

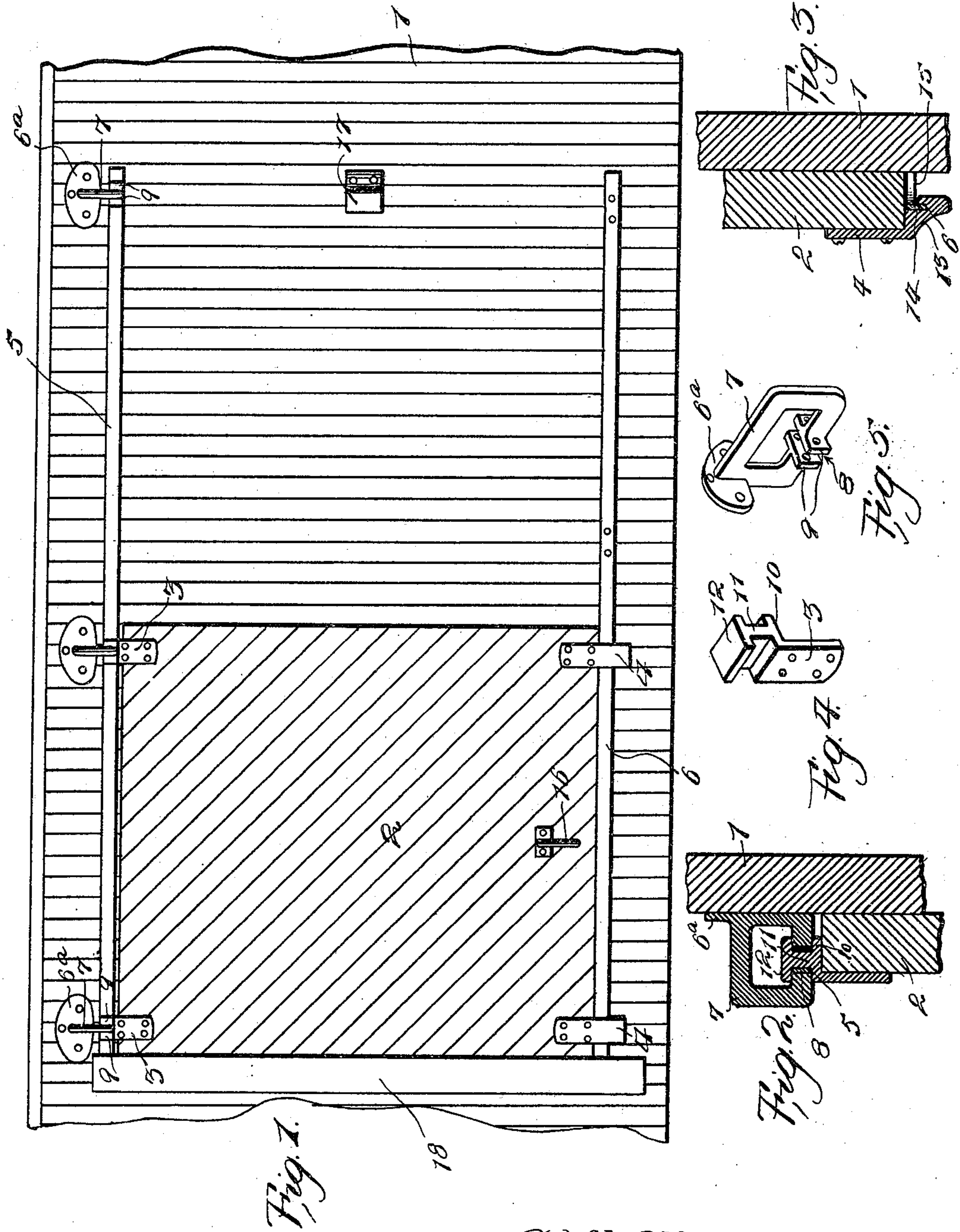
No. 684,023.

Patented Oct. 8, 1901.

C. H. WILLIAMSON.
DOOR HANGER.

(Application filed May 17, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES H. WILLIAMSON, OF ST. JOSEPH, MISSOURI.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 684,023, dated October 8, 1901.

Application filed May 17, 1901. Serial No. 60,763. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. WILLIAMSON, a citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented a new and useful Door-Hanger, of which the following is a specification.

This invention relates to door-hangers, and has for its object to provide improved means especially designed for slidably mounting a freight-car door so as to insure a free slidable movement and at the same to prevent vertical movement thereof, as such a jumping movement is detrimental to the track and hangers. It is furthermore designed to provide a simple and inexpensive device which may be conveniently applied to any ordinary freight-car now in common use and also to have the door-hanging apparatus firmly braced at the points where the door is normally supported in its closed position.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of a portion of a car having the door thereof mounted by the devices embodying my invention. Fig. 2 is a detail transverse sectional view taken through one of the hangers and the adjacent supporting-bracket for the upper track. Fig. 3 is a similar view taken through the lower track. Fig. 4 is a detail perspective view of one of the door-hangers. Fig. 5 is a detail perspective view of one of the brackets for the upper track.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

In the accompanying drawings there is shown a portion of one side of a freight-car 1 and the usual sliding door 2, having the upper duplicate hangers 3 and the lower duplicate guides 4, which respectively engage the upper and lower tracks 5 and 6.

As best indicated in Fig. 2 of the drawings, it will be seen that the upper track comprises two longitudinal rails or sections spaced at suitable intervals and supported by terminal and intermediate duplicate brackets. Each bracket comprises a flat attaching bracket or plate 6^a, having perforations for the reception of fastenings whereby the bracket may be secured flat against the side of the car. From this plate there projects outwardly a skeleton or longitudinally-slotted arm 7, which has an intermediate vertical slot 8, intersecting the lower edge of the arm and communicating with the longitudinal slot. The upper track sections or rails are received within the vertical slot and lie against the respective sides of the slot, to which they are connected, preferably to ears or lateral extensions 9, projected in opposite directions from the lower side of the arm and flush with the opposite sides of the vertical slot, said ears being perforated for the reception of fastenings whereby the rails are connected to the bracket. It will be understood that the vertical slot is wide enough to permit of the rail-sections being spaced at a suitable distance to receive the upstanding shanks of the door-hangers.

At each upper corner of the door there is provided a hanger comprising a flat attaching-plate 3, secured to the outer side of the door and provided with an upper lateral flange 10 to embrace the upper edge of the door, thereby providing an angle attaching-bracket. From the middle of the flange 10 there rises a straight shank 11, which is provided at its upper end with a transverse head 12, thereby forming a substantially T-shaped shank that is slidably received between the rails or track-sections with the head overlapping the upper edges of the track-rails and the flange portion 10 lying adjacent to the under side of the track-rails, whereby the track is embraced by the hanger, so as to prevent upward jumping of the door by the jolting movement of the car.

It will be observed that one of the terminal supporting-brackets is located at one side of the doorway and the intermediate supporting-bracket is located at the opposite side of the doorway, so that the hangers correspond with these brackets when the door is closed,

and the weight of the door comes directly upon the brackets, so as to insure a strong and durable support for the door in its normal position.

5 The lower edge of the door is guided by the pair of guide-brackets 4, each of which has a pendent inwardly-offset portion 13 (shown best in Fig. 3) and provided in its upper face with a slot 14 for slidable connection with the
10 lower side of the lower track 6. This track is spaced from the side of the car by means of a plurality of spacing-blocks, one of which has been indicated at 15 in Fig. 3, said blocks receiving the fastenings whereby the track is
15 secured to the car and also located between the paths of the lower edge of the door and the inner portion of the guide-bracket.

A suitable handle 16 is provided upon the door for convenience in opening and closing
20 the same, there being a stop-bracket 17 secured to the side of the car and between the corresponding outer ends of the tracks. The movement of the door is limited in the opposite direction by means of an upright stop
25 piece or strip 18, secured to the side of the car at the inner ends of the track.

What is claimed is—

1. In a door-hanging apparatus, the combination with a track, of a slidable door having
30 opposite hangers slidably engaged with the track, and opposite supporting-brackets for the track, said brackets being spaced at an interval corresponding to that between the hangers and located at the points where
35 the latter are situated in the normal closed position of the door, whereby the weight of the door is sustained directly by the brackets, substantially as described.

40 2. In a door-hanging apparatus, the combination of a two-rail track, and supporting-

brackets therefor, each consisting of an attaching member, from which projects an integral arm having a longitudinal and a vertical slot intersecting the lower edge of the arm and the longitudinal slot, the respective
45 sides of the vertical slot having opposite laterally-projected ears, and the rails adapted to be received within the slot and connected to the respective ears, and a door-hanger, comprising an angle attaching-bracket, hav-
50 ing an upstanding substantially T-shaped shank adapted to be slidably received between the track-rails with the head overlapping the same, substantially as described.

3. In a door-hanging apparatus, the combination of a two-rail upper track, supporting-brackets therefor each comprising an attaching member, having an integral laterally-projected arm provided with a longitudinal slot and a vertical slot intersecting the
60 lower edge thereof, the sides of the vertical slot having oppositely-directed lateral ears, the track-rails being received within the vertical slot and secured to the respective ears, a hanger having an upstanding substantially
65 T-shaped shank adapted to be slidably received between the track-rails, a lower track, and a guide-bracket having a pendent and laterally-offset portion provided in its upper face with a slot for slidable connection with
70 the lower edge of the lower track, substantially as described.

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

CHARLES H. WILLIAMSON.

Witnesses:

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JNO. W. KOCH.