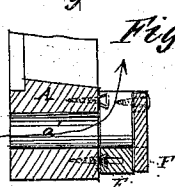
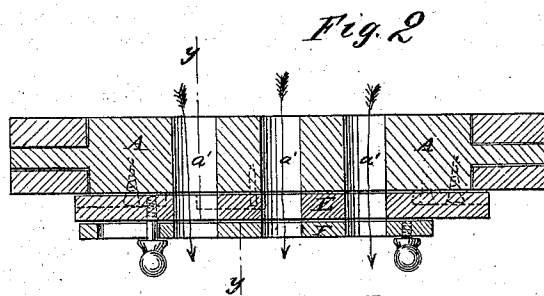
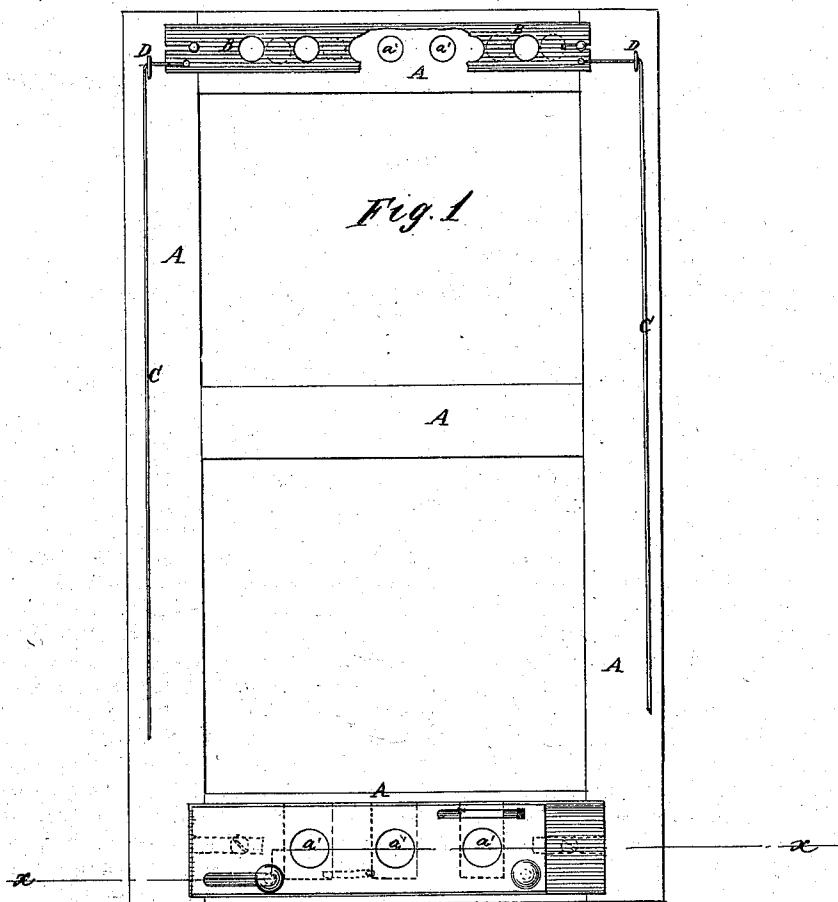


J. C. BATES.
Window Sash Ventilators.

No. 136,638.

Patented March 11, 1873.



Witnesses:

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C. Scaggs

Inventor:

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PER

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UNITED STATES PATENT OFFICE.

JOHN C. BATES, OF COLD SPRING, NEW YORK.

IMPROVEMENT IN WINDOW-SASH VENTILATORS.

Specification forming part of Letters Patent No. 136,638, dated March 11, 1873.

To all whom it may concern:

Be it known that I, JOHN C. BATES, of Cold Spring, in the county of Putnam and State of New York, have invented a new and useful Improvement in Window-Sash Ventilator; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a window-sash to which my improved ventilator has been applied. Fig. 2 is a detail section of the same taken through the line *x x*, Fig. 1. Fig. 3 is a detail section taken through the line *y y*, Fig. 2.

The invention relates to the well-known mode of ventilating houses through air inlets and outlets in the window-sashes; and consists in employing two slides, relatively apertured with respect to each other and to the sash-bar so as to admit either a direct or indirect draft, as hereinafter described.

A represents a window-sash, in the upper and lower cross-bars of which are holes *a'*. B is a single slide of the ordinary kind, having holes similar in shape, size, and position to the holes in the sash-bar. I use a double slide, E F, the inner one, E, of which has the holes *a'* extended up through its upper edge in the form of transverse slots, as shown in Fig. 3 and in dotted lines in Fig. 1. The slide E moves upon headed pins or screws attached to the sash-bar, and the heads of which enter dovetailed grooves in the inner side of said

slide. The movement of the slide E is limited by a pin attached to the sash-bar, and which enters a slot in the said slide E. The outer slide F has holes formed in it, and it is kept in place upon the slide E, and its movements are limited by headed pins or screws which pass through slots in the said slide F, and are attached to the said slide E. One of these pins or screws may have a knob attached to or formed upon it to serve as a handle for moving the slide E. The slide F may be moved by a knob attached to it. With this construction the slides E F may be so adjusted that the holes through them may be over each other, as shown in Figs. 1 and 2, giving a direct ventilation; or the holes in the sash and inner slide E may be over each other, as shown in Fig. 3, in which case the air enters the room through the openings in the upper edge of the inner slide E; or the inner slide E may be so adjusted as to cover the holes in the sash-bar and exclude the air.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The application to a cross-bar of the window-sash A, having holes *a'*, of the slides E F, relatively slotted as shown in Fig. 3 of drawing and described, to admit the air directly or indirectly, in the manner set forth.

JOHN C. BATES.

Witnesses:

ISAAC BATES,
WM. J. FLOYD.