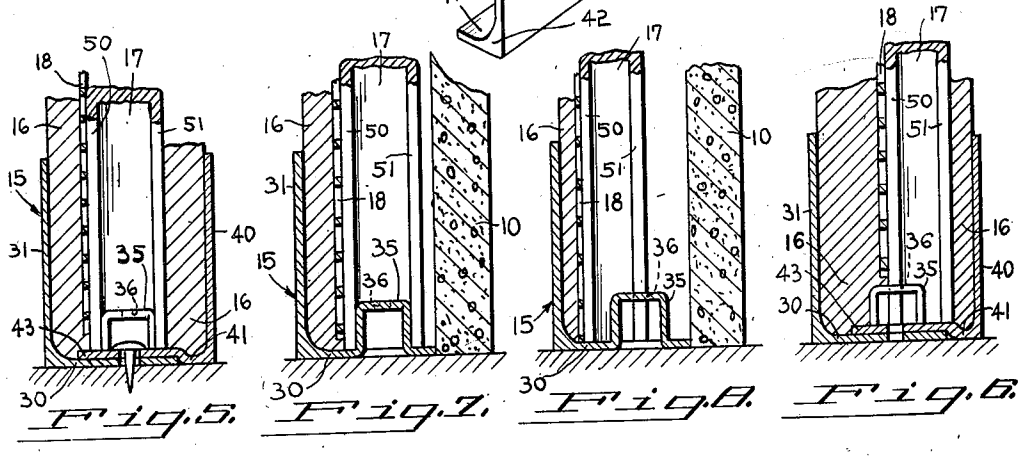


Fig. 5. Fig. 7. Fig. 8. Fig. 6.

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UNITED STATES PATENT OFFICE

2,245,644

BUILDING CONSTRUCTION

Henry Braloff, Rockville Centre, N. Y.

Application September 27, 1939, Serial No. 296,733

7 Claims. (Cl. 72—46)

My invention generally relates to building construction, and more particularly relates to improved arrangements for facilitating the construction of plastered walls and partitions of the buildings.

In the construction of pre-fabricated buildings and relatively inexpensive homes, labor is an important factor in the final cost. Efforts have been made to reduce the labor and difficulties attendant on the construction of plastered walls and partitions. The present invention is directed to further facilitate the use of tracks and vertical bars adjacent to the wall for supporting a metal lath or mesh upon which the plaster is placed. Skilled attention and care was heretofore necessary in aligning the tracks with respect to the required wall surface, since the position of the tracks finally determined the plane of the wall.

According to my present invention, I provide a novel arrangement for the tracks and associated vertical connecting bars permitting a plurality of positions for the vertical bars in a direction transverse to the plane of the wall. The actual plane of the wall accordingly may be determined subsequent to the laying of the tracks, and any one of a plurality of positions for the vertical bars may be used, as will hereinafter be described in detail. A further important feature of my present invention resides in the novel construction for the tracks, wherein the major section thereof may be used in wall constructions, and a further element combined therewith for adapting the tracks for partition constructions.

These and other advantages, capabilities and features of the invention will appear in the subjoined detailed description of specific embodiments thereof illustrated in the accompanying drawings, in which

Figure 1 is a front view of a wall assembly, partially broken away, indicating the arrangement of its components.

Figure 2 is a vertical cross-sectional view taken along the line 2—2 of Figure 1, through the wall assembly.

Figure 3 is an enlarged perspective view of the section of the top or ceiling track for accommodating the vertical channel bars.

Figure 4 is an enlarged perspective view of a section of the base or floor track, with a separable partition unit spaced from the body of the track.

Figures 5 and 6 are vertical cross-sectional views through the base of a partition assembly in accordance with the invention, showing the variable positioning of the vertical channel bars with respect to the base track.

Figures 7 and 8 are vertical cross-sectional views of a base track assembly for a wall, illustrating the variable positioning of the vertical channel bars therein.

Figure 9 is a perspective view of a section of a modified form of base track.

Figure 1 is a front view, illustrating the arrangement of the track and bar assembly, and Figure 2 is a vertical cross-sectional view therethrough. The external wall is indicated at 10, which is generally of masonry, such as brick, although it may be of terra cotta, tile, stone, etc. The outside edge 11 of the masonry wall 10 is generally made plumb or otherwise perpendicular to the floor or base 12. However, the inside edge 13 of the wall is usually not plumb, and may contain irregularities which may interfere with the construction of the plaster wall adjacent thereto.

In prior constructions, protuberances of inside surface 13 introduced difficulties in the proper positioning of the ceiling and base tracks 14 and 15. Heretofore, the position of tracks 14 and 15 determined the final plane of the plaster wall 16. A protuberance by brick or other surface 13 interfered with the plane of plaster wall 16, and required repositioning of either tracks 14 or 15, or both. As will be apparent hereinafter, my novel construction permits several positions for the vertical supporting for the plaster wall with respect to the inner wall surface 13, greatly facilitating the installation of the tracks 14 and 15 and associated structure.

Vertical metal bars or channels 17 are positioned between ceiling track 14 and base track 15 in the manner to be described. Wire lath or mesh 18 is secured by wire or other suitable means to the vertical bars 17 in the usual manner. The plastered surface 16 is applied to the wire lath to complete the wall construction.

Ceiling track 14 contains a plurality of spaced vertical slots 20 having chamfered edges 21. Base track 15 contains an arrangement of slots 36 and 37 to accommodate the bottom edge of channel 17. The channel bar is first inserted in the proper vertical slot 20 of ceiling track 14, which slot is elongated so that the bar may be slipped up and permit its lower end to be placed into the accommodating slots of lower track 15.

Figure 3 is an enlarged perspective illustration of one form which the ceiling track 14 may assume in practice. Track 14 comprises an extending flange 22 containing holes 23 by which

the track is secured with nails 23' to a beam 24 or other surface at the top of the proposed wall, as illustrated in Figures 1 and 2. A series of plaster holes 25 are provided in the vertical side 26 of track 14 for bonding thereof with the plaster. A further vertical wall 27 is parallel with wall 26 and spaced therefrom forming the forward face of track 14. The illustrated ceiling track is of unitary sheet construction, interconnecting with strips 28 joining the parallel vertical walls 26 and 27.

Figure 4 is an enlarged perspective illustration of a section of base track 15 constructed in accordance with the present invention. Base track 15 comprises horizontal face or base 30 integrally joined with vertical side or face 31. Vertical side 31 forms the baseboard for the plaster wall, as indicated in Figures 1 and 2. Track 15 may be formed of plastic or composition material by molding or the like, whereupon a stiffening joint 32 is provided between perpendicular planes 30 and 31 of the track for strengthening their juncture. The track may optionally be formed of stamped sheet metal or other suitable material. The track is secured in position on the floor by nails introduced through a plurality of holes 33 spaced along the horizontal face 30 thereof, shown in Figures 1 and 4.

A series of receptacles 35 for accommodating the vertical bars 17 is provided upon base 30 of track 15. Receptacles 35 extend upwardly from horizontal base 30 and contain opposed horizontal slots 36, 36 between adjacent receptacle members 35. The transverse width of slots 36 is of the order of the thickness of the channel bars 17 to properly accommodate and interlock them in a manner to be described in more detail in connection with Figures 5 and 8. Vertical receptacle members 35 are spaced apart by a distance equal to the thickness of the channel bars 17, forming vertical slots 37 for accommodating the channel bars. Members 35 are rectangular in form and are molded integrally with base 30 and track 15 if the track is of molded construction. Members 35 are preferably hollow as shown. When track 15 is formed of sheet metal, hollow members 35 may be stamped out in the required shape, or formed separately and suitably secured to base 30 by welding or any other method.

A separate unit 40, 41 is employed in conjunction with the base track 15, for converting track 15 for plaster partitions. In partitions there is no masonry or back wall, and two base boards on each side of the plaster wall are required, adjacent the floor. Section 40, 41 attachable to track 15 serves as a novel addition thereto for use as the second base board, and forms an important feature of the present invention. Section 40, 41 comprises flange 41 extending inwardly from the bottom edge of face 40. Unit 40, 41 is of the same material as track 15. When molded, unit 40, 41 contains a strengthened joint 42 for rigidity. A series of spaced lap joints 43 extend from flange 41.

In assembling unit 40, 41 with track 15, rear edge 45 of the unit 40, 41 is placed in abutment with edge 46 of track 15, whereupon lap extension 43 extends over base 30 of the track. A slot 47 in lap 43 coincides with slot 33 of track 15, as will now be evident. The track securing means, such as nails, are placed through openings 33 and 47, fixedly positioning track 15 and section 40, 41 on the floor, as shown in Figures 5 and 6. Base track 15 is accordingly a standard structural unit for use in the construction of partitions or walls; the additional base board unit 40, 41 being employed therewith for the construction of partitions effecting material savings in stock or expensive special items for the builder.

Figures 5 and 6 are vertical sectional views through a base track assembly for a partition, illustrating the variable positioning of vertical channel bars 17 therein. The wire lath 18 is secured to bar 17 in the usual manner, and the plaster 16 is applied to the wire lath 18. Upwardly extending faces 31 and 40 of track sections 15 and unit 40, 41 respectively form the base boards for both sides of the partition. Channel bars 17 contain flanges 50 and 51. The inside distance between channels 50 and 51 correspond to the overall width of receptacle members 35. The central section of channel bars 17 are fitted within spaces 37 between receptacles 35. In Figure 5, bar 17 is shown in its central position. In Figure 6 the left flange 50 is fitted in slot 36 of vertical member 35. The right flange 51 extends to the right of unit 35. Substantially one-half of the width of bar 17 rests in vertical slot 37, between receptacle units 35.

The position of the vertical bars 17 and associated wire lath 18, as shown in Figure 6, is accordingly displaced to the right with respect to the central position thereof, shown in Figure 5. This displacement corresponds to half the width of bar 17. In practice, vertical bars 17 are of the order of one to two inches in width. The transverse slots 36 permit positioning to the right or left of the central position of bar 17, accordingly permitting a range of displacements for the vertical bars on the order of one-half inch to one inch of either side of the central position. It is to be understood that the bars 17 may be displaced to the left of the central position by positioning their right edges 51 in slots 36 instead of the left edges 50, as shown in Figure 6. Such alternate relation is illustrated in Figure 8.

Figures 7 and 8 are vertical cross-sections through a base track assembly for a wall rather than a partition construction. The masonry or other outer wall 10 eliminates the necessity for the additional base board corresponding to face 40 of Figures 5 and 6. Base track 15 is nailed or otherwise secured in position on the floor in the manner previously described. In Figure 7, channel bar 17 is shown straddled around receptacle units 35 positioned between the vertical slots 37 thereof, corresponding to the central positioning of the bars. In Figure 8 right edge 51 is inserted in horizontal slot 36 and the right half of the bottom channel bar 17 rests in the vertical slot between adjacent members 35. Channel bars 17 are accordingly spaced further from wall 10 than in the corresponding central position, leaving a greater space between the plaster wall 16 and the masonry wall 10. The spacing from wall 10 to the plaster wall 16 may be substantially reduced from the position shown in Figures 7 and 8 by inserting the left edge 50 of bar 17 in slots 36, corresponding to the illustration in Figure 6.

A further form which the track may assume in practice is illustrated at 15' in Figure 9, wherein five distinct positions for the arrangement of vertical bars 17 may be effected. The modified base track 15' comprises a base 30' containing receptacles 35' spaced to form vertical slots 37' in a manner similar to those of the previously de-

scribed track 15. The vertical front wall 31' of track 15' forms the base board of the plaster wall. In track 15', two sets of opposed tracks 60 and 61 are used corresponding to the single set 36 of track 15. The flanges 50 and 51 of bars 17 may be straddled over receptacle units 35 for central positioning thereof, corresponding to the position shown in Figure 7. However, multi-positioning of the vertical bars 17 may be readily effected by inserting one or the other of flanges 50 or 51 of bars 17 into one or the other of horiozntal slots 60 and 61. Thus, bars 17 may be placed in either of two positions at the right or the left of the central position, corresponding to the two sets of horizontal slots, 60 and 61.

It is to be understood that the present invention may assume other forms than the illustrated embodiments. The ceiling track 14 may be made similar to the base track described at 15 or 15' so that the positioning of the top end of bars 17 may be made to readily correspond to the variable positioning of the bottom ends thereof. One, two or more sets of horizontal slots corresponding to 36 or 60, 61 may be made in the vertical receptacle units to permit even closer adjustment of the positioning of the vertical bars, and provide a greater number of optional positions for them. It is obvious that various changes and modifications may be made in the details of construction without departing from the general spirit of the invention as set forth in the appended claims.

I claim:

1. A track for supporting ends of a group of channel bars for wall construction comprising a base, a plurality of receptacle units extending upwardly from said base, said units being spaced from each other by an amount of the order of the thickness of said bars to accommodate an end of a bar, the width of said units being of the order of the distance between the flanges of the channel bars to permit straddling of an end of a bar about a unit and within its spacing with the next adjacent unit, each of said receptacle units having a transverse slot communicating with said spacings to accommodate one of the flanges of the channel bar extending longitudinally in either direction, whereby a plurality of distinct alignments for the channel bars are provided in either direction.

2. A track for supporting ends of a group of channel bars for wall construction comprising a base, a plurality of receptacle units extending upwardly from said base, said units being spaced from each other by an amount of the order of the thickness of said bars to accommodate an end of a bar, the width of said units being of the order of the distance between the flanges of the channel bars to permit straddling of an end of a bar about a unit and within its spacing with the next adjacent unit, each of said receptacle units having a transverse slot communicating with said spacings and having a thickness of the order of the thickness of the flanges of said channel bars to accommodate a flange of an end of the bar and hold the bar in suitable position for the wall construction, whereby a plurality of distinct alignments for the channel bars are provided.

3. A track for supporting ends of a group of channel bars for wall construction comprising a base, a face extending upwardly from said base and integral therewith, a plurality of receptacle units integral with and extending upwardly from said base, said units being spaced from each other by an amount of the order of the thickness of said bars to accommodate an end of a bar, each of said receptacle units having a transverse slot communicating with the spacings between adjacent receptacle units to accommodate a flange of an end of the bar and, in conjunction with the walls of the unit adjacent the slot and the adjacent spacing, hold the bar in suitable position for the wall construction whereby a plurality of distinct alignments for the channel bars are provided.

4. A track for supporting ends of a group of channel bars for wall construction comprising a base, a face extending upwardly from said base integral therewith and having a reenforced juncture therebetween, a plurality of receptacle units extending upwardly from said base, said units being spaced from each other by an amount of the order of the thickness of the bars, the width of said units being of the order of the distance between the flanges of the channel bars to permit straddling of an end of a bar about a unit and within its spacing with the next adjacent unit, each of said receptacle units having a transverse slot communicating with said spacings and having a thickness of the order of the thickness of the flanges of said channel bars to accommodate a flange of an end of the bar and hold the bar in suitable position for the wall construction, whereby a plurality of distinct alignments for the channel bars are provided for correspondingly optionally positioning the wall with respect to the track.

5. A track for supporting ends of a group of channel bars for wall construction comprising a base, a plurality of receptacle units extending upwardly from said base, said units being spaced from each other by an amount of the order of the thickness of said bars, each of said receptacle units having a plurality of transverse slots communicating with the spacings between adjacent units to accommodate a flange of an end of the bar and, in conjunction with the walls of the unit adjacent the slot and the adjacent spacing, hold the bar in suitable position for the wall construction, whereby a plurality of distinct alignments for the channel bars are provided.

6. A track for supporting ends of a group of channel bars for wall construction comprising a base, a face extending upwardly from said base and integral therewith having a reenforced juncture therebetween integral with and extending upwardly from said base, said units being spaced from each other by an amount of the order of the thickness of said bars to accommodate an end of a bar, the width of said units being of the order of the distance between the flanges of the channel bars to permit straddling of an end of a bar about a unit and within its spacing with the next adjacent unit, each of said receptacle units having a plurality of transverse slots communicating with said spacings and having a thickness of the order of the thickness of the flanges of said bars to accommodate a flange of an end of a bar and, in conjunction with the walls of the unit adjacent the slot and the adjacent spacing, hold the bar in suitable position for the wall construction, whereby a plurality of distinct alignments for the channel bars are provided for correspondingly optionally positioning the wall with respect to the track.

7. A track for supporting ends of a group of channel bars for wall construction comprising a base, a face extending upwardly from said base and integral therewith, a plurality of receptacle units integral with and extending upwardly from

said base, each of said receptacle units having a transverse slot to accommodate a flange of an end of a channel bar and hold the bar in suitable position for the wall construction whereby a plurality of distinct alignments for the channel bars are provided, said base having a plurality of spaced openings, a separate member coextensive with the track having an upwardly extending face and a flange extending from an edge thereof for abutment with the free edge of said track, and means extending from said member for securing said member with said track comprising lap portions arranged to overlap said base and having openings coinciding with said base opening when said edges are in abutment whereby said track is provided with two spaced opposed faces as baseboards for partition construction.

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