No. 837,302. PATENTED DEC. 4, 1906.

J. HORSFIELD.

WINDOW VENTILATOR.

APPLICATION FILED JULY 17, 1905.

Fig. 1.

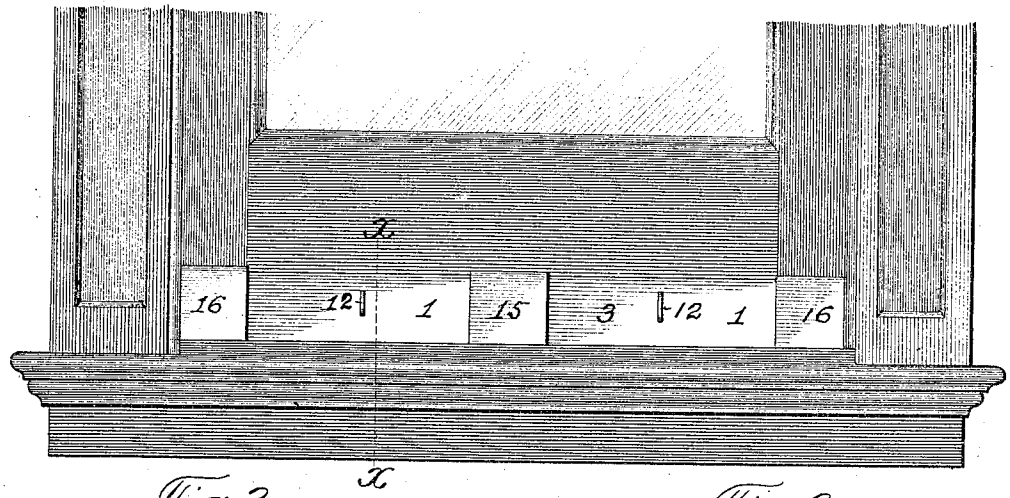


Fig. 2.

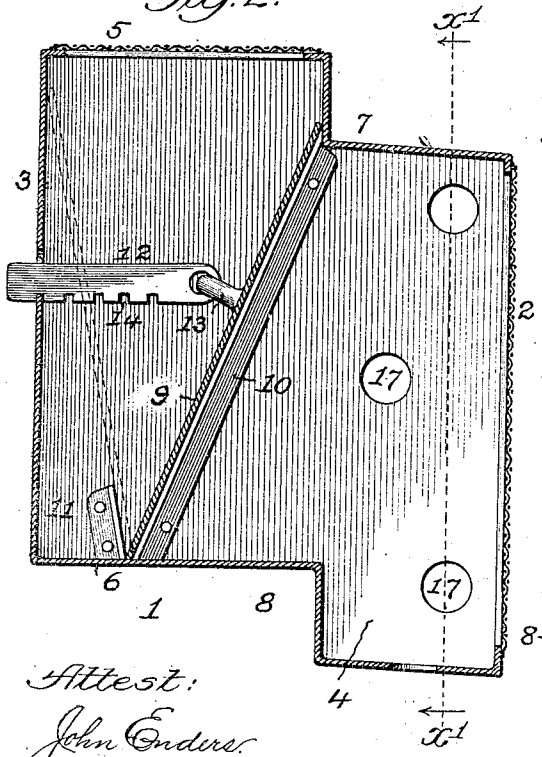
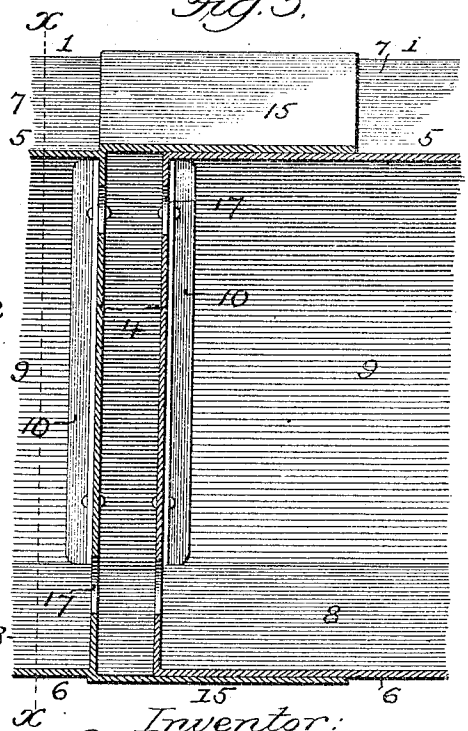


Fig. 3.



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WINDOW-VENTILATOR.

No. 837,302. Specification of Letters Patent. Patented Dec. 4, 1906.

Application filed July 17, 1905. Serial No. 269,937.

To all whom it may concern:

Be it known that I, JOHN HORSFIELD, a citizen of the United States of America, and a resident of Traverse City, in the county of Grand Traverse and State of Michigan, have invented certain new and useful Improvements in Window-Ventilators, of which the following is a specification.

This invention relates to that class of window-ventilators which are located between the lower end of the bottom sash and the sill of a window-frame, and has for its object to provide a simple and efficient structural arrangement and combination of parts rendering the appliance easy of application and adapting the same for ready adjustment to different widths of windows and with which entrance of rain and the like is effectually prevented, all as will hereinafter more fully appear and be more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a general elevation illustrating the ventilator in place in a window-frame. Fig. 2 is an enlarged detail transverse section of the ventilator at line $x\,x$, Figs. 1 and 3. Fig. 3 is an enlarged detail longitudinal section at line $x'\,x'$, Fig. 2, illustrating the adjustable connection between a pair of the casings of the ventilator.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 is an oblong and substantially rectangular box or casing having vertical front and rear walls 2 and 3, vertical end walls 4, and top and bottom walls 5 and 6. Such box or casing in a simple form of the present invention will constitute the entire housing of the ventilator as adapted for smaller and standard widths of windows. In a more universal form of the ventilator a plurality of such boxes or sections are connected together end to end in manner hereinafter described to form a ventilator of the extended length required in windows of a large width.

In the present improvement the vertical front wall of the casing 1 is formed of perforated material and provides an extended horizontal inlet to the casing for the air used in ventilating a room or apartment. Similarly, the top wall 5 of the casing has its rear portion formed of perforated material and provides a vertical outlet for the air from the casing into the room or apartment to be ventilated.

7 is an offset or recess in the forward and upper edge of the casing adapted to receive the lower end of the bottom sash-rail when the appliance is in place in a window-frame and affords a ready and substantial means for securing the appliance in place.

8 is an offset or recess in the lower or rear edge of the casing adapted to fit the stop-bead and sill of the window-frame to assist in maintaining the appliance in place in a substantial and rain-proof manner.

9 is a damper extending the length of the casing and fulcrumed at its lower end within said casing in sockets formed by angularly-arranged webs or flanges 10 and 11 on the end walls of the casing, as illustrated in Figs. 2 and 3. The upper end of said damper is free to vibrate in a path immediately beneath the perforated portion of the top wall 5 of the casing and in its forward position, as illustrated in full lines in Fig. 2, rests against the wall of the offset 7 and in such position is adapted to prevent any passage of the air from the aforesaid air-inlet of the casing to and through the aforesaid air-outlet of the casing. With the upper end of said damper in its rearward position free passage is afforded for the air from the aforesaid inlet to the outlet of the casing.

12 is a draw-bar having connection with the damper by a pivot-eye or loop 13. Such draw-bar extends out horizontally through an opening in the rear wall 3 of the casing for manipulation by hand and is provided with a series of notches 14, adapted to engage the lower edge of the opening through which the bar passes to lock the bar, and with it the damper 9, at any required adjustment.

15 is a telescopic extension or sheath secured to one end of a box or casing 1 for the reception of an adjacent end of a companion box or casing, as illustrated in Fig. 3, and adapted to afford a longitudinal extension or contraction between the parts in applying the same to different widths of windows.

16 represents sleeves fitting one or both ends of a casing in a manner to permit of a slip adjustment of said sleeves. By a longitudinal arrangement of such sleeves the adjustment of the appliance to windows of different widths is assisted to a greater range when used in connection with the sleeve 15, above described. When used on the respec-

tive ends of a single casing, the sleeves are adapted to afford the entire longitudinal adjustment.

17 represents openings in adjacent walls of a pair of coupled casings to afford communication between the interior of the two casings, so that with the damper of one casing closed and the damper of the other casing opened the air passing through the inlets of both casings may pass through the single outlet of the casing having its damper open.

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

1. In a window-ventilator of the type herein described, the combination of a box-like casing adapted to fit between the lower sash and sill of a window and provided with a perforated outer wall and a top wall the rear portion of which is perforated, a vibratory damper extending the length of the casing and adapted to control the passage of air through the casing, inclined webs or flanges on the inside of the casing forming seats for the sides of the damper and a fulcrum-socket for the lower end of the damper, and means for manually operating the damper, substantially as set forth.

2. In a window-ventilator of the type herein described, the combination of a box-like casing formed with offsets at its upper forward edge and lower rear edge adapting the casing to fit between the lower sash and sill of a window and provided with a perforated outer wall and a top wall the rear portion of which is perforated, a vibratory damper extending the length of the casing and adapted to control the passage of air through the casing, inclined webs or flanges on the inside of the casing forming seats for the sides of the damper and a fulcrum-socket for the lower end of the damper, and means for manually operating the damper, substantially as set forth.

3. In a window-ventilator of the type herein described, the combination of a pair of box-like casings formed with offsets at their upper forward edges and lower rear edges adapting the casings to fit between the lower sash and the sill of the window, each casing having a perforated outer wall and a top wall the rear portion of which is perforated, an extension or sheath attached to the end of one casing and adapted to receive the adjacent end of a companion casing, a vibratory damper extending the length of each casing and adapted to control the passage of air through the casings, and means for manually operating the dampers, the adjacent end walls of the respective casings being perforated, substantially as set forth.

Signed at Chicago, Illinois, this 15th day of July, 1905.

JOHN HORSFIELD.

Witnesses:
ROBERT BURNS,
M. H. HOLMES.