

(No Model.)

J. H. REYNOLDS.
RAILWAY CAR.

No. 302,029.

Patented July 15, 1884.

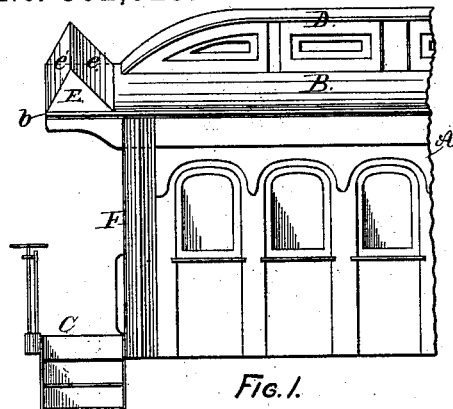


Fig. 1.

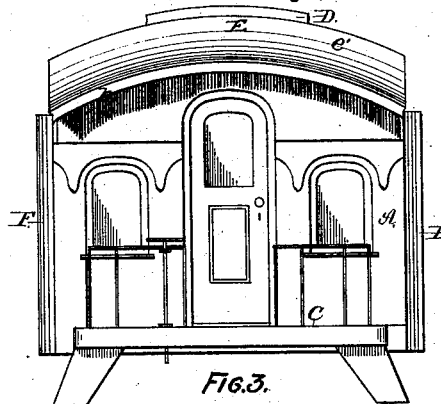


Fig. 3.

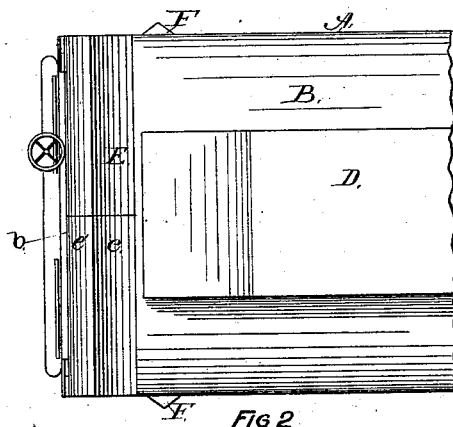


Fig. 2.

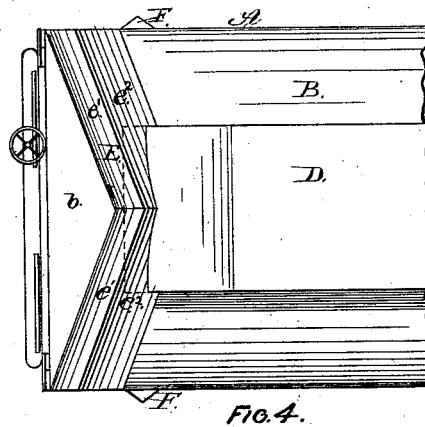


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN H. REYNOLDS, OF TROY, NEW YORK.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 302,029, dated July 15, 1884.

Application filed April 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. REYNOLDS, of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Railway-Cars, of which the following is a specification.

My invention relates to improvements in the construction of railway-cars; and the object of my invention is to provide facilities for preventing the dust, cinders, and other light and floating particles that are caused, raised, or set in motion by the transit of a train of cars from becoming deposited upon the platform, or attached to the end of a car, where, by reason of their uncleanness, they become a source of great discomfort and annoyance, and, by soiling the apparel of passengers, a frequent cause of much damage. I attain this object by means of the construction illustrated in the accompanying drawings, which are herein referred to and form part of this specification, and in which—

Figure 1 is a side elevation of one end of a railway passenger-car provided with my improvements; Fig. 2, a plan view, and Fig. 3 an end elevation, of the same; and Fig. 4, a plan view of a modified form of my improvement.

As represented in the drawings, A is the body of an ordinary passenger-car, having its roof B extended lengthwise to form a cover for the platform C, in the usual manner. Said roof can be made either with or without the "monitor deck" D, as may be preferred.

Across the roof B, closely to the outer end of its projecting end *b*, the deflector E is placed, and said deflector may be either permanently or temporarily attached to or built upon said roof. The said deflector I preferably make in the prismatic form shown in Fig. 1, and arrange in a direct line across the roof, as shown in Fig. 2, and when used on the present construction of cars—in respect to the intervening space between the projecting ends of the roofs of two conjoining cars, and where the monitor deck does not exceed fifteen inches in height—I find that a height of from ten to twelve inches from the level of the roof of the car to the apex of the deflector is suffi-

cient for the purpose of deflecting all the dust, cinders, and other particles that may fall or lodge upon the roof of the car, and to cause a detour of the currents that will prevent said dust, cinders, &c., from entering into the space between the two conjoining cars; but I do not limit myself to the proportions given above. The inner angle, *e*, of said deflector I preferably make flatter than the outer angle, *e'*; but a very satisfactory result can be obtained by making the outer angle flatter than the inner one; also, by making both angles equal, and also by making its inner face vertical, or nearly so.

When a train of cars is under motion, the currents of air produced thereby force all the dust and cinders that may lodge upon the roof to move rapidly toward the rear of the train; and when the roofs of said cars are provided with my deflectors the particles or granules of dust and cinders and the currents of air, by striking said deflectors, are deflected upward, thereby creating a strong upward current of air between the conjoining ends of the cars, and before the weight of said particles can carry them downward the speed of the train will cause the space between the projecting ends of the roofs of the two conjoining cars to pass from beneath the falling particles, which will then fall upon the roof of the next car in the train, to undergo a repetition of the operation just described.

Upon opposite sides of the car, close to the ends thereof, I attach deflectors E, made in prismatic form and arranged in vertical lines, as shown in Figs. 1 and 2. The deflectors F deflect the currents of air and the dust, cinders, &c., laterally away from the car, and prevent them from entering sidewise into the space between the ends of two conjoining cars.

In the modification shown in Fig. 4 the deflector E, instead of being arranged in a direct line across the roof B of the car, is arranged in the form of a chevron, with its point turned toward the middle of the car. When made in this form, the inner face, *e'*, of said deflector may be set vertically, at an angle—inclined either backward or forward—or with a curved surface, either concave or convex. When ar-

ranged in this chevron-like form, the said deflector will force the discharge of the particles of dust, &c., to pass sidewise from the roof of the car, and the impetus they acquire from
5 the speed of the train will carry said particles clear from the sides of the car.

I claim as my invention—

A deflector, E, attached to or built upon the

roof of a car for the purpose of deflecting the currents of air, cinders, dust, &c., therefrom, 10 as herein specified.

JOHN H. REYNOLDS.

Witnesses:

WM. H. LOW,
S. B. BREWER.