No. 793,015. PATENTED JUNE 20, 1905.

G. MOULTON.

VENTILATOR.

APPLICATION FILED OCT. 9, 1903.

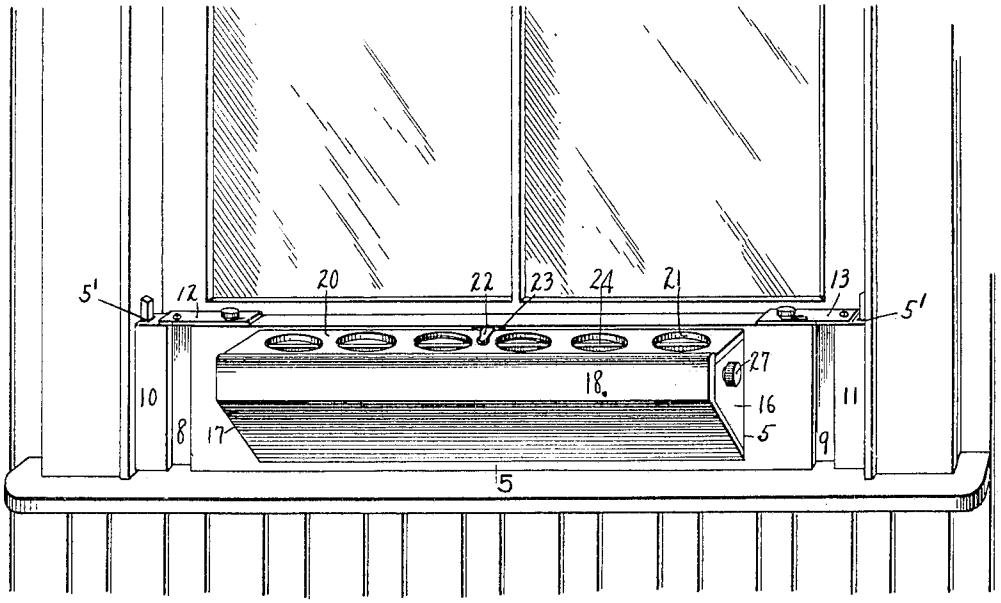


Fig. 1.

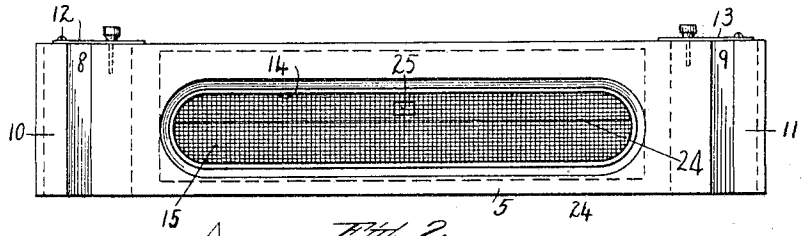


Fig. 2

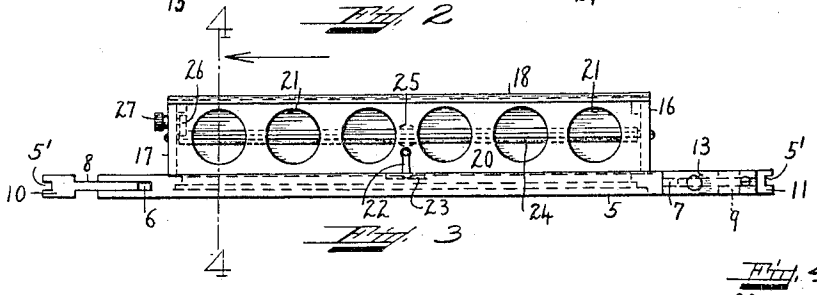
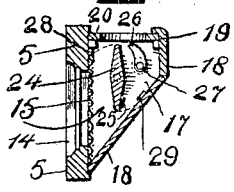


Fig. 3.

Fig. 4.



Witnesses:

H. E. Kemick.

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Inventor:

Gilman Moulton

per Eugene Humphrey

His atty.

No. 793,015. Patented June 20, 1905.

UNITED STATES PATENT OFFICE.

GILMAN MOULTON, OF SOMERVILLE, MASSACHUSETTS.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 793,015, dated June 20, 1905.

Application filed October 9, 1903. Serial No. 176,432.

To all whom it may concern:

Be it known that I, GILMAN MOULTON, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Ventilators, of which the following is a specification.

This invention relates to certain new and useful improvements in ventilating devices designed more particularly to be placed in the windows of apartments to admit fresh air therein.

The invention has for its object to provide means whereby fresh air may be thus admitted under mechanical direction and regulation and which will also automatically prevent high winds from forcing dirt or dust through the air-passages of the ventilator into the room.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved ventilator applied to a window. Fig. 2 is a side elevation illustrating the inlet-opening. Fig. 3 is a top plan view; and Fig. 4 is a sectional view on line 4 4, Fig. 3, looking to the left.

Referring to the drawings, 5 designates a suitable span-board adapted to extend across the lower part of a window and provided with end grooves 5', adapted to interlock with vertical strips attached to the sides of the window-frame, whereby the ventilator is held in place, or, if desired, said board may be provided with deeper end cuts or grooves 6 7, into which may be fitted tenons 8 9 of extension-pieces 10 11, the latter being provided with suitable grooves adapted to engage the vertical strips of the window-frame above mentioned. These extension-pieces are secured to the main board after adjustment by means of strips 12 13, extending over the tops thereof, whereby the parts are connected and the spaces between them are covered when the extensions are drawn out. Said strips are secured in position by any suitable means.

My improved ventilator is so arranged in the window that the lower sash of the latter, when raised and lowered, plays up and down behind the span-board 5, as clearly illustrated in Fig. 1. Said board has an opening 14, covered by a wire screen 15, secured to the inner face of the board. A deflecting-box is formed over this screened opening, said box having inwardly-projecting end pieces 16 17 secured to the face of the board near the ends of the opening 14. The inner edges of these end pieces are formed to provide a curved or angular casing 18 when properly covered, the inner face of said casing serving to deflect the incoming current of air entering through opening 14 and directing it through the outward openings in the top of the box.

The casing 18 is provided with a groove 19, in which slides a lid 20, provided with a series of circular air-vents 21, said lid being held in place by means of a catch 22, pivotally attached thereto and having its free ends turned into and out of an indentation 23 in the board 5. Within casing 18 is pivoted a shutter 24, designed to exclude dirt or dust, said shutter having a preponderant or weighted side formed in any suitable manner, a weight 25, secured to one edge thereof, being illustrated in the drawings. By this arrangement the weighted portion of the shutter holds the latter normally open, and fresh air is freely admitted into the room through the ventilator. The weight of the shutter is so arranged, however, that a sudden gust of wind or an excessively-strong inward current powerful enough to overcome the preponderance of the weight will for the time close the same, thus automatically excluding the entrance of dirt and dust, which often accompany high winds. The position of shutter 24 may also be positively adjusted in a partially-closed position or wholly so by means of an arm 26, mounted to rotate in the end 17 and provided with a knob 27, whereby the same may be readily turned, said arm being provided with a detent adapted to press against the upper side of shutter 24 and close the same against the influence of the weight 25. When closed, the edges of the shutter will strike strips of felt 28 29, which serve to effect an air-tight closure of the passage.

The advantages of my improved ventilator will be at once apparent to those skilled in

the art to which it appertains. It will be particularly observed that the same may be readily applied to a window or removed therefrom and any collection of dirt may be easily removed by uncovering the box and brushing it out. It will also be observed that the volume of air entering said ventilator may be readily regulated and that sudden gusts of wind are prevented from having any deleterious effect within the apartment.

I claim as my invention—

1. A ventilator comprising a span-board having an opening therein, a deflecting box or casing supported by said board and provided with outlet-openings, a valvular shutter mounted in said box or casing and having a preponderant side, and means for positively adjusting said shutter.

2. A ventilator comprising a span-board having an opening therein, a deflecting box or casing supported by said board, a sliding top for said casing provided with outlet-openings, a shutter pivotally mounted in said box or casing and having a preponderant side, and means for positively adjusting said shutter.

3. A ventilator comprising a span-board having an opening therein, a deflecting box or casing supported by said board and provided with outlet-openings, a valvular shutter mounted in said box or casing and having a preponderant side, and an arm mounted in said casing and provided with a detent adapted to engage said shutter.

4. A ventilator comprising a span-board having an opening therein, a deflecting box or casing supported by said board and provided with outlet-openings, a valvular shutter mounted in said box or casing and having a weight secured to one side thereof, and adjusting means adapted to engage the opposite edge of said shutter.

5. A ventilator comprising a span-board having an opening therein, extension-pieces for said board, a deflecting box or casing supported by said board and provided with outlet-openings, a valvular shutter mounted in said box or casing and having a preponderant side, and means for positively adjusting said shutter.

GILMAN MOULTON.

Witnesses:

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