

J. Bonnell Jr.,

Car Ventilator.

No. 100,589.

Patented Mar. 8. 1870.

Fig. 1

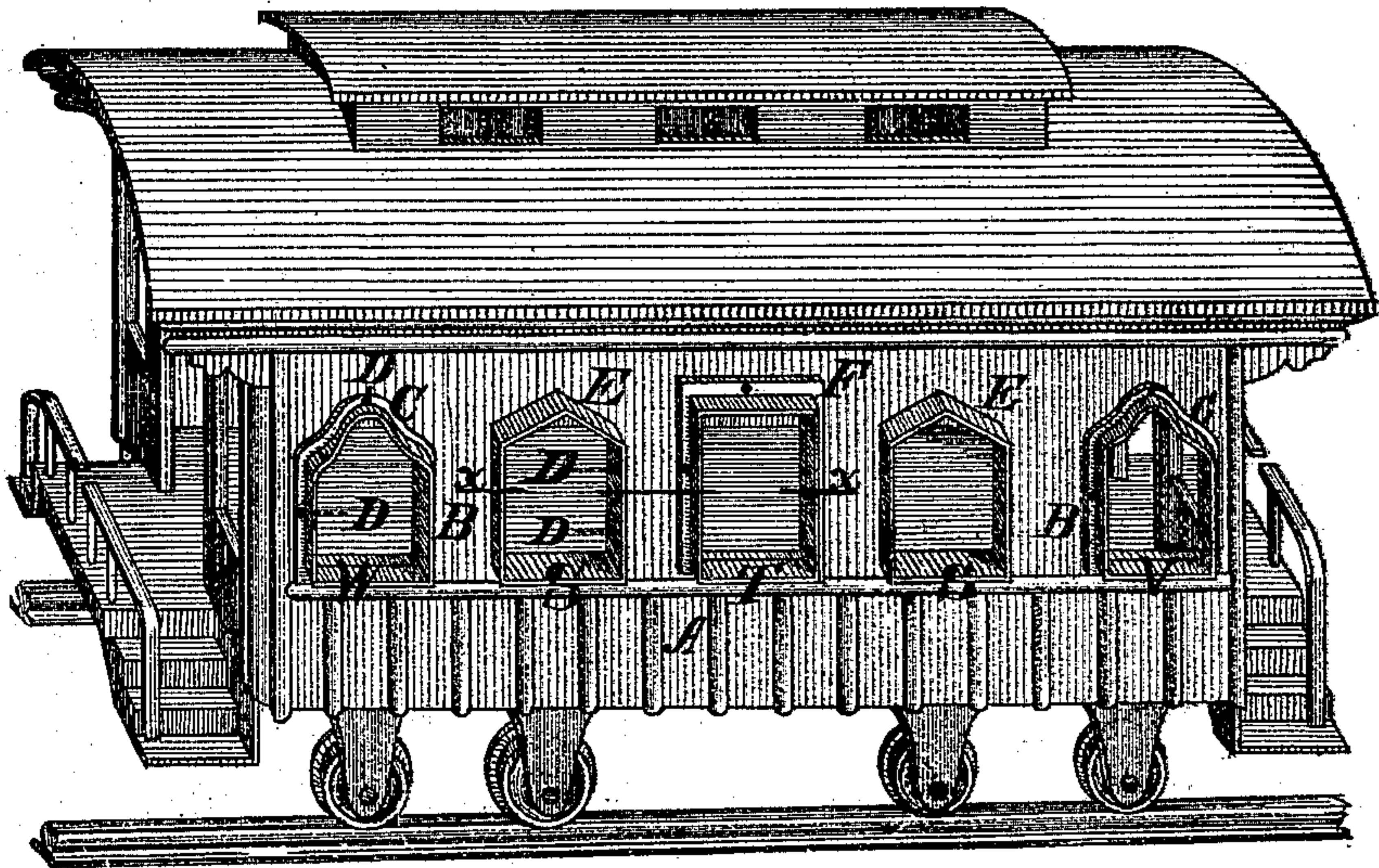


Fig. 2



Witnesses

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ISAAC BONNELL, JR., OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND
H. G. LUMBARD, OF SAME PLACE.

Letters Patent No. 100,589, dated March 8, 1870.

RAILROAD-CAR VENTILATOR.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ISAAC BONNELL, JR., of Chicago, in the county of Cook, and State of Illinois, have invented a Dust and Cinder-Excluder for Car-Windows; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings and letters marked thereon, making a part of this description, in which—

Figure 1 is a perspective representation of a car, the windows of which are provided with my dust and cinder-excluder.

Figure 2, a broken section, taken on line *x x*, fig. 1, showing different methods of attaching my invention.

The nature of the present invention consists in providing car-windows with projecting frames or flanges, which, while they do not exclude the view from the inside of the car, prevent dust, cinders, &c., from entering the windows when open for the purpose of ventilation, and prevent the glass from being obscured by such dust, cinders, &c., when the windows are closed.

A represents an ordinary railroad car, in which is placed several styles of car-windows now most in common use.

My invention consists in placing around these windows, flanges or frames B E F, which project outward from the car from two to four inches, in order that when the car is in motion, dust, cinders, sparks, &c., may be carried by the windows or caught by the frames, and thus prevented from entering the car.

In making the device, thin strips of wood may be mitered together at the angles, and secured by nails or screws to the outside of the jamb-casing, as shown at figs. 1 and 2, or flanges may be formed on the strips for the convenience of fastening them to the flat side of the car, closely to the jamb-casings, as shown at F, same figures.

Wrought or cast-iron frames may be used, similarly constructed to those shown at W V. In this case, flanges C may be formed on them to fasten to the flat

sides of a car, or they may be formed to fasten to the jamb-casings like the frames shown at windows S S. The iron frames or flanges, however, can, when the windows have arched tops, be provided at less cost than wooden ones, and they may have any ornamental style which is desired.

In the drawings, the car-windows are placed far enough to use a separate frame for each window; but some cars have windows placed so closely together that a partition-frame between them, connected by top and bottom flanges, will fully answer the purpose.

The top and bottom parts of the frames are equally as necessary as the side pieces, for when a train of cars is moving, the direction of the current of air is frequently upward and downward, carrying what moving dust, &c., there may be with it. This especially is the case when the cars are moving over a broken country, passing through cuts, and by buildings, &c.

It will be seen from this description, that the device not only prevents dust from entering the car when the sashes are raised up, but that it prevents dust, cinders, smoke, &c., from coming in contact with the glass when the sashes are shut, and obscuring a view from the inside of the car. In this respect the device differs from the ordinary projecting ventilator, inasmuch as such ventilator has no glass window to protect.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

Providing car-windows, having sliding sashes therein, with projecting box frames, which surround said windows and serve to keep dust, cinders, &c., out of the car when it is in motion, and the sashes are raised up, and to keep such dust, cinders, &c., from coming in contact with the glass when the sashes are shut, as specified.

ISAAC BONNELL, JR.

Witnesses:

G. L. CHAPIN,
H. G. LUMBARD.