

H. M. PAINE.
 APPARATUS FOR PROTECTING RAILROAD CARS FROM DUST.
 No. 8,645. Patented Jan. 6, 1852.

Fig: 1.

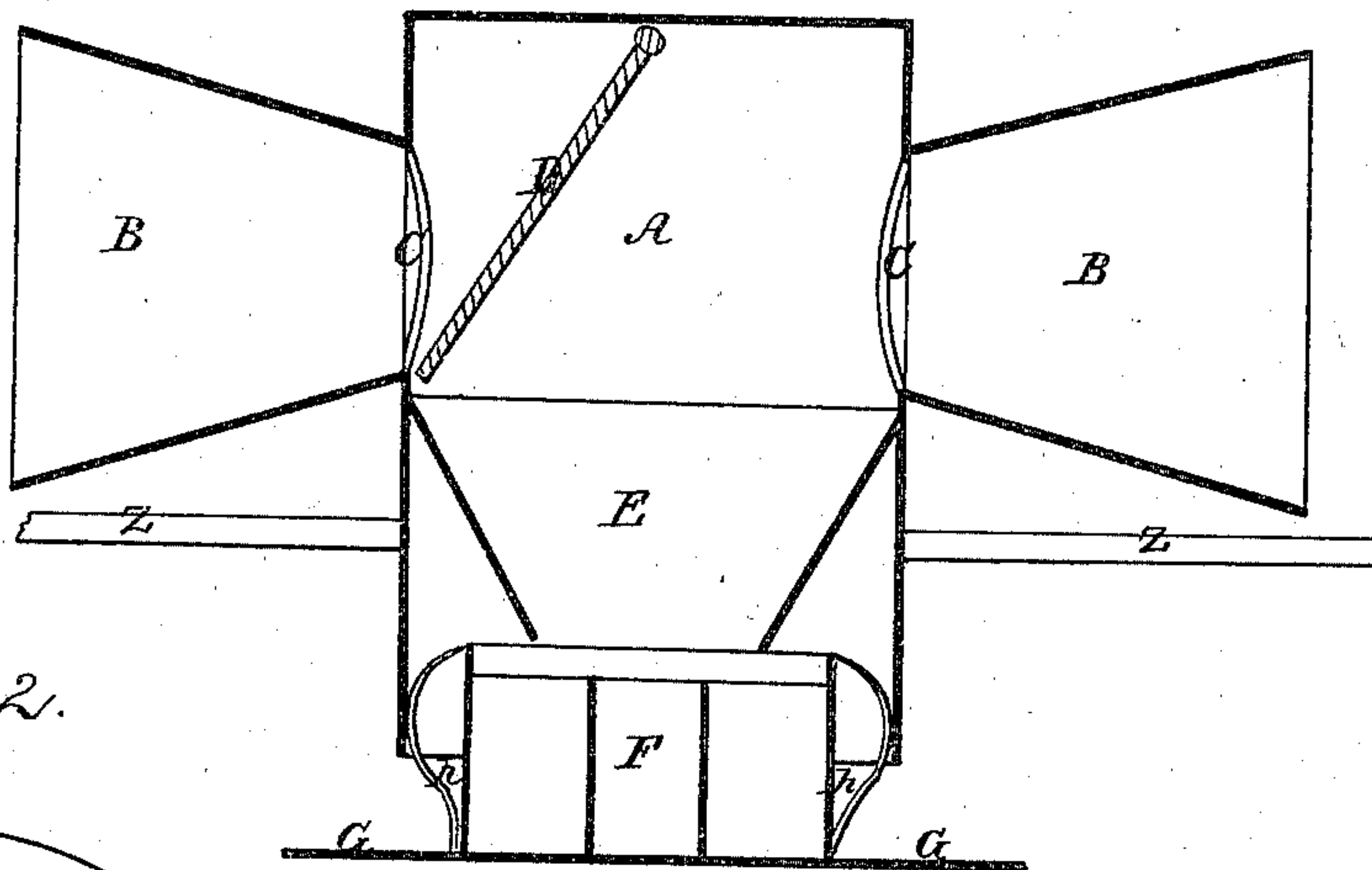


Fig: 2.

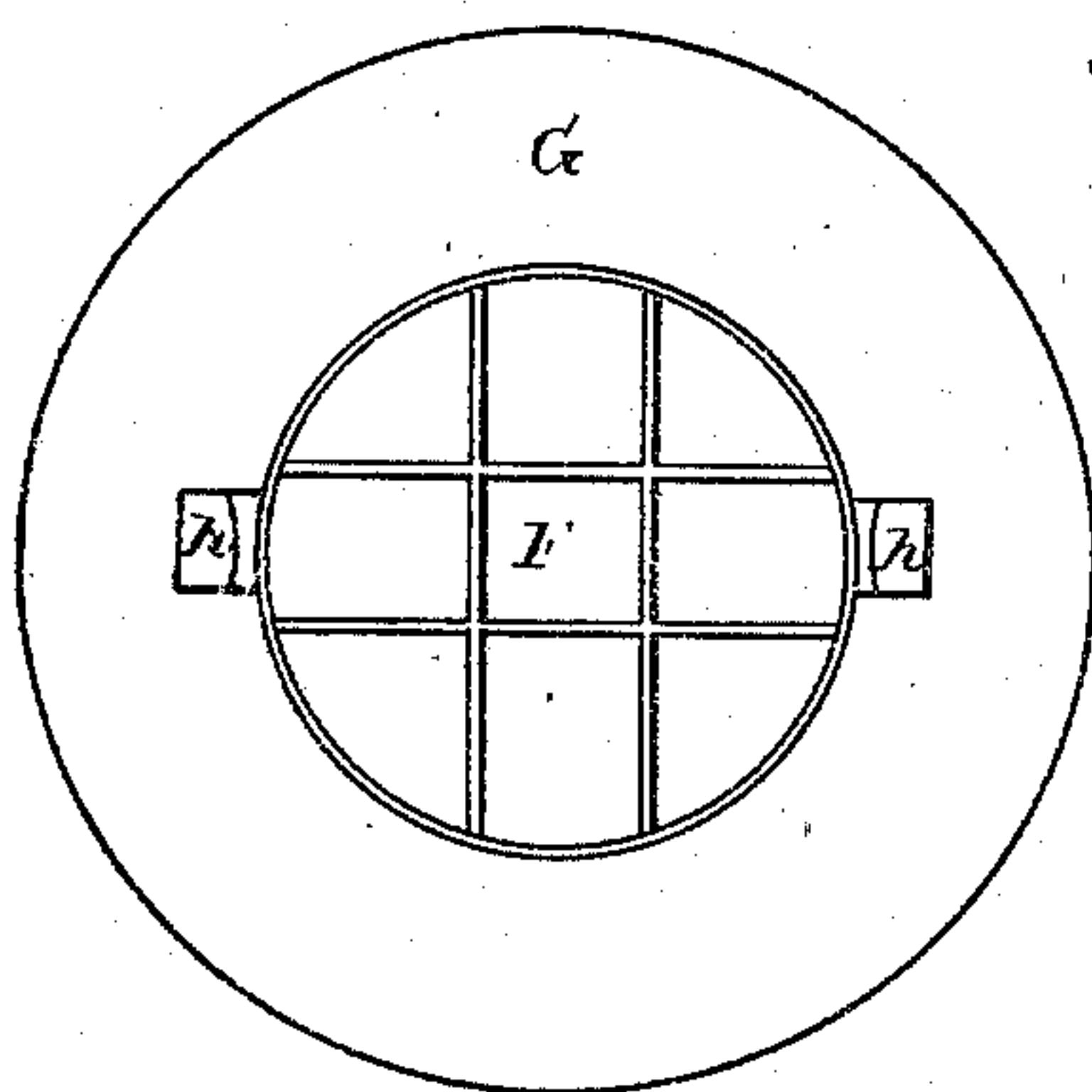


Fig: 5.

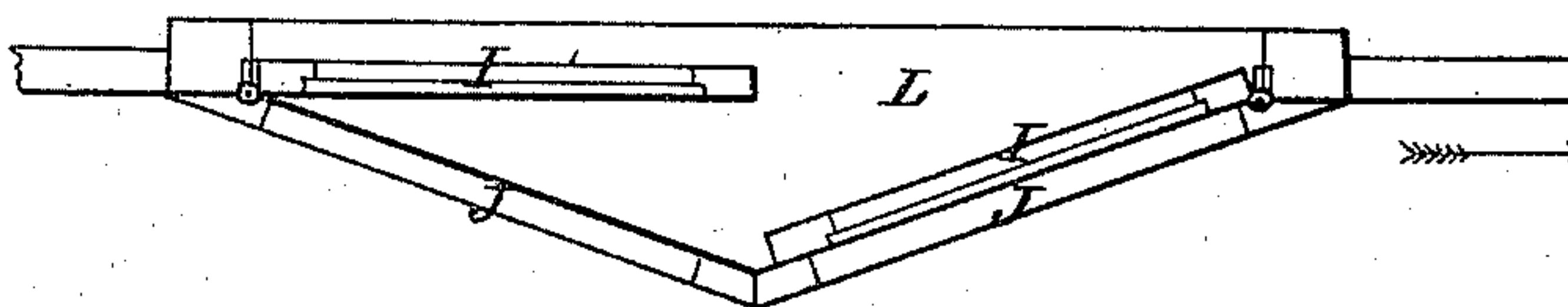


Fig: 3.

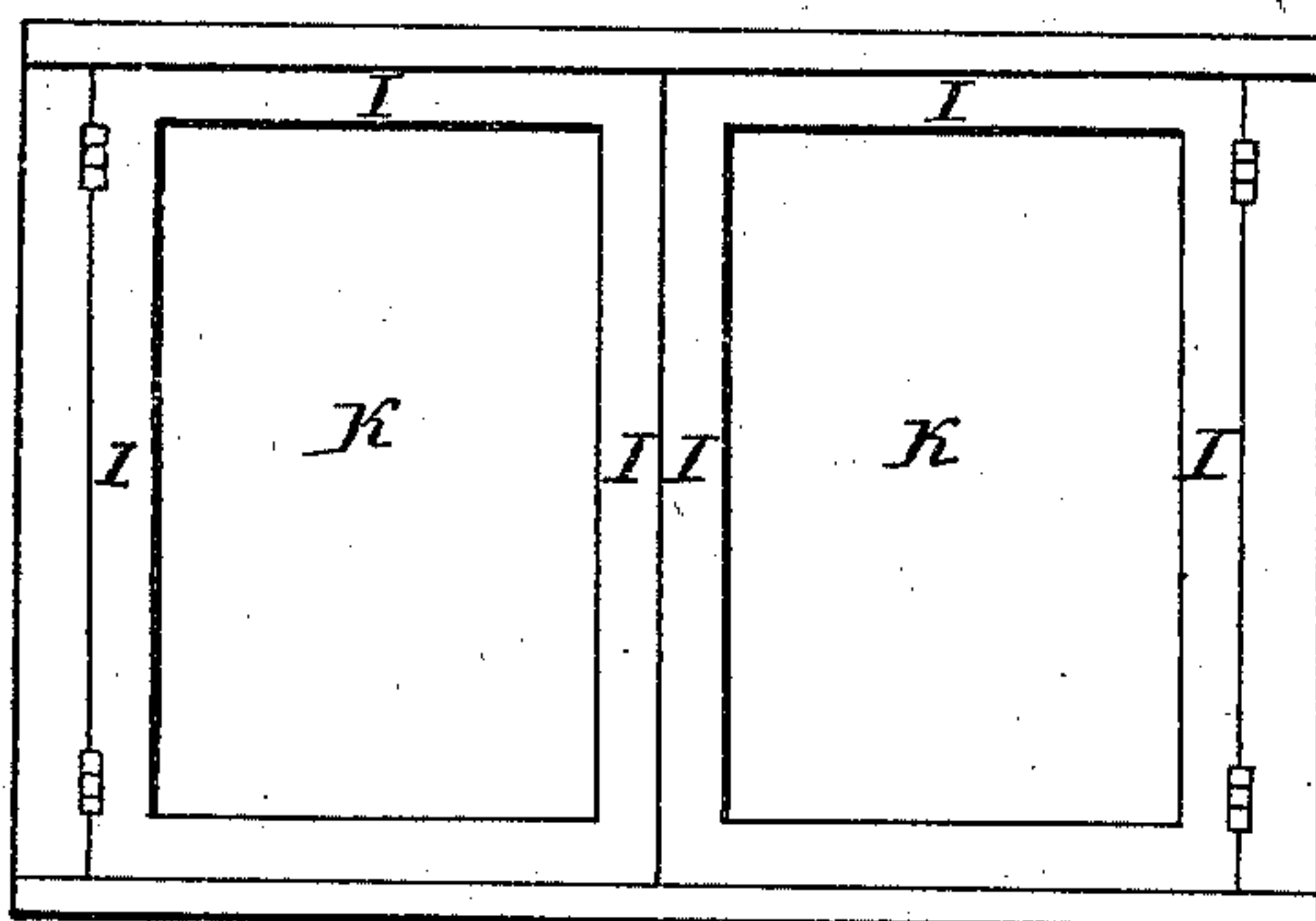
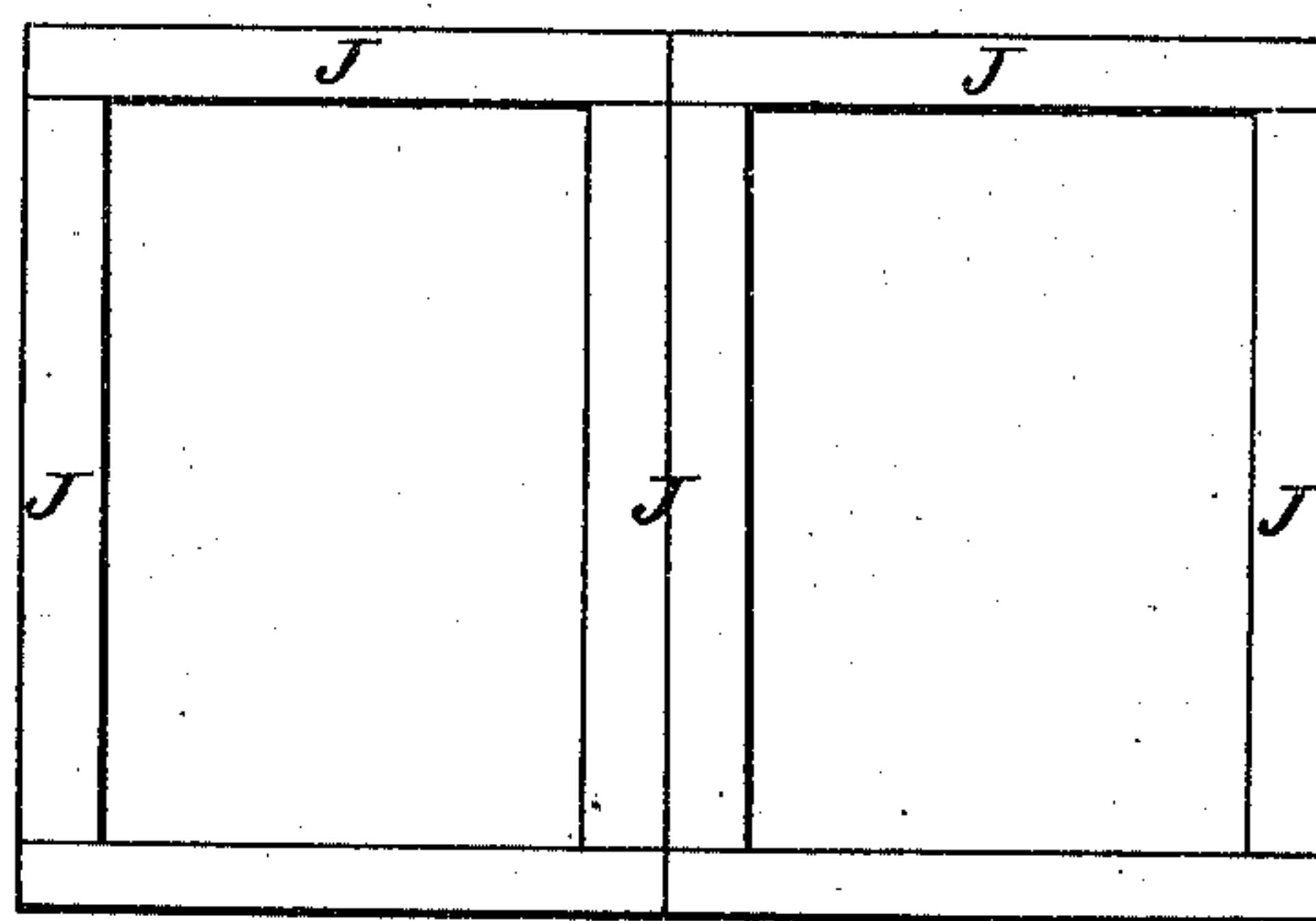


Fig: 4.



UNITED STATES PATENT OFFICE.

H. M. PAINE, OF WORCESTER, MASSACHUSETTS.

VENTILATING-WINDOW FOR RAILROAD-CARS.

Specification of Letters Patent No. 8,645, dated January 6, 1852.

To all whom it may concern:

Be it known that I, HENRY M. PAINE, of Worcester, in the county of Worcester, Massachusetts, have invented a certain new and useful Improvement in the Windows of Railway and other Carriages, the following being a full, clear, and exact description thereof.

My invention consists in the mode of protecting the interior of passenger cars from the annoyance of sparks and dust, which is effected by the peculiar arrangement and construction of the windows, which, together with a proper ventilation above, causes an outward current through the open windows, while at the same time the view from the window is in no way obstructed; but on the contrary the range of vision is considerably extended, without danger to the passengers. To effect this desirable result, I form the window in the parts, divided in the center vertically, each separate sash, I, I, being hinged to the frame or casing at the sides; and when the window is closed, the two sashes shut outward against a frame, J, J, (see Figure 4) longer and wider than the sashes, and permanently affixed to two plates or projections, L, L, (see Fig. 5,) one at the top, the other at the bottom of the window; the whole forming an obtuse angled projection beyond the line of the side of the car to a safe and proper distance. This enables a passenger, when the window is closed, to look forward or back, without danger; and when one of the

halves of the window, (the rear one) is drawn inward, there is a perfect dust deflector forward, that while it does not curtail the range of vision, as in ordinary cars, effectually shields the passenger from the annoyance of sparks and dust, and also from unpleasant currents of air, entering the cars.

I am aware that repeated attempts have been made to prevent the sparks from entering the cars by deflecting boards or slats; but they have been outside, and independent of the windows; they could not be adjusted by the passengers themselves; they are an additional expense, and can not effectually shield off the dust and sparks, unless they should cover the window, so as to obstruct the view therefrom; therefore I wish to be understood as not claiming a deflector. But

What I do claim as my invention, and desire to secure by Letters Patent, is—

The construction and arrangement of the windows of a car or carriage in the manner and for the purpose set forth, by causing the parts of the window to stand at an angle outward, when closed, and opening inward to a line with the inside of the car as described; whereby I insure ventilation, without the annoyance of dust, by means of the window alone, without the addition of other deflectors.

HENRY M. PAINE.

Witnesses:

WM. GREENOUGHE,
J. BECKWITH WEST.