S. DARLING.

Railway Car Window.

No. 201,598. Patented March 26, 1878.

Fig. 1

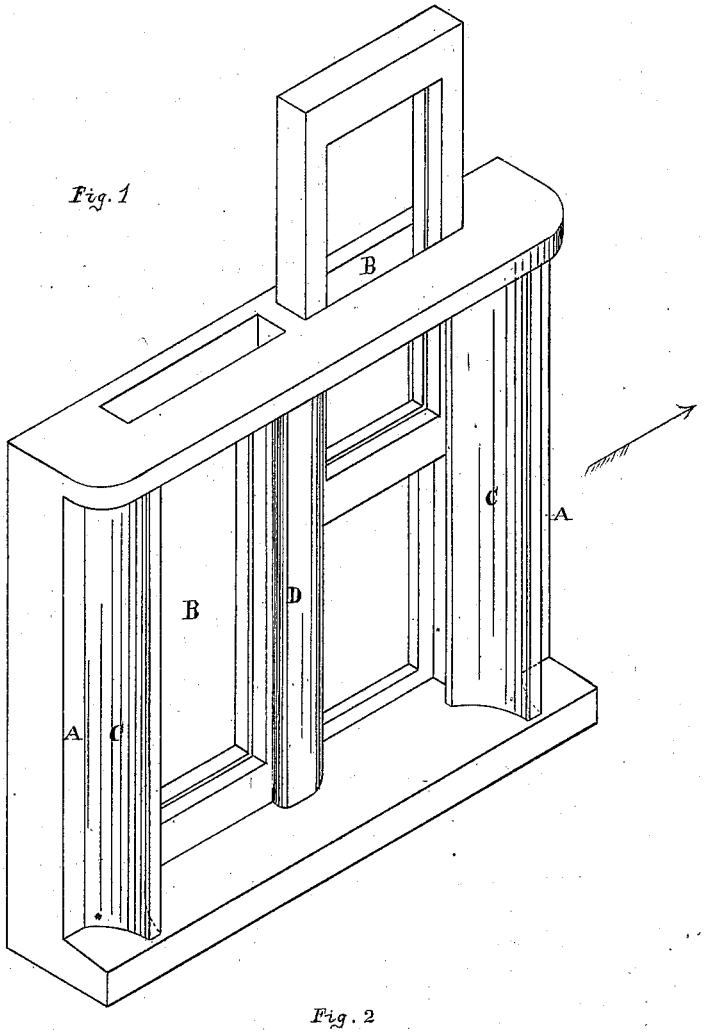
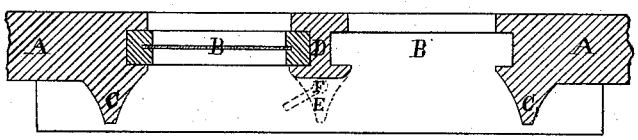


Fig. 2



Witnesses

Calvin W. Parsons

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UNITED STATES PATENT OFFICE.

SAMUEL DARLING, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN RAILWAY-CAR WINDOWS.

Specification forming part of Letters Patent No. **201,598**, dated March 26, 1878; application filed December 6, 1877.

To all whom it may concern:

Be it known that I, SAMUEL DARLING, of Providence, in the State of Rhode Island, have invented certain Improvements in Railway-Car Windows; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The object of my invention is the ventilation of railway-cars; and it consists in making the common car-window, which is from twenty-one to twenty-three inches wide, in two parts, dividing it vertically, so that there shall be two narrow sashes in the place of one of the usual width, and in attaching to the outside of the car, near the outer edge of each narrow sash or part of the window, a spark, dust, or wind fender, thus two openings or narrow windows being between two fenders; and also in using the molding which is usually put near car-windows for finish as fenders, extending them out for that purpose, all of which will be more fully described and illustrated in the following specification and drawing.

Figure 1 of the drawing is a side elevation of my improved ventilating-window and a portion of the wall of the car; Fig. 2, a plan or horizontal section.

A A, Figs. 1 and 2, wall of the car; B B, Figs. 1 and 2, the narrow windows; C C, the fenders; D, the dividing bar or post between the sashes.

There is a great need of a car-window that can be kept open when the cars are in motion without the admission of cinders, dust, or too much air.

My improved window is so arranged that the forward part of it can be opened when the cars are in motion without the wind or cinders coming in, and it is also arranged so that air may be admitted without blowing directly upon those in other seats, and may be so constructed that no wind shall be admitted, or that air may be admitted and the amount regulated by the person sitting at the open window.

By dividing the common-width car-window into two parts, which may be covered by one blind, fenders can be used, extending out from the side of the car less than half as much as would be required for the common-width window without being divided.

The common window, which is about twenty-three inches wide, requires fenders six inches wide from the sash out, which is too wide for practical use and good proportionate finish. When made so wide they are liable to be knocked off in various ways, and they also obstruct the view from the windows in an objectionable degree.

When the common windows are divided into two parts, or when they are made about twelve inches wide, and two of them located between two fenders or moldings, as above described, and the dividing-bar is not made to extend out from the window-sash more than is required for strength—say one-fourth or three-eighths inch—a molding one inch deep is sufficient, in most cases, to prevent the wind produced by the motion of the car from coming in when the window is open.

The fenders or moldings should extend out from the sash one inch for every four inches of opening in the window, and as the sashes in some cars are made farther in from the outside of the wall than in others, the moldings or fenders will have to extend out farther in some than in others.

When the car is in motion the forward part of my window can be open without the admission of wind, and should the passenger wish to admit a small current of air, he can do so by opening the rear part of the window, in which case the wind will not blow directly upon persons in other seats, but sufficiently upon those in the seat opposite the open window, and but very few cinders will come through that part of the window.

I preferably make the window as above described; but it is obvious that there may be modifications and additions without departing from the principle of my invention.

As a modification, a permanent fender may be attached to the separating-post, a cross-section of which is shown at E in dotted lines; also, a swinging fender, F, may be attached to the separating-post, instead of a permanent one, with sufficient friction upon the bearings to prevent the wind caused by the motion of the car from moving it, but arranged so that

the passengers can set it at any angle desired for ventilating purposes.

Having thus fully described my improvement, what I claim, and desire to secure by Letters Patent, is—

The combination, in a railway-car, of a window made in two parts, or narrow windows having a dividing-bar between them, and two spark-fenders, one fender being placed at the outer edge or margin of one part of the window, and another fender placed at the outer edge or margin of the other part of the window, two parts of a window or two narrow windows being thus placed between two fenders, the sides of the window standing parallel with the wall of the car, and no fender being placed between the two parts or narrow windows, substantially as described.

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Witnesses:

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