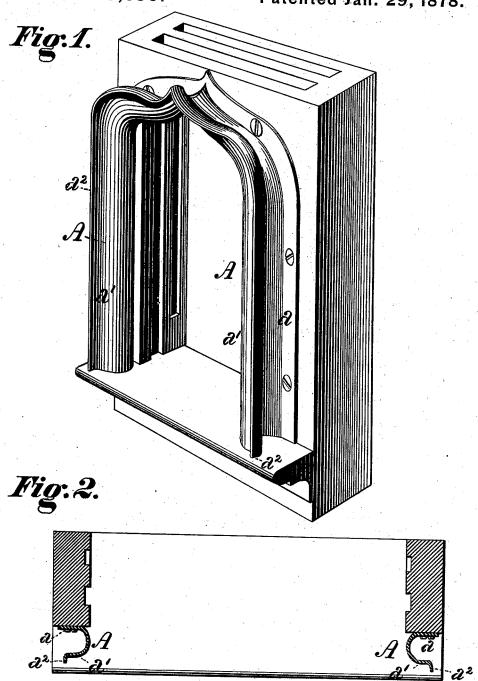
## D. M. EVERSTINE. Car-Window Deflectors.

No. 199,630.

Patented Jan. 29, 1878.



Geo. F. Vaillant. D. S. Collier.

Dan M. Eurstine, by J. Thomden Bell, ATTORNEY

## UNITED STATES PATENT OFFICE

DANIEL M. EVERSTINE, OF CUMBERLAND, MARYLAND.

## IMPROVEMENT IN CAR-WINDOW DEFLECTORS.

Specification forming part of Letters Patent No. 199,630, dated January 29, 1878; application filed July 21, 1877.

To all whom it may concern:

Be it known that I, DANIEL M. EVERSTINE, of Cumberland, in the county of Alleghany and State of Maryland, have invented a certain new and useful Improvement in Deflectors for Railroad-Car Windows, of which the

following is a specification:

The object of my invention is to provide a simple, cheap, and efficient device for the prevention of the injury and annoyance to passengers on railroad-trains occasioned by the entrance of dust, sparks, and cinders into the windows of the cars while in motion, and this without curtailing the admission of light and air; to which end my improvement consists in combining with a railroad-car window a channeled or trough-shaped deflectingplate, projecting outwardly from the window on each side thereof, and extending from the base or sill entirely around the top of the same, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a view, in perspective, of my improved deflector; and Fig. 2, a horizontal section of the

To carry out my invention, I provide a deflecting plate or plates, A, of sheet or light cast metal, bent or molded into trough or U form, which I secure upon the outside of the car at each side of the window, and as close as practicable thereto, with its convex side next the window.

The plate is to be made of such length as to extend vertically from the base or sill of the window at each side to and entirely around the top, the two side sections of the plate being curved or inclined toward each other at

the top to a point of junction.

The two side sections may be made separately, or the entire deflector be formed of a single plate or casting, as the judgment of the constructor may dictate; and the width of the deflector—that is, its projection beyond the outside of the car—should be as great as is compatible with security against encountering stationary objects or passing trains, a matter which will be readily determined by the maximum width of car permissible upon the railroad on which it is to be applied.

The inner flange a of the deflector should be of such form and dimensions as to afford proper accommodation for the screws or other devices by which it is to be attached to the car; and upon the outer flange  $a^1$  I, by preference, form a supplemental flange, a<sup>2</sup>, projecting from the edge of the plate substantially at right angles to the outside of the car, the more effectively to divert cinders, &c., into the concavity or channel of the plate.

The plate may be beaded, or ornamented in any manner desired; and while I prefer that the side sections should be connected by curves, as shown, they may be made elliptical or inclined at top, if preferred or deemed more

appropriate on square windows.

In the operation of my improved deflector, dust, sparks, cinders, or rain-drops which strike the concave face of the plate on the front side of the window are prevented from entering the same, and will drop between the sills, those near the upper portion of the window being deflected by the curved upper portion of the channeled plate in front into and down the rear channel.

My improvement is, it will be observed, of

cheap and simple construction, and can be readily attached to a car without involving special fixtures for its reception, or presenting any deviation from the general style of finish

at present adopted.

I am aware that projecting plates or guards of various forms have heretofore been proposed and patented for attachment to one or both sides of car-windows for preventing the entrance of sparks, &c.; but, so far as my knowledge and information extend, they have been separately applied only to the lower portions thereof.

Projecting box-frames formed of straight strips, mitered together so as to surround the outside of a car-window, have likewise been

patented.

I do not, therefore, broadly claim a deflecting plate or frame as connected with a carwindow.

I claim as my invention, and desire to secure by Letters Patent1. The combination, with a railroad-car window, of a channeled or trough-shaped deflecting-plate, projecting outwardly from the window on each side thereof, and extending from the base or sill entirely around the top of the same, substantially as set forth.

2. As a new article of manufacture, a channeled or trough-shaped metal plate formed to

fit entirely around a car-window, except at base, and having its concavity outward, and a projecting flange upon its outer edge, substantially as set forth.

D. M. EVERSTINE.

Witnesses:

JOSEPH A. CAHILL, L. H. DOWDEN.