

No. 631,042.

Patented Aug. 15, 1899.

F. P. HAYLES.
VENTILATOR.

(Application filed Nov. 15, 1898.)

(No Model.)

Fig: 1.

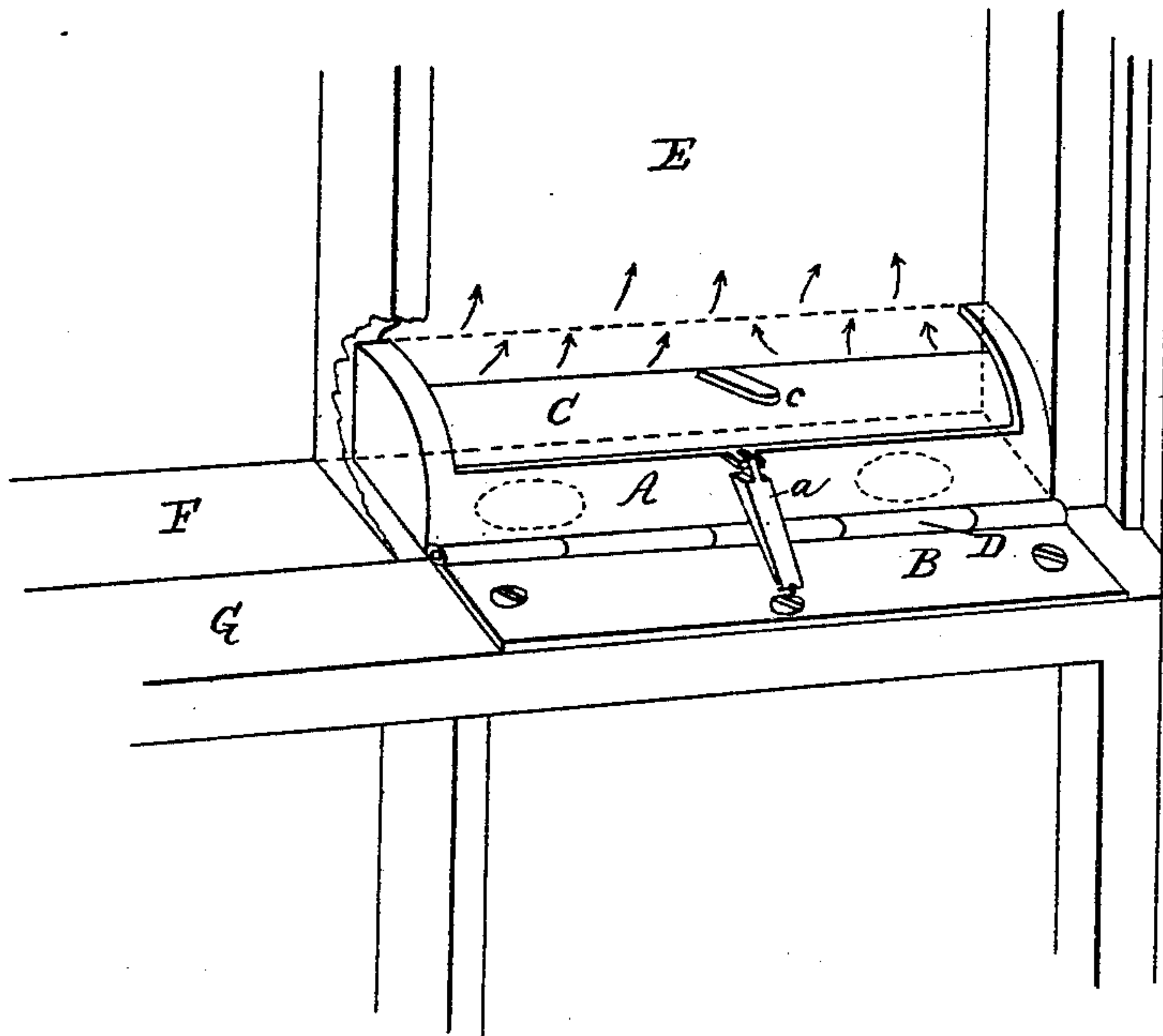
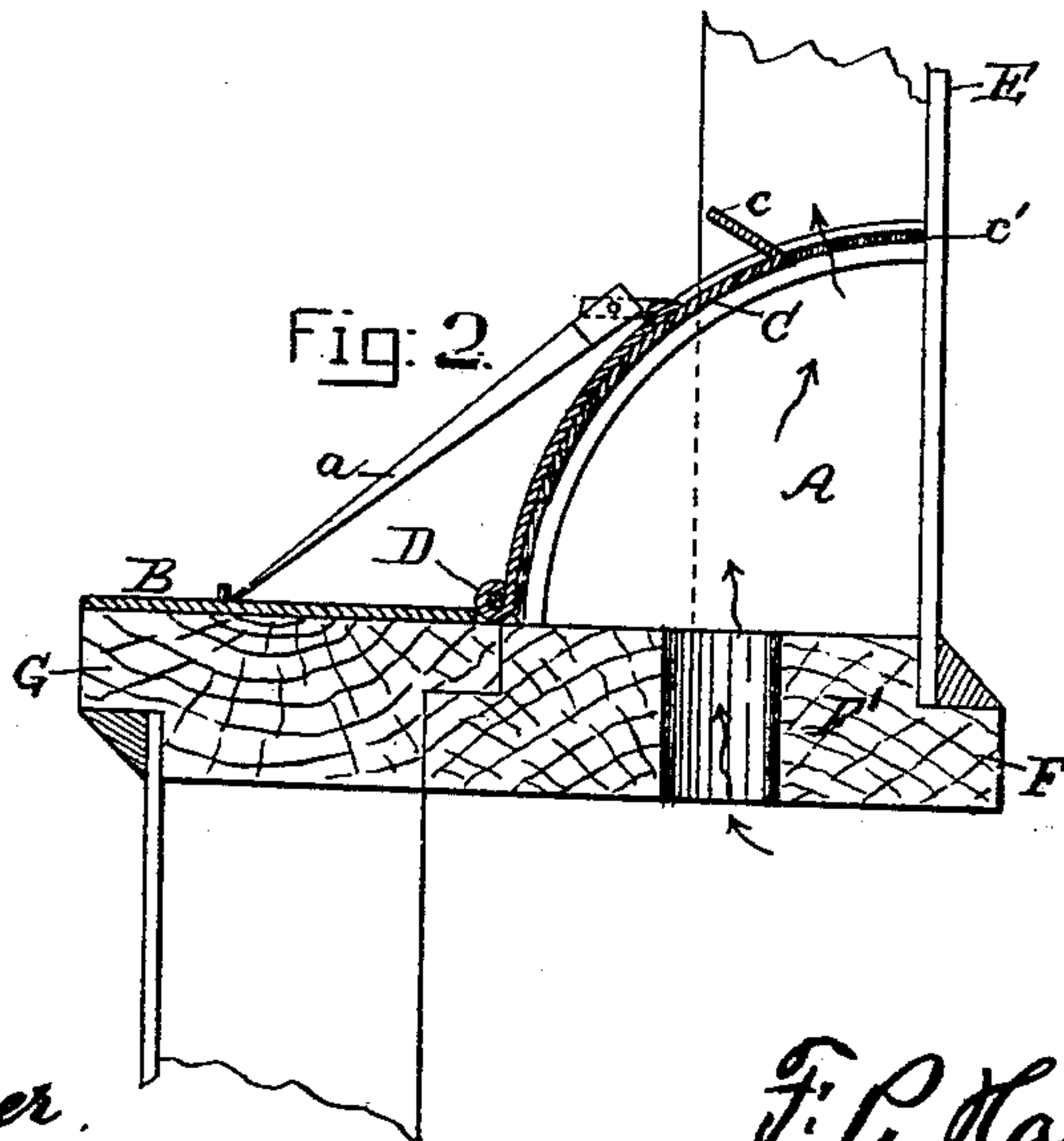


Fig: 2.



Witnesses.
L. H. Latimer.
W. L. Limer.

Inventor.
F. P. Hayles
per
Albert Stetson, Attorney.

UNITED STATES PATENT OFFICE.

FREDERICK P. HAYLES, OF NEW YORK, N. Y.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 631,042, dated August 15, 1899.

Application filed November 15, 1898. Serial No. 696,500. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK P. HAYLES, a citizen of the United States, and a resident of New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Ventilators, of which the following is a specification.

My invention relates to improvements in ventilators, more particularly to those designed to be attached to windows.

The object of my invention is to provide a ventilator for attachment to a window which, while being economical, shall establish thorough ventilation, avoid all tendency to cause a draft, be easily and perfectly adjustable to the requirements, and be ornamental in its appearance.

My invention consists of a ventilator adapted to be fastened to and operated in conjunction with the sashes of a window and is furnished with a damper or sliding valve for controlling the ventilation.

The essential features of my invention will be readily understood by an inspection of the drawings, in which—

Figure 1 represents an elevation, and Fig. 2 an end sectional view.

As will be seen, the ventilator consists of two portions—a base or fastening piece B, attached to the ventilator proper, A, by means of the hinge D.

C is the adjustable damper, sliding in grooves in the part A, and *c* a thumb-piece for operating the damper C.

a is a stay for preventing the parts turning on the hinge D when the damper C is opened or closed.

G is the upper rail of the lower sash, F the lower rail of the upper sash, and F' perforations in F for admitting the air. E is the pane in the upper sash.

The arrangement and operation are easily perceived from the figures. The ventilator is fastened by the part B to the upper rail of the lower sash, and the hinged portion A is brought over against the pane E and pressed firmly against it by the cleat *a*. Directly beneath the ventilator, in the upper sash F, per-

forations F' are made, or that portion of the upper sash lying beneath the ventilator may be entirely cut away. The admission of air is controlled by the damper C. The joint between the ventilator and the parts of the sash and pane may be rendered air-tight by being lined with felt, rubber, &c.

I have shown the body of the ventilator as curved, and I prefer this form because the air entering is thereby directed along the pane upward to the top of the room and becomes heated before it descends. Thereby all drafts are avoided. I may, however, make the sides straight and inclined at an angle to the window-pane, but there is more draft from this form. While I prefer to make the ventilator hinged, it may be constructed so that the parts B and A are integral, in which case, in order that the upper sash may slide by the lower for purposes of removal, for instance, the ventilator must be taken off. To accomplish this readily, the screw-holes may be made large enough to admit the heads of the screws and provided with elongated slots along which the screws may be slid and the device held fast in the well-known manner. In case it may be desirable to manipulate the damper from either end instead of by the piece *c* a thumb-screw working a rack and pinion may be substituted. A natural modification would be to cut holes on the curve of the ventilator and corresponding ones in the damper and then slide the damper lengthwise after the manner of the ordinary stove-damper.

An advantage accruing from the curved shape of my ventilator is that the current of air is directed upwardly along the pane, and the accumulation of frost is thereby prevented.

Having thus fully described and illustrated my invention, what I claim is—

1. In a ventilator attached to the top rail of an inner sash, the combination of a base, a curved hood hinged to the base in such a position that its free end may rest against the glass of the outer sash, an adjustable damper sliding within the hood, and means for retaining the base and hood relatively fixed.

2. In a ventilator attached to the top rail of

an inner sash, the combination of a base, a curved portion hinged to the base in such a position that its free end may rest against the glass of the outer sash, an adjustable damper
5 sliding within the hood, and an upper sash having perforations in it, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 12th day November, A. D. 1898.

FREDERICK P. HAYLES.

Witnesses:

ROBERT J. FITZPATRICK,

WILLIAM LEMUN.