S. MEYER.

WINDOW VENTILATOR.

APPLICATION FILED OCT. 22, 1918.

1,399,787. Patented Dec. 13, 1921.

Fig. 1

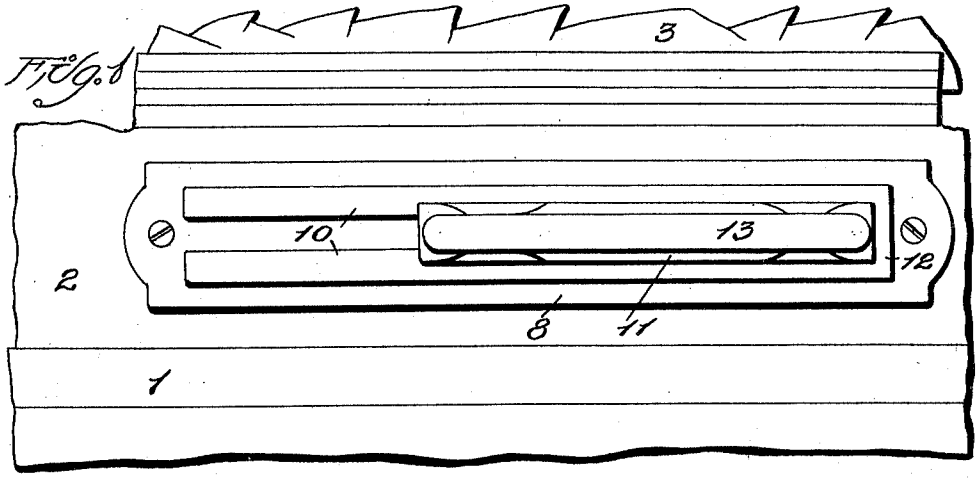


Fig. 2

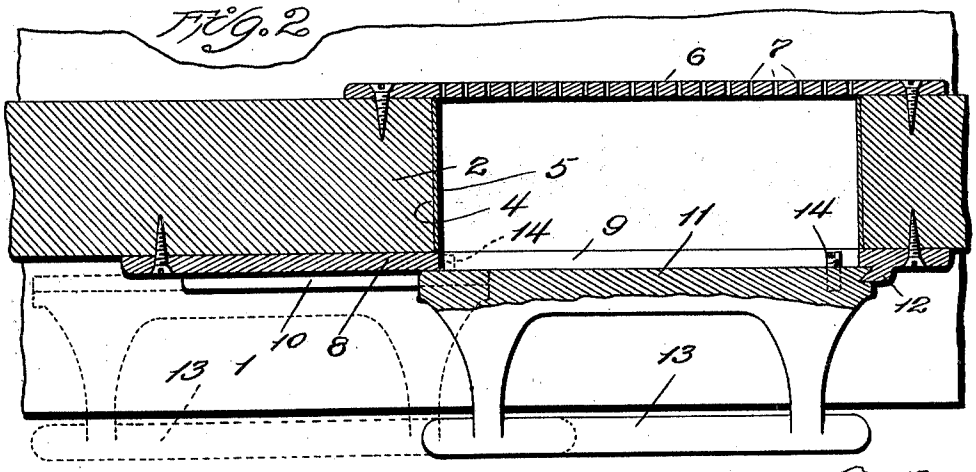
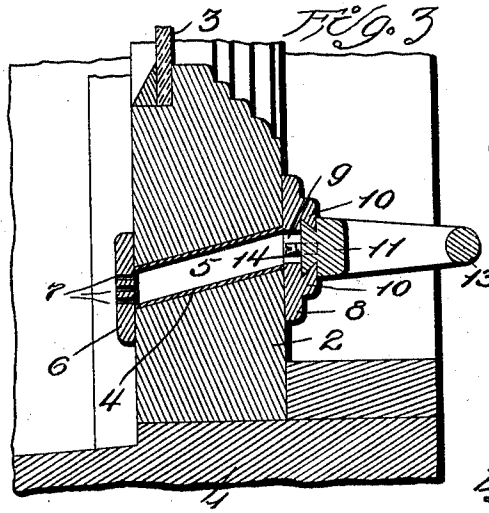


Fig. 3



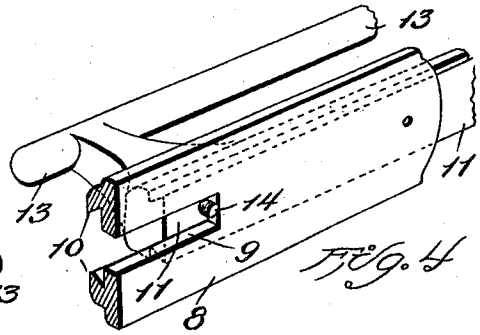


Fig. 4

INVENTOR
SAM MEYER,
by Raph. Kalish ATTORNEY.

UNITED STATES PATENT OFFICE.

SAM MEYER, OF ST. LOUIS, MISSOURI.

WINDOW-VENTILATOR.

1,399,787. Specification of Letters Patent. Patented Dec. 13, 1921.

Application filed October 22, 1918. Serial No. 259,214.

To all whom it may concern:

Be it known that I, SAM MEYER, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Window-Ventilators, of which the following is a specification, reference being had to the accompanying drawing, forming a part thereof.

This invention relates to a certain new and useful improvement in window-ventilators, the chief object of my present invention being to provide a simple, inexpensive, and efficient window-ventilator which may be easily and readily installed in the window-sash and conveniently opened and closed at will, the manipulating-handle of the ventilator serving also as a convenient handle for raising and lowering the window-sash.

With the above and other objects in view, my invention resides in certain novel features of form, construction, arrangement, and combination of parts, all as will hereinafter be described and afterward pointed out in the claims.

In the accompanying drawing,

Figure 1 is a fragmental elevational view of a window-frame and its sash equipped with a ventilator embodying my invention;

Fig. 2 is a horizontal sectional view through the lower sash-rail and the ventilator, the ventilator closing-member or plate and its operating-handle being shown in full lines in closed position and in dotted lines in open position;

Fig. 3 is a vertical sectional view through the lower sash-rail and the ventilator; and

Fig. 4 is a fragmental perspective view of the ventilator as seen more especially from the rear.

Referring to the said drawing, in which like reference characters refer to like parts throughout the several views, 1 is fragmentarily a window-frame, 2 the lower rail of a sash slidable in the frame 1, and 3 the glass of a window and its frame of usual or standard construction.

The sash-rail 2 is provided transversely with a slot, as at 4, disposed preferably on a bevel, the slot 4 sloping or inclining upwardly from the outer to the inner face of the window, as seen especially in Fig. 3. Tightly disposed within the slot 4 and closely hugging its walls, and forming part of the ventilator, is a hollow metallic shell or lining 5 open at its outer and inner ends, which are, respectively, substantially flush with the outer and inner faces of the sash-rail 2, the lining 5 serving particularly to prevent any entering water or dampness rotting the wooden sash-rail 2. Fixed flatwise upon the outer face of rail 2 and over the outer open end of slot 4 and its lining 5, is a plate 6 provided with a plurality of air-perforations 7, the plate 6 serving in a large measure to prevent the entrance of dust-particles from the exterior.

Fixed flatwise upon the inner face of sash-rail 2 and over the inner open end of a slot 4 and its lining 5, is an elongated plate 8 of considerably greater length than the slot 4 and provided longitudinally within its length toward one end of the plate with a slot, as at 9, of dimensions to register approximately with the open inner end of slot 4 and its lining 5. Disposed longitudinally upon, and preferably integral with, the plate 8, is a pair of suitably spaced and undercut projections 10—10, which extend substantially throughout the length of plate 8 and which form, with the intervening upper face of plate 8, a retaining guideway for a slide-plate 11, the guideway being permanently closed at one end and in line approximately with one end of the slot 9 by an also suitably undercut projection 12, the other end of the guideway being open for the insertion of the plate 11, and also to permit the movement of the plate to effect an opening of the slot. The slide-plate 11 is of just sufficient length and size to completely and fully cover the slot 9 and hence also close the inner end of slot 4 and its lining 5, when the slide-plate is in ventilator-closing position or in the position thereof shown in full lines in Fig. 2; and extending outwardly from, and preferably integral with, the plate 11, is a suitable and preferably also somewhat ornamental handle 13 providing a convenient hand-grip for slidably manipulating the slot-opening-and-closing plate 11. Projecting inwardly from the plate 11 and disposed within the slot 9, is a removable pin or stud 14 adapted to engage an end wall of the slot 9 to limit the slidable movement of plate 11 and its manipulating hand-grip 13 when operated or actuated to ventilator-opening position or into the position thereof shown in dotted lines in Fig. 2.

In assembling the parts of the ventilator, the closure slide 11 is first slid into the guideway in the plate 8 and over the slot 9, and

the stop pin 14 inserted in its threaded opening in the slide, the stop pin projecting into the slot 9 and serving to limit the opening movement of the slide, and also to prevent the slide from being displaced from the guideway.

In use, the plate 11 is usually or normally, we may say, in ventilator-closing position, and when in such position its manipulating handle 13 is conveniently useful also, and especially adapted to be employed, as a hand-grip for raising or lowering the window-sash, the plate 8 and its slide-plate retaining projections 10—10 being firmly fixed to the sash, as described. To open the ventilator, the slide-plate 11 is conveniently actuated through or by its handle 13 to ventilator-opening position, its movement to such position being limited by the stop 14, the handle 13 being also adapted to provide a convenient hand-grip for raising or lowering the window-sash when the late 11 is in ventilator-opening position.

It will be observed that when the slide plate 11 is moved to full open position, the greater portion of the slide plate remains in the guideways and upon the plate 8, said plate and guideways serving as a support for the slide plate when in full open position, and thus avoiding breaking of the parts by accidental pressure upon the slide plate when in open position, which would likely occur if there were no support therefor other than at its inner end.

My new ventilator is simple and inexpensive, may be easily and cheaply installed in the window, and is conveniently operable at will, and it will be evident that the plate 11 may be moved as may be desired to any position intermediate full open and closed position to admit a greater or less amount of air.

I am aware that minor changes in the form, construction, arrangement, and combination of the several parts of my ventilator may be made and substituted for those herein shown and described without departing from the nature and principle of my invention.

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

1. The combination with a window sash having a rail provided with an elongated opening therein, of a ventilator, comprising a plate of greater length than the opening in said sash rail and having an elongated opening toward one end thereof registering with the opening in said sash rail and provided with spaced undercut longitudinal projections upon opposite sides of the elongated opening therein and extending throughout substantially the length of said plate to form a guideway thereon, a closure slide of less length than said plate adapted to close the opening in said plate and having a dovetailed projection fitted in the guideway on said plate, and a pin secured to said slide and projecting into the slot in said plate to limit the opening movement of said closure slide, the extension of said plate beyond the opening therein serving as a support for the slide when in open position.

2. The combination with a window sash having a rail provided with an elongated opening therein, of a ventilator, comprising a plate of greater length than the opening in said sash rail adapted to be fixed upon said rail and having an elongated opening toward one end thereof registering with the opening in said sash rail and provided with spaced undercut longitudinal projections upon opposite sides of the elongated opening therein and extending throughout substantially the length of the plate to form a guideway thereon, said guideway being open at one end and closed at its other end adjacent to the end of the opening in the plate, a closure slide of less length than the plate adapted to close the opening in said plate and having a dovetailed projection adapted to be slid into said guideway at the open end thereof and over the opening in said plate, a stop pin secured in said slide and projecting into the slot in said plate and serving as a stop to limit the opening movement and displacement of the slide, and a hand grip projecting from and carried by said slide, the extension of the plate beyond the opening therein serving as a support for the slide when in open position.

In testimony whereof, I have signed my name to this specification.

SAM MEYER.