M. MOOERS.

WINDOW VENTILATOR.

APPLICATION FILED FEB. 18, 1920.

1,382,927. Patented June 28, 1921.

FIG. 1

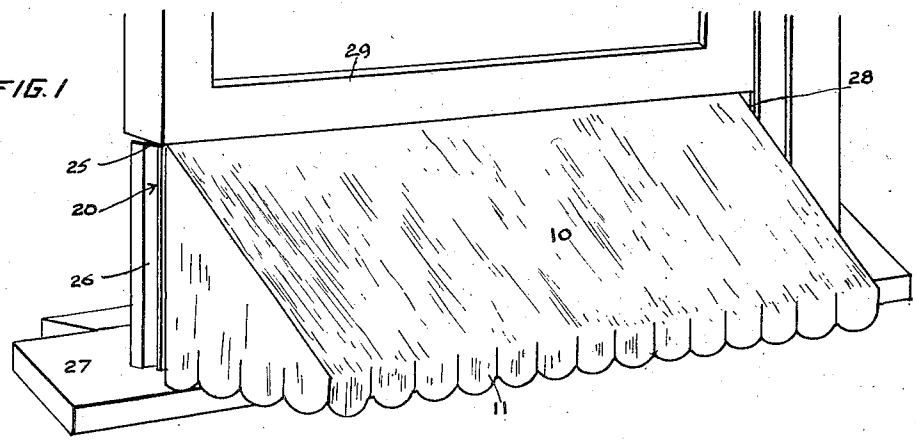


FIG. 2

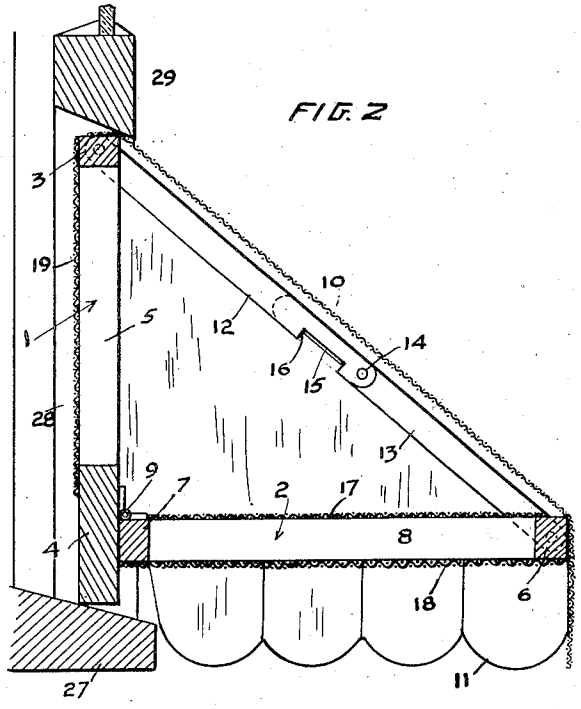


FIG. 3

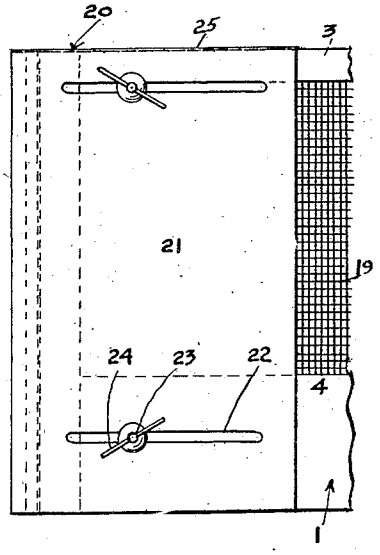


FIG. 4

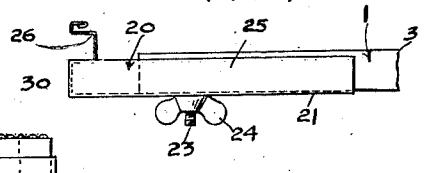
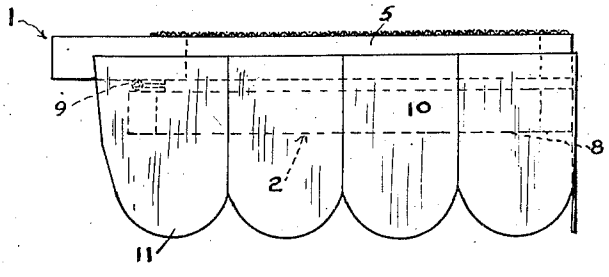


FIG. 5



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WINDOW-VENTILATOR.

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Application filed February 18, 1920. Serial No. 359,531.

To all whom it may concern:

Be it known that I, MARION MOOERS, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Window-Ventilators, of which the following is a specification.

The primary object of this invention is to provide a ventilator of simple, compact and inexpensive form which when in place in a window will provide for effective ventilation and exclude fog, wind, rain, insects and dust from the room being ventilated.

Another object of the invention is to provide a ventilator of the character described which is of attractive appearance and capable of being readily positioned for use, by closing one or the other of the sashes of a window upon the ventilator when the latter is placed in the window frame.

Another object is to provide a ventilator which is capable of being adjusted to fit in the frames of windows of various sizes.

A further object is to provide a device of the character described which when not in use may be collapsed into compact, flat form whereby it may be packed or stored in small compass.

The invention possesses other advantages and features, some of which, with the foregoing will be set forth at length in the following description where I shall outline in full that form of the invention which I have selected for illustration in the drawings accompanying and forming a part of the present specification. In said drawings I have shown one form of the construction of my invention, but it is to be understood that I do not limit myself to such form, since the invention as expressed in the claims may be embodied in a plurality of forms.

Referring to the drawings:—

Figure 1 is a fragmentary perspective view showing the ventilator of my invention in place in a window.

Fig. 2 is a vertical sectional view of the ventilator showing it in place in a window which latter is shown in part and in section.

Fig. 3 is a fragmentary rear elevation showing the extensible end construction.

Fig. 4 is a fragmentary top plan view of the construction shown in Fig. 3.

Fig. 5 is an end elevation showing the ventilator folded.

In the present embodiment of the invention as illustrated in the drawing, I provide a collapsible frame comprising two rectangular sections 1 and 2 adapted to extend at right angles to one another when in operative position. The section 1 comprises parallel top and bottom bars 3 and 4 extending lengthwise of the frame and joined at their ends by end bars 5. This section extends vertically when the device is in use. The other section comprises parallel front and rear bars 6 and 7 and end bars 8. The bar 7 where jointed to the bars 8 is hinged as at 9 to the bars 5 so that when the section 2 is in operative position, it extends at right angles to and outwardly from the lower end of the section 1, the bars 7 and 4 abutting to limit the movement of the sections of the frame, whereby they extend at right angles to one another.

A flexible canopy or cover 10 of canvas or the like, is secured to the bars of the sections so as to extend over the space between the sections, said cover being inclined downwardly from the upper bar 3 to the outer bar 6 and extending downwardly vertically at the ends of the sections so as to inclose all but the under side of the section 2 and rear side of the section 1. The canopy may have escalloped fringes or edges 11 depending from and hiding the bars 6 and 8. To support the canopy and brace the frame, a brace 12 is pivoted at one end to each end of the section 1 near the ends of the bar 3 and a brace 13 is pivoted at one end to each of the ends of the bar 6. These braces are overlapped and pivoted to each other as at 14, the pivot extending through one end of one brace and the intermediate end of the other brace. These braces 12 and 13 fold when the frame is collapsed and when extended are limited as to movement by a stop lug 15 on one bar engaging in a notch 16 in the other bar.

Mounted on upper and lower sides of the section 2 and secured to the bars 6, 7 and 8, thereof, are wire screens 17 and 18 extending over this section 2 in spaced parallel relation to one another. The upper screen is preferably of finer mesh than the lower screen so that fog which penetrates the lower screen will upon encountering the finer mesh screen be prevented from passing therethrough and will condense thereon. This double screen arrangement also excludes dust, wind, insects and rain. Mount-

ed on the rear side of the section 1 is a wire screen sheet 19 secured to the bars 3, 4, and 5 of said section. This screen provides an additional safeguard against the passage of fog, moisture, rain, wind, and dust through the ventilator.

To provide for use of the ventilator in windows of various widths greater than that of the ventilator proper, I provide extensible ends 20 for the ventilator. Mounted on the ends of section 1 are extensible plates 21 having slots 22 therein receiving threaded bolts 23 carried on the bars 3 and 4. Wing nuts 24 are turned on these bolts and adjustably hold the plates in position. The upper edges of these plates are provided with flanges 25 which extend over and upon the upper side of the bar 3. The outer ends of the plates are constructed to fit closely about the window frame at the sides thereof. These ends are bent angularly to provide inwardly offset vertical channels 26 in which the guide strips of the window frame or the pulleys not shown, extend, so as to hold the ventilator in the frame.

In using the ventilator, it may be placed either in the upper or lower portion of a window frame. I have shown the device in the lower part of the window resting upon the sill 27 of said window with the ends in engagement with sides 28 of the window frame.

The bar 4 extends below the frame 1 and rests upon the sill so as to dispose the ventilator above the sill and provide for the ready passage of air therethrough.

The sash 29 is raised to accommodate the ventilator and then closed so as to rest upon the upper bar 3 of the ventilator as shown in Figs. 1 and 2. By inwardly offsetting the channels 26, there are provided flat end extremities 30 on the plates 21 which extremities will engage the opposite flat surfaces of the sides of the window frame. With the ventilator in this position, the section 2 extends outwardly from the sill 27 and air is permitted to enter the room through the screens 17 and 18 and the screen 19. The canopy will prevent a direct current of air and wind and rain from entering the room. Fog upon encountering the screen 18 will condense and drop from the screen or if passing through the screen 18 will immediately encounter the screen 17 and condense and drop upon the screen 17. The screen 19 will act as an additional safeguard against the entrance of fog into the room. Water will collect on the screens 17 and 18 and fog encountering this water will immediately condense. Thus it will be seen that I provide for an effective ventilation to the exclusion of fog. When not in use, the upper section 1 is folded upon the section 2 of the device, and the ventilator in flat compact form, as shown in Fig. 5, may be packed or stored in small compass.

I claim:—

1. A ventilator, of the character described, comprising frame members extending angularly from one another, screens extending over said frame members, and a canopy secured to said frame members and inclosing the space therebetween not covered by said screens.

2. A ventilator, of the character described, comprising frame members extending angularly from one another, screens extending over said frame members, and a canopy secured to said frame members and inclosing the space therebetween not covered by said screens and a hinge joining said frame members.

3. A ventilator comprising a rectangular upright frame, a rectangular frame secured to and extending outwardly from the lower end of said upright frame, screens extending across and secured to said frames, and a canopy extending from the top of the upright and downwardly to the front edge of the other frame and also inclosing the spaces at the ends of the frames.

4. A ventilator comprising a rectangular upright frame, a rectangular frame secured to and extending outwardly from the lower end of said upright frame, screens extending across and secured to said frames, and a canopy extending over the top of said frames and closing the front, top, and ends thereof, a hinge connecting said frames with one another.

MARION MOOERS.