

E. LEVERICH.

DUST-GUARDS FOR RAILWAY-CARS.

No. 182,939.

Patented Oct. 3, 1876.

Fig: 1.

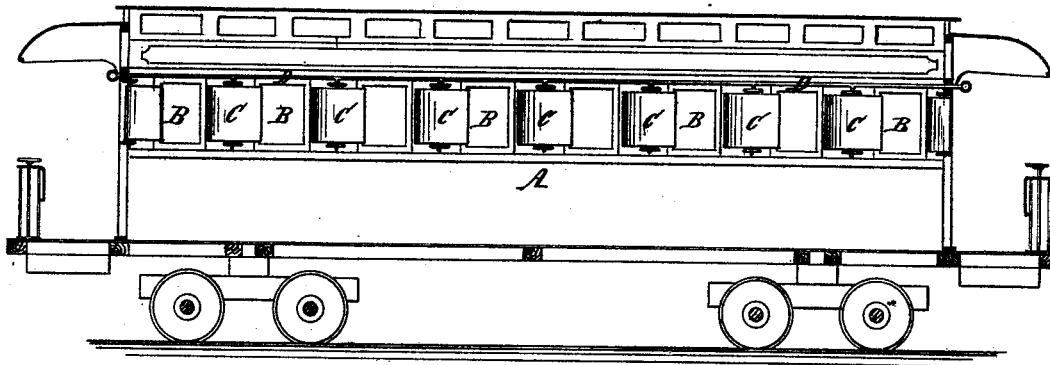


Fig: 2.

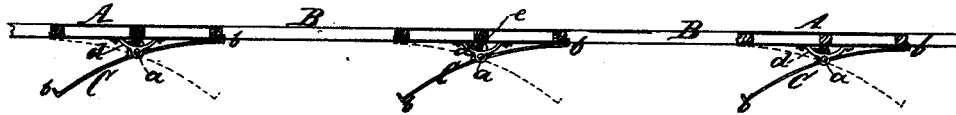
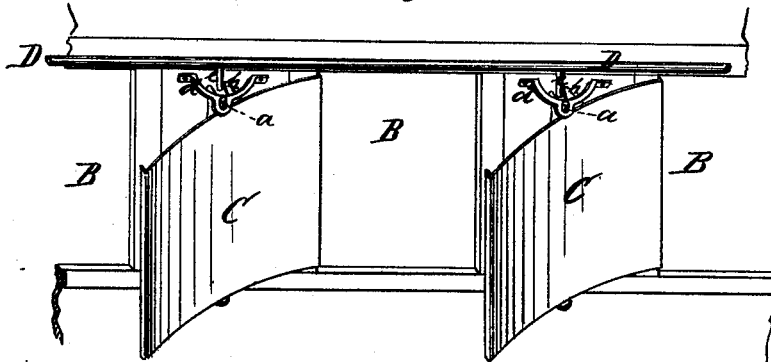


Fig: 3.



Witnesses:  
Ernst Bilhuber.  
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Inventor:  
Edward Leverich

# UNITED STATES PATENT OFFICE.

EDWARD LEVERICH, OF NEW YORK, N. Y.

## IMPROVEMENT IN DUST-GUARDS FOR RAILWAY-CARS.

Specification forming part of Letters Patent No. **152,939**, dated October 3, 1876; application filed July 22, 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 that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a side elevation of a railway-car with my invention applied. Fig. 2 is an enlarged plan view, and Fig. 3 a perspective view, of the several parts in detail.

The object of my invention is to exclude dust and cinders from the windows of railway-cars; and it consists in arranging a pivoted deflector upon the outside of the car and between each of the windows thereof, as will be hereinafter fully described.

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

A represents the body of a railway-car; B B, the windows. C C are deflectors placed between each of the windows, and pivoted at *a* to lugs *d*, secured to the body of the car. In the spaces between the end windows and the ends of the car the deflectors should be constructed of one-half the length of those used between the windows, and pivoted at their outer edges, as shown in Fig. 1, the connection with the operating-rod causing them to stand parallel with the side of the car when those between the windows are reversed, as it will be seen that the end deflectors will only be needed when the end of the car to which they are respectively attached constitutes the forward end.

These deflectors are constructed preferably of metal, of a length corresponding to the space between the windows, and of a width about equal to the height of the same. They are preferably curved, as shown, and secured at an angle to the side of the car, according to the direction in which it is moving. The curved form insures a sufficient degree of divergence to direct the dust or cinders entirely clear of the window, and also allow them to be pivoted as near the body of the car as practicable. Flanges *b b* are provided at each end to shut over the window-frame and prevent the dust from passing in behind. D is a sliding operating-rod, provided with projections or arms *e e* that engage with notched lugs *h*, attached to each deflector, so that they may be simultaneously operated.

The rod D may be arranged to be operated either from the interior or exterior of the car, and extended to the platforms.

By this invention the windows can be kept open and a thorough ventilation secured, and the dust and cinders effectually excluded, which will add greatly to the comfort of passengers.

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

The pivoted deflectors C C, provided with the flanges *b b* and notched lugs *h*, in combination with the operating-rod D, having arms *e*, substantially as above described.

EDWARD LEVERICH.

Witnesses:

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