

No. 717,319.

Patented Dec. 30, 1902.

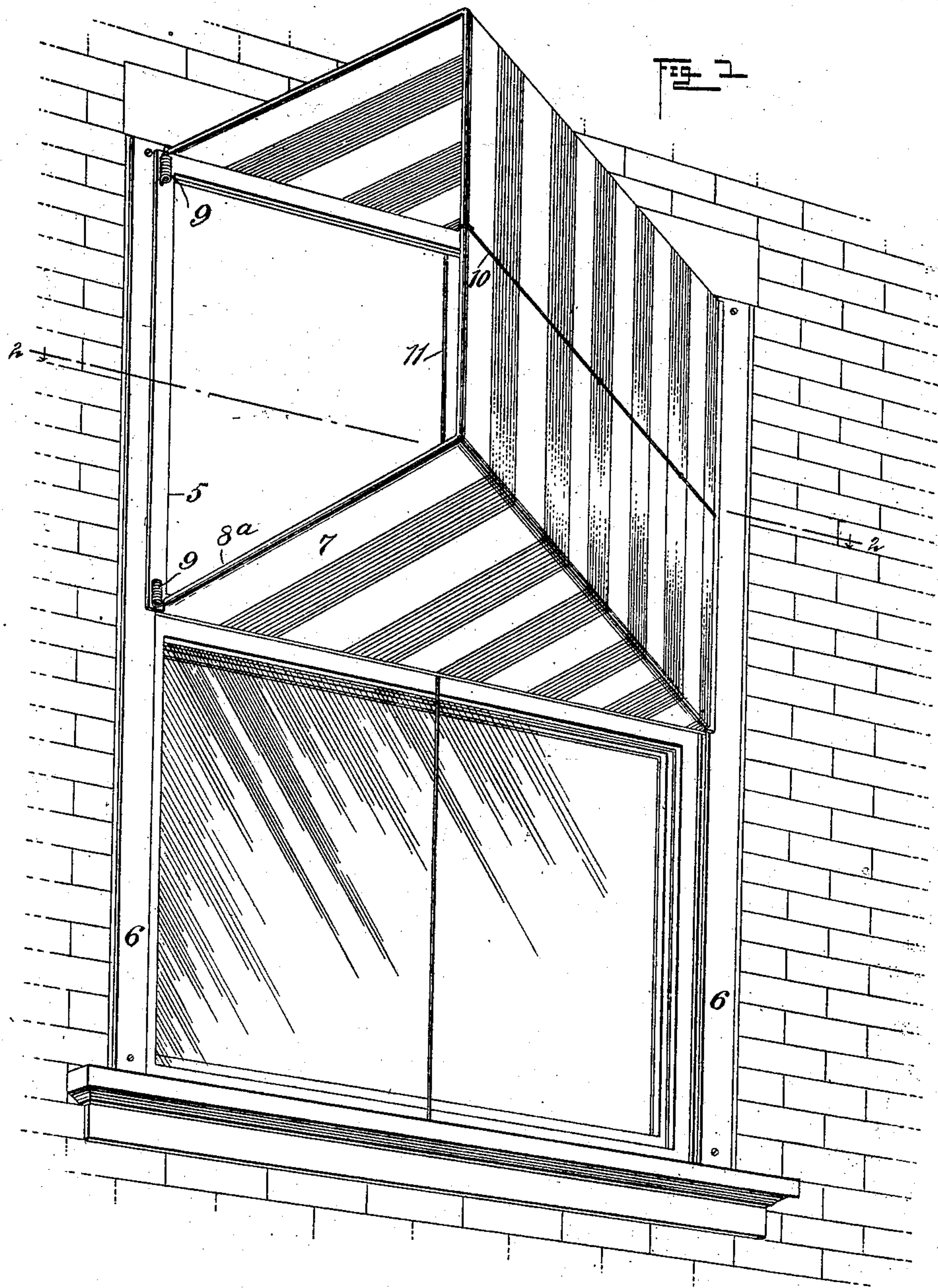
R. E. M. BAIN.

VENTILATOR.

(Application filed Aug. 28, 1902.)

(No Model.)

2 Sheets—Sheet 1



WITNESSES:

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No. 717,319.

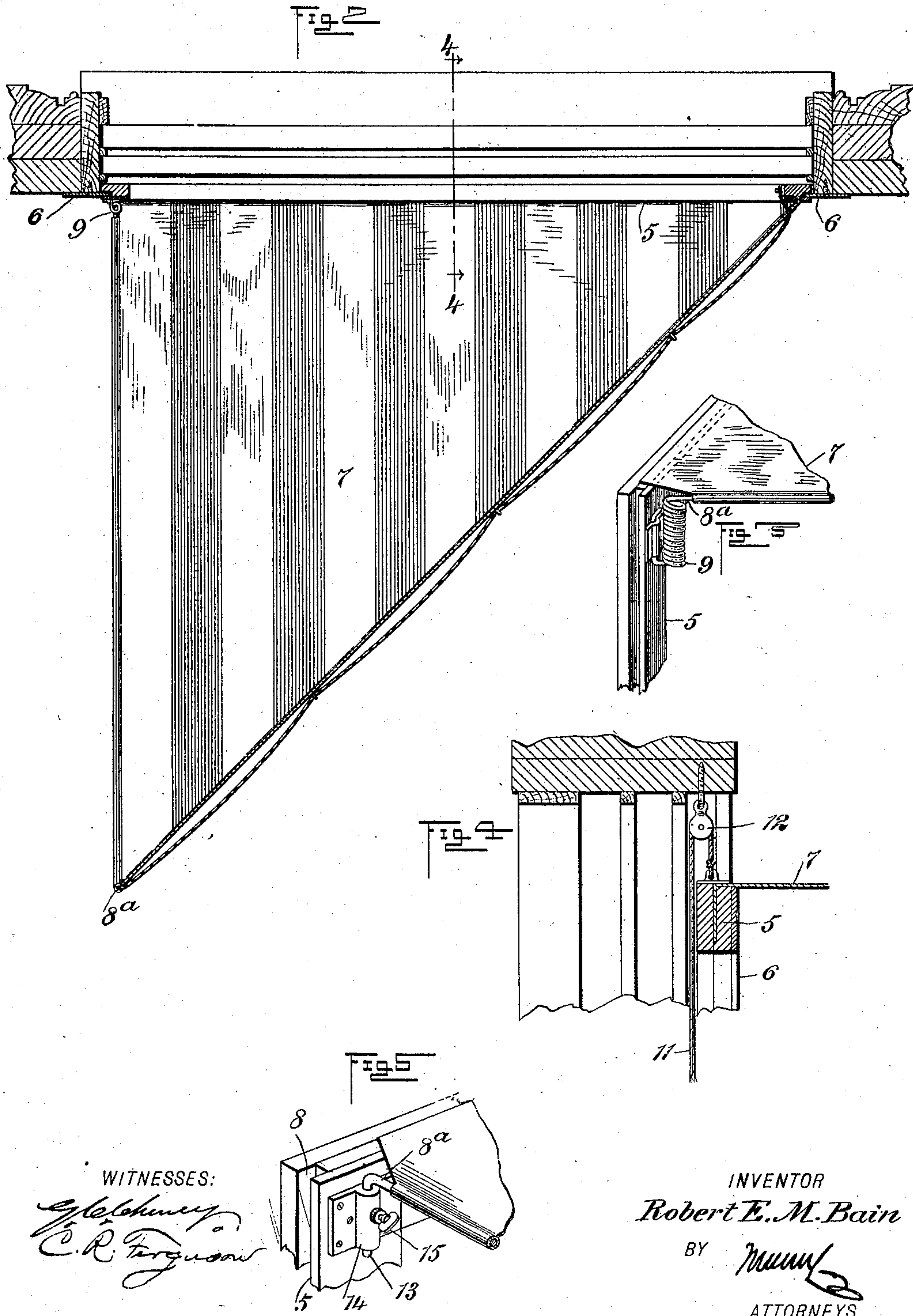
Patented Dec. 30, 1902.

R. E. M. BAIN.  
VENTILATOR.

[Application filed Aug. 26, 1902.]

(No Model.)

2 Sheets—Sheet 2.



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# UNITED STATES PATENT OFFICE.

ROBERT EDWARD MATHER BAIN, OF ST. LOUIS, MISSOURI.

## VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 717,319, dated December 30, 1902.

Application filed August 26, 1902. Serial No. 121,041. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT EDWARD MATHER BAIN, a citizen of the United States, and a resident of St. Louis, in the State of Missouri, have invented a new and Improved Ventilator, of which the following is a full, clear, and exact description.

This invention relates to improvements in ventilators designed to be attached to a window-casing to direct or force air into a room through the open window; and the object is to provide a ventilator of simple construction so arranged that it may be moved to the upper or lower portion of a window, as desired, and that may be folded back when not in use.

I will describe a ventilator embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a ventilator embodying my invention. Fig. 2 is a section on the line 2 2 of Fig. 1. Fig. 3 is a detail in perspective, showing one form of connection between the ventilator-bow and the frame. Fig. 4 is a section on the line 4 4 of Fig. 2, and Fig. 5 shows another means for attaching the ventilator to its frame.

Referring to the drawings, 5 designates a frame movable up and down in relation to a window-casing and carrying the hood-shaped ventilator. Attached to the vertical members of the window-frame at the outer side are guide-plates 6, which enter channels 8, formed in the vertical members of the frame 5.

The ventilator consists of a hood 7, of any suitable material—such, for instance, as canvas or awning material—or it may be formed of metal or wooden slats designed to fold one upon another, similar to Venetian blinds. The front or open end of the hood is attached to a metal bow 8<sup>a</sup>, having swinging connection with one side of the frame 5. The opposite edge of the hood material is attached to a vertical rail of the frame, while the upper and lower edges are attached to the upper and lower rails or members of the frame.

The ends of the bow 8<sup>a</sup> are connected to spiral springs 9, which are attached to the frame 5. These springs obviously will move the

hood to its open position, as indicated in Fig. 1, when the same is released by unloosening the cord 10, attached to the bow 8<sup>a</sup> and extended along the hood and then down the window-casing. This cord obviously may be used for moving the hood to folded position when not desired for use.

The frame carrying the ventilator may be moved forward by any desired means. I have here shown a cord 11 as attached at one end to the frame and passing over a pulley 12, connected to the upper portion of the window-frame. By drawing upon the cord 11 the frame and ventilator may be raised, and upon releasing the cord the ventilator will move downward by gravity. It is designed that the opening of the ventilator shall be placed in a general direction of the wind. If it is desired to reverse the ventilator, a fastening screw or screws of one of the guide-plates 6 may be removed, so that said guide-plate may be swung outward and the frame 5 taken out and reversed.

While I have shown and described the device as particularly useful in house ventilation or for directing cool air therein, it may be used to direct hot air into a drying-chamber or the like.

In Fig. 5 I have shown another means for attaching the bow 8<sup>a</sup> to the frame. In this example the ends of the bow are turned inward, as at 13, to engage in socket members 14, attached to the frame, and the bow may be rigidly held as adjusted by means of thumb-nuts 15, operating in said socket members.

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

1. A ventilator, comprising a frame, a folding hood attached to said frame, and a bow having swinging connection with the frame at one side, and to which the open end of the hood is attached.

2. A ventilator comprising a frame, arranged to move vertically on a window-casing, a bow having swinging connections with said frame at one side, and a hood of foldable material attached to said bow and also attached to said frame.

3. A ventilator designed to be attached to a window-casing, comprising a frame having a sliding connection with the window-casing,

a bow having swinging connection with the frame at one side, a hood of flexible material attached to said bow and to the frame, and means for moving the ventilator vertically.

5 4. A ventilator designed to be attached to a window-casing, comprising a frame having channels in its vertical side portion, guide-plates secured to the window-casing and engaging in said channels, a bow having spring  
10 connection with said frame, and a flexible material attached to said frame and also attached to the bow.

5. A ventilator designed to be attached to a window-casing, comprising a frame having  
15 its vertical rails provided with channels,

guide-plates secured to the window-casing and engaging in said channels, a bow, coiled-spring connections between the ends of said bow and the frame, and a hood of flexible material attached with its forward or open 20 end to said bow and having its opposite end attached to the frame, and also having its upper and lower edges attached to the frame.

In testimony whereof I have signed my name to this specification in the presence of 25 two subscribing witnesses.

ROBERT EDWARD MATHER BAIN.

Witnesses:

HUGO KINTSCH,  
CYRIL CHADWICK.