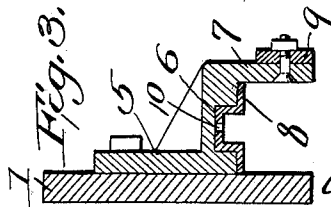
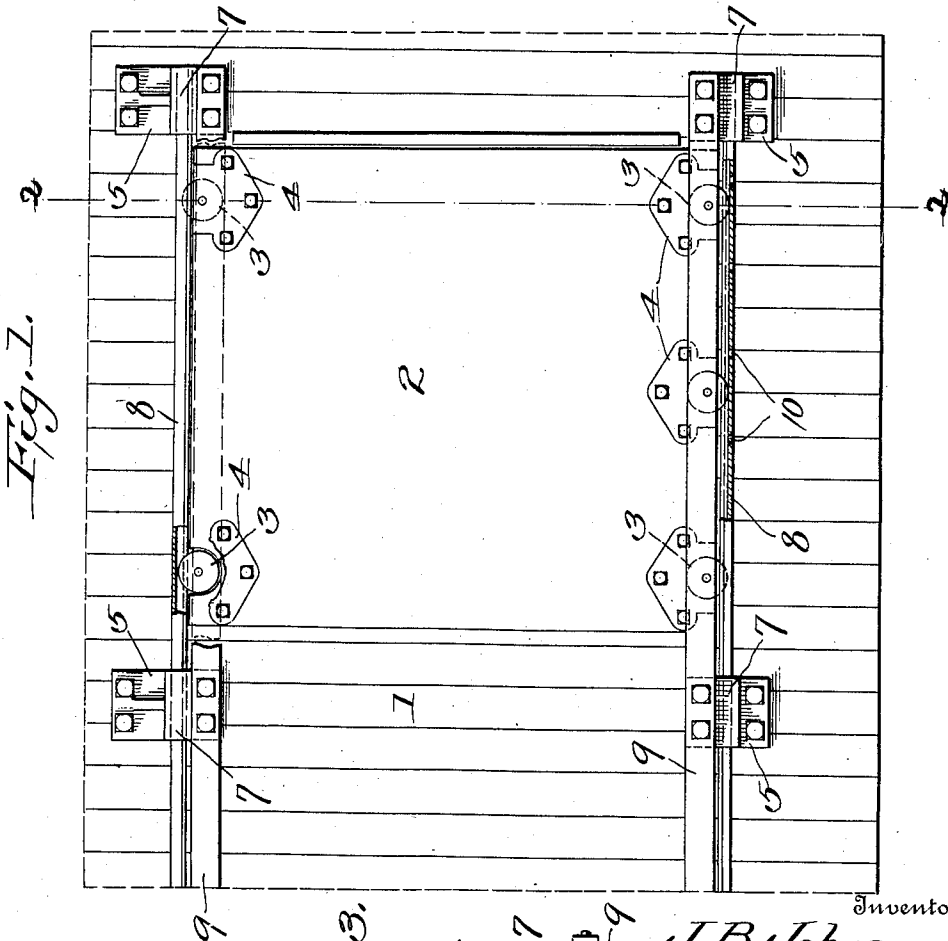
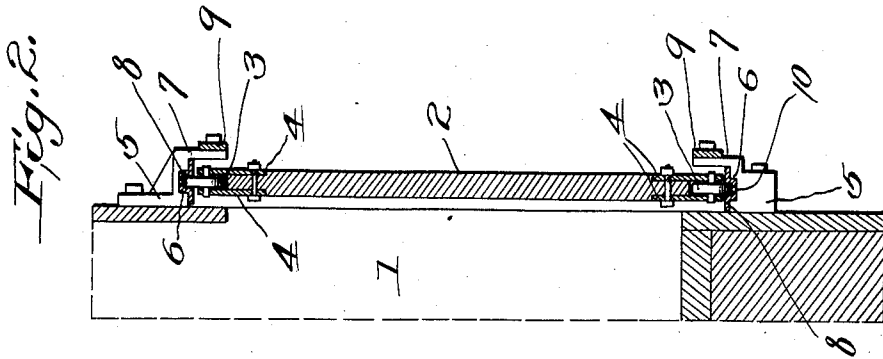


J. B. JOHNSON & J. T. VANCE.
ATTACHMENT FOR FREIGHT CAR DOORS.
APPLICATION FILED DEC. 23, 1911.

1,063,690.

Patented June 3, 1913.



Witnesses

Oliver H. Smith
E. B. McBath

J. B. Johnson
J. T. Vance

Chas. E. Brock
Attorney

UNITED STATES PATENT OFFICE.

JOHN B. JOHNSON AND JAMES T. VANCE, OF BOWLING GREEN, KENTUCKY.

ATTACHMENT FOR FREIGHT-CAR DOORS.

1,063,690.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed December 23, 1911. Serial No. 667,547.

To all whom it may concern:

Be it known that we, JOHN B. JOHNSON and JAMES T. VANCE, citizens of the United States, residing at Bowling Green, in the county of Warren and State of Kentucky, have invented a new and useful Improvement in Attachments for Freight-Car Doors, of which the following is a specification.

10 This invention relates to an improvement in car door hangers, and the object of the invention is to increase the ease with which doors of this kind can be opened and closed, it being well known to those accustomed to the continuous handling of freight cars that the doors in present use are liable to jam and stick and it is at times necessary to pry the door open with crow bars in order to move it.

20 The invention consists of the novel features of construction hereinafter set forth, pointed out in the claims and shown in the accompanying drawings, in which,

Figure 1 is a side elevation showing a car door with our invention applied thereto. Fig. 2 is a transverse section on the line 2-2 of Fig. 1. Fig. 3 is an enlarged detail section taken vertically through an upper bracket and track.

30 In these drawings, 1 represents the side of a car and 2 a door of the usual construction. The door is cut out at top and bottom to receive suitable rollers 3, and these rollers are journaled between suitable plates 4, which are set into the faces of the door, and overlap the recesses into which the rollers extend. It is of course understood that the rollers at the top project above the door and those at the bottom below the door and as shown in the drawings more rollers can be applied at the bottom than at the top. The weight of the door is supported entirely by the bottom rollers, the top rollers serving as guides and preventing the door from sticking at the top.

45 It is common practice in constructing car doors to provide such a loose construction that the door has a vertical movement. This is believed to be a disadvantage as it not only may result in the door jumping off its track way but it also causes necessarily more or less pounding upon the supporting track, which tends to loosen it from the sides of the car or cause it to sag. We aim therefore to provide a door, which will move freely and easily in a straight horizontal

plane but which is prevented by the construction of the tracks and hangers from jumping or jerking vertically.

To support the car door in proper position we employ both at the top and bottom and upon opposite sides of the door way suitable brackets 5, which brackets are angled and the under face of the horizontal portion is provided with a longitudinal groove 6. Of course those brackets arranged at the bottom of the car door would have this groove formed in the upper face of the horizontal portion of the bracket. Fitting respectively between the sides of the car and the vertical arm 7 of the brackets 5 is a track-way 8, suitably angled to fit the grooves 6 of the brackets, as clearly shown in Fig. 3.

The rollers 3 at the bottom of the door roll in the U-shaped track 8 supported by the lower brackets, and the upper rollers roll within the similar shaped track-way 8 carried by the upper brackets. The door is therefore confined between said track-ways and has no loose vertical movement. To avoid any possible danger of the door being displaced, suitable guide bars 9 are secured to the vertical arms 7 of the brackets 5 and extend the length of the travel of the door.

In order that water may not stand or collect in the U-shaped track-way the same is provided with suitable drain openings 10, thereby avoiding the formation of ice in said track-way during cold weather.

From the above description, it will be seen that we have provided a hanger comprising very few parts, and economical in construction while at the same time strong and durable.

What we claim is:—

1. A device of the kind described comprising angled brackets having horizontal portions, said portions being transversely grooved, a U-shaped trackway, fitting in said grooves, said trackway being supported by said brackets, a door adapted to move parallel with said trackway and rollers carried by the door and engaging said trackway.

2. The combination with a car and door having rollers adapted to project above the upper edge of the door, of angled brackets secured to the sides of the car and having an outwardly extending portion, and a depending portion spaced from the car, the

outwardly extending portion of each bracket being transversely grooved upon its underside, a track-way having a central U-shaped portion, the said U-shaped portion
5 fitting in the grooves of the brackets, the rollers of the car door traveling in said track-way, and a bar parallel to the door face, said bar being carried by the depend-
ing portions of the brackets, rollers carried at the bottom of the door, and a track en- 10 gaged by said last mentioned rollers.

JOHN B. JOHNSON.
JAMES T. VANCE.

Witnesses:

JOE D. FONVILLE,
FRENCH T. BLEWELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."