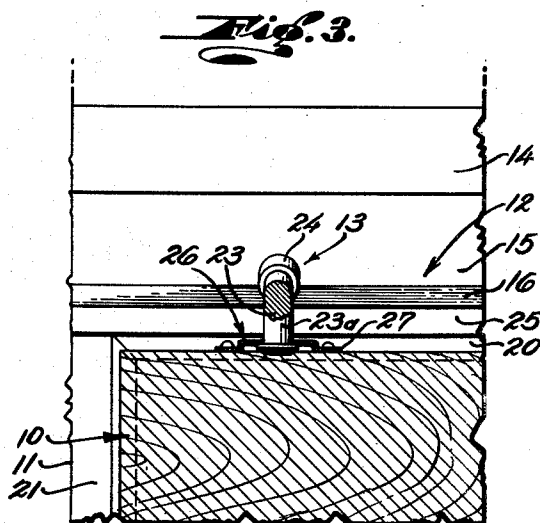
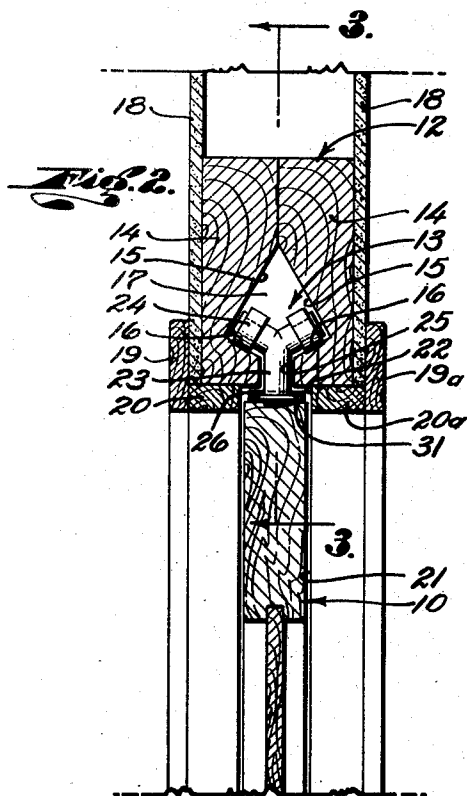
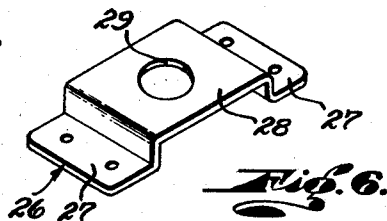
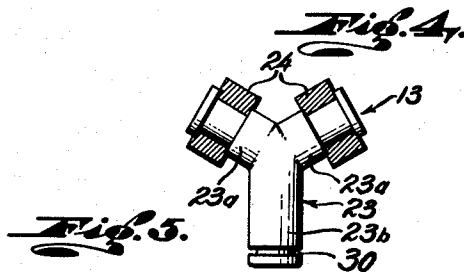
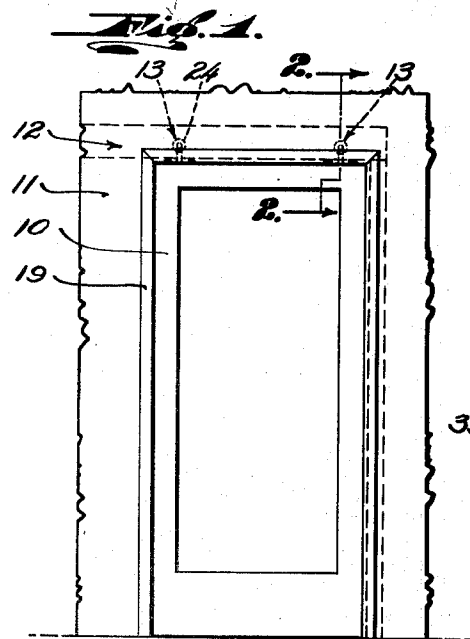


Sept. 26, 1950

P. G. AUSTIN
SLIDING DOOR MOUNTING

2,523,935

Filed Nov. 7, 1946



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2,523,935

SLIDING DOOR MOUNTING

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Application November 7, 1946, Serial No. 708,407

1 Claim. (Cl. 16—89)

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This invention has to do with overhead mountings for sliding doors of a type generally used in dwellings where the door carriers are pre-installed within a track overlying the door opening, and the door subsequently is attached to and suspended from the carriers.

More specifically, the invention relates to door mountings wherein the carrier track is formed or contained within a pair of wooden headers extending across the top of the door opening and so formed as to permit downward projection of the carriers to connections with fittings on brackets carried by the top of the door.

One of my major objects is to provide an improved connection between the carrier and the door bracket, having various advantages with respect to the security given the door suspension and the facility with which the connection may be made in installing the door, or disconnected for removal of the door. In accordance with the invention, the carrier and bracket parts to be joined are conditioned for interconnection by vertically raising the door for association of its bracket with a depending portion of the carrier, and interlocking the parts by a laterally movable locking element. Typically the locking element may take the form of an element movable transversely within an initially open space overlying the door, which later is in effect closed by a facing strip confining the door in place.

Specifically, the invention contemplates forming the carrier with a depending shank receivable within an opening in a bracket carried by and having an under surface spaced above the door, and interconnecting the parts by lateral insertion of a locking element receivable within a recess in the shank to engage and support the under surface of the bracket, and thereby suspend the door.

A further object of the invention is to provide an improved wheeled carrier structure comprising an essentially Y-shaped body, the upper branches of which carry rollers traveling opposed inclined surfaces of the track with the lower branch of the body depending below the track for reception of the locking element and connection with the bracket, as and for the purposes stated.

More complete understanding of the invention, including the above mentioned features and objects, will be had from the following description of a typical embodiment illustrated by the accompanying drawing, in which:

Fig. 1 is an elevational view showing the door and the immediate frame and wall structure;

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Fig. 2 is a fragmentary enlarged cross-section on line 2—2 of Fig. 1;

Fig. 3 is a section on line 3—3 of Fig. 2;

Fig. 4 is a view showing one of the traveling door carriers;

Fig. 5 is a plan view of the locking element; and

Fig. 6 is a perspective illustration of the door-carried bracket.

Fig. 1 shows the door 10 mounted for sliding movement into a recess contained in the usual manner within the wall 11, as will be understood without necessity for specific illustration. The door is suspended for sliding travel from an overhead built-in track structure 12 containing and traversed by a pair of wheeled carriers generally indicated at 13.

Referring to Fig. 2, the overhead track structure 12 comprises a pair of wooden beam sections 14 each shaped to have inside angular surfaces 15 and 16 forming a longitudinal recess 17 containing the carriers 13. As illustrated, the track sections are part of the internal wall or door framing and in the finished condition of the wall are covered by the plaster coats 18. The door opening is finished by the usual casing members 19 and 20 within opening 21 provided at one side for reception of the door as it is slid into the wall. At this point it may be mentioned that one of the top strips 20a is applied only after the door is mounted, to permit access to the space 22 overlying the door for insertion of the locking element as will be explained. Each carrier 13 comprises a Y-shaped body 23, see Fig. 4, the upper branches 23a of which carry rollers 24 which travel the inclined track surfaces 16. The lower branch 23b of the body constitutes a shank depending through the elongated opening or slot 25 for connection with the door-carried bracket 26. As illustrated in Fig. 6, the bracket has flanges 27 for attachment to the top edge of the door, and an upwardly offset portion 28 containing an opening 29 for reception of the carrier shank 23b. The lower end portion of the shank contains an annular groove 30 to receive a locking element which, as shown in Fig. 5, may consist of a resilient metallic split or bifurcated ring 31, the branches of which spread when thrust against the shank, and then restore as the groove portion of the shank is received within the locking element opening 32.

In the process of installing the door, the latter is turned within the wall opening so that a workman may grasp the side edges of the door and

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lift the door to put one of the carrier shanks through its bracket opening 29 a distance bringing the groove 30 into the space between the door edge and the offset portion 28 of the bracket. The bracket and space 22 being accessible since the facing strip 20a has not yet been applied, the locking element 31 is then thrust into the shank groove to vertically support the door by engagement of the under surface of the bracket. The door then may be swung into the plane of its wall opening and the second side raised to bring the second carrier and bracket into the described interfitting relation, whereupon the connection is completed by insertion of the locking element. Installation is completed by the application of the facing strip 19a and 20a to confine the door and complete enclosure of the described connections. If desired the locking elements 31 may be shaped to facilitate their removal at such time as the door is to be dismounted, as by providing within the element an opening 33 which may receive an appropriate tool by which the element can be pulled from the shank.

I claim:

For use with a track structure having inwardly inclined surfaces, a symmetrically Y-shaped carrier for sliding doors comprising a body having a depending portion adapted to be attached to a door and a pair of branches ex-

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tending upwardly and outwardly in diverging directions therefrom, and a pair of rollers carried by said diverging branches respectively at angles corresponding to the inclination of said track surfaces and adapted to ride on said surfaces to movably support said body.

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