

S. D. INGRAM.

VENTILATORS FOR WINDOWS.

No. 176,789.

Patented May 2, 1876.

Fig. 1.

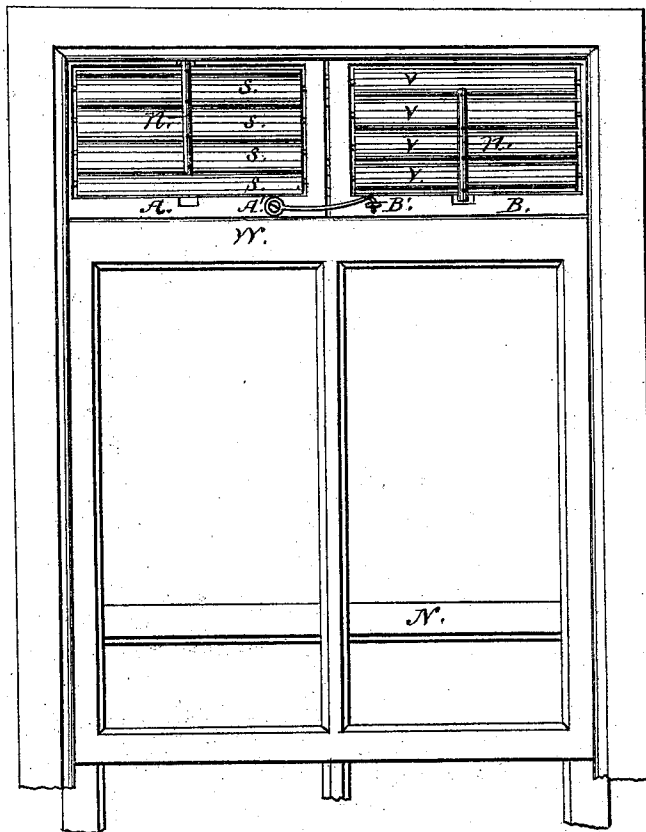


Fig. 2.

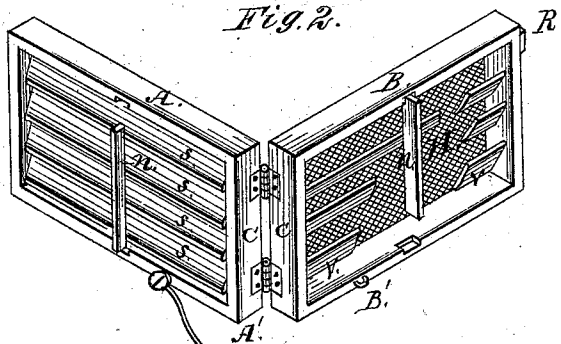
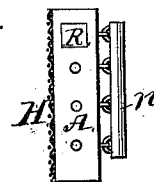


Fig. 3.



Witnesses:

Peter Struckee
Theophilus Weaver

Inventor:

Samuel D. Ingram

UNITED STATES PATENT OFFICE.

SAMUEL D. INGRAM, OF HARRISBURG, PENNSYLVANIA.

IMPROVEMENT IN VENTILATORS FOR WINDOWS.

Specification forming part of Letters Patent No. **176,789**, dated May 2, 1876; application filed March 23, 1876.

To all whom it may concern:

Be it known that I, SAMUEL D. INGRAM, of the city of Harrisburg, county of Dauphin and State of Pennsylvania, have invented an Improvement in Ventilators for Windows, which I do not believe was ever before known or used; and I hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a front elevation of a common window, having the upper sash let down part way in the frame, and having my improved ventilator inserted above the sash. Fig. 2 is a perspective view of my ventilator detached from the window. Fig. 3 is an end view of one of the folding frames of my device.

The usual custom of lowering the upper window-sash, or of raising the lower one, to admit cold air from without, for the purpose of ventilating rooms in dwellings or public buildings, is far from being satisfactory, as the currents of air cannot be controlled properly, and persons occupying places in the room where the current strikes are liable to have their health seriously affected. Moreover, the openings thus made, by hoisting or lowering the window-sash, are not screened from dust and insects; and in the case of public-school buildings, the openings afford opportunities for mischievous intrusions and annoyances from the outside.

To obviate such and other objections, and to provide a popular, cheap, and well-regulated ventilator in such suitable form that it may be readily inserted or removed from the grooves in common window-frames, and having its inlets properly disposed to control the air-currents, is the object of my present invention.

My improved ventilator consists of two rectangular frames, A B, connected together vertically by the hinges C C, in such manner that when the frames are fully extended a hooked latch, A', and catch B' serve to maintain their correct alignment in the same plane

as in position in the window-grooves, (shown in Fig. 1,) and when said latch is released from its catch, the said frames may be more or less folded upon themselves, as shown in Fig. 2, thus shortening the structure transversely, so that its ends may pass the window-beads to insert or to remove the ventilator, and each of the said frames has the movable transoms S or V, connected by the usual staple cross-tie N, by which the transoms are deflected to direct the current of air toward the ceiling, or toward the floor of the room, or to any intermediate direction desired, or by being fully deflected to close the openings of the ventilator. On the outer sides of the said frames are affixed thereto the mosquito-bar H, (shown in Figs. 2 and 3,) which is any suitable netting or gauze usually employed for such purposes.

It will be observed that my improved attachment for windows may be inserted above the upper sash or below the lower sash, and that when in place in the window it cannot be removed therefrom from the outside, as the latch A' must first be lifted.

To make the device rattle-proof, the elastic blocks or cushions R are attached, as shown in Figs. 2 and 3.

Having thus fully and clearly described my invention, what I regard as new and useful, and what I desire to secure by Letters Patent of the United States, is embraced in the following claim:

I claim—

The removable frames A B, provided with the hinges C C, the transoms S V, the screen H, latch A', and catch B', these parts being arranged for operation in the ordinary grooves for window-sashes, substantially as set forth.

In testimony that I claim the foregoing as my invention I have hereunto set my hand and seal this 23d day of March, 1876.

SAMUEL D. INGRAM. [L. S.]

Attest:

PETER STUCKER,
THEOPHILUS WEAVER.