

N. M. BARNES.
WINDOW VENTILATOR.
APPLICATION FILED FEB. 1, 1912.

1,038,825.

Patented Sept. 17, 1912.

Fig. 1.

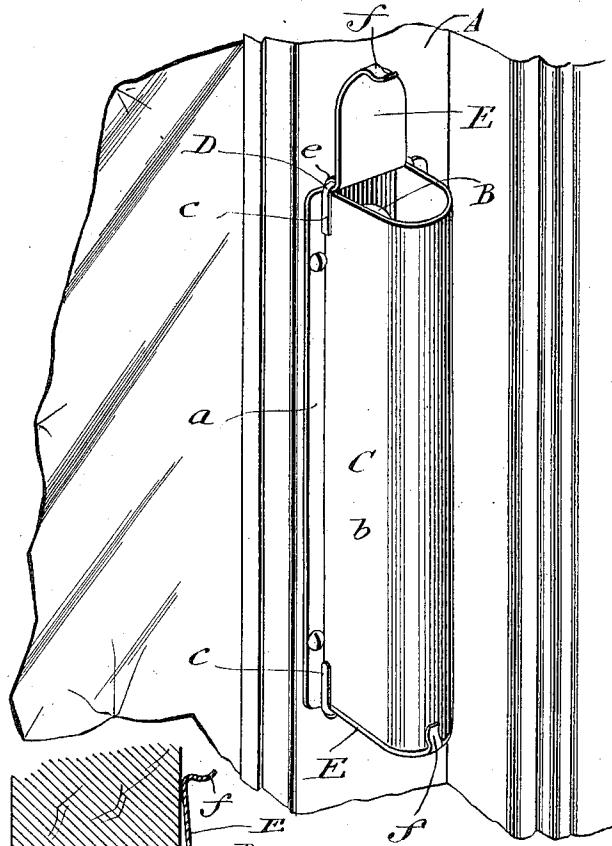
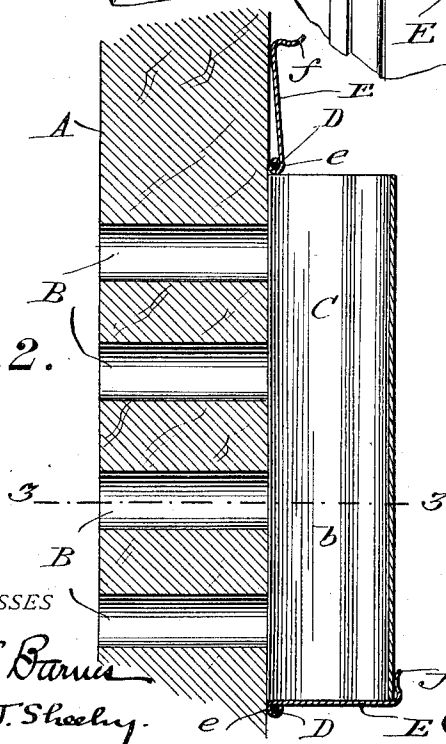


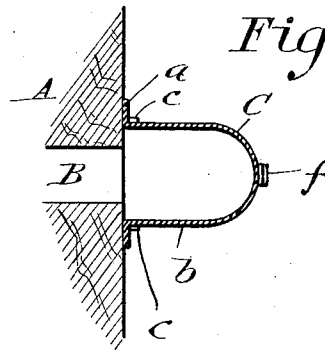
Fig. 2.



WITNESSES

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Fig. 3.



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UNITED STATES PATENT OFFICE.

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WINDOW-VENTILATOR.

1,038,825.

Specification of Letters Patent.

Patented Sept. 17, 1912.

Application filed February 1, 1912. Serial No. 674,673.

To all whom it may concern:

Be it known that I, NATHAN M. BARNES, citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented new and useful Improvements in Window-Ventilators, of which the following is a specification.

My present invention has to do with what are known as window ventilators; and it contemplates the provision of a simple and inexpensive device calculated to supply an apartment with fresh air without subjecting the occupants to a draft, and one that is susceptible of being quickly and easily applied without the employment of skilled labor, and is so constructed that it is adapted to enhance rather than detract from the finished appearance of the wood-work of a window sash.

With the foregoing in mind the invention will be fully understood from the following description and claims when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is a fragmentary perspective illustrating a portion of a window frame, a portion of a window sash and my novel ventilator as properly positioned on the latter; the ventilator being shown with its upper end open and its lower end closed. Fig. 2 is a section taken through the vertical center of the ventilator and also taken through the sash. Fig. 3 is a horizontal section taken in the plane indicated by the line 3—3 of Fig. 2, looking downward.

Similar letters of reference designate corresponding parts in all of the views of the drawings.

In furtherance of my invention, I provide in a side stile A of a window sash a vertical series of holes B, which extend throughout the thickness of the stile so as to effect communication between an apartment in a building and the outer air.

Against the inner face of the sash stile and over the inner ends of the holes B, which may be expeditiously and easily produced by an ordinary auger, I arrange in upright position the body C of my novel ventilator. The said body C is formed of a single piece of sheet-metal in the shape clearly shown in Figs. 1 and 3, and is open at its upper and lower end, and is provided with side flanges a, which are disposed at

right angles to its sides b, and are carried throughout the height of the body. At its upper and lower ends and at points adjacent the flanges a, the body C is provided with cross-rods D, which are fixed to the body, preferably in the manner shown in Fig. 1. By this is meant that each cross-rod D is provided with angularly disposed end portions c, which end portions are located in the corners between the sides b and the flanges a of the body, and are soldered to the body. This specific mode of fixing the cross-rods D relative to the body is advantageous because it is strong and durable and at the same time inexpensive.

The upper and lower ends of the body C are controlled by doors E. Each of these doors is formed of a single piece of sheet-metal and is provided at its inner end with a barrel e to pivot the door to a cross-rod D, and at its outer end has a curvilinear projection f, which extends from the door toward the body C. Being of sheet-metal and curved inwardly, the projections f of the doors E are possessed of resiliency, and hence when the doors are closed against the ends of the body C, the frictional contact between the said projections and the body will serve to hold the doors E against casually opening. It will also be manifest that the projections f constitute finger pieces through the medium of which the doors may be conveniently opened when occasion demands. Attention is also here directed to the fact that the connections of the door barrels e to the rods D are stiff connections, and in consequence of this the doors E are adapted to remain in the different positions in which they are placed.

In the application of my novel ventilator, the flanges a of the body C are arranged against the face of the sash stile A, and are screwed or otherwise fastened to the said stile; the body C of course covering the plurality of holes B. When the ventilator is thus applied, either one of the doors E may be opened; the opening of the upper door being attended by upward discharge of the inflowing fresh air, and the opening of the lower door being attended by downward discharge of such air, or if desired both doors may be opened at one and the same time. In either event it would be appreciated that while a considerable quantity of fresh air will be let into the apartment, the occupants of the apartment will be guarded by the

body C against a draft. It will also be understood that when occasion demands both ends of the body C may be closed to prevent the passage of air therethrough.

5 In addition to the advantages hereinbefore ascribed to my novel ventilator, it will be observed that the ventilator is so simple and embodies such a small amount of material that it may be made and sold with
10 profit for a very small price; and it will also be appreciated that but little work is required in the adaptation of a sash stile to receive the ventilator, and in the application of the ventilator to the stile.

15 Having described my invention, what I claim and desire to secure by Letters-Patent, is:

1. The herein described ventilator adapted to be attached to a stile of a window
20 sash over apertures in the stile and consisting essentially of a sheet-metal body bent into U-shape in cross-section and having integral apertured flanges disposed at right-angles to its sides, cross-rods having angu-
25 larly disposed end portions arranged in the corners between the sides and flanges of the

body and soldered thereto, and swinging doors adapted to be opposed to the ends of the body and having barrels surrounding the cross-rods and also having on their outer
30 ends curvilinear projections forming combined frictional fasteners and finger pieces.

2. The herein described ventilator adapted to be attached to a stile of a window sash over apertures in the stile, and comprising
35 a body of channel form in cross-section open at its opposite ends and having on its sides means for attaching it to a window sash stile or the like, and swinging doors connected with the body and adapted to be closed
40 against the ends thereof, whereby the air from without the sash can be entirely excluded or can be directed from either or both ends of the body.

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

NATHAN M. BARNES.

Witnesses:

R. C. JACOBS,

G. S. ANDERSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."