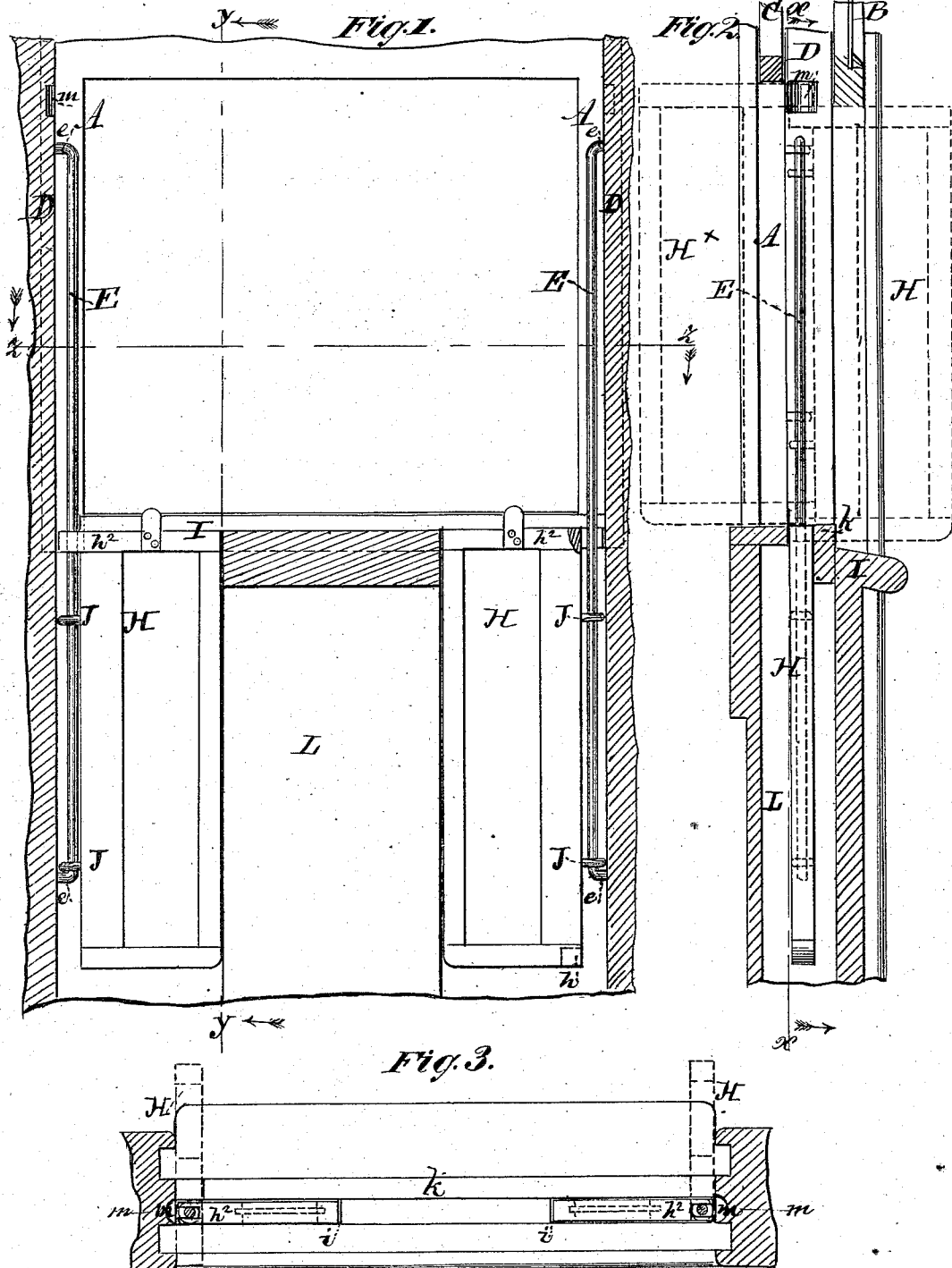


E. L. WALLACE.

Dirt-Rejectors and Ventilators for Railroad-Cars.

No. 157,894.

Patented Dec. 15, 1874.



Witnesses
John Becker
Thos. H. Hays

E. L. Wallace
by his Attorney
Brown & Allen

UNITED STATES PATENT OFFICE.

EDWARD L. WALLACE, OF PATERSON, NEW JERSEY.

IMPROVEMENT IN DIRT-REJECTORS AND VENTILATORS FOR RAILROAD-CARS.

Specification forming part of Letters Patent No. **157,894**, dated December 15, 1874; application filed October 20, 1874.

To all whom it may concern:

Be it known that I, EDWARD L. WALLACE, of Paterson, in the county of Passaic and State of New Jersey, have invented an Improved Dirt-Rejector and Ventilator for Railroad Passenger-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification.

My invention relates to a novel construction and arrangement of means for preventing the entrance of dust, smoke, cinders, cold air, and rain into the window of a railroad passenger-car when in motion, and avoiding inconvenience to persons seated at such window, and also to persons in the rear thereof. The invention consists in the combination, with the window-frame, of a panel or glazed sash, hinged to the window-frame so that it may be turned outward to prevent the entrance of dirt, cold air, or rain, and arranged to slide vertically to a position below the window-sill, so as to be out of the way when not in use.

In the accompanying drawing, Figure 1 is a vertical sectional view of a car-window frame, taken in a line parallel with the inner and outer walls of the car, as indicated by the line *x x* in Fig. 2. Fig. 2 is a transverse vertical section taken in the line *y y* of Fig. 1. Fig. 3 is a horizontal section taken in the line *z z* of Fig. 1.

A represents a window-frame of a passenger-car, provided with a sash, B, and a blind, C, having two parting-stops, D, between them—one on each side of the frame A—and extending from top to bottom of the frame. E is a rod or bar nearly as long as the stop D, having its ends *e* turned at about right angles with its length. H is a panel or glazed sash, which forms the dirt-rejector and ventilator. It is of a length corresponding with the distance from the window-sill I to the lower edge of the sash B when raised to its greatest height, and of a width of about six inches, more or less. To one edge of the rejector H two or more eyes, J, are attached by inserting their shanks in said edge. The rejector H is hinged to the side of the window-frame by passing the rod E through the eyes J, and then inserting one or both ends *e* in the outer

face of the stop D, the rod E thus serving as the hinge-pivot. By this arrangement the rejector H may be turned outward, as shown in dotted lines in Figs. 2 and 3, in which position it has the effect of preventing the entrance into the window of smoke, cinders, dust, cold air, or rain when the train is in motion, and avoiding inconvenience to the person seated at the window to which it is applied, and also to the person immediately in the rear thereof, and causing an outward draft through the window, so as to ventilate the car, and expel smoke and dust therefrom.

The width of the sash or panel H should be such as to allow it to project outward not more than four inches beyond the outer wall of the car, in order to insure the prevention of contact with passing trains or projecting objects along the road. The angle of inclination with relation to the outer wall of the car may vary somewhat; but I prefer to arrange it at right angles, as shown, as I find that such position, and the projecting distance of four inches above mentioned, will effectually accomplish the desired object. The rejector may be a board or panel of solid wood or other suitable material, or it may be glazed in order to allow the person seated at the window to look forward without suffering inconvenience from the smoke, cinders, dust, &c.

The sash or panel H is held in place, when turned outward, by means of a notch, *h*, cut in the lower corner thereof, and fitting against a rabbet, *k*, on the sill I. If desired, the notch may be made in the rabbet *k*; but I prefer to have it in the rejector itself, leaving the rabbet entire, so as to exclude dust when the rejector is not in use. The rejector may be held in place by a spring or any other suitable device, instead of the notch above described.

Two of the rejectors are placed at each window—one at each side—so that one of them may be used when the train is going in one direction, and the other when going in the opposite direction. In some cases a passenger may desire to turn the rejector inward instead of outward, in which case it may be turned as indicated by H* in Figs. 2 and 3.

At each end of the sill I an opening, *i*, is cut, corresponding in form and size with the width and thickness of the rejector. When

the rejector is not in use, it is turned to a position parallel with that of the sash B and blind C, when it may be made to slide vertically downward into the space L, between the inner and outer walls of the car, its upper edge h^2 filling the opening i , and forming a continuation of the upper surface of the sill I. The upper edge h^2 of the rejector fits around the rod E, and up against the stop D, so as to exclude dust from the space L; and in order that it may turn freely when it is raised, a recess, m , is cut in the upper portion of the stop D to receive the projecting end of the upper edge h^2 .

This dirt-rejector and ventilator is cheap, light, neat, and durable, and has been found, in practice, to accomplish the purpose for which it is intended. It can be readily applied to cars already built by cutting openings in the sill, and taking out the stop D and attaching the rod E and ventilator thereto, after which the stop may be replaced and fastened by screws above the window-sill.

I am aware that it is not broadly new to arrange a vertically-sliding dirt-rejector and ventilator in respect to the window of a railroad-car, and such of itself I disclaim; but

What I claim as new, and desire to secure by Letters Patent, is—

The panel H, hinged to the window-frame by means of the vertical rod E and eyes J, in combination with the space L, constructed below the window-sill, between the outer and inner walls of the car, substantially as described, whereby the said panel may be moved vertically to enter the said space, where it will be entirely concealed from view, and its upper edge fill the opening i and form a continuation of the upper surface of the window-sill, as and for the purpose set forth.

EDWARD L. WALLACE.

Witnesses:

MICHAEL RYAN,
BENJAMIN W. HOFFMAN.