

(No Model.)

E. A. HILL.
CAR DOOR BRACKET.

No. 580,943.

Patented Apr. 20, 1897.

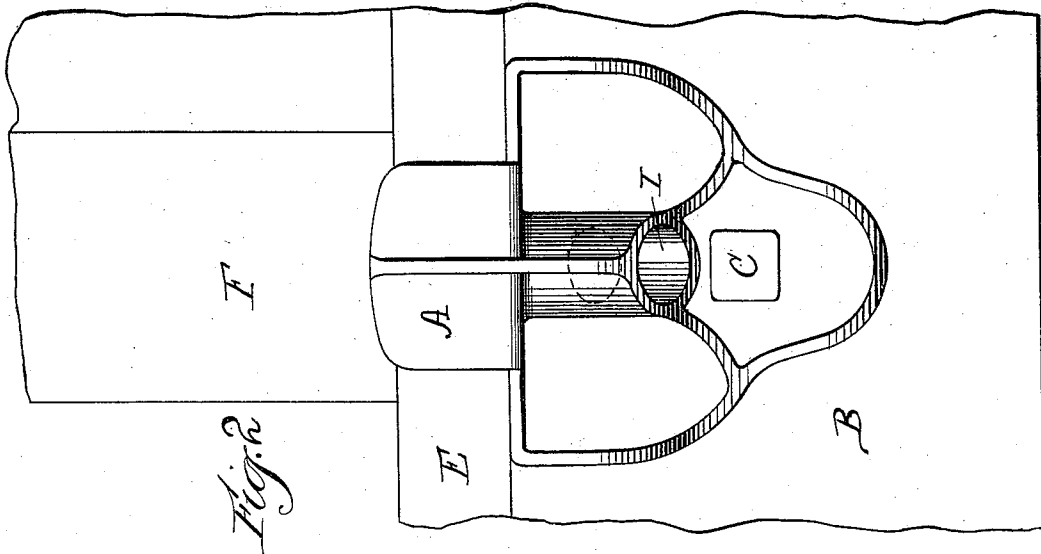


Fig. 2

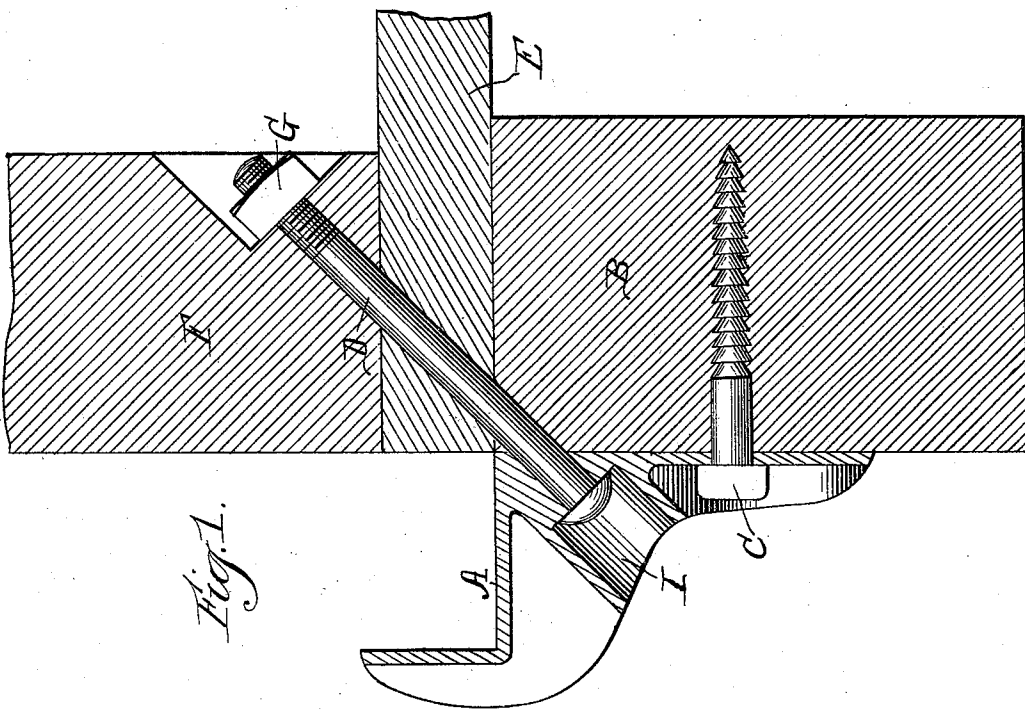


Fig. 1.

Witnesses
Wm. J. Hanning
J. M. S. Rheem

Inventor
Edward A. Hill
By Raymond W. Quinlan
Atty

UNITED STATES PATENT OFFICE.

EDWARD A. HILL, OF CHICAGO, ILLINOIS, ASSIGNOR OF TWO-THIRDS TO
EDGAR A. HILL AND JAMES L. MALLORY, OF SAME PLACE.

CAR-DOOR BRACKET.

SPECIFICATION forming part of Letters Patent No. 580,943, dated April 20, 1897.

Application filed August 12, 1895. Serial No. 559,000. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. HILL, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brackets for Car-Doors, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in brackets for guiding the lower edges of freight-car doors in sliding into and out of closed position, and has for its object to so secure such a bracket to the car-door that it cannot be detached from the car and the car surreptitiously entered unless the car-door be opened or unsealed at the time. Numerous devices for accomplishing this purpose have been heretofore invented, in all of which known to me there is the feature of non-rotative engagement between the bracket and its anchor or fastening-bolt; but in the present instance I propose to secure the fastening-bolts on the inside of the car, as against tampering from any one on the outside of the car. These objects are attained by the devices illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical section through a portion of a car frame and bracket embodying my invention, and Fig. 2 represents a front view thereof.

Similar letters of reference indicate the same parts in both figures of the drawings.

Referring by letter to the accompanying drawings, A indicates the bracket of usual form, secured to the side of the car below the edge of the door, and preferably to the car-sill B, by means of ordinary lag-screws C, passing through perforations in the bracket and entering the sill. Such screws can of course be withdrawn from the outside by means of a wrench or other tool and replaced without any evidence of their removal; and to provide against such surreptitious removal of the bracket I provide one retaining bolt or screw D, which passes diagonally through the bracket and up through the car-flooring E and door-post F in an oblique direction, with its inner screw-threaded end projecting beyond the post on the inside of the car and having applied thereto a retaining-nut G. Of course the head of the retaining-bolt D

must be of such configuration or so protected by the conformation of the bracket that a wrench cannot be applied thereto.

As shown in the drawings, an ordinary round-headed bolt is employed, to which of course a wrench cannot be applied. With a bolt of this kind it is not necessary to protect the head by the conformation of the bracket, but as a matter of precaution I have shown the bracket as provided with a socket I, in which the head of the retaining-bolt D is seated, so that even though a square-headed bolt be substituted for the round-headed bolt shown the bolt cannot be turned from the outside, and as the retaining-nut is on the inside of the car so long as the door is closed the retaining-nut cannot be removed, and consequently the bracket cannot be taken off.

It is also obvious that with such a socket as is shown in the drawings if the bolt were exactly reversed, that is to say, the head were on the inside of the car, serving merely as a retaining device, and the nut were on the outside, but in and fitting the socket I, such nuts could not be removed from the bolt, whether the bolt had a square or round head on the inside of the car, because of the conformation of the bracket, which would preclude the application of a wrench to the nut, just the same as it would preclude the application of a wrench to a square-headed bolt if the head of such bolt were seated in the socket in the bracket.

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

1. In combination with a car-frame and a car-door bracket, a retaining-bolt for a car-door bracket, running from a point on the bracket outside of the car and below its floor to a point within the car and above its floor with suitable retaining devices at the ends of said bolt, substantially as described.

2. The combination with a car-frame, of a bracket secured thereto below the flooring, of a retaining screw or bolt passing diagonally through the bracket, flooring and car-frame, and a retaining device for the end of the bolt inside the car and above the flooring thereof, substantially as described.

EDWARD A. HILL.

Witnesses:

CHAS. B. BOWEN,
M. E. SHIELDS.