

E. ROBINSON.
Car Ventilator Window.

No. 208,495.

Patented Oct. 1, 1878.

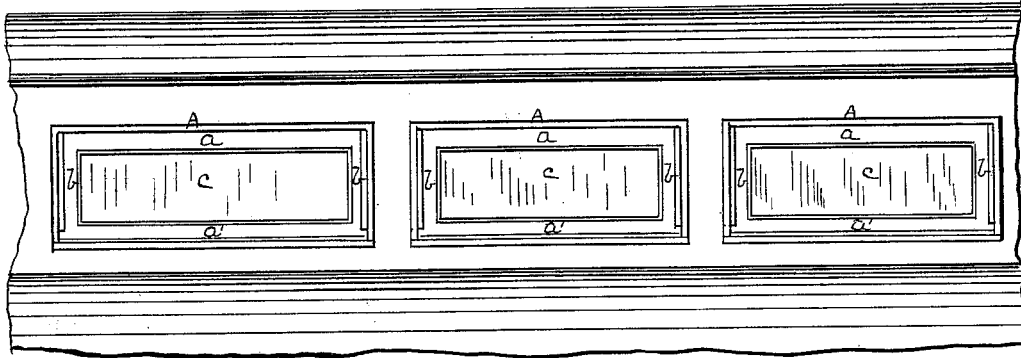


Fig. 1.

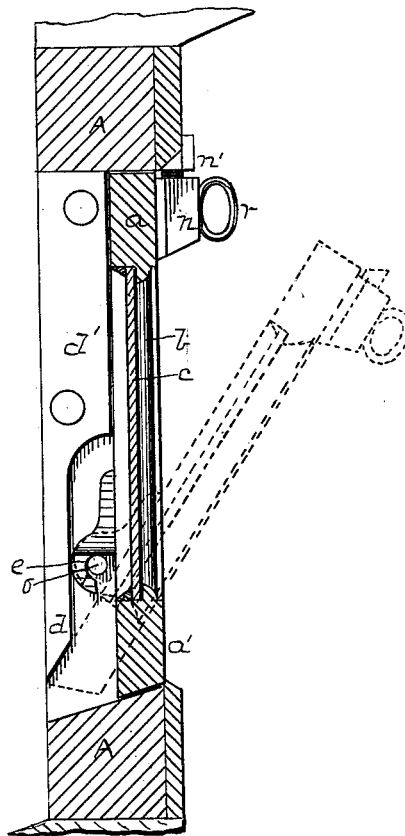


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN CAR VENTILATOR-WINDOWS.

Specification forming part of Letters Patent No. 208,495, dated October 1, 1878; application filed
August 7, 1878.

To all whom it may concern:

Be it known that I, EDWARD ROBINSON, of Wilmington, county of New Castle, State of Delaware, have invented or discovered a new and useful Improvement in Ventilators for Railroad-Cars; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a detached view, in elevation, of a portion of the central elevated part of the roof of a car-body with three of my improved ventilating devices arranged therein; and Fig. 2 shows a transverse sectional elevation, to an enlarged scale, of my improved ventilator.

It has been found desirable in car-building to arrange windows along the sides of the central elevated part of the roof, which may not only serve to admit light, but also for purposes of ventilation; but, on account of the exposed position of such windows or ventilators, they are apt to become loaded or covered with dust and dirt; and from their elevated position it is difficult to properly clean them without removing them, for which no adequate provision has before been made.

My present invention is designed to overcome this difficulty by pivoting the windows or ventilators in place in such way that they may be readily removed for cleaning, &c., without loosening, removing, or unscrewing any of the connections which pivot the window in place.

In the drawing, A represents the window-casing, which may be built in the side of the car in the usual way.

The window-sash or ventilator-frame may consist of rails *a a'* and *b*, framed together in any desired manner, so as to give the desired form to the window; and in this sash any desired form and color of glass, *c*, may be set in the usual or any convenient way.

Instead of hinging this window to the casing by a butt-hinge, as has heretofore been done, so as to open in a horizontal plane, I arrange it to open in a vertical plane in the following way: Hooks *e*, opening downward, are

attached to the side rails *b* near the bottom or below the middle, one to each rail. Pins *o* are set in the side of the casing in such manner that when the ventilator or window is in place the hooks *e* may engage with, or hook onto and rest on, such pins, as shown clearly in Fig. 2. The window or ventilator may then open from the top, turning or moving on these hooks and pins as pivots. I prefer, however, to limit this motion by means of stops *d*, one on each side casing. The lower ends of these stops are beveled, as shown, so as to give a broader bearing to the window-rail *a'*, which rests against it when the window is opened, as shown by dotted lines, Fig. 2.

The stops *d* are so placed as to allow the window to open only the desired distance, and when so opened it will be held securely by the hooks and pins *eo* and stops *d*, so that it cannot be jarred or shaken from its place by the motions of the car. The window may, however, when partially opened, be raised bodily until the hooks *e* disengage with the pins *o*, and thus removed for cleaning or other purposes, without unfastening or removing the parts which pivot it in place.

The stop *d* may be formed by cutting out the ordinary side strip *d'* of the casing, so as to provide the requisite room for the movements of the window and hooks *e*, and in any case the upper ends of the strips *d'* may be carried up full, as shown, so as to form an outside bearing for the window when closed; also, an ordinary spring-catch, *nn'*, or other equivalent fastening device, may be attached to the top rail, *a*, so as to fasten the window when closed. This catch may be opened by a hook engaging the loop *r*, or by a cord or other device extending down within reach.

I claim herein as my invention—

In combination with a car window or ventilator, open hooks *e*, pins *o*, and stop *d*, arranged substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand.

EDWARD ROBINSON.

Witnesses:

JNO. HENRY PUHL,
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