No. 754,219. PATENTED MAR. 8, 1904.

B. D. JONES.

DOOR GUARD.

APPLICATION FILED OCT. 7, 1903.

NO MODEL.

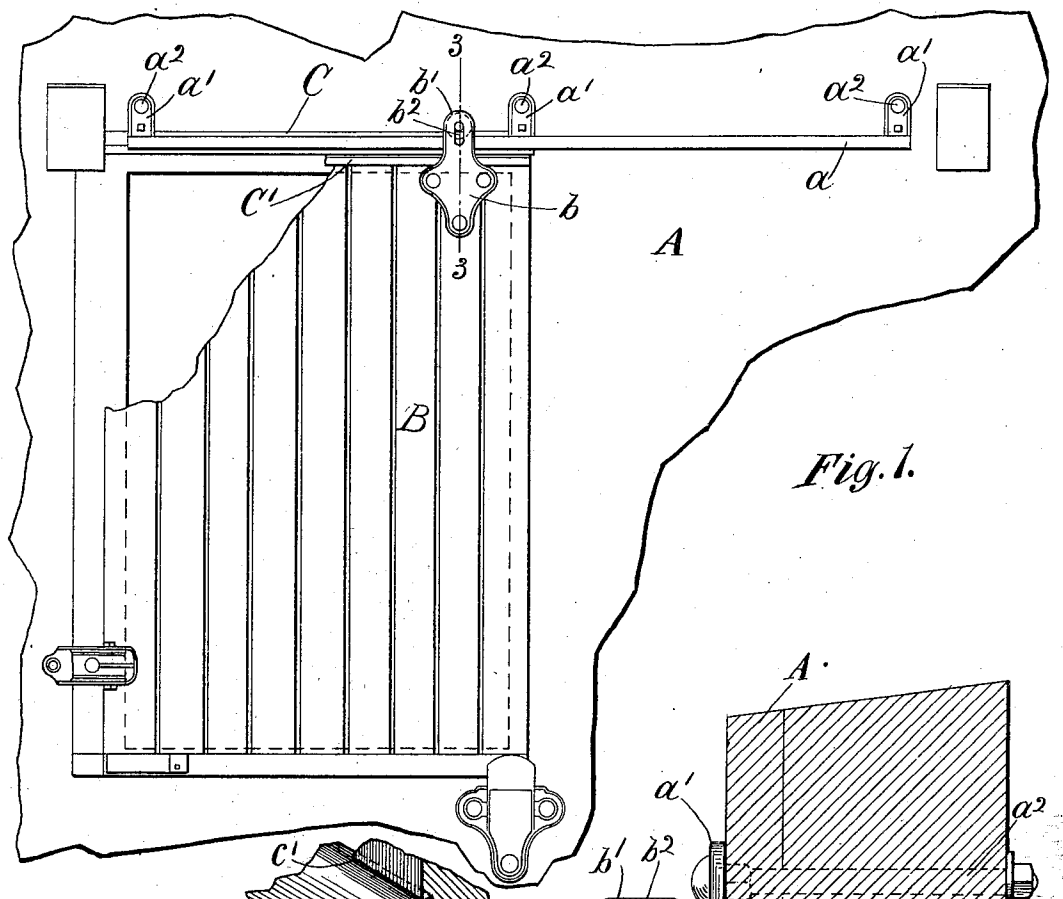


Fig. 1.

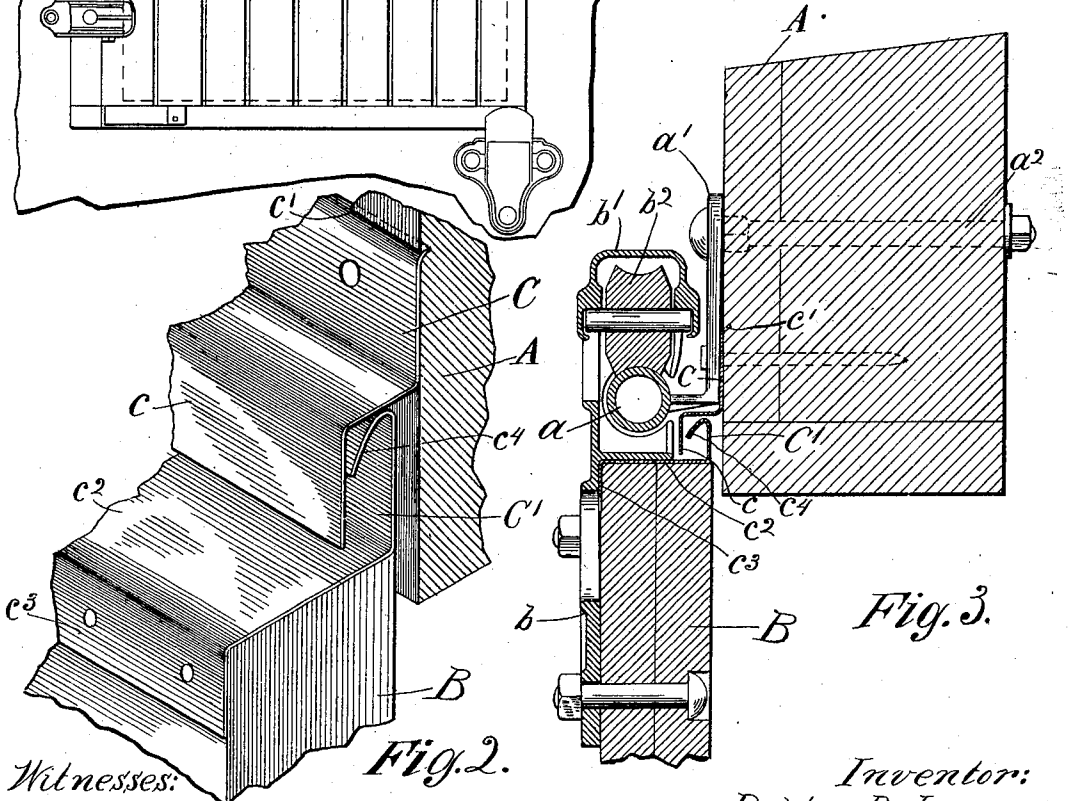


Fig. 2.

Fig. 3.

Witnesses:
W. H. Colton
Arthur B. Seibold.

Inventor:
Belden D. Jones.
By
Coburn & McRoberts Att'ys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 754,219. Patented March 8, 1904.

UNITED STATES PATENT OFFICE.

BELDEN D. JONES, OF CHICAGO, ILLINOIS, ASSIGNOR TO JONES CAR DOOR COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

DOOR-GUARD.

SPECIFICATION forming part of Letters Patent No. 754,219, dated March 8, 1904.

Application filed October 7, 1903. Serial No. 176,056. (No model.)

To all whom it may concern:

Be it known that I, BELDEN D. JONES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Door-Guards, of which the following is a specification.

My invention relates to guards for doors, and is especially concerned with certain improvements to be used in connection with sliding doors, such as car-doors, to render the same stormproof.

The object of the present invention is to provide an improved stormproof guard which will insure a waterproof joint between the door and the associated structure and will discharge the water and drippings upon the outer face of the door.

In the accompanying drawings, which form a part of this specification and illustrate the preferred embodiment of my invention, Figure 1 is a side view of a portion of a car-body and sliding door provided with my invention. Fig. 2 is a perspective view of the top portion of the door of Fig. 1, and Fig. 3 is a sectional view on the line 3 3 of Fig. 1.

Referring to the drawings by reference-letters, the letter A denotes a car-body of suitable form and construction and provided with the usual door-openings in its sides, and B represents a sliding door adapted to be moved back and forth to cover and uncover the opening with which it is associated. The doors are adapted to run on suitable rails or tracks *a*, which are attached by suitable brackets *a'* to the sides of the car-body above the door-openings and are of sufficient length to enable the doors to be slid to position to uncover the openings. The brackets are preferably secured to the sides of the car-body at suitable intervals by means of suitable bolts a^2, which pass through the side of the car and are secured in place in any suitable manner, such as shown in Fig. 3. In the preferred construction the rails are in the form shown in Fig. 3 and are attached to the supporting-brackets *a'* in the manner there indicated, although of course it is to be understood that the rails and their supporting-brackets may be of any suitable form and construction. Each door is provided with suitable hangers *b*, which are secured at its front and rear upper corners by suitable bolts and which extend upwardly and inwardly to provide overhanging portions *b'*, in which suitable rollers or wheels b^2 are journaled, as clearly shown in Fig. 3, in position to run on the track.

Above the door-opening and extending across the width thereof is secured a suitable deflecting plate or strip C, which at its top lies closely against the car and is offset or stands away from the side of the car along its lower edge, as shown at *c*. This deflecting plate or strip lies between the side of the car-body and the brackets *a'* and at its upper edge is preferably provided with an inturned flange or bead *c'*, which is slightly inclined upwardly and designed to be driven into or set into a groove in the frame of the car in order to prevent water from passing back of the strip and leaking into the car. The strip C is secured or attached in place by any suitable means, such as by screws or nails, as shown in Figs. 2 and 3. The lower offset edge or margin of the deflecting plate or strip, which is outturned in any suitable manner and preferably as shown in Fig. 3, extends down approximately to a point slightly above the upper edge of the door B.

The upper edge of the door is provided with a vertical plate or strip C', which extends for the entire width of the door and lies in the space between the car-body and the lower margin or edge of the plate or strip C, so as to be overlapped by the latter. The plate C' is preferably angular in form and extends forwardly, as at c^2, toward the front edge of the top of the door, where it is provided with a downturned flange c^3, as shown clearly in Figs. 2 and 3. The plate C' is suitably secured upon the top edge of the door by any suitable means and coöperates with the deflecting plate or strip C to form a stormproof guard protecting the joint between the upper edge of the door-opening and the upper edge of the door.

In order to prevent the rain or other water

from splashing or being forced up over the edge of the strip C', I provide a deflector, which is designed to deflect any water, as well as sparks or snow, that may enter under the lower edge of the strip C, and this guard is preferably mounted on or carried by the strip C'. In the present embodiment of the invention the guard takes the form of a flange or return-bend c^4, projecting laterally or outwardly from the strip C' and preferably inclined or curved downwardly toward the offset vertical portion c of the strip C.

The strips or plates may be constructed of any suitable material and preferably are made from suitable lengths of galvanized iron.

When the door is closed over the door-opening, the upturned portion of the strip C' lies behind the outwardly-deflected portion of the plate or strip C, with the deflector c^4 extending downwardly toward the latter strip, and it is obvious that when the parts are thus located any water that may drip down over the side of the car above the door-opening will be deflected by the plate or strip C outside the inner strip C', which will prevent its finding its way to the joint between the upper edge of the door-opening and the upper edge of the door. In the event that rain is driven in a slanting direction toward or water is thrown against the side of the car it is prevented from splashing or washing up over the upper edge of the strip C' and into the car by the deflector c^4, which turns the water back or deflects it downwardly, so that it will pass back to the outside of the door. When the strip C' is provided with the forwardly-extending portion c^2, the water will be carried by it to the outer face of the door, as the portion C' forms an apron covering substantially the top of the door.

The deflector c^4 is also designed to prevent snow from drifting or blowing over the top of the door as well as to obviate the possibility of sparks finding an entrance to the car by the same path.

While I have shown and described my invention as applied to car-doors, it is of course understood that it may be employed in other locations or with sliding doors upon any structure.

Having described my invention, what I claim is—

1. A guard for sliding doors comprising two overlapping plates or strips, the outer one secured to the frame above the door-opening and the inner one secured to the door and extending the width thereof, and a deflector carried by one of the strips and extending laterally toward the other strip.

2. A guard for sliding doors comprising two plates or strips, one secured to the frame above the door-opening and having a lower vertical offset portion, the other secured along the width of the door and having a vertical portion adapted to enter the offset and provided at its upper edge with a downwardly-extending flange terminating adjacent the offset portion of the other strip.

3. A guard for sliding doors comprising two overlapping plates or strips, one secured to and having an inturned upper edge entering the frame above the door-opening and having its lower edge offset, and the other secured along the width of the door and having a vertical portion adapted to enter the offset and provided with a flange at its upper edge extending downwardly toward and terminating adjacent the offset.

In testimony whereof I affix my signature in presence of two witnesses.

BELDEN D. JONES.

Witnesses:
ARTHUR B. SEIBOLD,
ELIZABETH MOLITOR.