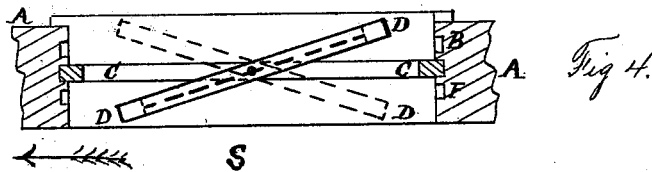
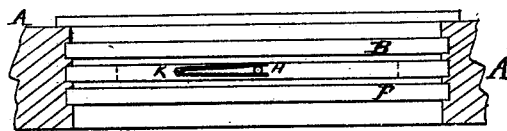
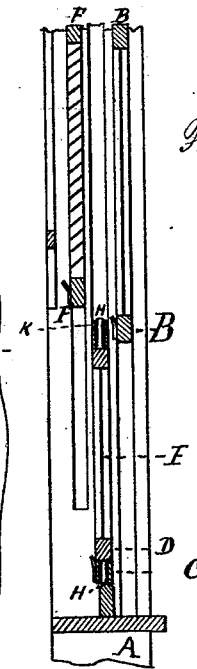
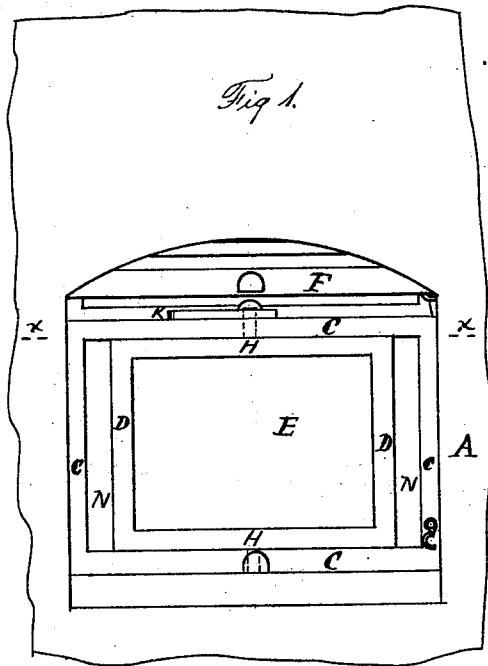


W. C. HICKS.
Car-Window.

No. 221,678.

Patented Nov. 18, 1879.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM C. HICKS, OF SUMMIT, NEW JERSEY.

IMPROVEMENT IN CAR-WINDOWS.

Specification forming part of Letters Patent No. **221,678**, dated November 18, 1879; application filed October 8, 1879.

To all whom it may concern:

Be it known that I, WILLIAM CLEVELAND HICKS, of the town of Summit, State of New Jersey, have invented a new and useful means for ventilating cars and protecting passengers from dust and cinders; and I hereby declare that the following is a full, clear, and exact description and specification of the same, taken in connection with the accompanying drawings, making part thereof.

It is well known that when the windows of passenger-cars used on railways are open the draft is inward to a great extent, and that the dust and cinders are thrown into the faces of the passengers, or against their clothes, to their great annoyance and discomfort.

My invention is designed to obviate these difficulties, and at the same time to aid in ventilating the cars; and it consists in certain combinations of deflectors with the ordinary windows arranged in the walls of a railway-car to be opened near the seats for the passengers. These combinations are set forth in the claims at the end of this specification.

In order that persons skilled in the art may understand, make, and use my invention, I will proceed to describe the same, referring to the drawings, in which—

Figure 1 is a front elevation of my invention as it appears from the inside of the car. Fig. 2 is a vertical longitudinal cross-section of the same through the center of the window. Fig. 3 is a horizontal section of the side of the car just above the window, showing the top of the ordinary window-sash, the ordinary blind, and my sliding frame with pivoted transparent deflector. Fig. 4 is a horizontal section through the side of the car, window-frame, and sliding frame just above the deflector on the line *x x*, Fig. 1.

A represents the side walls of a car, and the window-framing arranged to hold the ordinary window B, so that it can be slid up and down when required, the latter being provided with a suitable catch to hold it up. F is an ordinary window-blind, also arranged with a suitable catch to hold it up. C is the sliding frame, also provided with a catch to hold it at its highest position. When it is in use it is to be brought down into the position shown in Fig. 1.

The sliding frame C is provided with a deflector, D, pivoted to it, so that it can be swung on the pins H H as centers, and made to stand at different angles to the said window or frame C, as shown in Fig. 4. The frame C is provided with a spring-holder, K, which holds the deflector D in the plane of the frame when it is to be slid upward, and also holds it on either angle, (shown in Fig. 4,) or at any desired angle to the window.

I prefer to make the deflector transparent, like the ordinary window B, so that the passengers may look out.

E represents the glass of the deflector D. On the sides of the deflector D, I prefer to leave spaces N N, so that air may be allowed to enter or escape from the car when the deflector is in the position shown in Fig. 3.

The slide F is arranged to be slid down when the deflector is in the position shown in Fig. 4, so as to hold the deflector in place by resting on the top of it. When the deflector is in the position shown in Fig. 3 it may act as a blind before the slide and deflector D.

The operation of my invention is as follows: The sliding frame C being held at its highest position, the window B and the blind F may be used in the ordinary way; but if it is desired to ventilate the car, or to keep the dust and cinders out when the window B is open, the sliding frame C is lowered and the deflector D is brought down opposite the space left open by the window, air will circulate through the openings N N on each side of D, even if the deflector D is parallel with the slide C; but if it is desired to create a draft and to keep out the dust and cinders, the deflector being placed at an angle, as shown in full lines, Fig. 4, will, if the car is moving in the direction indicated by the arrow, cause a draft of air from the inside, S, of the car to the outside, and ward off anything which may be tending to enter the window, the angle of the deflector giving it an outward direction. In case the car is moving in a direction the opposite to that indicated by the arrow, the deflector must be set at an angle shown by the dotted lines, Fig. 4. The angle of D may, of course, be varied to suit any condition and to give more or less draft.

The frame C may be placed under the win-

dow and raised with it, a recess being provided below to hold it when the window is down.

The holder K is made to clasp the pivot H, which is flattened above the upper rail of C to keep the deflector in the same plane as the frame C when the latter is moved up. The same holder will retain the deflector in any desired position by pressure on the sides of H, or by suitable notches being made in H.

The deflector D need not be made narrower than the inside of the frame C, and may be made as wide as the window-opening. In such cases the openings on each side of D will be obtained only by turning it at an angle to the window, as in Fig. 4.

Having now fully described the manner in which I construct my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, substantially as hereinbefore set forth, of the car-window arranged to slide in the walls of a car, and the deflector pivoted in bearings on a sliding frame to swing before or in the opening made by raising the window, all constructed and arranged to operate substantially in the manner and for the purposes set forth.

2. The combination, substantially as hereinbefore set forth, of the car-window arranged to slide in the walls of the car, and the frame provided with a deflector arranged to leave openings N N on its sides, all constructed and arranged to operate in the manner and for the purposes set forth.

WILLIAM CLEVELAND HICKS.

Witnesses:

W. L. BENNEM,

JAMES M. HICKS.