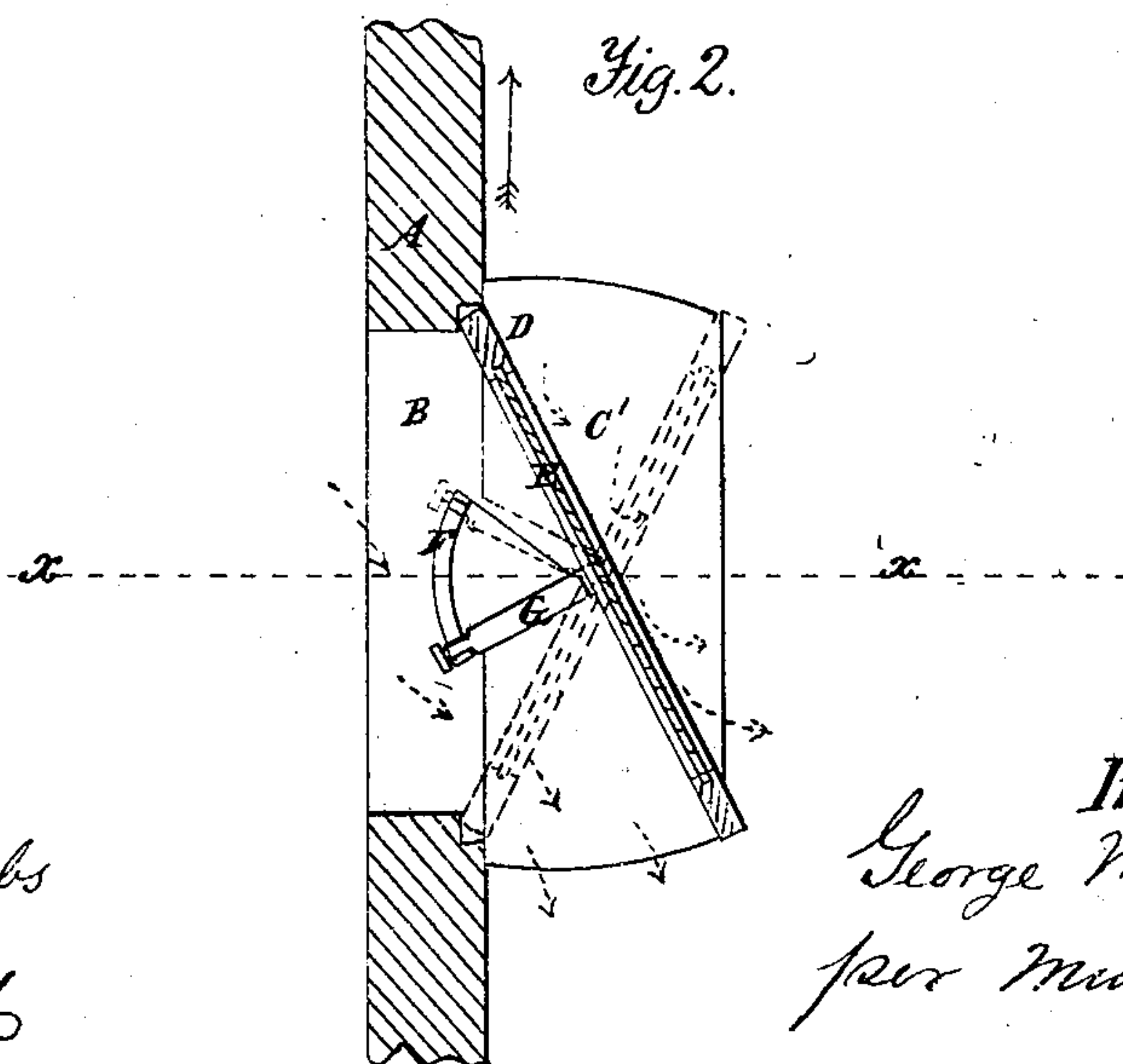
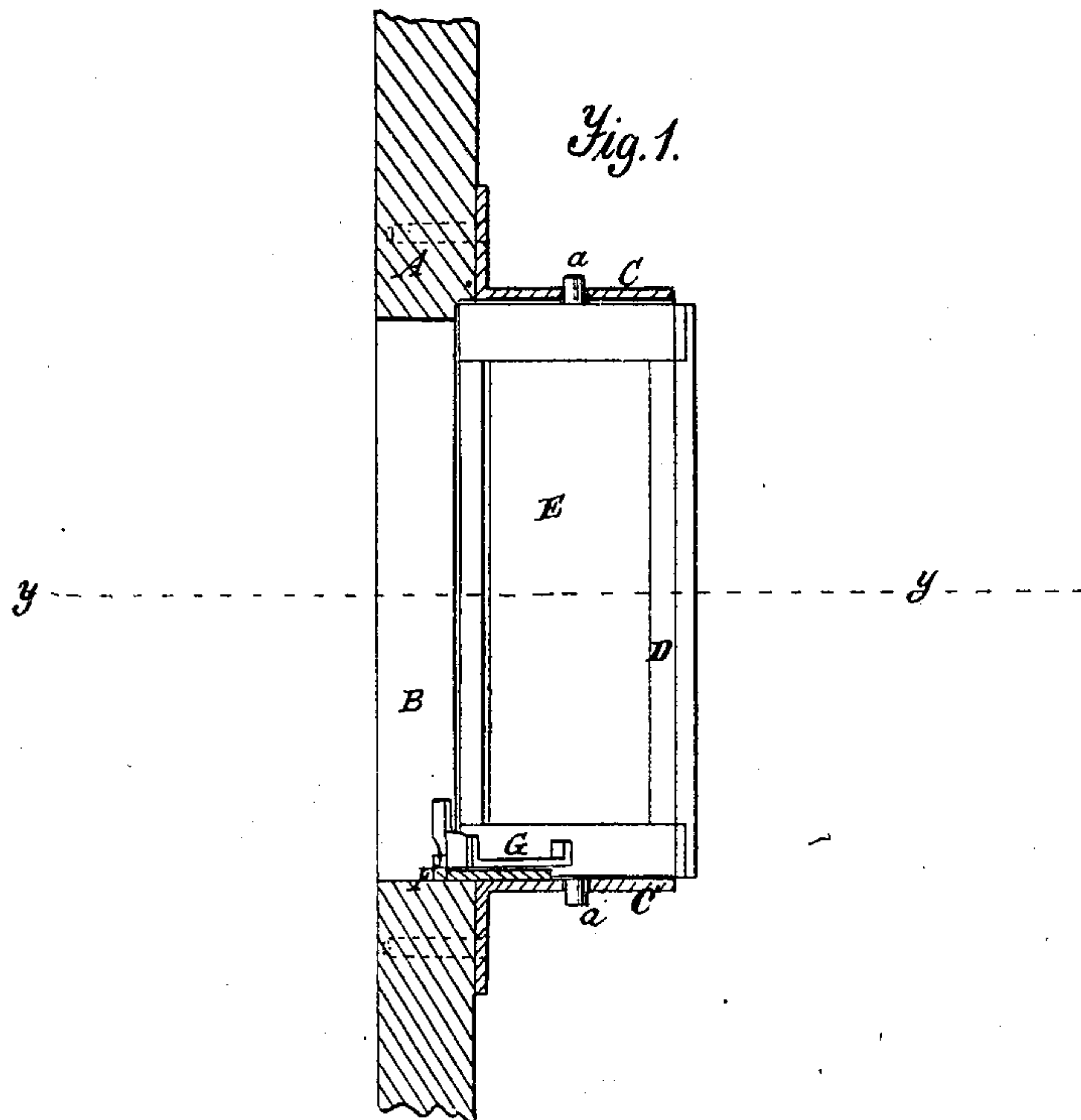


G. MANN, Jr.
WINDOW FOR RAILROAD CARS.

No. 41,079.

Patented Jan. 5, 1864.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE MANN, JR., OF OTTAWA, ILLINOIS.

IMPROVEMENT IN WINDOWS FOR RAILROAD-CARS.

Specification forming part of Letters Patent No. 41,079, dated January 5, 1864.

To all whom it may concern:

Be it known that I, GEORGE MANN, Jr., of Ottawa, in the county of La Salle and State of Illinois, have invented a new and useful Improvement in Windows for Railroad-Cars, and which improvement I term a "Deflecting Car-Window;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section of my invention, taken in the line *xx*, Fig. 2; Fig. 2, a horizontal section of the same, taken in the line *yy*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in having the frame of the car-window hung on central pivots and arranged in such a manner that it may be adjusted in an oblique position relatively with the car-body, so as to deflect dust, cinders, &c., from the car while the same is in motion, and at the same time admit of a passage of air out from the car, and also admit of being so adjusted as to cause air to enter the car through the window when there is no dust to contend with.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a portion of one side of a car-body, and B the opening over which the window is placed. C C' are two horizontal projecting pieces which are attached to the side A of the car, one being at the top and the other at the bottom of the opening B. These pieces C C' may project, say, from four to six inches out from the side of the car.

D represents the window-frame of square form and having a glass, E, fitted into it. This frame is provided with a central pivot, *a*, at its top and bottom, and said pivots are fitted loosely in the projecting pieces C C', so that the frame D may be turned between them.

To the lower projecting piece, C', there is attached a segment-rack, F, into which an elastic bar, G, which is attached to the lower end of the frame D, catches, the bar G, in consequence of catching into said rack, serving to secure the frame D in an oblique position relatively with the side A of the car and

in two opposite oblique positions, as shown clearly in Fig. 2, one of said positions being shown in red.

The opening B is provided with the ordinary car-window, which is not shown in the drawings.

The pivots *a* are fitted in the plates C C' at such a distance from the side A that when the frame D is turned or adjusted in an oblique position one edge of the frame will be in contact with one side of the opening B, as shown in Fig. 2.

In order to use my invention, the inner or ordinary window is raised, and the outer window or frame, D, adjusted in an oblique position so that the open space will be behind or face the back end of the car and the closed end face the front end of the car, as shown in black in Fig. 2, the black arrow indicating the direction of the movement of the car.

By this means the dust, cinders, &c., are deflected by the glass E out from the car-body, while a current of air will be allowed to pass out from the car through the open end at the back of frame D, as indicated by the dotted arrows. When the car is moving in the opposite direction, the frame D is adjusted in the reverse position. (shown in red in Fig. 2.)

At any time when there is no dust to contend with, the frame D may be so adjusted as to have its open end facing the front of the car, so that air will be forced into the latter as it is propelled along. The frame D may also be adjusted parallel with the car-window to allow the air to pass between when D is not required as a deflector.

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

The supplemental window attached to the side of the car at the exterior of the ordinary or usual window, in the manner substantially as herein described, to admit of the adjustment of the supplemental window in an oblique position relatively with the side of the car, as and for the purpose specified.

GEORGE MANN, JR.

Witnesses:

EDWIN R. FAY,
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