R. P. PROCTOR.

FENDERS FOR CAR-WINDOWS.

No. 180,635. Patented Aug. 1, 1876.

Fig. 1.

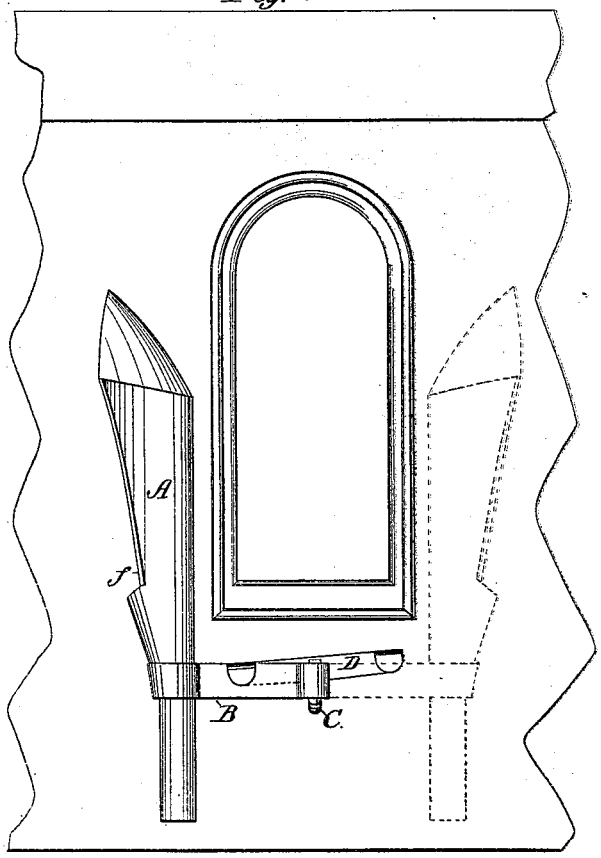


Fig. 3.

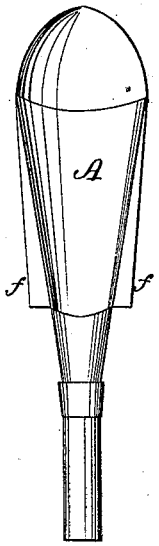


Fig. 2.

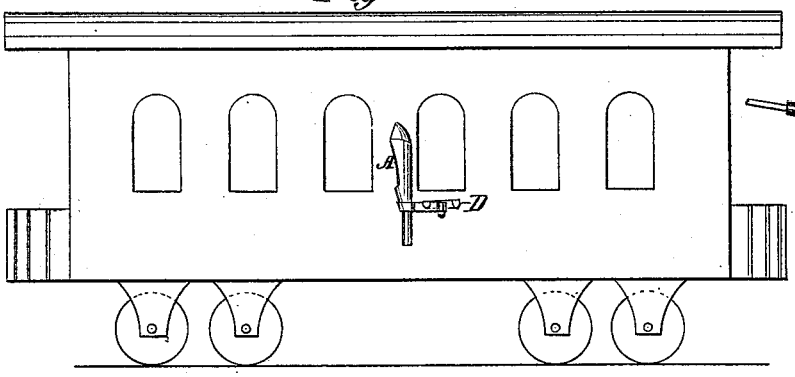
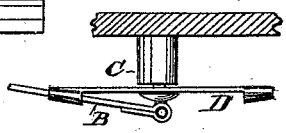


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

RAPHAEL P. PROCTOR, OF EDINBURG, VIRGINIA.

IMPROVEMENT IN FENDERS FOR CAR-WINDOWS.

Specification forming part of Letters Patent No. **180,635**, dated August 1, 1876; application filed March 18, 1876.

To all whom it may concern:

Be it known that I, RAPHAEL P. PROCTOR, of Edinburg, in the county of Shenandoah and State of Virginia, have invented a new and Improved Fender for Car-Windows; and I do hereby declare that the following is a full, clear, and exact description of the same.

Railway-cars have been provided with fenders consisting of flat or curved plates for the purpose of preventing dust, sparks, cinders, &c., from entering the windows while the train is in motion. My improvement in this class of devices is in the form of a hood or funnel, converging to a tube at its lower extremity, and pivoted to a bracket beneath the car-window, to adapt it to be turned to either side thereof, and there secured by a catch, which is likewise pivoted to said bracket, as hereinafter described.

In the accompanying drawing, forming part of this specification, Figure 1 is a side elevation of a fragment of a car, showing my improved device as applied in practice. Fig. 2 is a side elevation of a car provided with my device; Fig. 3, a front view of the funnel detached from the car; Fig. 4, a detail view, showing the manner of pivoting the funnel and its catch.

The sheet-metal hood or funnel A is similar in shape to the wind-sail of a ship, being tapered from its upper to its lower end, which latter is in the form of a tube, *a*. It is rigidly secured to, and supported vertically by, an arm, B, which is pivoted horizontally upon the bracket C, projecting laterally from the car-body immediately beneath the window. The open side of the funnel is turned outward, or from the window, whether it be on one side or the other thereof; and in practice it will always be turned in the direction the train is moving, so as to catch and arrest the dust, cinders, &c., which pass close alongside the car, and would otherwise be drawn into the window when open. In order to hold the funnel in either position—that is, on either side of the window—I employ a double catch, D, which consists of a metal plate or bar having a lip or flange, *c*, at each end, adapted to pass over the supporting-arm B of the funnel, and thus hold it in the desired position. The catch is pivoted to bracket C, so as to swing vertically thereon, but be incapable of movement in a horizontal plane. The funnel and catch are thus made accessible from the car-window, and the former may be adjusted from one side to the other without difficulty, inconvenience, or delay, while in either position it offers no obstruction to the admission of light, or the view from the window.

In view of the tapered form of the upper portion of the funnel, and the lower portion *a* being tubular, a downward draft is caused by the passage of air across the mouth of the tube while the train is in motion, thus causing the dust and cinders arrested and gathered by the funnel to be carried downward, and discharged through the tube. The sides of the funnel are extended laterally at *f*, forming wings that prevent the passage of dust, &c., between the body of the funnel and the side of the car.

What I claim is—

1. The funnel or hood A, pivoted beneath the car-window, and thus adapted to be adjusted on either side of the window, as shown and described.

2. The funnel or hood A, having the tubular lower portion *a*, as and for the purpose specified.

3. The combination, with the hood or funnel adapted to swing from side to side of the window, of the catch or locking device, pivoted as described, so as to swing in a vertical plane, as set forth.

RAPHAEL P. PROCTOR.

Witnesses:

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JOSEPH COMER.