H. M. SANDERS.
VENTILATORS.

No. 195,660. Patented Sept. 25, 1877.

Fig. 1.

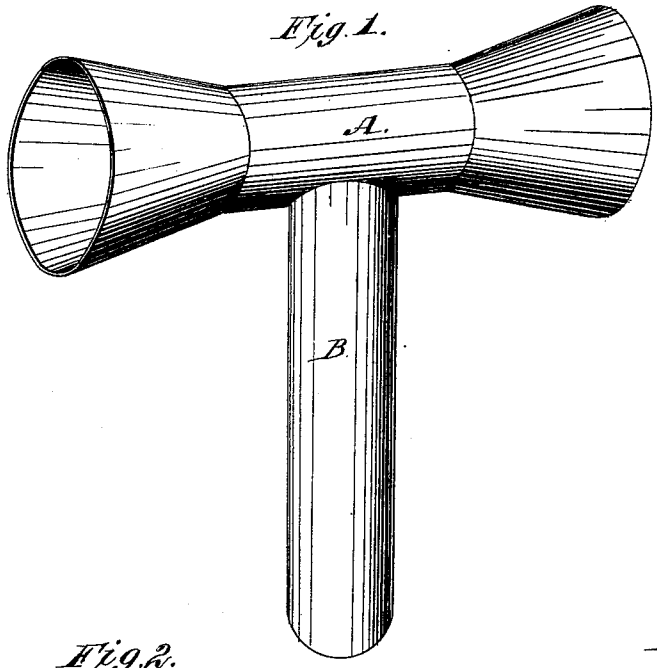


Fig. 2.

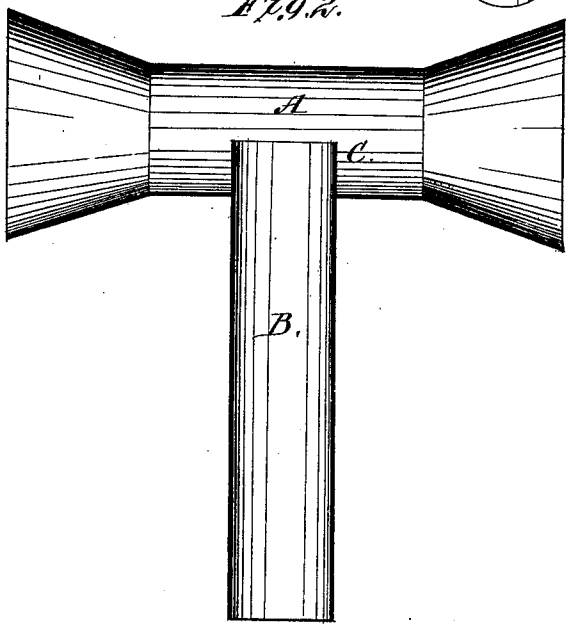
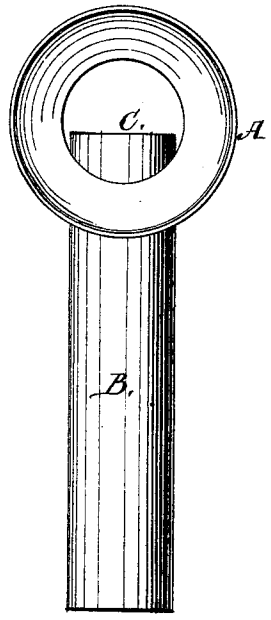


Fig. 3.



Witnesses:
Jou^a Luther
Isaac S. Meriam

Inventor:
Henry M. Sanders

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY M. SANDERS, OF WORCESTER, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO JONATHAN LUTHER AND MOSES W. WHEELER, OF SAME PLACE.

IMPROVEMENT IN VENTILATORS.

Specification forming part of Letters Patent No. **195,660**, dated September 25, 1877; application filed August 28, 1876.

To all whom it may concern:

Be it known that I, HENRY M. SANDERS, of the city and county of Worcester, Commonwealth of Massachusetts, have invented certain new Improvements in Ventilators; and I do hereby declare the following to be a full and clear description of the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 represents a perspective view of my ventilator. Fig. 2 represents a sectional view of the horizontal and vertical pipes. Fig. 3 represents an end view of the ventilator, showing the vertical pipe extending into the horizontal pipe.

This invention relates to railway-car and other ventilation; and consists in being constructed of horizontal and vertical pipes, or two pipes placed at right angles to one another, with the extension C of the vertical pipe B, as shown by the drawing, extending into the horizontal pipe to the center of same, or to such a point beyond the point of intersection of the two pipes that are placed at right angles to each other as may be necessary to give a free and unobstructed air-passage around the sides, as well as over the top, of the projecting point or extension-pipe C.

The advantage claimed by this manner of constructing a ventilator with the extension C into the horizontal pipe is, that it forms a more perfect vacuum and prevents any possibility of a downward draft or current of air by fluctuating or variable winds. The current of air passing through the horizontal pipe, over the top and around the sides of the extension-pipe C, is always sure to create a draft up through the vertical pipe, and also enables the air to pass through from either end of the horizontal pipe, making its exhaustive capacity equally powerful when operating in either direction.

That others skilled in the art may be able to make and apply and use my invention, I need only call attention to the drawings, and say that A represents the horizontal pipe, and B the vertical pipe, and C represents the projection of the vertical pipe B, substantially as set forth.

What I claim as my invention, and desire to secure by Letters Patent of the Government of the United States, is—

A car-ventilator composed of the horizontal pipe A and the vertical pipe B, the latter being the smaller of the two, and having its upper end C projecting into the former without touching its sides, whereby the air is enabled to circulate freely past the sides of the end C, and thus cause a greater draft, substantially as shown and described.

HENRY M. SANDERS.

Witnesses:

JONA. LUTHER,

ISAAC S. MERIAM.