

C. Bird,
Door Check.
No. 112,210. Patented Feb. 28. 1871.

Fig. 1.

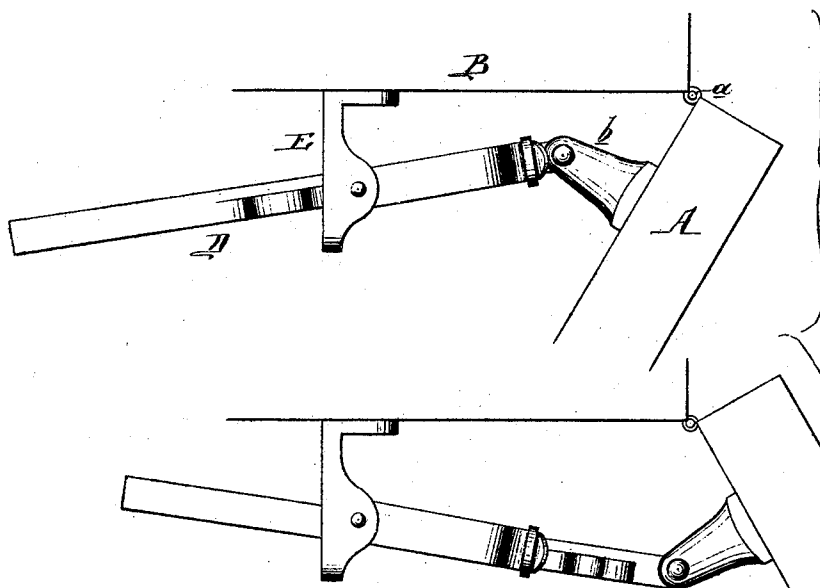
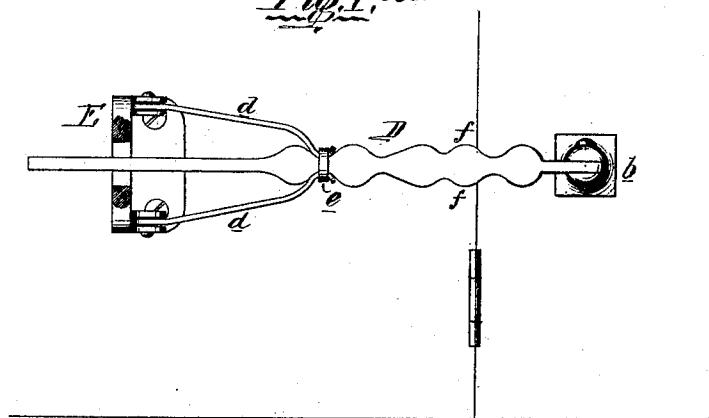
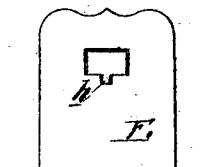


Fig. 2.

Fig. 3.

Fig. 4.



WITNESSES

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CHARLES BIRD, OF LOWER MERION TOWNSHIP, ASSIGNOR TO HIMSELF, CHARLES J. FIELD, AND T. P. SARGENT, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 112,210, dated February 28, 1871.

IMPROVEMENT IN DOOR-CHECKS.

The Schedule referred to in these Letters Patent and making part of the same.

I, CHARLES BIRD, of Lower Merion township, county of Montgomery, State of Pennsylvania, have invented a Device for the Adjustment and Retention of Doors, of which the following is a specification.

Nature and Object of the Invention.

My invention consists of a device too fully described hereafter to need preliminary explanation, for retaining a door in an open or partly open condition, and at the same time permitting the door to be readily adjusted so as to be more or less open.

Description of the Accompanying Drawing.

Figure 1 is a front view of my device for retaining doors;

Figures 2 and 3, plan views of the same; and Figure 4, a view of part of the device.

General Description.

A represents part of the door of a railroad-car, hinged at *a*, in the usual manner, to the end B of the body of the car.

To a stud, *b*, secured to the back of the door, is hinged an arm, D, which passes through and is guided by a plate, E, secured to the body of the car, and to lugs on this plate are connected arms *d d*, bent, as shown, at the outer ends, where a gum ring passes round both arms, renders them elastic, and causes them to embrace the arm D, on both upper and lower edges of which are corrugations *f*, arranged directly opposite to each other, as shown.

When the door is opened the arm D, guided by the plate E, will slide through the opening in the same, and between the edges of the arms *d d*, the

latter yielding to the corrugations, and closing on and gripping the bar between the corrugations with such force as to retain the door after it has been opened to the desired extent, and prevent it from being moved by the motion of the car or by the wind, the door yielding only on the application of considerable force, when it has to be entirely opened or closed or to be adjusted to another position, and there retained by other corrugations of the bar.

In the present instance the arm D has at the back and for its better guidance a rib, *h*, adapted to a slot in the plate E, as best observed in fig. 4.

The bar may have corrugations on one edge only, the other edge being straight, but I prefer the corrugations on both edges.

Although I have alluded to my invention as applied to the adjustment and retention of the doors of railroad-cars, it will be evident that it may be applied with advantage to other doors, or to the lids of boxes or trunks.

Claims.

The bar D, hinged to a door, and having corrugations *f*, in combination with a fixed plate E, for guiding the bar, and elastic arms *d*, adapted to the corrugations, all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. BIRD.

Witnesses:

WM. A. STEEL,
F. B. RICHARDS.