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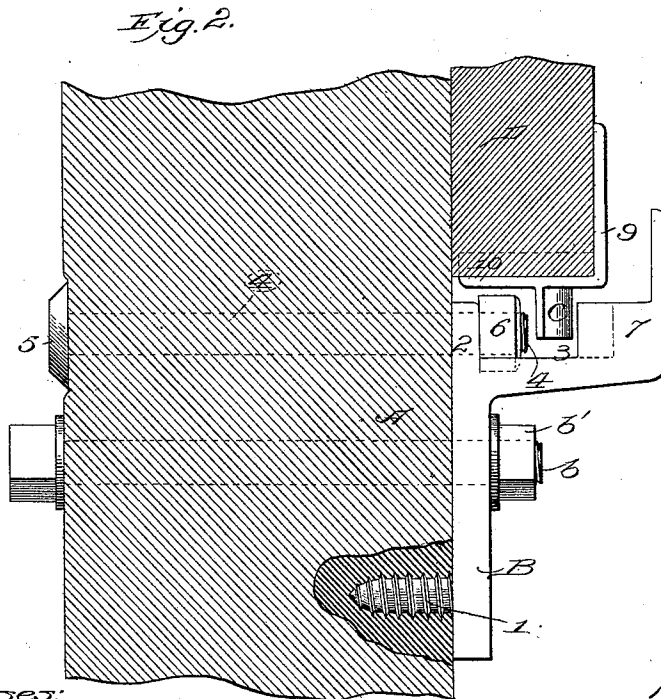
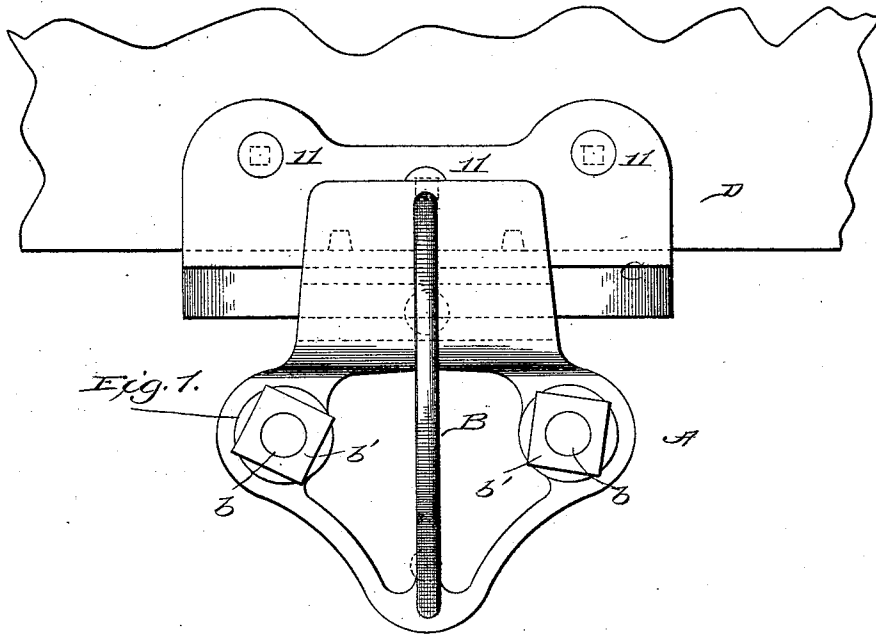
2 Sheets—Sheet 1.

W. W. HOLMES.

GUIDE BRACKET AND WEDGE FOR SLIDING DOORS.

No. 530,182.

Patented Dec. 4, 1894.



witnesses:

Harry S. Parker.
Mr. Dyer.

Mr Dyer.

Inventor:

William W. Holmes
By F. W. Ritter Jr
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2 Sheets—Sheet 2.

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Fig. 3.

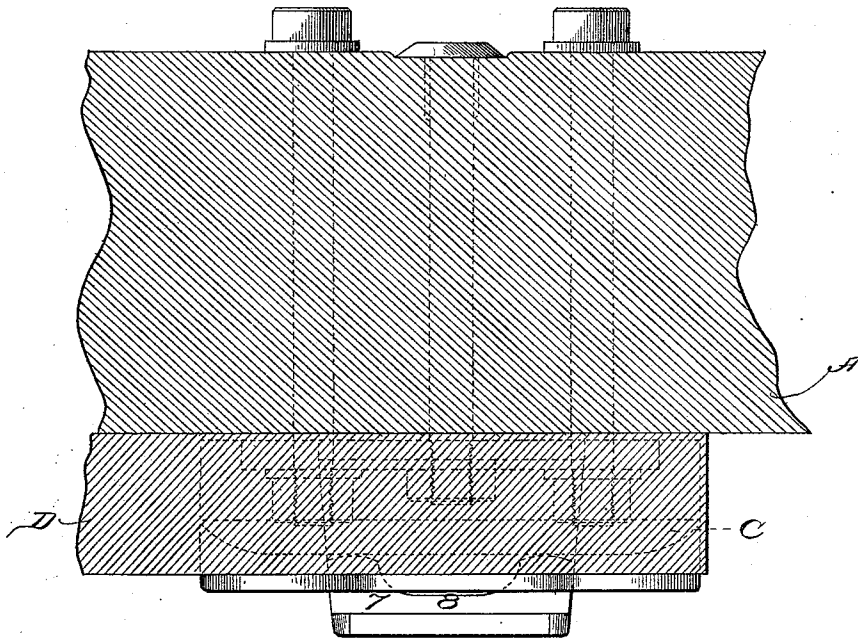
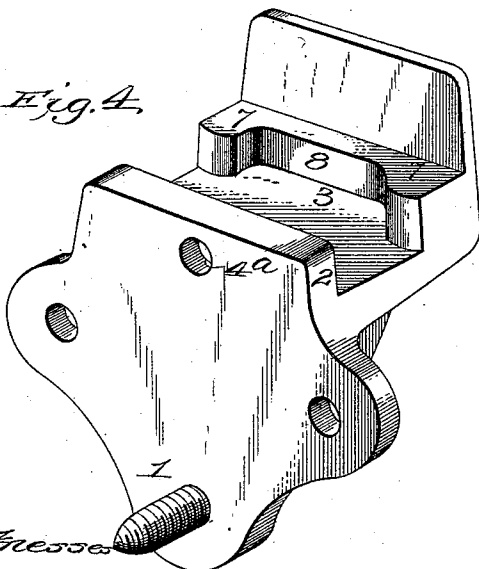
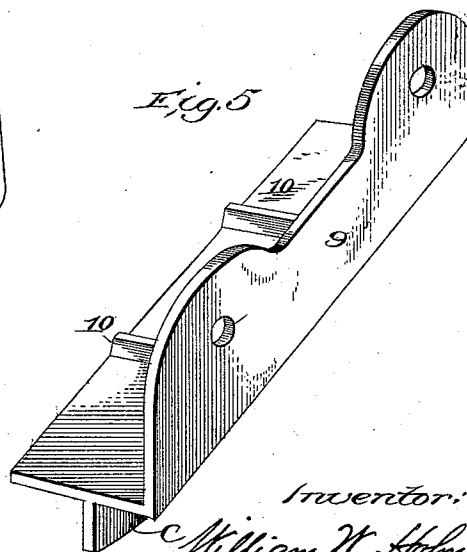


Fig. 4.



Witnesses
Harry S. Rohrer.
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Fig. 5.



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Atty.

UNITED STATES PATENT OFFICE.

WILLIAM W. HOLMES, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE Q. & C. COMPANY, OF SAME PLACE.

GUIDE-BRACKET AND WEDGE FOR SLIDING DOORS.

SPECIFICATION forming part of Letters Patent No. 530,182, dated December 4, 1894.

Application filed May 24, 1894. Serial No. 512,373. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. HOLMES, a citizen of the United States, residing at Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Guide-Brackets and Wedges for Sliding Doors; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1, is a front view, in elevation, of a guide bracket and wedge embodying my invention, and portions of a door and sill to which the wedge and bracket are attached. Fig. 2, is a side view of the same, in elevation, the portions of door and sill being in section. Fig. 3, is a top view of the devices, the portion of the door being in section and the position of wedge and fastening bolts being indicated by dotted lines. Fig. 4, is a detached, rear perspective view of the guide bracket; and Fig. 5, is a detached perspective view of the bracket wedge.

Like symbols refer to like parts wherever they occur.

My invention relates to the construction of guide brackets and wedges for securing the bottoms of sliding doors, and while of general application to all suspended sliding doors, has been especially devised for use on the doors of freight cars.

The usual construction of guide brackets, or those commonly employed for securing the bottom of sliding doors for cars, is of a character which permits of the removal or displacement of the bracket to such an extent as will permit the door to be swung outward from the car and access obtained without destroying the seal used to secure the car door while in transit. To overcome these objections and provide a simple guide bracket which shall be secure against unauthorized removal or displacement while the car is in transit, I form the bracket with two sets of fastenings one of which is by preference a threaded bolt or lag screw integral with and projecting from the back of the bracket so as to be secreted when the bracket is secured to the car, and another of which may be and preferably is, a through bolt the hole for which, in the bracket, is in the rear of the

wedge channel so as to be covered by the wedge and thereby concealed when the door is closed and the wedge in position; and a guide bracket so constructed embodies the main feature of my invention.

There are other minor features of invention, all as will hereinafter more fully appear.

I will now proceed to describe my invention more fully so that others skilled in the art to which it appertains may apply the same.

In the drawings A indicates a portion of the side or sill of a car—or other structure to which the guide bracket B is attached, and C the wedge which co-acts with the guide bracket and is secured to the door D. The wedge and guide bracket are usually malleable castings, but may be of any suitable material, or produced in any desired manner.

The guide bracket if desired may be of the usual or any approved general pattern so that when in position on the car it may not present any unusual appearance, and it may therefore have the usual through bolts *b, b*, secured by the exposed nuts *b', b'* which will support the bracket against heavy blows. I provide the bracket, however, at its back, with secret fastenings, the lower of which may be a simple projection or projections to enter the sill or side of the car and prevent the rotation of the bracket when the bolts *b b* are removed—but said projection is preferably a single one in the form of a lag screw 1 cast integral with and projecting from the back of the guide bracket. Above the lag screw 1 and formed in an ear or flange 2 which stands above the bottom of the wedge channel 3 at the back of the bracket, is a bolt hole 4^a (see Fig. 4) for the passage of a secret bolt 4 having a button head 5, and whose nut 6 is secreted in the wedge channel 3 of the bracket so as to be covered by the wedge C when the door is closed. If desired the vertical lip 7 of the guide bracket may be hollowed out centrally as at 8 (Fig. 3) which will facilitate the application of nut 6 to bolt 4 in applying the guide bracket to the sill A, without materially weakening the guide bracket or preventing it from properly co-acting with the wedge C.

The fastenings for the wedge as heretofore applied have developed material weakness

when in use, and to overcome this objection I provide the angle plate 9 which supports or carries the wedge C with a series of transverse ribs 10 (or equivalent projections such as lugs or points) which enter the bottom edge of the door, and support the wedge and angle plate against lateral force, and I then secure the angle plate above by a series of through bolts 11 well away from the edge of the door.

For the purposes of this specification I have illustrated the guide bracket in conjunction with a wedge projecting downward from the under side of the door, as such a construction is not only admirably adapted to conceal the secret fastening of the guide bracket but also reduces the projection of the fixtures from the side and renders them less liable to be struck and knocked off—but it will be evident to one skilled in the art that a laterally projecting wedge may be employed if desired, the wedge channel 3 of the bracket being correspondingly widened to receive the wedge.

The construction being substantially such as hereinbefore set forth, the guide bracket will be secured to the sill A—or other support—by screwing the lag screw 1 into the sill and bringing the bracket to its vertical position after which the button head bolt 4 is passed through the sill A and the nut 6 screwed upon the end which projects into wedge channel 3. The exposed bolts *b b* and nuts *b' b'* may then be applied in the usual manner.

The wedge C having been secured to the door D by means of ribs 10 and bolts 11 or in other suitable manner, and in proper position—will, when the door is closed, enter the wedge channel 3 of the bracket and conceal the nut 6 so that the secret fastening of the guide bracket can not be tampered with while the door is closed.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A guide bracket, having a wedge channel, a bolt orifice at the back of the wedge channel, and a projection at the back of the bracket below the wedge channel, substantially as and for the purposes specified.

2. A guide bracket, having a wedge channel, a perforated ear at the back of the wedge channel, and a lag screw at the back of the bracket, substantially as and for the purposes specified.

3. A guide bracket wedge, having an angle plate base provided with a series of transverse ribs; substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 2d day of May, 1894.

WILLIAM W. HOLMES.

Witnesses:

GEO. A. POWELL,
S. F. JOHNSON.