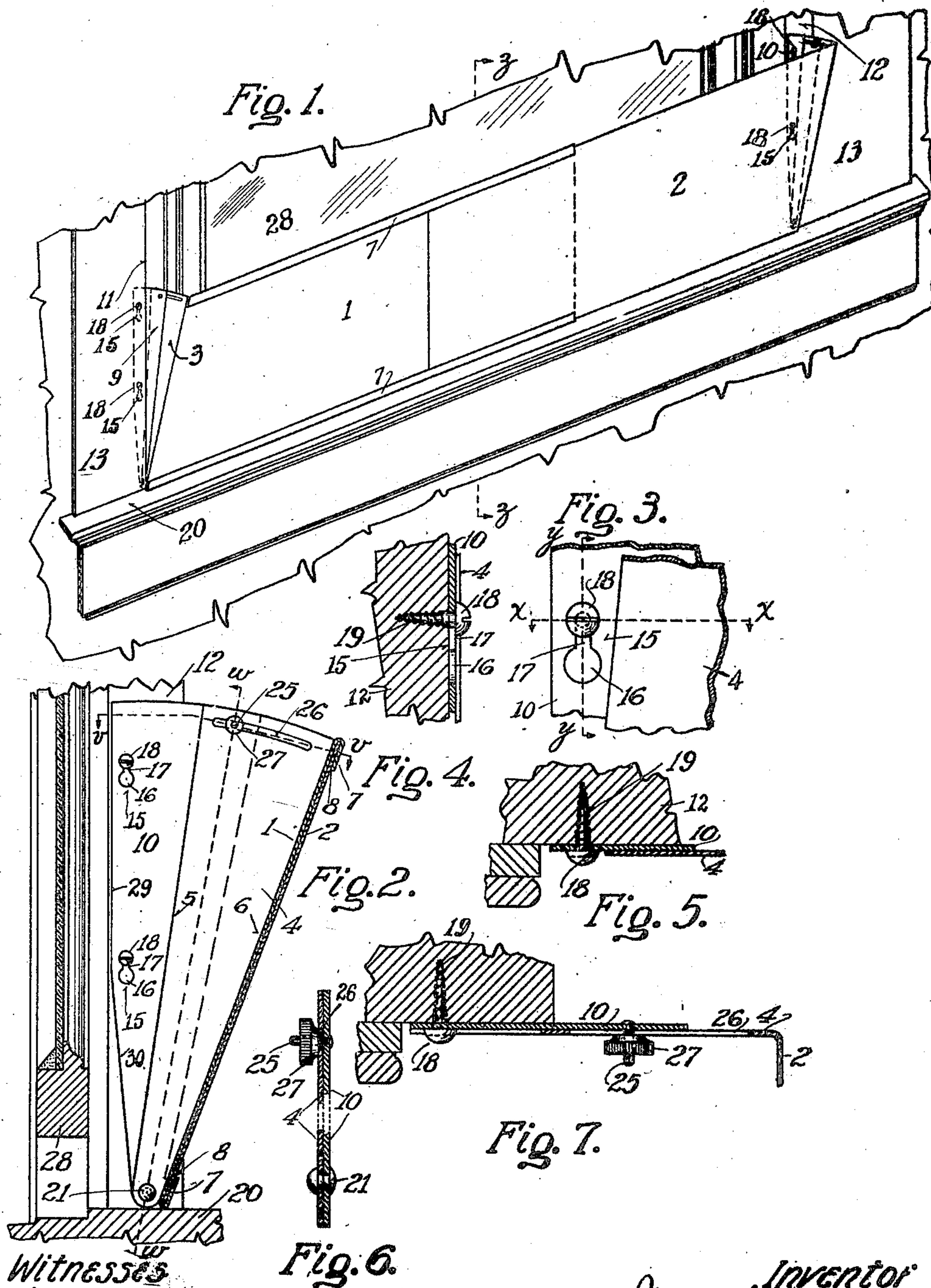


W. L. THORNE.
WINDOW VENTILATOR.
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963,831.

Patented July 12, 1910.



Witnesses

Lilian Burnett
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Fig. 6.

Fig. 7.

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UNITED STATES PATENT OFFICE.

WALTER L. THORNE, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-THIRD TO HARRY F. SIEBERN, OF CINCINNATI, OHIO, AND ONE-THIRD TO ALBERT N. SIEBERN AND ONE-THIRD TO LOUIS E. BROCKMANN, BOTH OF NORWOOD HEIGHTS, OHIO.

WINDOW-VENTILATOR.

963,831.

Specification of Letters Patent.

Patented July 12, 1910.

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To all whom it may concern:

Be it known that I, WALTER L. THORNE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Window-Ventilators, of which the following is a specification.

My invention relates to ventilators of the character of those applied to windows for deflecting the currents of air passing into the room so as to prevent direct contact thereof with the occupants of the room.

My invention consists in novel means whereby the ventilator is attached and detached and adjusted to various sizes of windows and for deflecting the currents of air to more or less extent, and the invention will be readily understood from the following description and claims, and from the drawing, in which latter:

Figure 1 is a perspective view of my improved device shown in connection with so much of a window-opening as is necessary to illustrate my invention. Fig. 2 is a vertical cross-section of the same on the line $z-z$ of Fig. 1. Fig. 3 is an enlarged front elevation of a detail showing the connection between the deflector and window-frame. Fig. 4 is a vertical cross-section of the same on the line $y-y$ of Fig. 3. Fig. 5 is a horizontal section of the same on the line $x-x$ of Fig. 3. Fig. 6 is a detail in section on the line $w-w$ of Fig. 2, showing the means of adjustment for the deflector-plates. Fig. 7 is a section on the line $v-v$ of Fig. 2, showing one end of the deflector.

My improved device comprises a plurality of relatively longitudinally slidable deflector-plates, shown at 1 2, which are provided with right-angular end-portions 3 4, shown bent from said plates at opposite ends thereof for forming flanges which taper toward their bottoms as shown by the angle between the edges 5 6 of said end-portions. The slidable connection between said plates is preferably accomplished by means of lips 7 on one of said plates for forming channels 8 between said lips and the body of said plate on which the lip is located, the other of said plates being slidable in said channels 8 for forming a telescoping construction for said deflector-plates.

9 10 are attaching-plates, which are re-

leasably secured to the respective side-walls 11, 12, of the window-frame 13 and act as supports for the deflector-plates. The attaching-plates are provided with apertures 15 comprising holes 16 from which slots 17 extend upwardly, the holes being sufficiently large to receive the heads 18 of screws 19 screwed into the side-walls 11 12 of the window-opening, the heads of said screws being distanced from said side-walls sufficiently to receive the thickness of the attaching-plates between them and the side walls, these attaching-plates being arranged to be received over the screw-heads by passing the holes 16 about said heads and then lowering the attaching-plates so that the walls of the slots 17 will be received about the shanks of the screws and be held in place by the heads of the screws, with the lowering ends of the attaching-plates adjacent to the sill of the window. The end-portions 3 4 are pivoted to the attaching-plates as shown by the pins 21.

25 is a screw on each of the attaching-plates which passes through the slot 26 in each of the end-portions 3 4, a nut 27 being received about said screw for clamping the end-portions to the attaching-plates at any desired angle to which the deflector-plates 1 2 may be swung on the pivots 21.

My improved construction permits the attaching-plates to be releasably placed in position close to the side-walls of the window-opening, and close slipping connection to be maintained between the end-portions and attaching-plates. I preferably employ a plurality of attaching means between each attaching-plate and the side-wall adjacent thereto, and place the plurality of attaching means and the pivot on said attaching-plate out of line with one another for permitting the edge 5 of the end-portions to be brought closer to the window and thereby increasing the range of adjustment for angle of the deflector-plates. I prefer to provide each attaching-plate with a plurality of outer edges 29 30 adjacent to the window-sash which extend at angles with relation to each other, either of which edges may be located parallel with the window-sash, the edge 29 being shown parallel with said sash in Fig. 2.

My improved device is adapted for at-

attachment to window-frames of various widths, and the device can be readily attached and detached as may be desired.

In attaching my device, it is placed between the walls of the window-opening and the deflector-plates 1 2 are pulled laterally for bringing the attaching-plates into range of the screws 19, when the holes 16 are received about the heads 18 of the screws 19 and the attaching-plates are lowered for bringing the slots 17 to rear of said heads, thus forming a ready connection between the window-frame and attaching-plates. The angle of the deflector-plates is regulated by convenient means and to desired extent so as to cause the currents of air to be deflected in desired directions, the means for changing the angle being convenient so that every time a change in the elevation of the window is made, a change may also be promptly made in the angle of the deflector-plates, if desired. In my improved device, further, the window may be entirely closed, the deflector presenting no interference whatever to the manipulation of the window-sash.

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

1. A window ventilator comprising deflector-plates slidable longitudinally one upon the other and arranged to extend across the window-opening and provided with integral end-portions which extend forwardly therefrom toward the window, attaching-plates to which said deflector-plates are pivoted, means for releasably securing said attaching-plates to the walls of the window-opening, and adjustable clamping means acting upon various points between said deflector-plates and attaching-plates arranged for selectively swinging said deflector-plates to desirable positions on their pivots and securing the same in said desirable positions, substantially as described.

2. A window ventilator comprising a plurality of deflector-plates slidable one upon the other and provided at opposite ends with right-angular end-portions integral therewith which taper toward their bottoms, attaching-plates arranged to be releasably secured to the walls of the window-opening, the said end-portions having pivotal con-

nection with said attaching-plates, and adjustable securing means between said end-portions and attaching-plates acting at selective points therebetween for selectively changing the angle of said deflector-plates on said attaching-plates, substantially as described.

3. A window ventilator comprising a plurality of deflector-plates slidable one upon the other and provided with substantially right-angular end-portions bent up therefrom at opposite ends of said respective deflector-plates, attaching-plates from which said deflector-plates are pivotally supported, said attaching-plates being provided with openings merging into reduced slots for forming slip connection with screws on the window-frame, clamp-screws on said attaching-plates, said end-portions provided with slots through which said clamp-screws pass, said clamp-screws arranged to be secured at selective points lengthwise of said slots for selectively changing the angle of said deflector-plates, substantially as described.

4. In combination, a window ventilator comprising a plurality of deflector-plates slidable one upon the other and provided at opposite ends with substantially right-angular end-portions, attaching-plates provided with pivots from which said deflector-plates are pivotally supported, each of said attaching-plates being provided with a plurality of connecting means for attaching devices arranged to be secured to the walls of said window-opening, said plurality of connecting means and the pivot on said attaching-plate being out of line with one another, said end-portions being provided with slots, and clamping means on said attaching-plates passing through said slots and arranged for being clamped at selective points lengthwise of said slots for selectively changing the angle of said deflector-plates, substantially as described.

In testimony whereof, I have signed my name hereto in the presence of two subscribing witnesses.

WALTER L. THORNE.

Witnesses:

COLEMAN AVERY,
EDWARD SOUTHWORTH.