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TRACK FOR ROLLING DOOR

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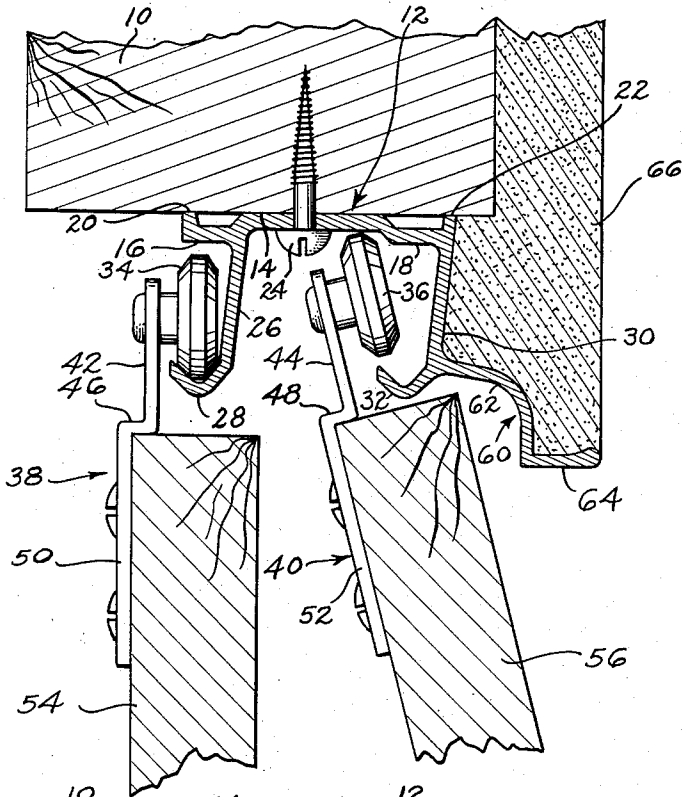


Fig. 2.

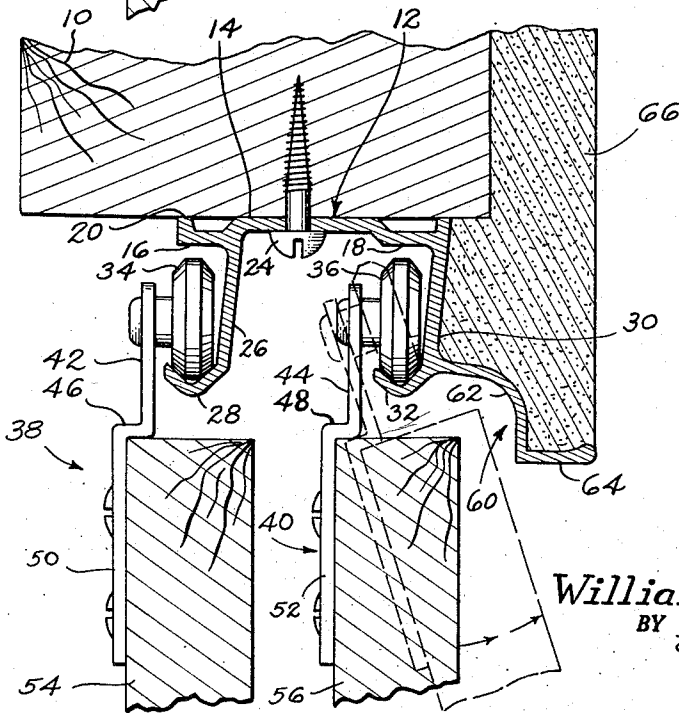


Fig. 1.

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TRACK FOR ROLLING DOOR

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2 Claims. (Cl. 16—96)

This invention relates to tracks for rolling doors of the class adapted for rolling sideways movement in the door framing members.

Although numerous types of tracks for rolling doors heretofore have been devised, none of them has been constructed in such a manner that it can be integrated with the door frame and wall. Accordingly it is the general purpose of the present invention to provide a rolling door track characterized by the following and other objects and advantages:

(1) It is securely fastened to and integrated with the door framing members and wall thereby stabilizing the track and improving the operation of the door.

(2) It serves the secondary but important function of receiving and supporting plaster which may be placed around the doorway, thereby further securing the track.

(3) It enables plastering the doorway flush with the opening, thereby giving it a modern, attractive appearance.

(4) It makes possible eliminating the molding which customarily is placed around the doorway, thereby reducing the cost of installing the door while at the same time providing a doorway of finished, attractive appearance.

(5) It provides a track wherein the rollers operate smoothly and without hazard of derailment.

(6) It makes possible mounting the door on the track and removing it therefrom as desirable or necessary, easily and without hazard of cracking the plaster around the doorway even though the plaster is applied to the very edge of the doorway opening.

(7) It makes possible silent operation of the door assembly.

(8) It is adaptable for installation in doorways of various shapes and sizes.

(9) It provides in a single unit, which may be inexpensively made from extruded aluminum or otherwise, means for mounting rolling doors and also for receiving and supporting plaster applied around the doorway.

The manner in which the foregoing and other objects of this invention are accomplished will be apparent from the following specification and claims considered together with the drawings, wherein a specific embodiment of the invention is illustrated.

In the drawings:

Fig. 1 is a sectional view in elevation illustrating the herein described rolling door track mounted in a doorway and supporting rolling doors in operative position; and

Fig. 2 is a sectional view in elevation similar to Fig. 1, illustrating the manner in which the doors may be removed from the track.

The herein described rolling door track is adapted for use particularly with doors which are adapted to roll or slide in the plane of the door into a recess provided in the side of the door opening, or along the sidewall adjacent the same. Such installations are to be found in kitchen cabinets, closets, wardrobes, and passageways in dwellings and other structures. The track may be applied where

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a single door panel is employed or where two or more panels are employed in overlapping relationship to each other to close off an opening of substantial span. In the presently illustrated embodiment, the track shown is adapted for use with two such door panels.

Generally stated, the rolling door track of the present invention comprises a base adapted to be secured to an upper framing member of the doorway, longitudinally thereof. Means are provided on the base for aligning it in this operative position, and for gripping or engaging the framing member, anchoring the track in place.

A track member also is provided, depending from the base, for mounting the wheels by which the door is supported. The track member may be offset vertically to make possible free tracking of the wheels. Also, the base of the track may be provided with downwardly-depressed longitudinally extending sections directly above the wheels for preventing their derailment.

Still further, there is provided attached to the track member and extending laterally outwardly therefrom, a web having a terminal substantially horizontal section. This web is dimensioned and positioned for receiving and supporting plaster which may be applied about the door opening. At the same time it screens and protects the track and roller assemblies.

Considering the foregoing in greater detail and with particular reference to the drawings:

As will be seen from Figs. 1 and 2, the rolling door track of my invention is adapted for attachment to the under surface of the upper horizontal door framing member 10. It comprises a base section 12 having a central flat portion 14, a pair of longitudinally extending, downwardly depressed sections 16, 18 and, along its upper longitudinal edges, a pair of ridges 20, 22.

The central flat section 14 may be perforated at spaced intervals so that the track may be fastened to framing member 10 by means of screws 24, or other suitable fastening means. Depressed sections 16, 18 prevent derailment of the door wheels in a manner which will be made more apparent hereinafter. Longitudinal ridges 20, 22 provide means for readily aligning the track in the door. Also, upon tightening screws 24, the ridges bite into the framing members slightly, anchoring the track in its operative position.

Depending from the base member are track members for supporting the rolling doors. The inner or left hand track member, as viewed in the drawings, comprises a side section 26 and a traction section 28. The side section is inclined from the vertical downwardly, in the direction of the traction section to provide side clearance for the wheels mounting the door. This feature prevents rubbing of the side faces of the wheels against the side section of the track member.

The traction section 28 extends laterally from side section 26 of the track member and is contoured to receive the door wheels in rolling engagement. It will be noted that it lies below and substantially opposite depressed section 16 of base member 12.

The outer or right hand track member, as viewed in Figs. 1 and 2, is constructed similarly to the inner track member in that it comprises a side section 30 and a traction section 32. Like side section 26, side section 30 is inclined from the vertical, downwardly and in the direction of the traction section for affording side clearance to the door wheels which it supports. Like traction section 28, section 32 extends laterally from the side section to which it is connected. It underlies and is opposite depressed section 18 of base member 12. In addition, it is contoured to support and guide a door wheel.

As has been indicated, traction sections 28, 32, are adapted to receive the wheels by which the doors are sup-

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ported, indicated at 34, 36, respectively. These are mounted for rotation in a vertical plane on brackets or door hangers, indicated generally at 38, 40, respectively. The hangers include head sections 42, 44, respectively, rotatably mounting wheels 34, 36. They also include the angled sections 46, 48 which embrace corners of the doors, thereby stabilizing the hangers and also offsetting the wheels which they carry in the direction of the central plane of the door so that the door hangs straight. Still further, the hangers include base sections 50, 52, respectively, which may be fastened to doors 54, 56 by means of screws, or otherwise.

Means are further provided for integrating the track with the surrounding structural components. This stabilizes the track and provides support for plaster or other structural materials which may be used to finish the outer surface of the doorway.

In the illustrated form, such means comprise a web indicated generally at 60. The web preferably is attached to the lower portion of side section 30 of the outer track member, substantially at the point of juncture of the side section and traction section 32 thereof. It extends generally outwardly and downwardly in a lateral direction, opposite the direction of extension of traction section 32.

Web 60 includes a connecting section 62 which preferably is downwardly arcuate to afford clearance for the outer edge of door 56. The outer edge of the connecting section merges with a terminal, substantially horizontal section 64. The web thus serves as an integrating member for integrating the track 12 with other structural elements of the door assembly. This may be accomplished by covering it with plaster 66 applied to the door opening. In this case the web 60 serves as a plasterground, receiving the plaster and supporting it.

In the alternative if it is not desired to plaster the doorway to the very edge of the opening, a molding or facing board may be seated in terminal section 64 of web 60 and nailed to structural member 10 in place of plaster 66, in an unillustrated but self-evident manner. The herein described track thus is versatile in permitting the construction of doorways of various designs.

The manner of installation and mode of operation of the herein described track is apparent from the above. First, the track is screwed or otherwise affixed to the upper horizontal structural member of the doorway. The doorway opening then may be finished off either by plastering it, the plaster being received and supported by web 60, by applying facing boards around the opening, or otherwise.

The doors then may be hung by placing the wheels on which they are supported in the respective traction sections 28, 32 of the track members. This may be accomplished easily by inclining each door, slipping the wheels into the traction section and then permitting the door to assume its normal, vertical, operative position. This operation is greatly facilitated by reason of the fact that

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the ceiling of central section 14 of the base member is elevated, affording sufficient room for manipulation of the door and attached wheels. When it is desired to remove the doors, the foregoing procedure is reversed.

When the doors are in operative position, the wheels clear side sections 26, 30 of the track members because of the inclination of the same. Also, they are confined by depressed sections 16, 18 of base member 12 so that it is difficult to derail the doors during normal operation, as long as they remain in a vertical position. Still further, the track is stabilized by engagement of ridges 20, 22 with structural member 10, as well as by the interlocking effect of plaster 66, or in the alternative, of a facing board installed in lieu thereof, either of which inter-engages the track with the structural members of the door. This prevents vibration and displacement of the track during its operation.

Having thus described my invention in preferred embodiments, I claim:

1. A track for rolling doors equipped with wheels, comprising an elongated horizontal base, a track member depending from the base and terminating in an inwardly directed traction section for the wheels of a rolling door, means projecting downwardly from the base and positioned vertically above the traction section for preventing derailment from the traction section of the wheels of a rolling door when the latter is moved in a vertical direction, and a web on the track member adjacent the traction section and extending laterally outward and downward from the latter a distance sufficient to afford clearance for the adjacent outer edge of a rolling door when the door is tilted and moved in an oblique direction during installation and removal thereof, said web having means thereon for supporting plaster and the like whereby the traction section is concealed.

2. The track of claim 1 wherein said means for supporting plaster and the like includes a substantially horizontal section projecting laterally outward from the lower edge of the web.

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