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SUPPORT TRACK FOR DRY WALL CONSTRUCTION

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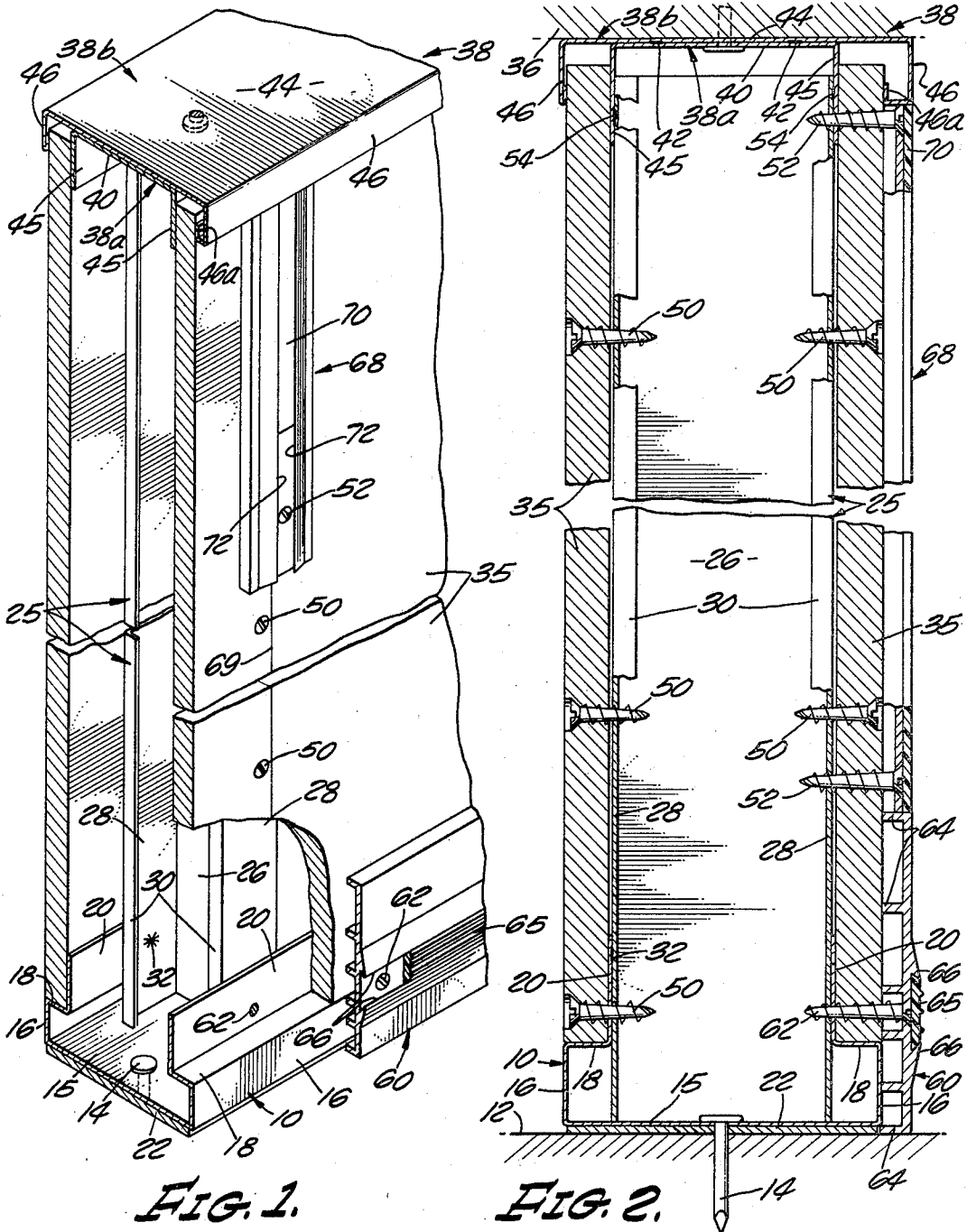


FIG. 1.

FIG. 2.

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**SUPPORT TRACK FOR DRY WALL CONSTRUCTION**

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1 Claim

**ABSTRACT OF THE DISCLOSURE**

The disclosure involves a so-called floor track which includes a floor-contacting member to be secured to a floor. Such floor member directly receives and supports the lower ends of the metal studs. The longitudinal outer edges of the floor member has integral upstanding flanges whose upper edges carry integral horizontal inwardly extending or stepped supporting flanges or ledges to receive the lower ends of wallboard slabs and to support the slabs. The inner edges of such stepped ledges in turn having integral upstanding flanges which may be spotwelded or otherwise fixed to vertical flanges of the respective metal studs. Such ledges are spaced from the floor and floor member adequately to position the lower edges of the wallboard slabs sufficiently above the floor to dispose them above mop water or the like on the floor and thus protect the lower slab edges. The ledges themselves may be covered with appropriate baseboards or protection plates.

This application is a continuation of application Ser. No. 519,582, filed Jan. 10, 1966, now abandoned.

This invention relates to building structures known as dry wall partitions, and more particularly those that may be readily installed and removed as in large commercial establishments. This improvement especially relates to wall base structures which are known as tracks and rest directly upon the floors to support upstanding partitions that commonly include wallboard slabs and the like.

It has been the prevailing practice to place the lower edges of wallboard slabs directly upon the floor when attaching them to metal studs currently used in dry wall partitions. Since wallboard slabs are typically produced with plaster, gypsum or fiber layers which are more or less water absorbent, the floor-contacting edges of these slabs become damaged by water from mopping or other moisture on the floors. In addition to the unsightly appearance, such abuse, if prolonged, results in weakening the lower edge portions.

It is therefore an object of this invention to provide channel tracks for dry wall partitions which entirely eliminate contact of wallboards with floors upon which the partitions are located.

Other objects and features of the invention will become apparent to those skilled in this art upon reference to the following specification and the accompanying drawing wherein there is disclosed an embodiment of the invention which presently is deemed to represent the best method of practicing the invention.

In the drawing:

FIG. 1 is a perspective view of a section of partition wall embodying at its lower end a floor track to be carried upon a typical concrete floor, for example, and in turn supporting the channeled metal studs and wallboard slabs carrying at their tops a ceiling cap or track;

FIG. 2 is a transverse vertical section of the structure of FIG. 1 mounted upon a concrete floor and extending upward to a ceiling.

As illustrated in the drawing, a floor-track 10 of chan-

neled metal construction is positioned upon a concrete or other suitable floor structure 12 and retained by suitable means such as nails 14 which have been driven or fired into position to penetrate the floor. The channeled track 10 embodies a main bottom wall or floor member 15 of elongated character extending throughout the length of the partitioned wall being constructed. At its edges, the floor member 15 carries integral upstanding flanges having heights corresponding to the distance above the floor 12 at which the lower ends of wallboards are desired to be placed as presently to be explained. At the top of each flange 16 there is integrally provided an inwardly directed ledge 18 which is horizontally disposed and extends the length of the partition wall to provide seats for the lower ends of the wallboards, as illustrated. In this construction, each ledge carries integrally at its inner edge, an upstanding flange 20.

When a floor track 10 is being installed, its position is established by shooting or otherwise driving a sufficient number of nails 14, or screws or the like, through the wall member 15 and into the floor along the locus of the floor track, the heads of the nails or screws retaining the track. Since concrete floors, for example, are commonly quite uneven, the floor track 10 is leveled, if necessary, as by means of wooden or metal shims 22 which may be placed either before the nails 14 are installed, as indicated in the drawings, or subsequently as desired.

A floor track 10 having been positioned, the next step in making the wall structure is to install studs 25. Commonly in construction of this nature, these studs 25 are channeled metal studs having backwalls or webs 26 provided at their edges with integral outstanding flanges 28 paralleling the upstanding flanges 20 of the floor track 10. Desirably the outer edges of the flanges 28 are in turn provided with inwardly directed narrow terminal flanges 30. When a stud 25 is properly positioned, with its bottom end resting upon the floor wall 15, the flanges 28 are frictionally mounted between the upstanding flanges 20 of the floor track 10; or the flanges 28 may be secured in place as by screws, or rivets, or spotwelding, such as indicated at 32.

Having thus mounted the flanges 20 of the floor track and the sides of the studs 25, the ledges 18 are now stabilized in their horizontal position so that they are ready to receive wallboard slabs 35 in upstanding position along the studs 25.

With dry wall partitions of the type here disclosed, it is common to extend them up to the ceiling of the building structure indicated at 36 and stabilize the partitions against such ceiling. For this purpose an appropriate type of cap 38, preferably dual-membered, is employed against the ceiling. The cap illustrated embodies two channeled members 38a and 38b which are rigidly joined together and are downwardly faced, overlying the studs 25, the lower 38a of these U-shaped members being narrower than and disposed within the other 38b. The narrower member 38a has a main wall or web 40 which is spotwelded at 42 to the main web or wall 44 of the other U-shaped member 38b. The narrower U-shaped member 38a has at its edges integral depending flanges 45 which are spaced from integral depending flanges 46 of the wider member 38b a sufficient distance to receive the upper ends of wallboard slabs 35 in a reasonably snug relationship. To facilitate insertion of the upper ends of the wallboard slabs 35, the depending flanges 45 of the inner U-shaped member depend a considerable distance below the outer flanges 46. When the cap 38 is to be secured to the ceiling 36, it may be secured by shooting nails or the like 48 up through the web members 40 and 44 and into the ceiling as illustrated at the top of FIG. 2.

When the floor track 10 and the cap 38 are positioned,

and the studs 25 located as above described, the upper edge of a wallboard 35 is moved into position against the respective longer depending flange 45, the lower edge of the wallboard 35 being tipped outwardly at a slight angle, whereupon the upper end of the wallboard 35 is moved upward into the space between the respective flanges 45 and 46 until the lower end of the wallboard 35 may be pressed into place along the respective ledge 18 into the operative position illustrated. The wallboard 35 is then retained in operative relationship as by means of self-threading screws 50 which are driven through the wallboard 35 and through the adjacent flange 28 of each stud 25, with the screwheads of the screws 50 counter-sunk somewhat in the wallboard 35 as illustrated.

With the above described relationship, the top edges of the studs 25 are spaced ordinarily somewhat below the web section of the cap 38, thereby allowing freedom of movement of the ceiling 36 on the upper end of the studs 25 under overload, and of the upper ends of the wallboards 35 when the latter are being positioned between the flanges 45 and 46 of the cap 38.

In addition, self-threading screws 52 may be used in the top of the structure to penetrate both the adjacent depending cap flange 45 and the adjoining flange 28 of the stud 25, this screw serving also to anchor the adjacent wallboard 35. However, in addition to the top screw 52, or in place of such a screw 52, the respective flange 45 of the cap 38 and the flange 28 of the stud 25 may be rigidly joined together by a spotweld 54. In this way the top of the stud 25 is secured to the flange 45, and thus to the ceiling 36, at an earlier stage of operation when the top of the stud 25 was being initially positioned.

It may also be desired in some instances to install low partitions rather than partitions reaching up to the ceiling. In such a case, the cap 38 would be anchored only to the tops of studs 25, thus stabilizing the top of such a partition. If desired, some other ceiling connection with the cap 38 may be provided.

The floor track 10, the metal studs 25, the cap 38 and the wallboard 35, having been assembled to produce the partition wall as above described, the joints between the lower ends of the wallboards 35 and the flanges 18 of the floor track 10 may desirably be covered by some appropriate baseboard or kick-plate 60. This baseboard 60 may be an appropriate extrusion disposed longitudinally along the wall at the bottom thereof, and anchored in place as by means of self-threading screws 62 which pass through the baseboard 60, the wallboard 35, the flange 20 and the flange 28 of the stud 25. With the extrusion 60 shown, appropriate inturred flange elements 64 are employed for properly spacing the baseplate 60, and in addition a flexible plastic sealing strip 65 may be employed to cover the heads of the screws 62, such strip 65 being snapped into position between integral overhanging ribs or lips 66, as perhaps best seen in the section at the bottom of FIG. 2. Similarly, in order to cover wallboard joints and the heads of various self-threading screws 50 employed to secure wallboards 35 to the studs 25, an appropriate extruded batten or trim strip 68 may be vertically disposed along the wallboards 35, especially at wallboard joints 69, and over rows of screw heads 50 where these are used. In practice, a limited number of screws 50 may be used, if desired, under each trim strip 68 in order to hold the wallboards 35 snugly against the studs 25 and to avoid buckling. However, screws 52 required to secure the trim strip 68, such as a screw at the top, a screw at the bottom, and a screw in the middle, may serve, without screws 50, to retain the wallboard against the studs 25. Such screws 52 may themselves desirably have their heads covered. This is easily accomplished by means of narrow plastic cover strips 70, similar to the sealing or cover strips 65, which strips 70 are, in turn, conveniently retained by overhanging undercut lips 72 similar to the parts 66 of the baseplate 60. Where a batten 68 is used, the overlying

flange 46 is spaced outwardly, to be substantially flush with the batten face, by means of an inwardly disposed spacing flange 46a being against the wallboard 35.

From the foregoing, it will be apparent that a floor track is provided, constructed and arranged for use in dry wall partitions to support the lower edges of wallboards at a sufficient distance above the floor carrying the partitions, whereby to avoid absorption of water which might gather on the floor and thereby damage the lower portions of the wallboards. It is also apparent that such supporting and elevating means is provided at the base of the dry wall partition which, at the same time, serves to cooperate with wall studs and a cap plate at the top of the wall to retain the wallboard anchored in firm position against the wall studs, thereby constituting a solid and substantially monolithic partition wall structure. It is further evident that such a substantially monolithic dry wall partition structure is provided which, at the same time, may be salvaged when it is desired to dismantle the wall so that the parts may be reused for construction of other wall structures or dry wall partitions.

Respecting the rigid connections provided by the weldspots 54 in FIG. 2, or clinch connections, or screws, which may be used instead of welding, it will be appreciated that these would be used when a permanent relationship between the floor 12 and the ceiling 36 is desired to be maintained. In this respect, use of the indicated shims 22 may be employed to stabilize the floor track 10 with respect to the floor if necessary. These shims 22, due to characteristic unevenness of the floors, will commonly be of broken or discontinuous nature and of varying thicknesses. Of course they might be substantially continuous in some instances, if required.

With further reference to the weldspots 54, these may be entirely eliminated as well as the connections between the flanges 45 of the cap 38 and the flanges 28 of the studs 25. Under such arrangement, the resulting frictional contact between the flanges 28 and 45 will permit the ceiling 36 to sag with respect to the wallboards and the studs under overload, which will be a very desirable condition in many instances. This condition of the omission of the screws 52 is intended to be represented at the left upper corner of FIG. 2.

While the best mode of practicing this invention now known has been specifically disclosed, it is apparent that modifications in the structures within the scope of this invention will occur to those skilled in the art.

What is claimed is:

1. In a floor track to rest upon a floor and receive the lower ends of a pair of wallboard in spaced apart relation and in elevated position above the floor;
  - a main horizontal floor member borne on the floor and to receive the lower ends of partition studs;
  - partition studs bearing directly upon and supported by said floor member;
  - a first pair of upstanding parallel flanges each extending longitudinally of and joining a respective edge of said floor member and extending upward into position spaced above said floor member;
  - a pair of horizontal ledges longitudinally carried along the tops of said respective flanges and extending inwardly and providing seats for the lower ends of wallboards in positions spaced above said floor member;
  - wallboards vertically carried at their lower edges on said ledges in said spaced positions to be protected against liquid on the floor, said wallboards being affixed to said studs;
  - and a second pair of parallel upstanding flanges joined respectively to the inward edges of said ledges and extending upwardly from the ledges to position the lower ends of said wallboards, such second pair of flanges being affixed to said studs for further support of said wallboards, wherein the horizontal floor mem-

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ber, the two pairs of upstanding parallel flanges, and the horizontal ledges form a unitary member.

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