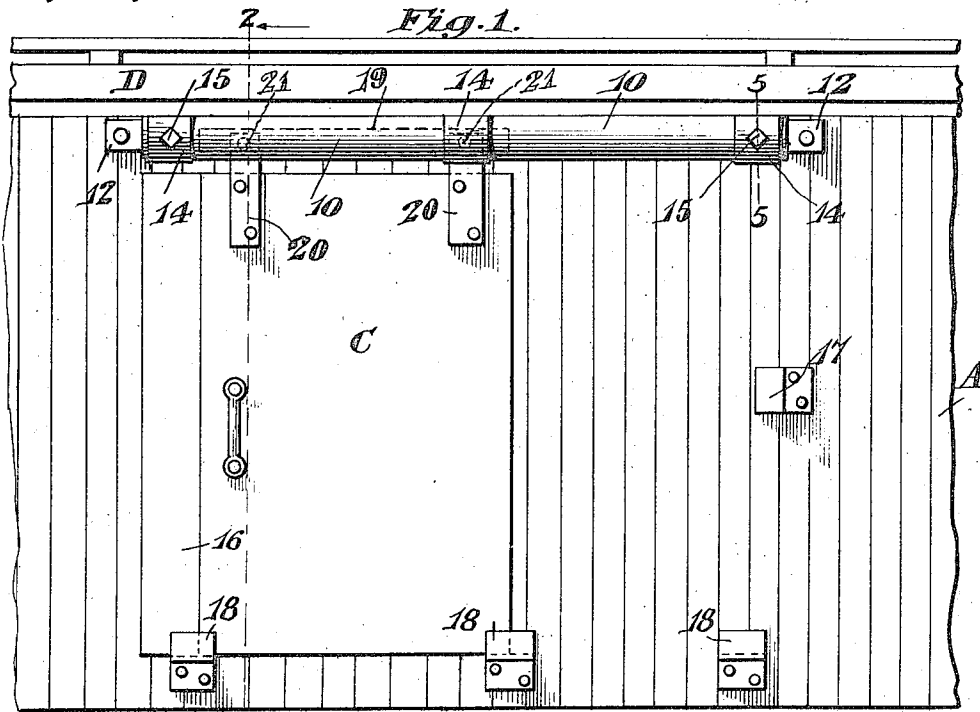
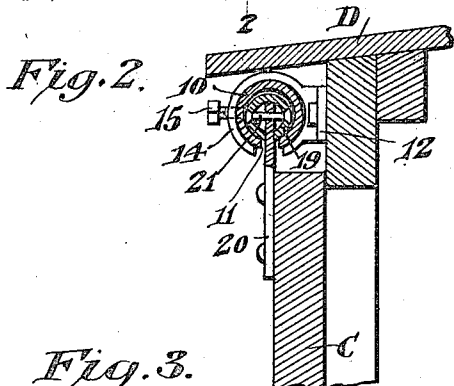
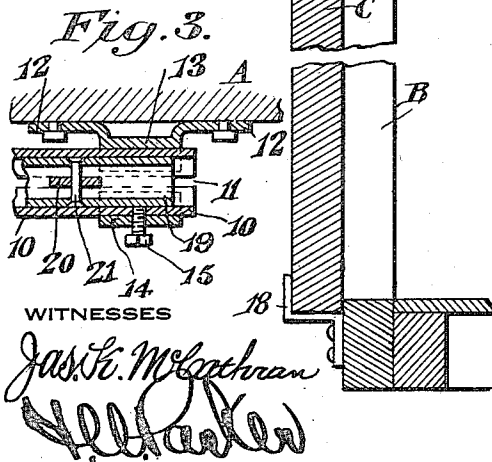
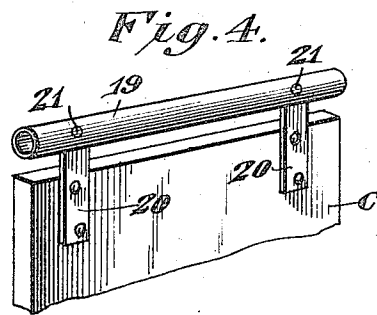
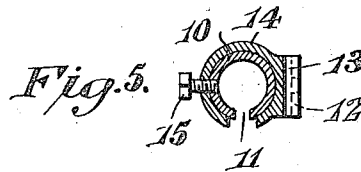


D. H. TOWNSEND.
SLIDING DOOR HANGER.
APPLICATION FILED JUNE 13, 1917.

1,269,133.

Patented June 11, 1918.



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DANIEL HILL TOWNSEND, OF MEMPHIS, TENNESSEE.

SLIDING-DOOR HANGER.

1,269,133.

Specification of Letters Patent.

Patented June 11, 1918.

Application filed June 13, 1917. Serial No. 174,610.

To all whom it may concern:

Be it known that I, DANIEL H. TOWNSEND, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented a new and useful Sliding-Door Hanger, of which the following is a specification.

The invention relates to a sliding door hanger, and has for its primary object to provide a device of this character, wherein the sliding door is supported from an overhead track, so that the door can be freely moved from closed to open position or vice versa, without any possibility of its becoming fouled or stuck, the hanger possessing simplicity of construction, efficiency in operation, strength, durability, and can be manufactured at a minimum expense.

Another object of the invention is to provide a hanger of this character wherein the door can be readily removed from the track, and when slidably supported thereby is susceptible of free sliding movement without possibility of binding and also is prevented from derangement or displacement, which would result in the fouling or the blocking of the movement of the door, and also assure the close fitting of the latter, as well as accuracy in the hanging thereof for operation.

Other objects will be in part obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, the combination of elements and arrangement of parts, which will be exemplified in the construction hereinafter set forth, and the scope of the application of which will be indicated in the following claim.

In the accompanying drawing:

Figure 1 is a fragmentary side elevation of a car body, showing the door hanger constructed in accordance with the invention applied and supporting the sliding door.

Fig. 2 is a sectional view on the line 2—2 of Fig. 1.

Fig. 3 is a fragmentary horizontal transverse sectional view, taken through the right hand end of the track when the door is open.

Fig. 4 is a fragmentary perspective view of the door, showing in detail the slidable tubular hanger core for the track.

Fig. 5 is a sectional view on the line 5—5 of Fig. 1.

Similar reference characters indicate like parts throughout the several figures,

Referring to the drawing in detail A designates generally a portion of the side of a car having the usual doorway or opening B therein, and C is the sliding door for closing the opening or doorway and is supported from a hanger structure hereinafter fully described.

The hanger structure comprises a tubular track 10 of the required length and having a uniform cross-sectional diameter, the lowermost point of said track being formed with a slot 11, which extends longitudinally thereof and opens through the opposite ends of the same. The track 10 is detachably supported in brackets each comprising a strap-like base 12 formed with a middle offset portion 13 from which projects a split collar or sleeve 14 adapted to embrace or encircle the track 10, the slit in the collar or sleeve being in registration with the slot 11 in the track and these brackets are fixed in any suitable manner to the outer face of the side A at intervals of said track contiguous to the roof D of the car body, which roof protrudes or extends over the track to protect the same during inclement weather.

In the outermost brackets are threaded, through the split collars or sleeves 14 thereof, set screws 15, which are also threaded into the tubular track 10 and if desired can extend interiorly thereof a distance to afford stops for limiting the sliding movement of the door C, which is adapted to travel between a stop cleat 16 and a stop 17, which, respectively, are mounted on opposite sides of the opening or doorway B, the cleat 16 being fastened in any suitable manner to the side A, while the stop 17 is bolted thereon, and when the door C is closed, it abuts the cleat 16 and when opened engages with the stop 17, thereby limiting the range of movement of the said door.

Below the path of movement of the lower edge of the door C are guides 18 through which work the door and the same prevent the outward swinging thereof from the side A of the body of the car when the door is moved from closed to open position or vice versa, and also when in either of these positions.

Slidably fitted in the tubular track 10 is a tubular member forming a hanger core 19, which in cross section is of considerably less diameter than the cross sectional diameter of the track 10, and near opposite ends,

thereof in the lower portion of the same are suitable slots through which project the upper ends of suspension straps 20 of the hanger, the straps being suitably fastened to the outer face of the door C in spaced relation to each other. The straps 20 are fastened in the core 19 through the medium of transverse rivets 21, which extend crosswise of the core and are passed through the straps 20 in the ends thereof housed within the core. The core 19 is freely slidable in the track 10 and the straps 20 work in the slot 11 in said track, while the cut away portions or slits in the collars or sleeves 14 of the brackets avoid any interference thereof with the movement of the core interiorly of the track.

By reason of the particular construction of the core 19 and its size relative to the track, the door C is capable of free sliding movement without possibility of jamming or becoming stuck, and in fact there is no way of fouling the door in its movement.

The brackets, each with the base 12 of the construction hereinbefore set forth, namely, the base 12 being disposed crosswise of the split ring or sleeve 14, said bracket can be fixed to the side A, so that the track 10 will be arranged close to the overhanging portion of the roof D of the body of the car, and this overhanging portion of the roof will avoid the entrance of snow, rain, or the like, through the doorway or opening B when the door is closed, and also will protect the track.

The door C can be readily removed or detached, as the core 19, hanger therefor can be readily extracted from the track 10 through the open end thereof and also said track can be detached from the bracket, should the occasion require. The particular mounting of the track permits the accurate adjustment thereof in the bracket, and the offsets 13 in the brackets allows the suspension straps 20 to be disposed flush with the

outside of the door C when the same is supported for sliding movement.

It is, of course, to be understood that the hanger structure can be used for mounting sliding doors other than on cars, therefore, the use of the invention is not restricted to the disclosure of application illustrated in the drawing. Furthermore, changes, variations and modifications may be resorted to, such as come properly within the scope of the appended claim, without departing from the spirit of the invention or sacrificing any of its advantages.

From the foregoing, it is thought that the construction and manner of operation of the invention will be clearly understood, and, therefore, a more extended explanation has been omitted.

What is claimed is:—

The combination with the longitudinally slotted tubular track, and means including intermediate and outer brackets for supporting the same, each bracket having a collar embracing the track and slotted to register with the slot in the track, of a tubular core of less diameter than the diameter of said track, slidably engaged therein, and having slots near opposite ends in its lowermost side, a pair of spaced straps forming hangers for supporting a door vertically engaged in the slots in said core, said straps being slidable in the longitudinal slot in said track, and fasteners passed transversely through the core and straps to secure the latter in said core, the core being of a length to connect both straps and substantially equal to the width of the door.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DANIEL HILL TOWNSEND.

Witnesses:

S. G. WALKER,
W. H. RICE.