

G. R. BUFFHAM.
Ventilator for Window.

No. 205,999.

Patented July 16, 1878.

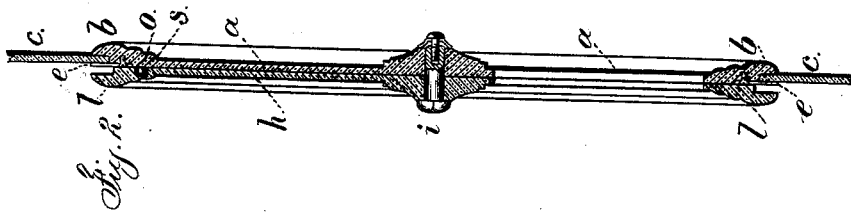
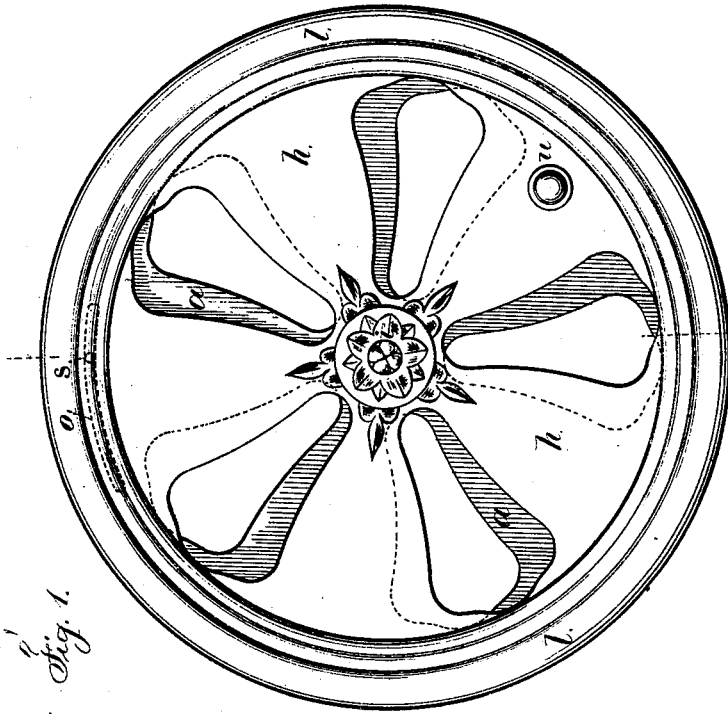


Fig. 2.



Witnesses

Chas. H. Smith
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Inventor

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UNITED STATES PATENT OFFICE.

GEORGE R. BUFFHAM, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN VENTILATORS FOR WINDOWS.

Specification forming part of Letters Patent No. 205,999, dated July 16, 1878; application filed June 28, 1878.

To all whom it may concern:

Be it known that I, GEORGE R. BUFFHAM, of Brooklyn, in the State of New York, have invented an Improvement in Ventilators for Windows, of which the following is a specification:

This ventilator is intended to be secured into an opening cut in the glass of the window, and to be made of glass, so as not materially to obstruct the light.

Ventilators have heretofore been adapted to the glass; but the same were liable to fall if the cement became injured.

My invention is made for preventing the ventilator becoming detached from the glass or falling and being broken or injured; also, for increasing the bearing for the pivot-pin to render the same more steady, and to ornament the surfaces. I also make a concealed stop to limit the movement of the ventilator in opening and shutting the same.

This ventilator is also constructed in such a manner as to hide the joint between the ventilator and the glass.

In the drawing, Figure 1 is an elevation of the ventilator, and Fig. 2 is a vertical section of the same.

The plate *a* is provided with an offset-flange, *b*, around its edge, and such plate should be the thickness, or nearly so, of the window-glass *c*. There is an opening cut in this glass *c* large enough to receive the plate *a*, with the flange *b* cemented to the outside surface of the glass.

The sheet-metal clip-plates *e* are held in place by screws that pass through the plate *a*, and the ends of the clips catch upon the back surface of the glass *c*, so as to firmly hold the parts and prevent the plate *a* becoming separated from the glass *c*. In this glass plate *a* there are openings through which the air passes to ventilate the room.

A second plate, *h*, similar to the plate *a*, is also provided with corresponding openings for the air to pass through, and there is a central pivot or pin, *i*, that passes through the two plates, and upon which the plate *h* can be partially revolved in opening and closing the

ventilator. The glass of these plates *a h* is made of increased thickness around the pivot-pin *i*, to increase the strength and form an ornament, and the same extends sufficiently along the surfaces of the plates *a* and *h* to strengthen the glass between the respective openings.

The flange *l* of the plate *h* extends over the surface of the glass *c*, so as to cover and conceal the joint between the said glass *c* and the ventilator-plate *a*, and also act to hold the ventilator from falling if the plate *a* becomes loose.

In the plate *h* there is a groove, *o*, formed as an arc of a circle. It does not pass through said plate, but is at a place where the material is sufficiently thick to obtain the necessary depth of groove, and hence such groove is not exposed or visible; and there is a projection, *s*, upon the plate *a*, that enters such groove and limits the amount of the movement in turning the plate *h* upon the plate *a* in opening or closing the ventilator.

The knob *u* projecting from the plate *h* allows of the plate *h* being moved.

I claim as my invention—

1. The plate *a*, having a flange, *b*, around its edge, by which the ventilator can be cemented to the window-glass, in combination with the sheet-metal clips *e* and screws, substantially as specified.

2. The window-glass ventilator made by combining the flanged plate *a b* with the plate *h*, both having ventilating-openings, and said plate *h* lapping over the window-glass, so as to prevent the ventilator becoming disconnected, as set forth.

3. In a window-ventilator, the concealed groove *o* in the plate *h*, passing partly through such plate, in combination with the plate *a* and stud *s*, substantially as set forth.

4. In the window-glass ventilator, the circular plates *a* and *h*, having the ventilating-openings, and of increased thickness around the pivot-pin, as set forth.

Signed by me this 22d day of June, 1878.

GEORGE R. BUFFHAM.

Witnesses:

A. D. SMITH,
WM. BURK.