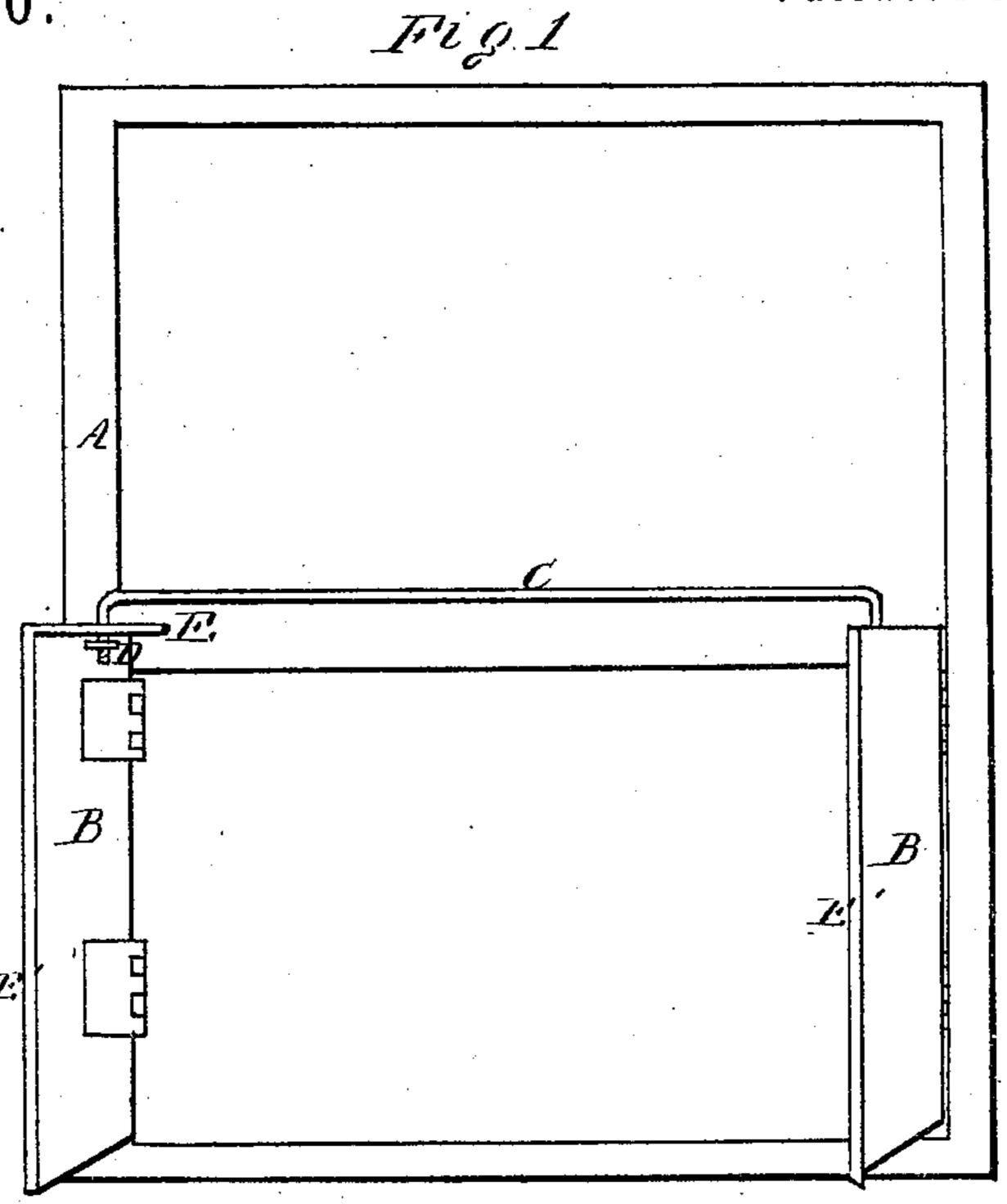
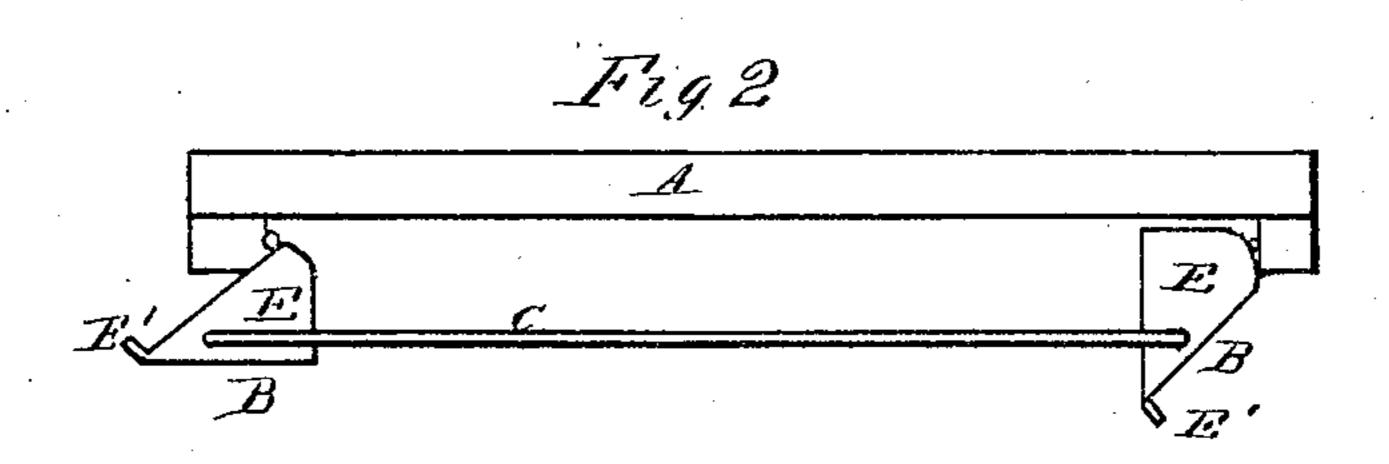
## J. D. SIMMONS.

## Ventilators for Railroad-Cars

No. 145,760.

Patented Dec. 23, 1873.





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## UNITED STATES PATENT OFFICE.

JASON D. SIMMONS, OF QUINCY, ILLINOIS.

## IMPROVEMENT IN VENTILATORS FOR RAILROAD-CARS.

Specification forming part of Letters Patent No. 145,760, dated December 23, 1873; application filed December 12, 1873.

To all whom it may concern:

Be it known that I, Jason D. Simmons, of Quincy, in the county of Adams and State of Illinois, have invented a certain new and useful Automatic Car-Ventilator, Dust and Cinder Fender; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

In the drawings, Figure 1 is a front view of

my invention, and Fig. 2 a top view.

My invention has relation to automatic ventilators and dust and cinder excluders for railroad-cars; and it consists in the construction and novel arrangement of hinged wings attached to the outside of a car on either side of a window, and so connected that one may be turned outward, while the other falls back toward the car, substantially as hereinafter more fully described.

Referring to the drawings, A designates a car-window, having hinged to its frame the wings B, which extend to about the top of the lower sash, or may extend the whole length of the window, and are provided with lugs E, turned inwardly on their upper ends, as shown. C is a rod, having its ends bent down, and threaded to hold nuts D. This rod connects the two wings B, the ends passing down through holes in the lugs E. The nuts are put on said ends below the lugs.

When the cars are in rapid motion, the forward wing is turned toward the window at an angle of about forty-five degrees, the air acting as a resistant. In this position the wing is held, the lug preventing it from closing against the window. The back wing is pushed toward the side of the car through the medium of the connecting-rod. The projecting wing guards the window against the entrance of dust or cinders, and, by creating a vacuum behind it, effects the perfect ventilation of the car.

As additional security against the entrance of dust and cinders through the car-window, a flange, E', is turned on the outer edge of each wing, as shown, and the ends of the wings extended, as shown, some distance below the bettern of the window.

bottom of the window.

Having fully described my invention, I claim—

1. The wings B, having the flanges E'turned on their outer edges, substantially as and for the purpose specified.

2. The wings B, having the inwardly-turned lugs E and outwardly-turned flanges E', and connected by means of the rod C, substantially as shown and described.

In testimony that I claim the foreging, I have hereunto set my hand this 5th day of February, 1873.

JASON D. SIMMONS.

Witnesses:

ALBERT R. COWDERY, DOMINIQUE J. LUEIZ.