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A. J. McLOUGHLIN

2,434,859

WINDOW STRUCTURE

Filed Oct. 31, 1945

Fig. 1

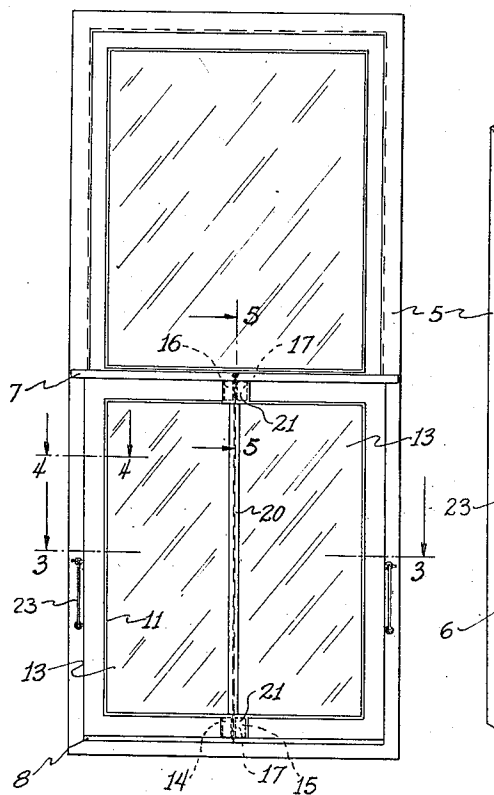


Fig. 2

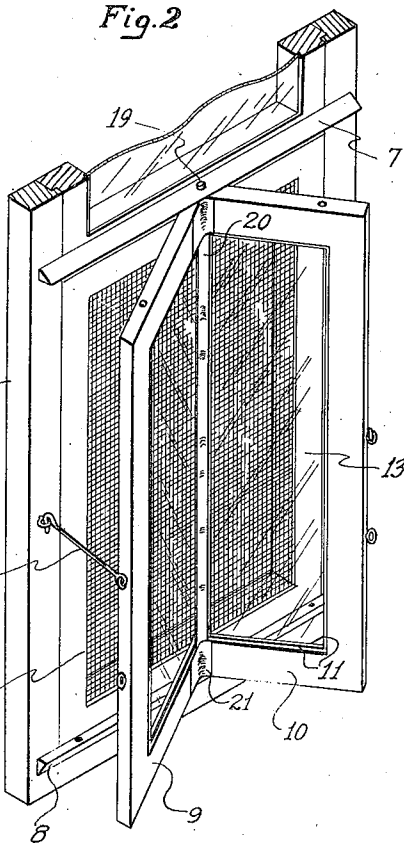


Fig. 3

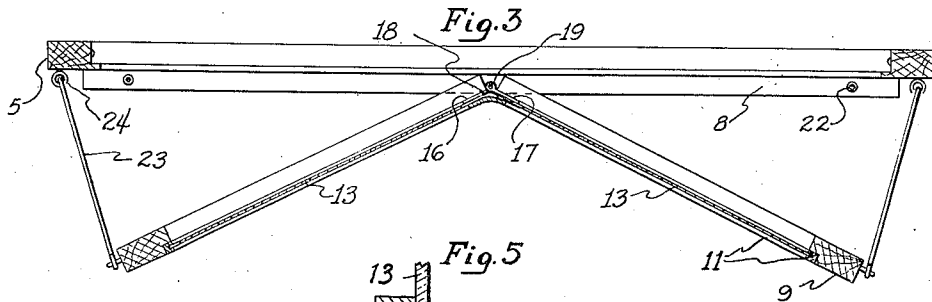


Fig. 5

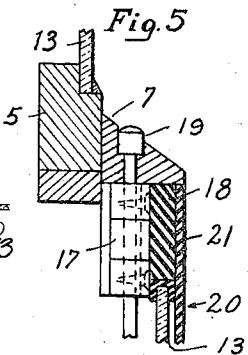
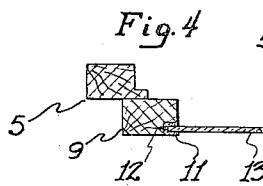


Fig. 4



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WINDOW STRUCTURE

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8 Claims. (Cl. 160-92)

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The invention herein comprises an auxiliary sash that is attached to the lower outside frame of a combination storm and screen sash and has a two-fold purpose, namely: to provide means for retaining the panel that heretofore had to be stored in a closet or elsewhere when not in use; and, to provide means to make this panel as useful in the summertime (to deflect breezes into the room) as it is in the wintertime (to insulate cold from entering the room). This is accomplished by employing glass or a newly manufactured material that has all the characteristics of glass; except that it is flexible and will bend—in twin half sashes that are hinged in the center. Using either material the sides of the sash may be opened for ventilation or closed for insulation. The invention is an improvement over pending application Serial No. 575,266, filed January 30, 1945.

Other objects and advantages of the invention will become apparent as the description of the same—in conjunction with the accompanying drawings—proceeds.

In the drawings:

Fig. 1 is a front elevation of a combination storm and screen sash window frame equipped with an auxiliary window, the subject of the present invention.

Fig. 2 is a perspective of the auxiliary window in open position.

Fig. 3 is an enlarged transverse section taken along lines 3—3 of Fig. 1.

Fig. 4 is a detailed transverse section on lines 4—4 of Fig. 1, and

Fig. 5 is an enlarged longitudinal, fragmentary section along lines 5—5 of Fig. 1.

More specifically, 5 designates a combination storm and screen sash window frame, in the lower portion of which is shown a screen 6. Extending transversely of the frame, slightly above and below the screen, are mouldings 7 and 8, which are designed to support my novel type of auxiliary storm window.

As will be noted, particularly in Figs. 1, 2, and 3 of the drawings, the window comprises twin half sashes 9 and 10 virtually, a sash of conventional dimensions, cut longitudinally in half. Each sash has its minor sides lined with a resilient channel rubber 11, which also extends between the center ends of the sash, to present in outline, a rectangle. The channel is fastened to the inner sides of the sash with small screws 12, or any other equivalent means, and is adapted to receive a pane 13. Opposite center sections of the sashes are mortised at 14—15 to accommodate

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separable complemental hinge sections 16—17, over which is cemented a padding 18, also of resilient material.

To sustain the twin half sashes in proper relationship, a pivot rod 19 is inserted through mouldings 7—8 and the hinge sections 14—15. In this connection, rod 19 serves in the dual capacity of sustaining the sashes and acting as a pintle for the hinge sections.

When thus set up, a long, narrow sealing strip of rubber, or the like, 20, with enlarged extremities 21, is secured to the inner portions of channels 14 and to the faces of paddings 18, whereby the sealing strip, channels and paddings are, for all practical purposes, vulcanized. Aside from sealing the sash joint from the elements, the thickness of the rubber—there are actually two plies—results in the formation of resilient cushions, especially at points in immediate proximity to the hinges.

In closed position, the sashes are held securely by friction catches 22, and when opened, hooks 23 and screw eyes 24 are utilized to maintain them in their adjusted positions.

Thus I have devised, as an adjunct to the normal type of combination storm and screen window an auxiliary window which when closed is essentially a storm window, and when opened, in a butterfly fashion, serves as a breeze deflector. Either or both sashes may be opened at will. Important, too, is the resilient joint between the twin sashes. As pointed out previously, it precludes the entrance of rain, snow, etc. Still further, it operates to hold the wings under tension when open, and to boost the return of the sashes to closed position as hooks 23 and eyes 24 are disconnected.

It is also to be noted that flexible glass or plastic glass in one piece, instead of two panes as described heretofore, may be used when found more desirable. Also, metal may be used in place of wood surrounding the glass with the necessary modifications while still adhering to this same idea.

I claim:

1. The combination with a combination storm and screen window frame of a pair of spaced mouldings carried by the exterior of the frame, a pair of swingable half sashes, complemental hinge sections mounted on the adjacent terminals of the sashes, and a pivot rod extending through the mouldings and the hinge sections.

2. The combination with a combination storm and screen sash window frame of a pair of spaced mouldings carried by the exterior of the frame, a pair of swingable half sashes, complemental

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hinge sections mounted on the adjacent terminals of the sashes, a pivot rod extending through the mouldings and the hinge sections, the inner sides of each sash and the space between the inner ends of the sash having affixed thereto a resilient rubber channel, a pane insertable in each channel, and sealing resilient strip secured to the meeting edges of the channels.

3. The installation with a combination storm and screen sash window frame of a pair of spaced mouldings carried by the exterior of the frame, a pair of swingable half sashes, complemental hinge sections mounted on the adjacent terminals of the sashes, a pivot rod extending through the mouldings and the hinge sections, the inner sides of each sash having affixed thereto a resilient rubber channel which projects into the space between the inner ends of the sash, a pane insertable in each channel, and sealing resilient strip secured to the meeting edges of the channels.

4. The combination with a combination storm and screen sash window frame of a pair of spaced mouldings carried by the exterior of the frame, a pair of swingable half sashes, the inner terminals of the sashes being spaced apart and mortised, complemental hinge sections in the mortises, a pivot rod extending through the mouldings and the hinge sections, the inner sides of each sash having affixed thereto a rubber channel which projects into the space between the inner ends of the sash, a pane insertable in each channel, a padding cemented over the hinge sections, and a sealing strip secured to the meeting edges of the channels and the paddings, the channels, strips and paddings being of resilient material.

5. The combination with a combination storm and screen sash window frame of a pair of spaced mouldings carried by the exterior of the frame, a pair of swingable half sashes, the inner terminals of the sashes being spaced apart and mortised, complemental hinge sections in the mortises, a

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pivot rod extending through the mouldings and the hinge sections, the inner sides of each sash having affixed thereto a rubber channel which projects into the space between the inner ends of the sash, a pane insertable in each channel, a padding cemented over the hinge sections, and a narrow sealing strip having enlarged extremities for covering the meeting edges of the channels, and the paddings, the channels, strips and paddings being resilient.

6. The combination with a combination storm and screen sash window frame of a pair of spaced supports carried by the frame, a rod disposed medially through and between the supports, a pair of half sashes pivoted to said rod and swingable outwardly thereon, panes in said sashes, and a resilient sealing strip joining the adjacent edges of the panes.

7. The combination with a combination storm and screen sash window frame of a pair of spaced supports carried by the frame, a pair of hinged half sashes adapted to swing outwardly from an axis disposed medially through and between said supports, and a resilient sealing strip joining the adjacent edges of the sashes.

8. The combination with a combination storm and screen sash window frame of a pair of spaced supports carried by the frame, a pair of hinged half sashes adapted to swing outwardly from an axis medially through and between said supports and means for selectively keeping said sashes opened and closed including spanners and friction catches.

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The following references are of record in the file of this patent:

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Number	Name	Date
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