A. B. PULLMAN.

CAR-WINDOW.

No. 180,158. Patented July 25, 1876.

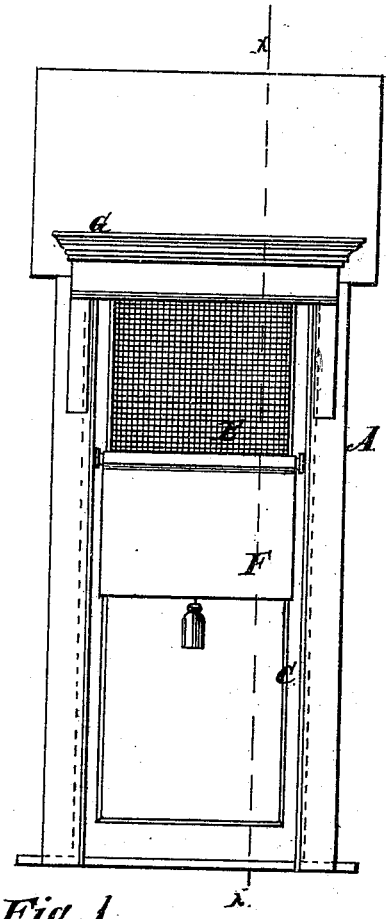

Fig. 1.

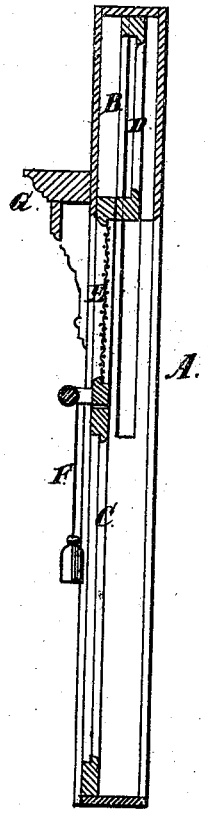

Fig. 2.

Witnesses:

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atty.

UNITED STATES PATENT OFFICE.

ALBERT B. PULLMAN, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN CAR-WINDOWS.

Specification forming part of Letters Patent No. **180,158**, dated July 25, 1876; application filed September 25, 1875.

To all whom it may concern:

Be it known that I, ALBERT B. PULLMAN, of Chicago, in the county of Cook and State of Illinois, have invented a Car-Window, of which the following is a specification, reference being had to the accompanying drawings, which form a part hereof.

My invention relates to that class of car-windows which have two sashes, one above the other.

My invention consists in the combination of the window-casement and the wire screen, so arranged that the wire screen will slide into the wall above the window-frame and down to the top of the lower sash; and also in making the window casement and the top sash of the window in such manner that the top sash will slide up into the wall above the window. This construction enables me to open the top half of the window and draw down the wire screen, and admit air to the car and exclude the cinders, &c.

My invention further consists in attaching the curtain to the bottom of the frame of the wire screen, so that the curtain, when the wire screen is down to admit the air, can be used for the lower part of the window only, and when the wire screen is raised into the wall the curtain can be used for the entire window.

In the accompanying drawings, Figure 1 represents a front view of my invention; Fig. 2, a transverse vertical section thereof, taken at the line *x x* in Fig. 1.

A represents the window-casement. B represents a recess above the window, made sufficiently large to receive the wire screen and the upper window-sash. C is the lower window-sash. D is the upper window-sash, and E is the screen. F is the window-curtain, attached with the ordinary curtain-fixtures to the lower part of the frame of the wire screen.

When it is desired to admit air into the car the upper window-sash D is raised into the recess B above the window, as shown in Fig. 2, and the wire screen is pulled down from the recess to the position shown in the drawings. The curtain F can then be used for the lower part of the window.

When it is desired to close the window the wire screen is raised into the recess B, and the upper window-sash D is pulled down, which tightly closes the top of the window. The curtain then extends from the top of the window, and can be used for the entire window.

G is the ordinary window-cornice, under which the top of the curtain passes when the wire screen is raised.

It is very desirable to admit air to a car or building, and at the same cover the aperture (which you open for the admission of air) with a wire screen, to exclude as much as possible dust, cinders, insects, &c. It is also desirable to have the wire screen as convenient as possible for application, and at the same time be entirely out of sight, and leave the window with the ordinary appearance when not in use. I accomplish all this by making the recess B above the window-casement, into which the wire screen can be raised entirely out of sight when it is not desired for use, leaving the window with the same appearance as any ordinary window.

All that is required to get ventilation is to open a window and pull down the wire screen into the position shown in the drawings.

By attaching the curtain to the lower part of the screen it is always kept in front of the window, where it is wanted, but never in front of the screen, where it is not wanted.

I claim—

1. The combination, substantially as specified, of the window-casement A, recess B, screen E, and curtain F, attached to the lower end of the screen.

2. The combination, substantially as described, of the window-casement A, recess B, upper sash D, and screen E, having the curtain F attached to its lower end.

3. The combination, substantially as described, of the window-casement A, the recess B, and the upper and lower sashes C D, so constructed and arranged that the upper sash can be raised into the recess, but the lower one cannot.

ALBERT B. PULLMAN.

Witnesses:

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L. A. BUNTING.