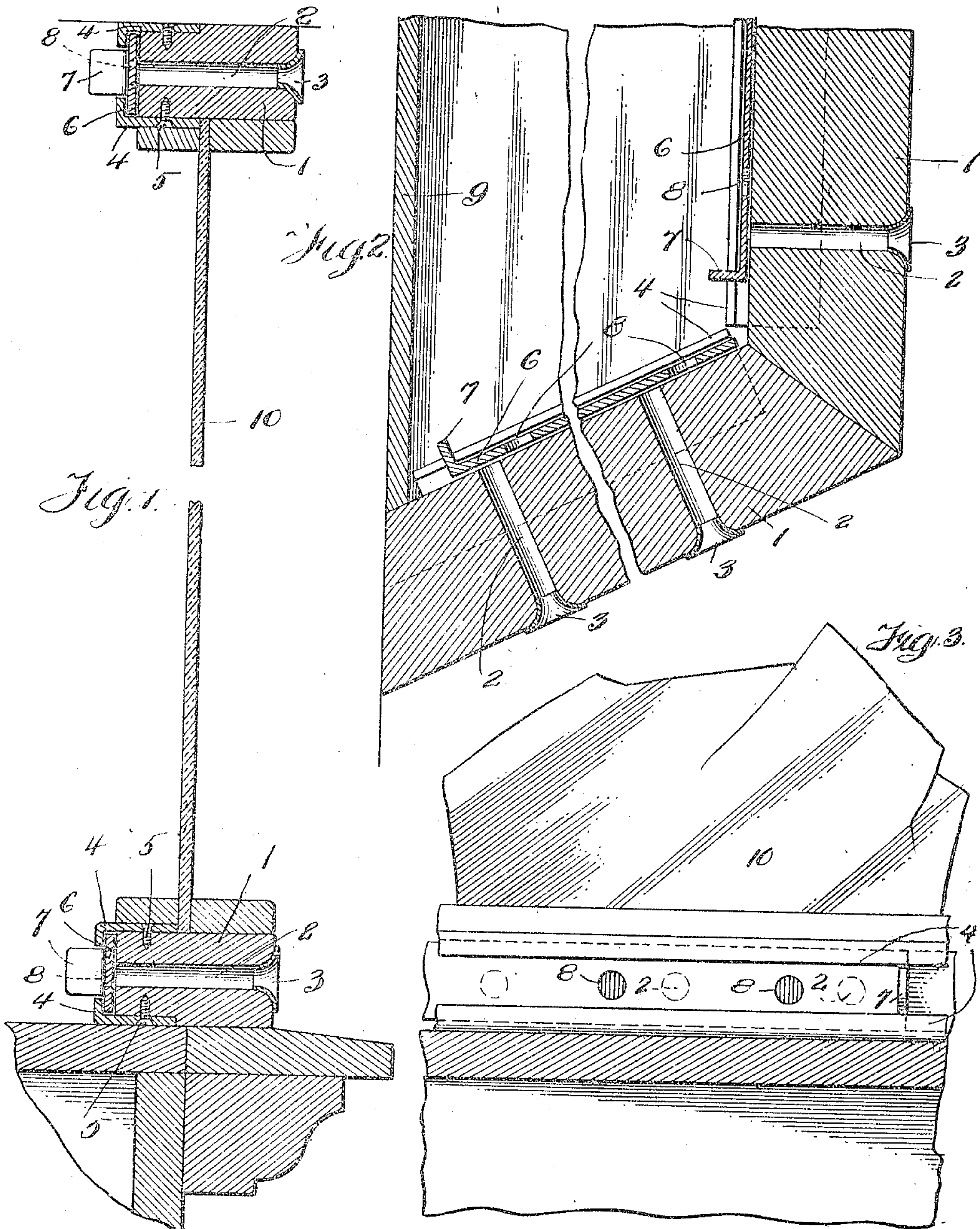


No. 875,300.

PATENTED DEC. 31, 1907.

J. F. SYKES.
VENTILATOR FOR WINDOWS.
APPLICATION FILED APR. 11, 1907.



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JAMES F. SYKES, OF PITTSBURG, PENNSYLVANIA.

VENTILATOR FOR WINDOWS.

No. 375,300.

Specification of Letters Patent.

Patented Dec. 31, 1907.

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To all whom it may concern:

Be it known that I, JAMES F. SYKES, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Ventilators for Windows, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in ventilators for windows, and has particular relation to the use of such structures in display windows of stores and at other points where liability of sweating and freezing is present.

One of the objects of my invention is the provision of a ventilator for controlling the temperature on the inner side of a window, of such construction as will enable it to be readily and quickly manipulated from the interior of the window to control the quantity of air admitted.

A further object is the provision of a device of this character which requires a minimum number of parts, each of which is relatively light in weight, the manner of mounting the parts providing for stability, thereby providing a construction which can be manufactured with a minimum of cost, which will be neat and attractive in appearance, durable in construction, simple and efficient in operation, and which can be readily applied to position.

To these and other ends, the nature of which will be readily understood as the invention is hereinafter disclosed, said invention consists in the improved construction and combination of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

In the drawings, in which similar reference characters indicate similar parts in each of the views,—Figure 1 is a vertical sectional view of a window-frame provided with ventilators in accordance with my invention. Fig. 2 is a horizontal sectional view of a portion of an angular window-frame, each of the side portions of the frame being shown as provided with an independent ventilator. Fig. 3 is a view of the inner side of a window frame, the exposed parts of the ventilator being shown in front elevation.

The structure of the ventilator consists of two guides 4, and the slides 6, together with suitable protecting members or sleeves 3.

These parts are applied to suitable parts of the window frame, such as the rail 1, through which extend a plurality of openings 2, the outer ends of which receive the protecting members 3.

The specific construction and relative arrangement of that portion of the ventilator located on the inner side of the window, is as follows: 4, 4, designate two guides each of which is angular (L-shaped) in cross-section, one of the angle sides (the longer) being secured to the rail 1, the plane of said side being at right angles to the plane of the face of the rail, while the other angle side is spaced from and extends in a plane parallel with said face, the angle sides of the opposing guides which are parallel with the face of the rail-face being in alinement with each other, while the other angle sides extend in planes parallel with each other, this construction providing a slide-way between the rail face and the inner faces of the alined angle sides of the guides. 6 designates the slide which is mounted in said slide-way, said slide having its end or ends bent up, as at 7, to form handles or grips for moving the slide within the slide-way. Each slide is provided with a plurality of openings 8, corresponding in number and size to the openings 2 of the rail 1, and so positioned relatively to each other as to register with the openings 2 when the maximum quantity of air is to be permitted to enter the window through the ventilator.

The guides 4 are secured in position by screws 5, or other suitable securing means, said screws extending through the parallel angle sides of the guides and therefore at direct right angles to the direction of any pressure which might be placed on the slide through the openings 2, when the slide is closed, hence, a positive holding means for the guides is provided, being such as to eliminate the necessity for the use of a heavy and cumbersome form of guide. And the fact that the guides are independent or separate from each other permits of their use in connection with a slide of any desired width, since the guides, being disconnected from each other, may be placed in any desired spaced relationship; and obviously, the use of the guides of similar cross-section permits of a guide being used on either side, so that there is no requirement of the manufacture of a special form of guide-way, it being necessary only to form a long strip of the required cross-section from which guides of

suitable length may be taken in suitable manner. The particular form of the guides is also advantageous inasmuch as they may be readily secured in position in such manner that the sides of the guides within which the screws are located may be protected by suitable means, such for instance as a strip 15, as shown in Fig. 1, while the opposite angle side will be seated in a recess formed in the under face of the rail, thereby practically preventing access to the screws excepting from the inside of the window and then only by removing a portion of the frame-work.

The ventilators may be placed at suitable points in the window frame. For instance, in Fig. 1, they are shown as applied at the top and bottom of the window, thereby permitting of the formation of a circulation through the ventilators on the inner side of the glass pane 10, to prevent the latter sweating or becoming frosted, the temperature on the inner side of the pane being approximately that of the outer side. Where the display window is in the form of an extension, the window being closed by an inside sash 9, the liability of sweating or frosting is especially liable and I therefore, in such cases, preferably place a sufficient number of ventilators to insure the formation of a circulation therein, the ventilators being located on each of the angular sides of the window.

As heretofore pointed out, the construction is simple and, owing to the form of the guides and the manner in which they are secured in position, the parts may be properly fashioned at the place where they are being applied, the workman requiring only guide strips and slide strips and protecting members 3, he being able, with his tools, to prepare the guides and slides of proper length and secure them in position in a stable manner, by means of ordinary screws. It will be understood, however, that, if desired, the exposed faces of the guides, as well as the slides may be ornamented in any preferred manner.

Having thus described my invention, what I claim as new is:—

1. The combination with a window frame having a plurality of openings extending therethrough, of independent spaced guides carried by the frame in opposed relation, each guide being angular in cross-section, said guides having one of the angle sides extending in parallelism, said angle-sides being disposed relatively to said openings in such manner as to present the inner ends of the openings between and spaced from said angle-sides, the adjacent angle sides being in alinement and spaced from the face of the

frame and from the inner ends of said openings to provide a slide-way, means for securing the parallel angle sides to the frame, and a slide mounted in said slide-way, said slide having a plurality of openings corresponding in number and position to the openings of the frame.

2. In a window frame, the combination with a rail having a plurality of openings extending therethrough, of independent spaced guides carried by said rail, said guides extending over the inner face of the rail on opposite sides of and spaced from the rail openings, each guide being L-shaped in cross-section, and having one of its sides extending in a plane at right angles to the face of the rail, said side extending in a plane parallel with the axis of the rail openings, the other side of the guide being spaced from and extending parallel with said rail face and the inner ends of the openings, means for securing the first-named side of the guide to the rail, and a slide mounted between the rail face and the opposing faces of the guides, said slide having openings corresponding in number and position to the openings in the rail.

3. The combination with a window frame having ventilating openings extending therethrough, of a slide movable over said openings, said slide having openings corresponding in number and position to the ventilating openings, and independent means located on opposite sides of and spaced from the inner ends of said openings for retaining the slide in position over the ventilating openings, said means being carried by the frame and having portions thereof extending within the plane of the frame, said portions being concealed by such frame.

4. The combination with a window frame having ventilating openings extending therethrough, of a slide movable over said openings, said slide having openings corresponding in number and position to the ventilating openings, and guides for retaining the slide in position over said ventilating openings, said guides being located on opposite sides of and spaced from said openings, each guide being independent of and similar in cross-section to its complemental opposing guide, and each guide having a portion extending within the plane of the window frame, said portions being concealed by such frame, and means for securing the guides to the frames, said means being located within the concealed portion of the guides.

In testimony whereof I affix my signature in the presence of two witnesses.

JAMES F. SYKES.

Witnesses:

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A. J. TRIGG.