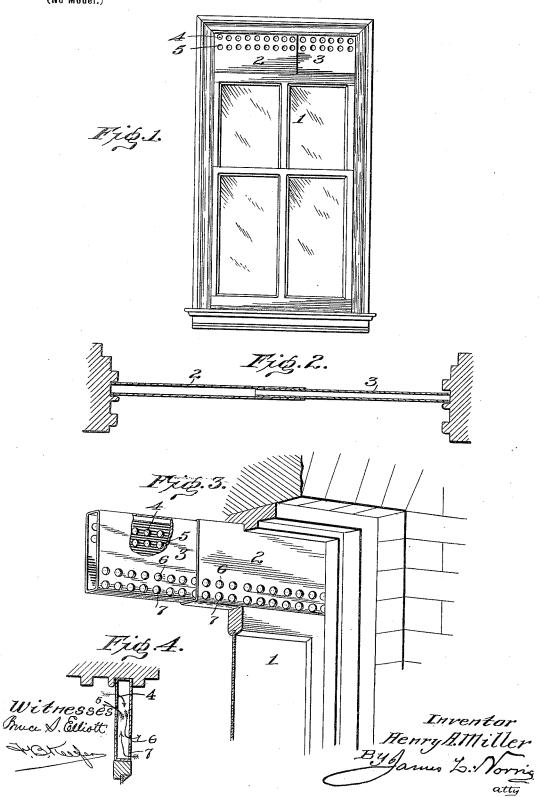
## H. A. MILLER. WINDOW VENTILATOR.

(Application filed Nov. 24, 1899.)

(No Model.)



## UNITED STATES PATENT OFFICE.

## HENRY A. MILLER, OF HOAGLAND, INDIANA.

## WINDOW-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 647,572, dated April 17, 1900.

Application filed November 24, 1899. Serial No. 738, 186. (No model.)

To all whom it may concern:
Be it known that I, HENRY A. MILLER, a citizen of the United States, residing at Hoagland, in the county of Allen and State of In-5 diana, have invented new and useful Improvements in Window-Ventilators, of which the following is a specification.

My invention relates to an improvement in

window-ventilators.

It is the object of my invention to provide an improved extensible ventilator which may readily be applied to a window of any width, which will permit the ready ingress to the room of fresh air and escape therefrom of 15 heated or impure air without causing a direct draft of air in the room, and which will provide for the free escape of water from the device to the outside of the window during a rain.

To this end my invention consists of a ventilator having the novel features of construction

hereinafter described.

To enable others to understand my invention, I have illustrated the same in the accom-

25 panying drawings, in which-

Figure 1 is an inside view of a window provided with my improved ventilator. Fig. 2 is a horizontal section taken longitudinally through the ventilator. Fig. 3 is a sectional 30 perspective view, from the outside, of a window with my ventilator shown in place; and Fig. 4 is a transverse vertical section of the same.

Referring to the drawings, the numeral 1 35 indicates the upper sash of a window, between the top of which and the window-casing my improved ventilator is designed to be removably applied. Said ventilator comprises two telescoping sections 2 3, respectively, each of 40 which is provided on opposite sides and near opposite edges with two rows of perforations, (indicated, respectively, by the numerals 4 5 and 67.) Each of the sections 23 is in the form of a hollow rectangular casing and may 45 be made of heavy block-tin, galvanized iron, or the like, one of the sections being large enough to permit the other section to telescope therein, as shown, so as to permit the device to be adjusted in léngth to extend from 50 side to side of the window to which it may be applied. In practice the ventilator would be

six to eight inches in height. The perforations would be about a half an inch in diameter. The lower row 7 of perforations on the 55 outer side of the device extend along the extreme bottom edge, as shown, so that during a rain any water which may be driven through the perforations may at once escape and run down the outside of the window. It will be 60 seen that two rows of perforations are provided on the lower outer side of the device and two similar rows on the top inner side. By this construction when the ventilator is in place the fresh air from the outside will 65 pass through the lowermost row 7 of perforations, be deflected inward, and pass into the room through the lower row 5 of the perforations on the inner side, while the heated air will pass from the room through the upper 70 row 4 of perforations, be deflected downward, and pass out through the upper row 6 of perforations on the outer side of the device, the principle which insures such currents of air being that heated air rises, while cold air de- 75 scends. Thus a continuous circulation of air in the room is insured, the counter-currents preventing a direct draft. The corresponding rows of apertures in the respective sections are of course made in alinement.

It will be evident that my ventilator may be applied equally well beneath the lower sash of the window, although it is believed that the best results will be obtained by placing it

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above the upper sash.

It will be seen that my device can readily be placed in or removed from a window, that it is simple in construction, and as each section can be made from a single piece or sheet of metal that it will be economical to manu- 90 facture. It will also be obvious that when used in connection with a stationary window, in which ease the ventilator would not ordinarily be removable and there would be no occasion for adjusting it, said ventilator could 95 be constructed in one continuous piece instead of two telescoping sections without departing from the spirit of my invention.

Having thus fully described my invention,

what I claim is-

The combination with a window frame and sash, of a ventilator consisting of a rectangular hollow easing formed in two telescoping about an inch and a quarter thick and from ! sections, and closed on all sides save that the inner and outer walls are provided with perforations along the upper edge of the inner wall and the lower edge of the outer wall, said casing being insertible between the end of a sash and one end of the window-frame, substantially as described.

In testimony whereof I have hereunto set inner my hand in presence of two subscribing witnesses.

HENRY A. MILLER.

Witnesses:

J. C. GRANDSTAFF,
W. W. FULTON.