No. 813,737. PATENTED FEB. 27, 1906.

W. A. RALSTON.

WINDOW VENTILATOR.

APPLICATION FILED FEB. 2, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

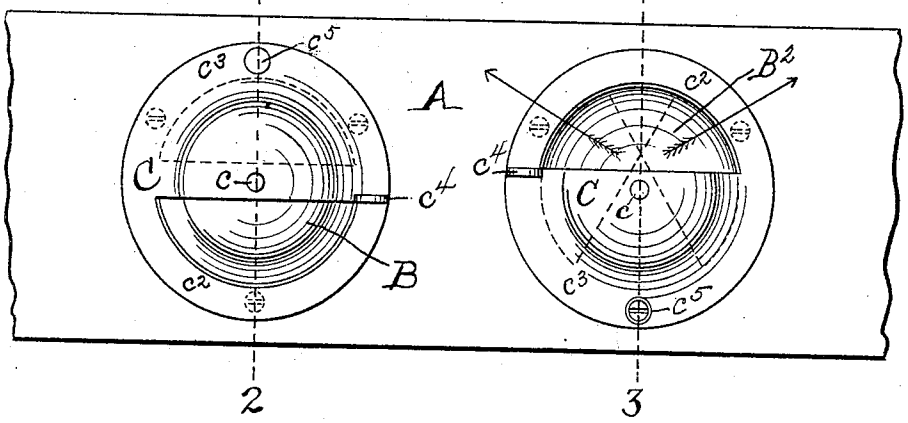


Fig. 2.

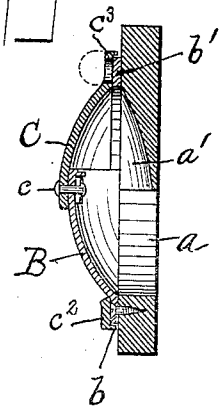


Fig. 3.

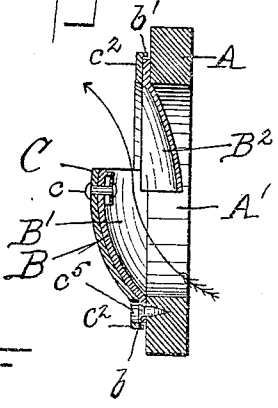
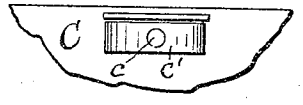


Fig. 4.



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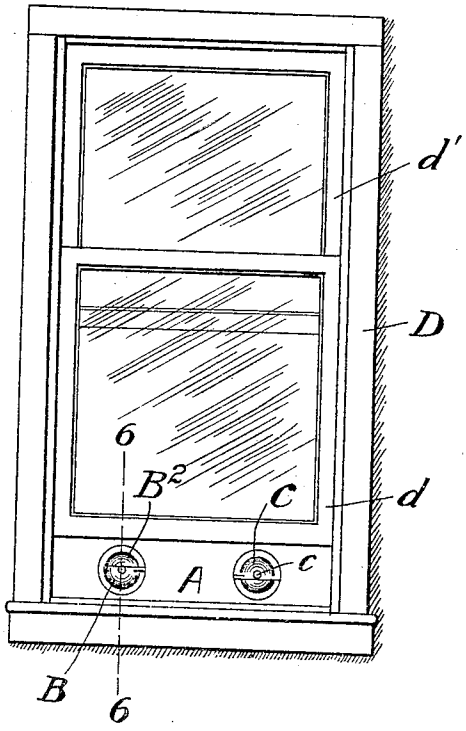
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2 SHEETS—SHEET 2.

Fig. 5.



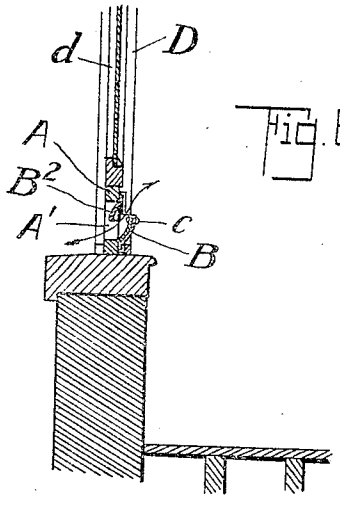


Fig. 6.

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WILLIAM A. RALSTON, OF ROCHESTER, NEW YORK, ASSIGNOR TO CALDWELL MANUFACTURING COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

WINDOW-VENTILATOR.

No. 813,737. Specification of Letters Patent. Patented Feb. 27, 1906.

Application filed February 2, 1904. Serial No. 191,658.

To all whom it may concern:

Be it known that I, WILLIAM A. RALSTON, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Window-Ventilators, of which the following is a specification.

This invention relates to window-ventilators, and is particularly intended for use in the window by means of a board set in the window-frame below the lower sash and upon which said sash rests.

In the drawings, Figure 1 is a front elevation of two ventilators embodying this invention, one of which is open and the other of which is closed. Fig. 2 is a vertical section on the line 2 2 of Fig. 1. Fig. 3 is a vertical section on the line 3 3 of Fig. 1. Fig. 4 is a view of a detail, and Fig. 5 is a front elevation, of a window supplied with this invention. Fig. 6 is a vertical section on the line 6 6 of Fig. 5.

A is the base or board on which the ventilators are fastened. In the form shown in Fig. 2 a semicircular hole a is cut through the board and above the base A is hollowed into a concave surface a'. Over the hole a and the concave a' is fastened the ventilator device, consisting of a semicircular lower stationary concave plate or portion B with its concave side opposite the hole a. The portion B occupies only little more than half the interior surface of the whole ventilator device and has a flange b extending from the concave portion B and a semicircular ring b', together with the flange b, to fill out the circle or total contour of the portion B. To the concave stationary portion B is fastened the semicircular concave movable portion or plate C, which is pivoted to the portion B in any suitable manner, such as by the pivot c, extending through the block c'. The stationary portion C has a concave part extending over only a little more than half the interior surface of the movable portion and is filled out by a semicircular ring c^2. The contour of the two parts is such that the ring c^2 and flange c^3 of the movable concave part C fits upon the flange b and ring b' and the concave part B of the lower and stationary part of the device. The movable part of the device has a handle c^4. It will be seen that by rotating the movable part C an opening may be made from the outer air through the hole a and upper open portion of the stationary part B of the ventilator or by rotating the part C the communication with the outer air may be closed to any degree that may be desired.

As a convenient mode of manufacturing the flange c^3 or ring c^2 of the outer and movable part of the device may have one or more holes c^5 bored through them through which the screws D may be inserted for fastening the stationary part B to the base A. Thus the two parts of the ventilator may be manufactured complete and may be fastened to the ventilator without being taken apart.

In the form of device shown in Fig. 3 a circular hole A′ is bored through the board A, and the stationary part of the ventilator device has a concave part B^2 toward the concave of the movable part C and the concavity B′, facing toward the hole A′ through the base. In other respects the construction is identical with the ventilator first described.

When the part C is fully opened, leaving the maximum passage for air, it will be noticed that the air must rise in the room where the device is situated and cannot blow horizontally to make an unpleasant draft. So, too, if the part C is rotated to the position shown by dotted lines in the right-hand device in Fig. 1 the draft may be compelled to blow upwardly and at an angle instead of straight through into the room or compartment. The reason of this is that the air is reflected by the concave B or B′ to the concave a' or B^2 and then will take the angular direction, bisecting, as it were, the angle of the edge of the stationary part B or B′ with the edge of the movable part C. Thus, as indicated in Fig. 1 at the right hand, the draft may be directed as desired.

The block c' is, in fact, a spring, which maintains a tension on the piece C and keeps the joint tight.

In Figs. 5 and 6 is shown the window-ventilator set in a window. The lower sash d is raised in the window-casing D, while the upper sash d' remains unmoved. The board or support A is put in place with the concave plates on the inner side and the lower sash d

is closed upon the top of the board or support A. In this way it is seen that the draft through the ventilator is compelled to move upward in the room.

What I claim is—

1. A ventilator comprising two semicircular plates pivoted together, and a base to which the inner or under one of said plates is fastened; said base having an opening through it in line with the fixed semicircular plate and provided above the opening with a concave surface opposite the movable semicircular plate; whereby the air passing through the base will strike said fixed plate and concave surface and be upwardly and inwardly deflected.

2. A ventilator comprising a base provided with a semicircular opening therethrough and having a concavity *a'* thereover, a stationary semicircular concave plate secured to the base over its semicircular opening, and a movable semicircular plate pivoted to said fixed plate over the said concavity for the purpose described.

WILLIAM A. RALSTON.

Witnesses:

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