

(No Model.)

C. E. BERRY.

DEFLECTOR AND VENTILATOR FOR PASSENGER CARS.

No. 500,555.

Patented July 4, 1893.

Fig. 1.

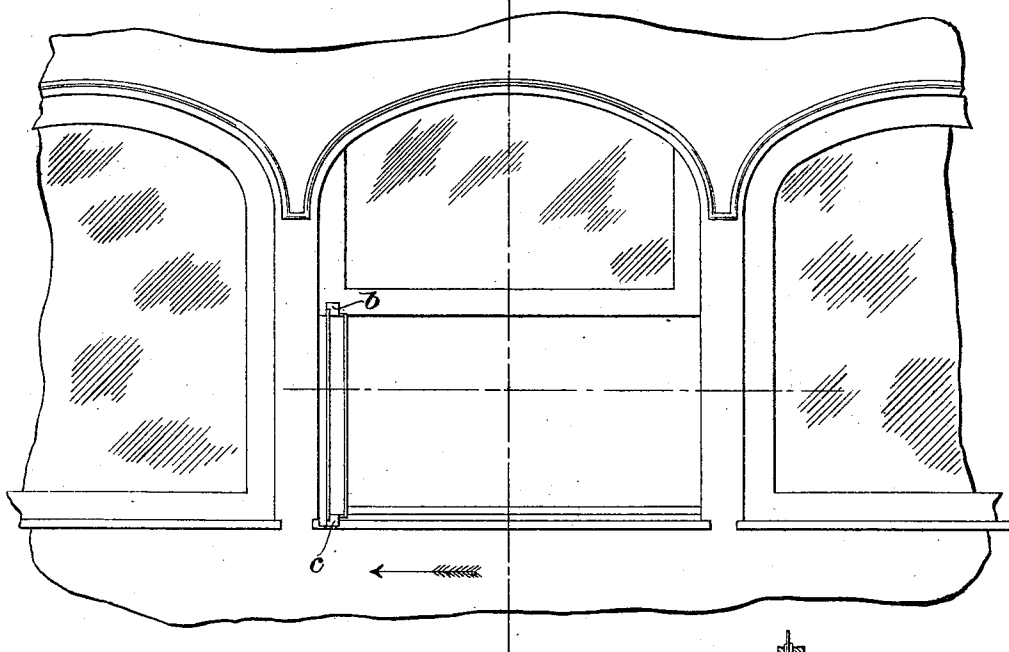


Fig. 2.

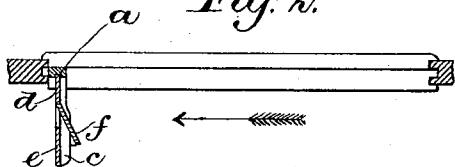
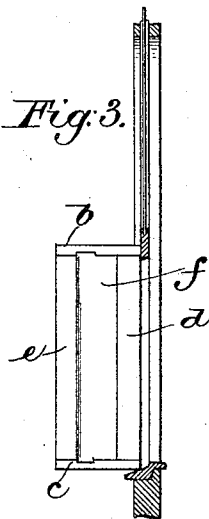


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES E. BERRY, OF CAMBRIDGE, MASSACHUSETTS.

DEFLECTOR AND VENTILATOR FOR PASSENGER-CARS.

SPECIFICATION forming part of Letters Patent No. 500,555, dated July 4, 1893.

Application filed October 6, 1890. Serial No. 387,156. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BERRY, of Cambridge, county of Middlesex, State of Massachusetts, have invented an Improvement in Deflectors and Ventilators for Passenger-Cars, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention has for its object to improve the construction of cinder deflectors and ventilators for passenger cars.

In accordance with this invention the deflector and ventilator is adapted to be secured 15 to the window at that side nearest the engine, it projecting outwardly substantially at right angles to the outer wall of the car.

The device consists of a vertical bar, a top and a bottom rail constituting the supporting 20 frame, and two vertical plates held in or secured to said frame, and having a slot or passage between them, and a deflecting plate arranged obliquely to the aforesaid vertical plates and covering said slot or passage at the 25 rear side of the device. Cinders and the like which strike against the front side of the vertical plates will be there checked, while those which pass through the slot or passage will strike against the front side of the deflecting 30 plate and will be deflected in a direction away from the window, while the air passing through this slot or passage being also deflected from or by the open window creates a current the tendency of which is to draw the air out of 35 the car and thereby materially assist ventilation.

Figure 1 shows in side view a deflector and ventilator attached to the window casing of a car; Fig. 2 a horizontal section of the deflector and ventilator shown in Fig. 1; Fig. 3 a rear 40 side view of the deflector and ventilator shown in Fig. 1.

The deflector consists of a vertical bar *a*, shaped to be fitted to the window casing, a top 45 rail *b*, and a bottom rail *c*, these three parts constituting the supporting frame. Two parallel vertical plates *d*, *e*, are secured to the top and bottom rails *b*, *c*, one of which as *d* is rabbeted to the vertical bar *a*, said plates being 50 so located as best shown in Fig. 2, to present

a slot or passage between them. A plate as *f* is herein shown as secured to the supporting frame, the inner edge of which abuts against the outer edge of the plate *d*, said plate *f* being arranged obliquely to the plate *d*, and covering the slot or passage between the plates. 55 This obliquely arranged plate *f* is sufficiently wide to overlies the plate *e* to some extent. The plate *f* is secured to the frame at the rear side of the plates *d*, *e*, so that the passage between the plates *d*, *e*, will have an inclined deflector back of it. Cinders and the like striking against the front of the plates *d*, *e*, are 60 checked, while those which pass through the passage between said plates strike the front of the deflector *f* and are deflected; also the current of air which passes through said slot or passage being deflected by the plate *f*, passing by and away from the open window, 65 draws the air contained within the car out of the window to thereby materially assist in ventilating the car. 70

I claim—

1. The deflector and ventilator herein described consisting of the vertical bar *a*, top 75 rail *b*, and bottom rail *c*, constituting the supporting frame, vertical plates *d*, *e*, secured to said frame with a slot or passage between them, and a plate *f* arranged obliquely at the rear side of the device and covering the said 80 slot or passage, one edge of said plate *f* abutting against the outer edge of the plate *d*, substantially as described.

2. The deflector and ventilator herein described consisting of the perpendicular plates 85 *e* and *f*, the latter being arranged obliquely to the former and overlapping one edge of the same, and separated therefrom to leave a passage or opening between said plates the inner edge of plate *f* being in the plane of the 90 plate *e*, and a supporting frame for said plates, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES E. BERRY.

Witnesses:

JAS. H. CHURCHILL,
ANNIE S. WIEGAND.