

W. L. WASHBURN.
SELF REGULATING VENTILATOR.

No. 32,730.

Patented July 2, 1861.

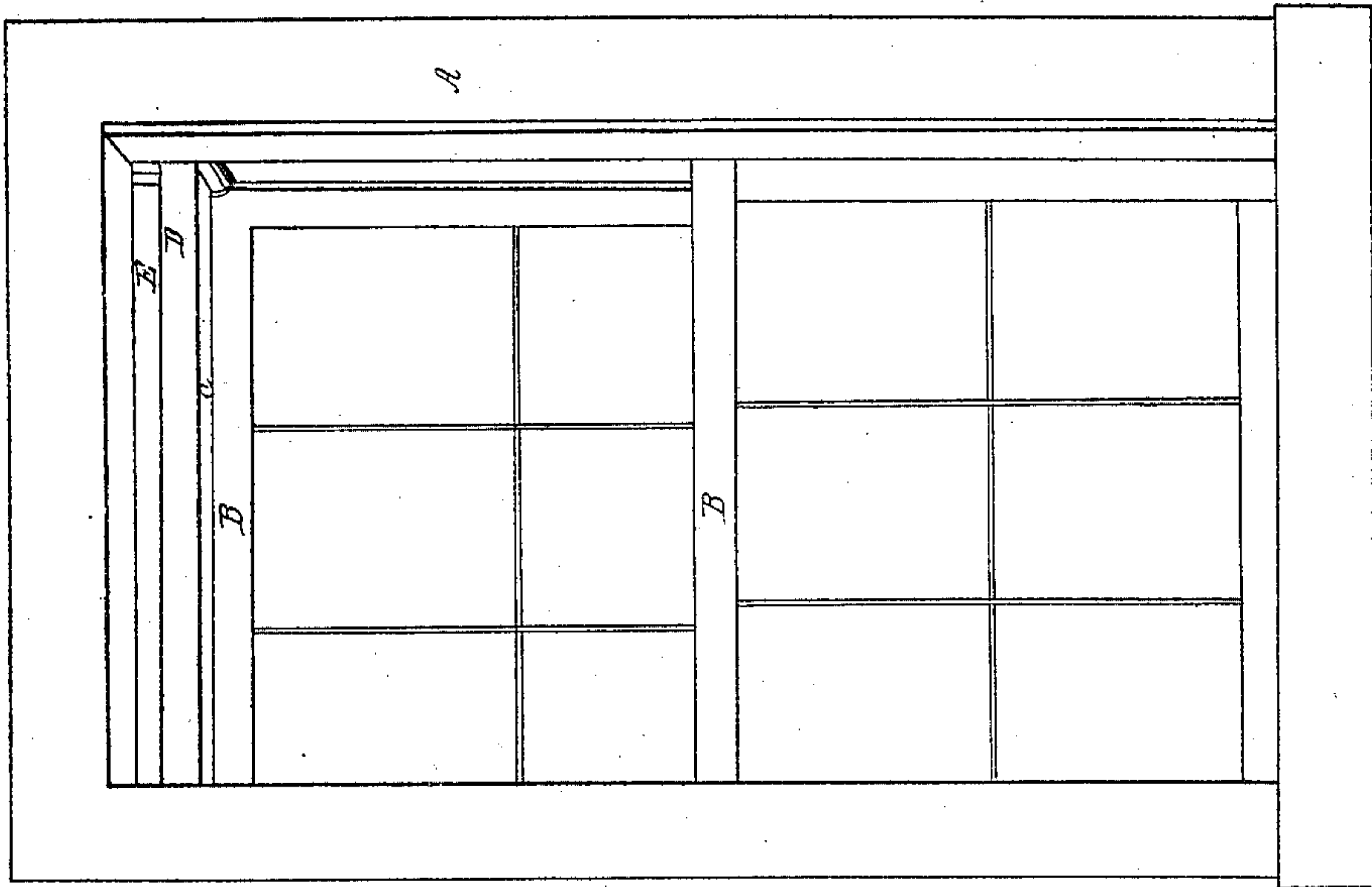
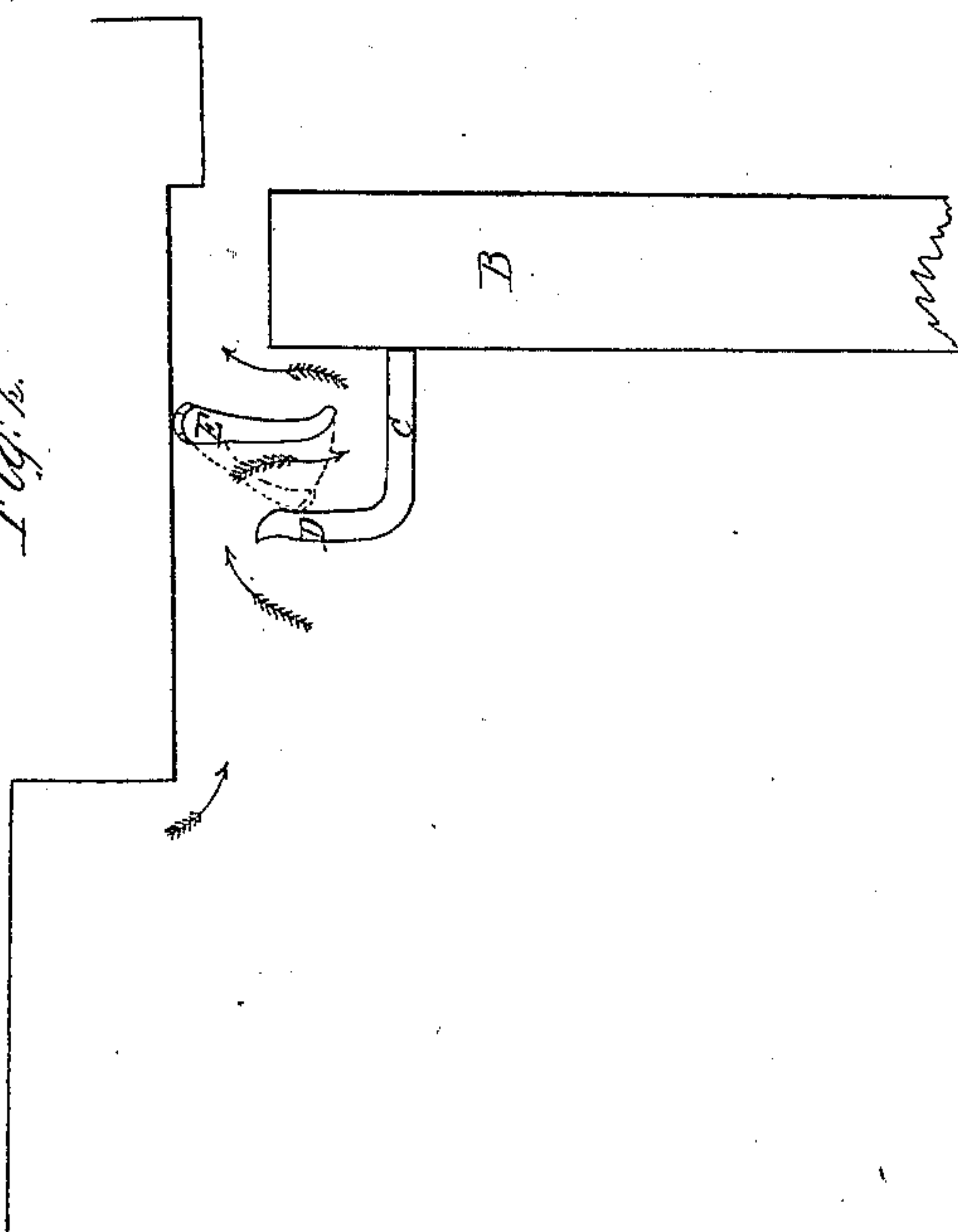


Fig. 1

Fig. 2



Witnesses:
C. G. Washburn
C. A. Newell

Inventor:
William L. Washburn

UNITED STATES PATENT OFFICE.

WILLIAM L. WASHBURN, OF SPRINGFIELD, MASSACHUSETTS.

VENTILATOR.

Specification of Letters Patent No. 32,730, dated July 2, 1861.

To all whom it may concern:

Be it known that I, WILLIAM L. WASHBURN, of Springfield, in the county of Hampden, in the State of Massachusetts, have invented a new and useful Ventilator for Dwelling-Houses, Churches, Halls, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, is a perspective view of a window with my improvement attached. Fig. 2, is a vertical transverse section of the ventilator and adjacent portions of the window sash and frame.

Similar letters of reference indicate corresponding parts in both figures.

The object of my invention is to provide a ventilator susceptible of ready adjustment, self regulating by the force of air and adapted to protect the inmates of rooms in which it is used from sudden and direct drafts.

My invention consists in a certain combination of flanged shelf and flap valve operating in connection with a window sash in manner hereinafter more fully explained.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

A, represents the window frame, and B, B, the sashes, C, is a horizontal shelf secured at the upper part of the sash and provided with a vertical flange D, as clearly shown in Fig. 2; E, is a flap valve hinged to the framing above the shelf C. The shelf C, D, and valve E, reach completely across the window from side to side and may be secured in any suitable manner, but it is preferred to fit the shelf in grooves in the jamb by which

means it may be readily adjusted to any desired height.

In using the apparatus the upper sash is lowered to any desired extent (as illustrated in Fig. 2) and a circuitous aperture thereby formed to permit the escape of noxious gases from the room or admit fresh air from without. By the deflection of the current, inmates of the room are effectually protected from sudden or direct drafts and in the event of an undue external pressure the swinging valve will partially or entirely close so as to automatically regulate the capacity of the aperture to correspond with the force of the current and as the pressure subsides will return to its former position. The outer surface of the valve may be made concave to cause the air to act upon it with greater effect.

The ventilator may be placed either on the inside or outside of the window as preferred.

I am aware that swinging valves in various forms have been employed for purposes of ventilation, but

What I claim as new and desire to secure by Letters Patent, is,

The combination of the flanged shelf C, D, and hinged valve E, with the window A, B, the whole being constructed and arranged in the manner and for the purpose herein shown and explained.

In testimony whereof I hereunto set my hand this eleventh day of January A. D. one thousand eight hundred and sixty.

WILLIAM L. WASHBURN.

Witnesses:

FRANCIS FRAPS,
E. W. DICKINSON.