J. C. McCLAIN.

WINDOW VENTILATOR.

APPLICATION FILED JAN. 28, 1910.

966,942.

Patented Aug. 9, 1910.

Fig. 1

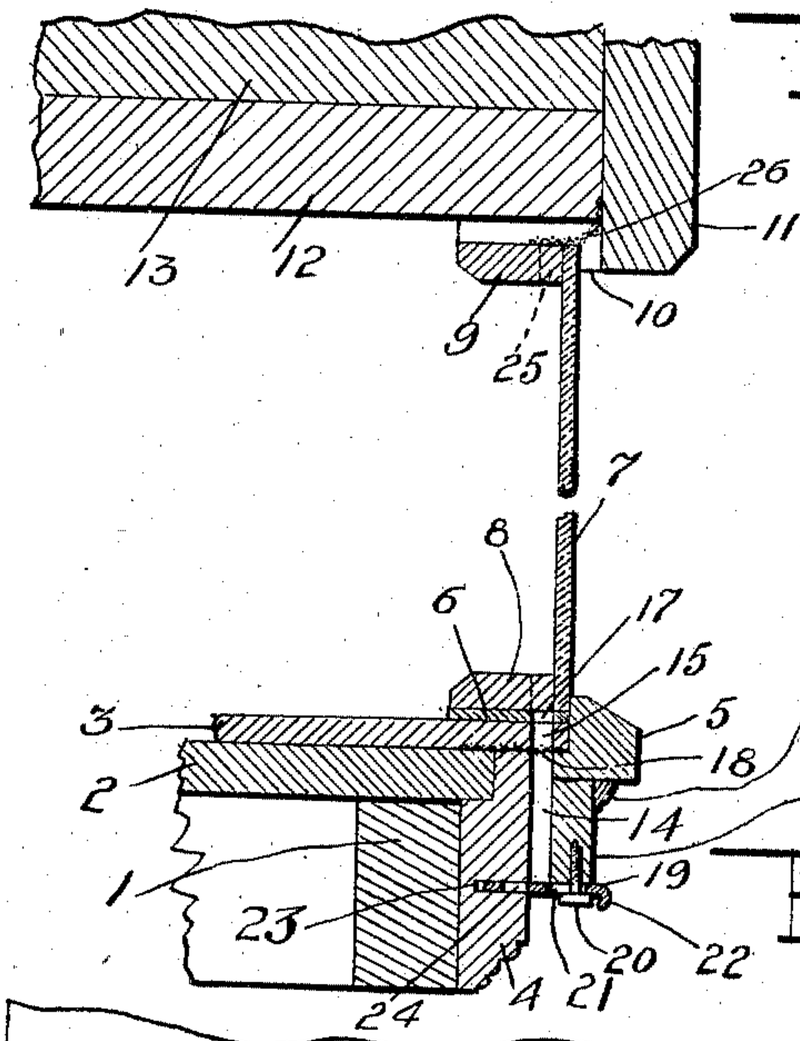


Fig. 2

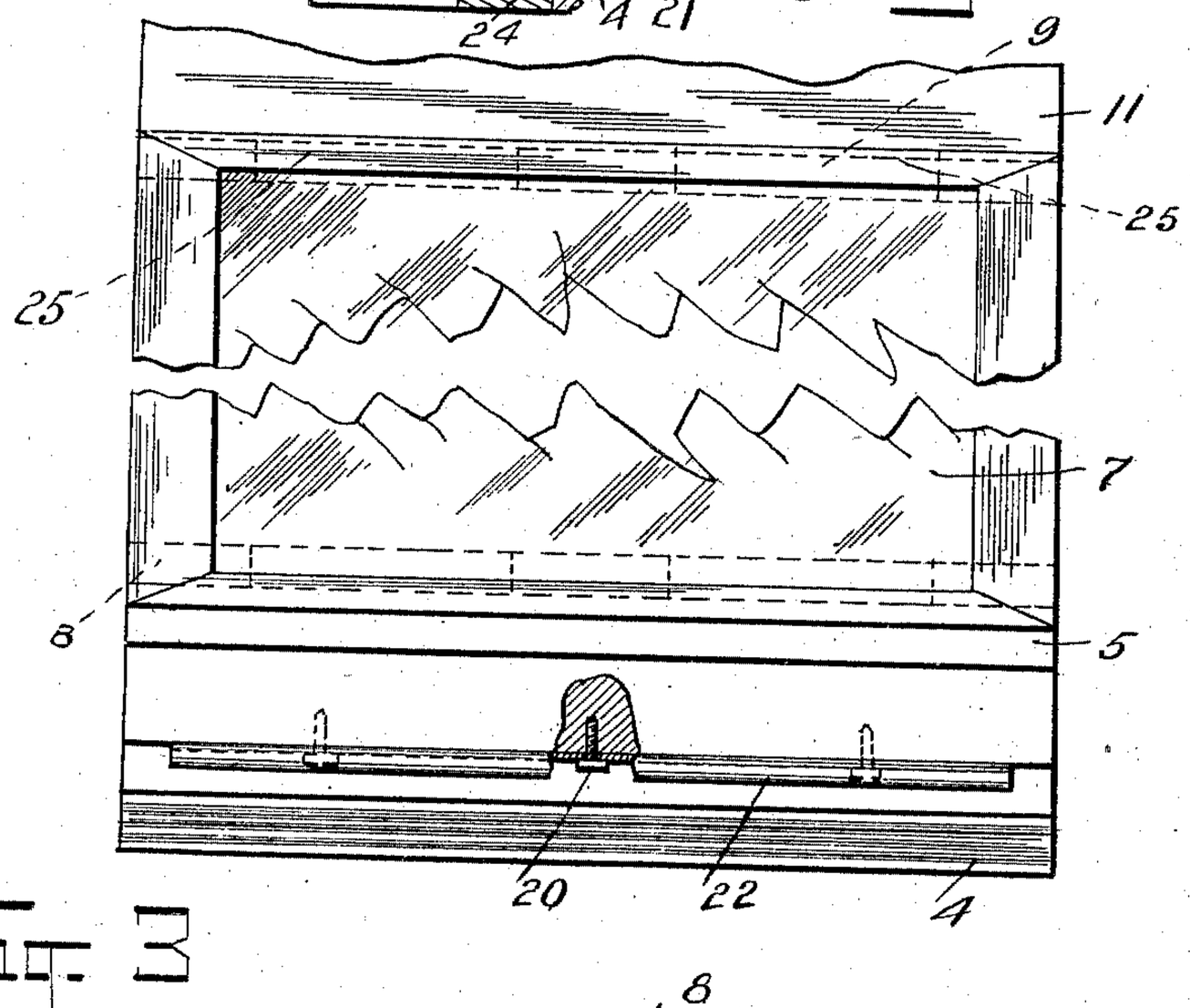
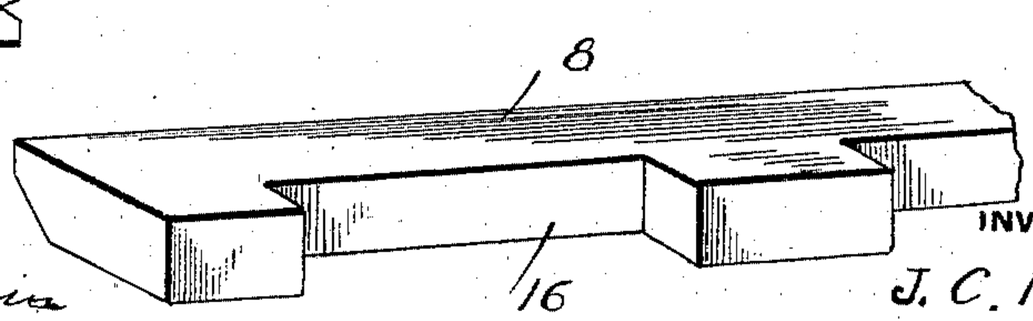


Fig. 3



WITNESSES

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WINDOW-VENTILATOR.

966,942. Specification of Letters Patent. Patented Aug. 9, 1910.

Application filed January 28, 1910. Serial No. 540,627.

To all whom it may concern:

Be it known that I, JOHNSTON C. McCLAIN, a citizen of the United States of America, residing at Ambridge, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Window-Ventilators, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to window ventilators, and the primary object of my invention is to provide a window with a ventilator which will prevent the frosting of window-panes, my invention being adapted to be used more particularly in connection with show-windows.

Another object of my invention is to furnish a show-window with a ventilating device which while permitting thorough ventilation prevents the rain or snow from entering while the device is in use.

A further object of the invention is to embody a ventilator in the construction of a window without materially changing or altering the window-frame.

A still further object of the invention is to furnish a show-window or other inclosure with a ventilating device that will insure free circulation of air from the outside of the window, the ventilating device having openings for directing the air upwardly upon the inner side of the window-pane and thereby preventing frost or moisture from accumulating upon the window-pane.

A still further object of the invention is to furnish a window with a ventilator having air inlet and outlet openings provided with means for preventing insects, dust and other foreign matter from entering said openings.

A still further object of the invention is to provide a window with a ventilator when constructing the window, the ventilator simply being an arrangement of parts that provides openings at suitable places for the admission of cold air and the expelling of warm air, thus reducing the cost of the ventilator to a minimum, besides providing practically an invisible ventilator.

A still further object of the invention is to provide a show-window with a ventilator that will carry off such water that drains to the lower edge of the window-pane when washing or cleansing the same.

With these and such other objects in view as may hereinafter appear, the invention consists of the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing forming a part of this specification, wherein:—

Figure 1 is a vertical sectional view of a portion of a window provided with my improved ventilator. Fig. 2 is a front elevation of the same partly broken away and partly in section, and Fig. 3 is an enlarged perspective view of a portion of the ventilating or furring strip.

In the accompanying drawings the reference numeral 1 denotes a rough sill and to this sill is connected a framing stile 4, and a sub-floor 2, supporting a parquet floor 3. Connected to the stile 4 is an apron 4^a supporting a sill 5 and a bead molding 5^a. Arranged upon the said floor 3 adjacent to the sill is a packing strip 6 adapted to support the lower edge of a window-pane 7, and holding said window-pane in position is a glass-retaining strip 8. The upper edge of the window-pane 7 is held by a retaining-strip 9 secured to the upper mold-board 11, said mold-board being supported by the ceiling 12 and joist 13 forming the upper part of the window inclosure.

Between the framing stile 4 and the apron 4^a is arranged a furring strip 14 providing air spaces adapted to register with openings 15 in the parquet floor 3, openings 17 in the packing strip 6 and recesses 16 in the retaining-strip 8. A furring strip 10 is arranged between the retaining strip 9, the ceiling 12, and the mold-board 11, said furring strip providing air spaces at the upper edge of the window-panes 7. A wire screen or piece of gauze 26 is used in connection with the furring strip, the lower edge of the piece of gauze 26 being secured to the retaining strip 9, while the upper edge is secured between the ceiling 12 and the mold-board 11. The piece of gauze 26 not only extends over the openings provided by the furring strip, but over recesses 25 formed in the retaining strip 9 adjacent to the window-pane 7. The retaining strips 8 and 9 are similar in construction and through the medium of the recesses 16 and 25 the air admitted at the lower edge of the window is carried to the upper edge thereof, thus retaining the inside temperature of the window-pane practically the same as the outside.

Arranged between the floor 3, the sub-floor

2 and resting upon the upper edge of the mold-board 4 and a portion of the sill 5 is a wire screen or piece of gauze 18 adapted to prevent dirt and foreign matter from passing upwardly into the window inclosure.

Slidably mounted upon the bottom edge of the apron 4^a is an oblong slide 19 held in engagement with the apron by screws 20 or other fastening means extending through slots 21 provided therefor in the slide 19. The outer edge of the slide 19 is bent downwardly, as at 22, to form a hand-grip, while the opposite edge thereof is adapted to extend into a groove 23 provided therefor in the framing stile 4. The slide 19 is provided with apertures or openings 24 adapted to register with the recesses of the furring strip 14 and admit air to said recesses and eventually to the window inclosure. The slide 19 can be closed during the summer time or whenever it is desired to shut off the supply of air to the window inclosure.

Through the medium of the openings at the lower and upper edge of the window-pane 7, I am enabled to maintain approximately the same temperature upon the inner side of the pane of glass 7 as upon the outer side, thereby preventing frost and moisture from accumulating upon the window-pane. I attach considerable importance to the fact that the air is admitted to the window inclosure against the inner side of the pane and by so locating the openings, they not only deflect the cold air directly against the window-pane, but serve the purpose of drain openings in removing water from the inner side of the window-pane, when the inner side of the pane is being washed.

From the foregoing it will be observed that my improved ventilator is simply a matter of structural elements embodied in the window-frame when it is constructed, and while I have herein illustrated what is believed to be the preferred embodiment of the invention, it is to be understood that the structural elements thereof can be varied or changed without departing from the spirit and scope of the invention.

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

1. In a ventilator for windows, a framing stile, an apron arranged exteriorly thereof and spaced therefrom, a sill mounted upon the apron having its inner face provided intermediate its ends with a shoulder, a pane of glass supported by the shoulder of the sill and having its inner face flush with the inner face of the apron, a lower retaining strip supported above the stile, abutting against the inner face of the pane and provided with vertically-disposed recesses extending over the space formed between the apron and the framing stile, means mounted upon the framing stile for supporting said strip, said strip abutting against the inner face of the pane of glass, furring strips positioned below the pane of glass and arranged in the space between the stile and the apron and providing vertically-disposed openings communicating with the vertically-disposed openings in the lower retaining strip, a mold board having its lower end projecting in front of and spaced from the top of the pane of glass, an upper retaining strip having longitudinally-extending recesses arranged above the top edge of said pane of glass, means for supporting the mold board and said upper retaining strip, and furring strips interposed between the mold board and the pane of glass at the top thereof and providing openings communicating with the longitudinally-extending recesses of the upper retaining strip.

2. In a ventilator for windows, a framing stile, an apron arranged exteriorly thereof and spaced therefrom, a sill mounted upon the apron having its inner face provided intermediate its ends with a shoulder, a pane of glass supported by the shoulder of the sill and having its inner face flush with the inner face of the apron, a lower retaining strip supported above the stile, abutting against the inner face of the pane and provided with vertically-disposed recesses extending over the space formed between the apron and the framing stile, means mounted upon the framing stile for supporting said strip, said strip abutting against the inner face of the pane of glass, furring strips positioned below the pane of glass and arranged in the space between the stile and the apron and providing vertically-disposed openings communicating with the vertically-disposed openings in the lower retaining strip, a mold board having its lower end projecting in front of and spaced from the top of the pane of glass, an upper retaining strip having longitudinally-extending recesses arranged above the top edge of said pane of glass, means for supporting the mold board and said upper retaining strip, and furring strips interposed between the mold board and the pane of glass at the top thereof and providing openings communicating with the longitudinally-extending recesses of the upper retaining strip, and an adjustable slide exteriorly of the pane of glass and supported by the bottom of the apron and extending into the stile and adapted to control the passage of air through the openings formed by the furring strips arranged between the apron and the framing stile.

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

JOHNSTON C. McCLAIN.

Witnesses:

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