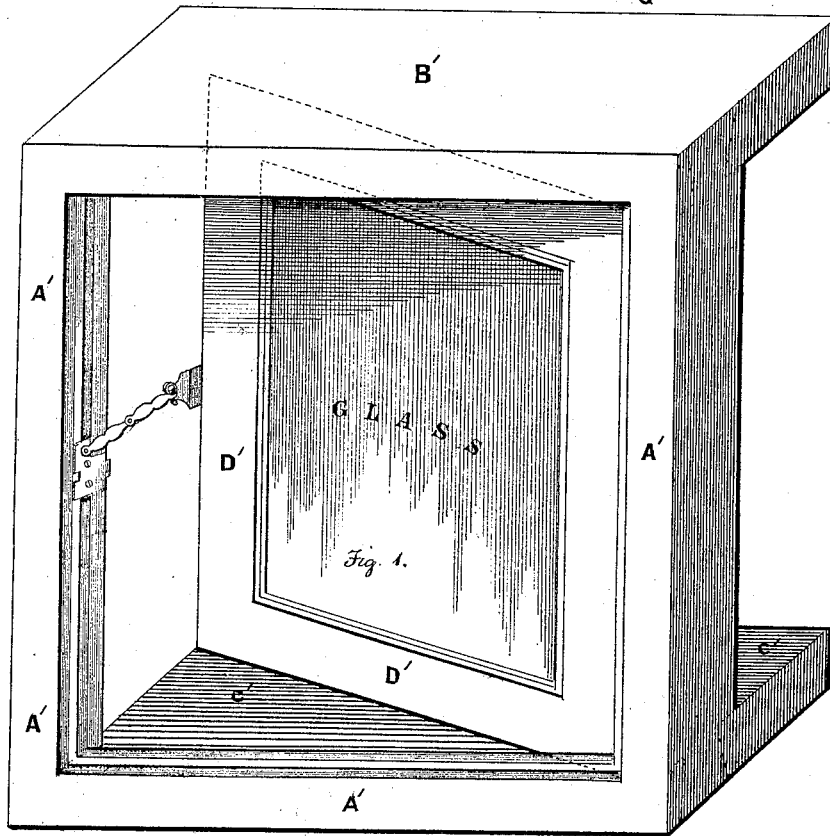
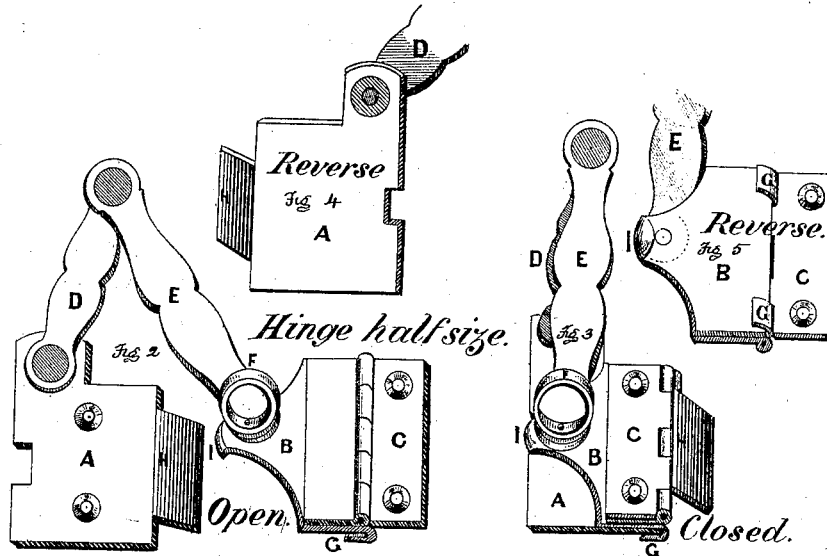


*J. F. Last,*

*Hinge.*

*No. 109,326.*

*Patented Nov. 15. 1870.*



*Wm. Chadwick*  
*J. F. Last*  
*Witnesses*

*John Fannon Last*  
*Attorney at Law*  
*inventor*

# United States Patent Office.

JOHN FANNON LASH, OF TORONTO, CANADA.

Letters Patent No. 109,326, dated November 15, 1870.

## IMPROVEMENT IN OPENING AND SHUTTING DEVICES FOR RAILROAD-CAR WINDOWS.

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

I, JOHN FANNON LASH, of the city of Toronto, in the Province of Ontario, Dominion of Canada, merchant, have invented a new and useful Improvement on the Method of Opening and Shutting Railway-Carriage Windows now in ordinary use on railways, and in connection with such improvement have invented a certain new and useful hinge and lock, to be attached to said windows, for the purpose of opening and shutting them in the manner invented by me, of which the following is a specification.

### *Nature and Objects of the Invention.*

My invention relates to car-windows which may be opened from either side, to provide necessary ventilation, without admitting dust.

It consists in a device combining the functions of a hinge and fastening, substantially as hereinafter described; and, further, in the combination therewith of a hinged strut, to retain the window open from either side, and assist in closing.

### *Description of the Accompanying Drawing.*

Figure 1 is a view of the window, open.

Figure 2 is a view of the hinge and lock, open.

Figure 3 is a view of the hinge and lock, closed.

Figures 4 and 5 are views of the reverse sides of the hinge and lock.

### *General Description.*

In fig. 1—

D is the sash, and

B' and C', the dust-guards.

In figs. 2, 3, 4, and 5—

A is a plate, screwed to the side of the carriage where the sash fits.

B is a part of the hinge which detaches from the plate A.

C is a part of the hinge screwed to the sash.

D and E are guides, to direct the hinge and to connect the same.

F is a ring or handle, to assist opening or closing the window.

G are clamps on the reverse side of B, to bind it to A when closed, thus preventing any shake when the window is open.

H is a flange, to assist in closing.

I is a catch on B, on the reverse side, to fasten the hinge to A, thus securing the sash.

A hinge and lock are attached to either side of the window. To open it, take hold of the ring or handle F, lift the catch I out of the notch in A, then shove the window open, as represented in the drawing, and the lock on the other side will act as a hinge.

The window can be opened in the same way from either side, the closed lock acting as a hinge.

### *Claims.*

I claim as my invention—

1. The combined clasp and hinge B C, provided with one or more hooks, G, and a catch, I, to adapt it to operate in connection with the plate A, substantially as and for the purposes set forth.

2. The hinged strut D E, in combination with the hinge B C and plate A, substantially as shown and described.

Dated at the said city of Toronto the thirteenth day of September, A. D. 1870.

Witnesses:

JOHN FANNON LASH.

E. M. CHADWICK, } Both of Toronto, Barris-  
Z. A. LASH, } ters at Law.