

E. NORTON.
Car Ventilator.

No. 98,095.

Patented Dec. 21, 1869.

Fig. 1.

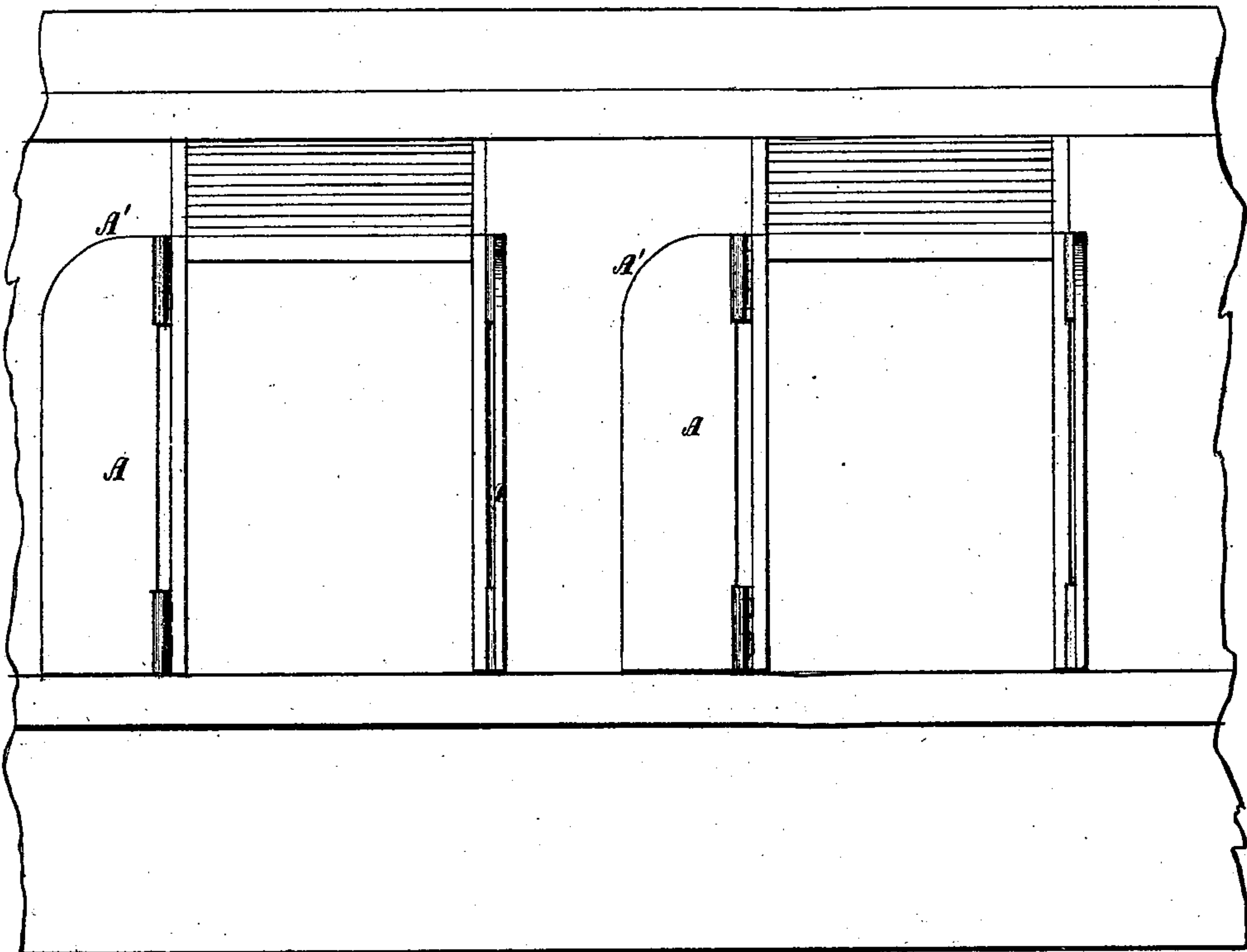
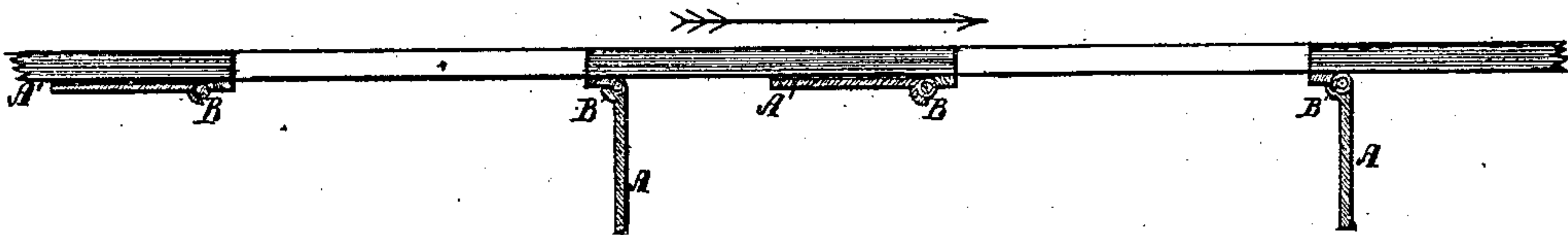


Fig. 2.



Witnesses:

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Geo. W. Mabee

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United States Patent Office.

EDWIN NORTON, OF BROOKLYN, NEW YORK.

Letters Patent No. 98,095, dated December 21, 1869.

RAILROAD-CAR VENTILATOR.

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

To all whom it may concern:

Be it known that I, EDWIN NORTON, of Brooklyn, in the county of Kings, and State of New York, have invented a new and improved Cinder and Dust-Arrester for Car-Windows; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in apparatus for preventing the cinders and dust from being blown into the cars, when in motion, through the open windows, and consists in the application to the cars, at the sides of the windows, on the exterior, by hinging thereto, or by other equivalent connection, small guard-plates of wood or other substance, to project outwardly in a right, or other suitable or preferred angle, at the side of the window, to arrest the cinder and dust moving rearward alongside of the car, and conduct it below the windows, the said guard-plates being arranged so that those on the side of the windows, in the direction of the movement of the train, may be adjusted to the operating position, while the others are folded back against the side of the car.

Figure 1 is a side elevation of a part of a car, showing the application of my improved guards; and

Figure 2 is a horizontal section through the side of the car.

Similar letters of reference indicate corresponding parts.

A great part of the cinders falls upon the tops of the cars, and are delivered over the ledges thereof, on the sides or on the lee side, when the wind blows across the train, while another portion is blown against the windward sides, and in this way they collect in considerable streams, rushing rearward and downward along the sides of the car, to be sucked in at the open windows from the sides of the advancing movement of the car.

I have found by practical experiment, that by the application of vertical guards A at the sides of the windows, projecting outwardly, either perpendicularly to the sides of the cars or nearly so, these currents may be arrested and caused to fall below the windows, instead of passing in thereat, as they now do; and I therefore propose to provide railroad-cars with these guards A, preferably by hinging them thereto, as represented in the drawings, so that they may be supported in the perpendicular position on the advancing side of the windows by a suitable construction of the hinges, or by stops applied in a suitable way, while those on the rear sides may swing back against the side of the car, as shown at A', where they may be fastened in any suitable way.

B represents projections on the hinges, to hold the guards in the said projecting positions.

The said guards may also have fastenings to hold them in the said projecting positions, but I expect that the action of the air on them will be such that fastenings will not be required either to hold them out or against the sides of the car, for it will naturally force those on the advancing sides around till the stops arrest them, while the others will be forced back against the sides of the car. This arrangement may be preferred, as requiring little or no attention in shifting or adjusting them at the ends of the routes, when the movements of the cars are reversed.

Having thus described my invention,

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

A car-window guard, with projections B thereon, arranged at the side of the window, and held at about a right angle thereto, as shown and described.

The above specification of my invention signed by me, this 26th day of October, 1869.

EDWIN NORTON.

Witnesses:

GEO. W. MABEE,

ALEX. F. ROBERTS.