

E. LEVERICH.
 VENTILATOR FOR RAILWAY-CARS.

No. 193,123.

Patented July 17, 1877

Fig. 1.

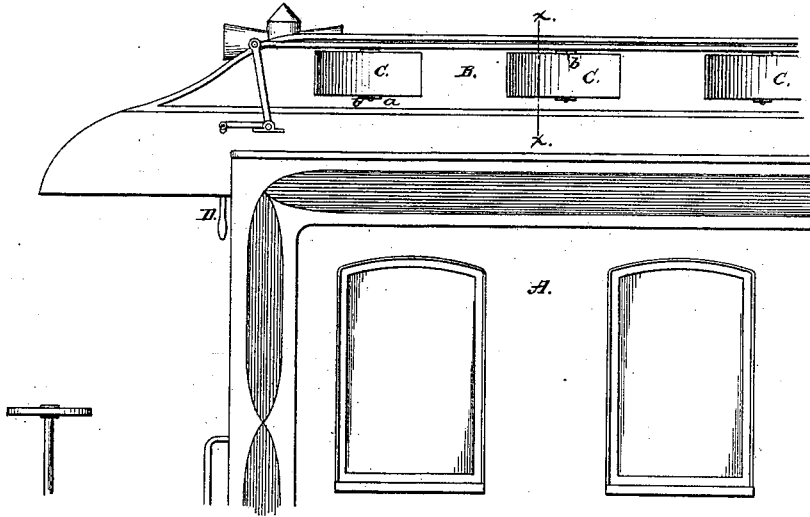


Fig. 2.

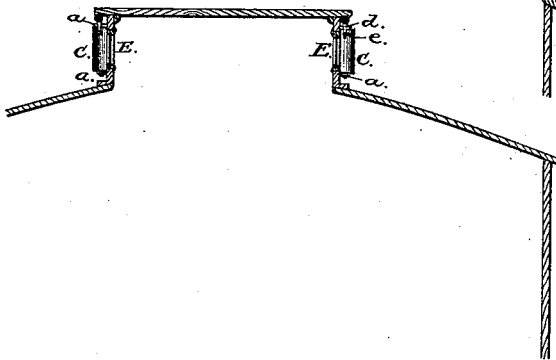
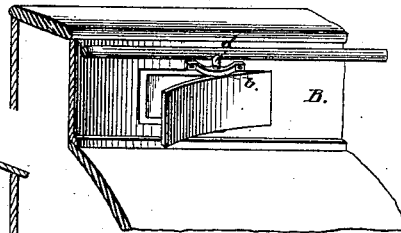


Fig. 3.



Witnesses;

Geo. H. Graham
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Inventor;

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 by C. W. Forbes
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UNITED STATES PATENT OFFICE.

EDWARD LEVERICH, OF NEW YORK, N. Y.

IMPROVEMENT IN VENTILATORS FOR RAILWAY-CARS.

Specification forming part of Letters Patent No. **193,123**, dated July 17, 1877; application filed December 11, 1876.

To all whom it may concern:

Be it known that I, EDWARD LEVERICH, of the city, county, and State of New York, have invented a new and useful Improvement in Railway-Cars; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a side elevation, Fig. 2 a cross-section, and Fig. 3 a perspective view, of a portion of a car containing my invention.

This invention relates to a ventilating attachment and dust-guard for which Letters Patent of the United States were granted to me October 3, 1876, and numbered 182,939; and it consists in arranging the pivoted deflectors upon the transom of the car, and directly opposite the openings, as hereinafter fully set forth.

In the Letters Patent referred to the deflectors are arranged between each of the windows and upon the body of the car, while in the present instance they are transferred to the transom or elevated portion of the roof, and arranged directly opposite the openings.

In the drawing similar letters of reference indicate corresponding parts in the several figures.

A represents the body of the car, and B the transom. C C are the pivoted deflectors, arranged outside of and directly opposite the openings. D is the operating-rod, provided with arms *d*, that engage with the slotted lugs *e*, attached to each deflector, so that they may be simultaneously operated. These deflectors are pivoted at *a* to lugs *b*, connected to the

transom, and are constructed of a curved or straight form, and slightly larger than the openings, to allow a bearing for the edge of each deflector against the side of the transom. They are preferably made of glass; but metal, wood, or other suitable substance may be used.

The lugs *b* are extended from the transom a sufficient distance to give the proper angle to the deflector when in position, as shown in Fig. 3.

The rod D may be arranged to be operated from the interior of the car, or applied as shown, and extended to the platforms.

It will be observed that in this arrangement of the deflectors an opening is secured, whatever the position of the deflectors, and the ventilation of the car is constant.

When, however, it is necessary or desirable to close the openings, an inside shutter, E, is provided, which may be hinged or constructed to slide over the same, as shown.

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

1. The pivoted deflectors C C, arranged upon the exterior of the transom of a car, directly opposite the openings therein, substantially in the manner shown and described.

2. The transom B, having openings and provided with external deflectors arranged opposite said openings, and inside shutters E, adapted and applied substantially as set forth.

EDWARD LEVERICH.

Witnesses:

EDW. CHAMBERLAIN,
CHAS. W. FORBES.