

Nov. 11, 1947.

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2,430,615

STORM WINDOW

Filed Feb. 17, 1944

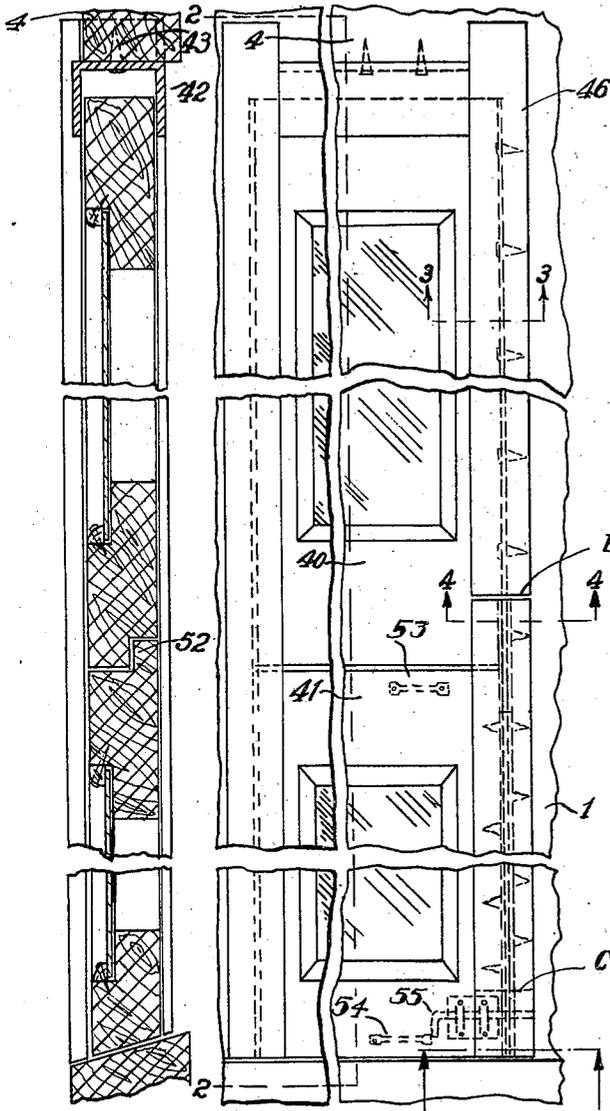


Fig. 2

Fig. 1

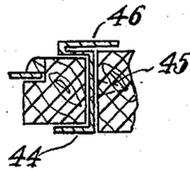


Fig. 3

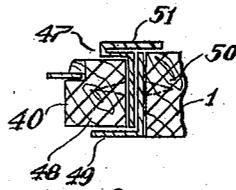


Fig. 4

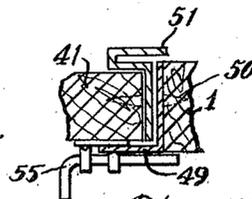


Fig. 5

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2,430,615

STORM WINDOW

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Application February 17, 1944, Serial No. 522,757

3 Claims. (Cl. 20—55)

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The present invention relates to storm windows used as a double window in buildings and dwellings. Such storm windows are usually removable and are put on buildings during the fall when cold weather sets in and are taken down again in the spring.

Many various arrangements have been devised for securing storm windows such as hinging or attaching eyes and bolts. The type of storm window that must be attached from the outside is inconvenient to put up on the upper floors and storm windows which are screwed into the sash frame tend to spoil and rot away the woodwork. Frequently, too, such storm windows do not fit well and permit drafts of cold air to come through.

The present invention overcomes these difficulties and provides a storm window construction which not only can be easily installed and removed from the inside, within the building, but also after removal provides a framework in which screens may be substituted.

The present invention has the further feature that it is substantially air tight, cutting out all drafts. Further advantage is to be found in the fact that the storm windows are themselves in sections and therefore comparatively light and easy to handle.

Other merits and advantages of the present invention will be more fully understood from a consideration of the specification below describing an embodiment of the same when taken in connection with the drawings, in which:

Figure 1 shows a broken elevational view of a form of the invention as viewed from the outside of the building.

Figure 2 shows a sectional broken view taken on the line 2—2 of Figure 1.

Figure 3 shows a section taken substantially on the line 3—3 of Figure 1.

Figure 4 shows a section taken on the line 4—4 of Figure 1, and,

Figure 5 shows a section taken substantially on the line 5—5 of Figure 1.

In Figures 1 to 5 inclusive the storm window is shown as made up of only two sections, 40 and 41, although a number of sections may be used. In this form of the invention, the channel in which the window sashes are set is shown in section in Figures 2, 3 and 4. The top channel attached to the top part of the frame 40 is simply an inverted U shaped channel 42 which is held to the frame 4 by means of spikes or pegs 43. The side channel member on one side has a section as shown in Figure 3. This channel 44 at one side of the frame extends all the way down from the

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top to the bottom and is nailed to the side of the frame by spikes or pegs 45. This channel 44 is in the form of a reversed C shape with a turned back flange 46 which goes over the face of the outside of the sash frame as indicated more clearly in Figure 1.

The channel 44 extends all the way up and down on one side of the sash and on the other side of the sash extends to a point B just above the end of the next to the last sash.

In Figure 1, since there are only two window sashes, the point B is just above the lower end of the top sash. The reason for this will appear more clearly later, but it may be stated that this construction enables the windows to be easily inserted and removed.

Extending from the point B down to the bottom of the frame on the right hand side shown in Figure 1, the lower channel member is composed of two elements, one element 47 being attached to the lower window sash 41 by pegs 48 and the other element 49 being nailed to the frame 1 by pegs 50. These two elements 47 and 49 together form substantially the same shape channel as shown in Figure 3. The element 47 is attached wholly to the lower frame 41 and not to the upper frame 40. This element has a reversed flange 51 which extends over the outer face of the frame 1 thereby serving as protection for this part of the frame and preventing the wind and weather from entering within the storm window. It extends down to the bottom of the window sash, as indicated in Figure 1. The inner L channeled member, however, may be cut short at the line C, as indicated in Figure 1.

The two sashes 40 and 41 are interlocked together by means of the shoulder flange 52 which is arranged to fit the shoulder extending upward on the inside side edge of the sash so that no water will drain inward through the window. The top inverted U shaped channel is long enough to extend over the wood of the top sash 40 and, as indicated in Figure 2, this top part of the sash has considerable leeway or space within the channel 42.

Handles 53 and 54 may be provided on the inside of the lower sash 41 which are used in putting the windows in place and removing them. The lower sash 41 is also provided with a latching bolt 55 which latches in place over the side edge of the window frame 1. In this construction the top sash member is put in place and slid upward in position to the top of the channel 42. The lower sash is then inserted by inserting the side of the sash in the side channel where the

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channel is the same all the way up and down the frame. It is then swung forward from an outer position inward toward the window frame after which the top sash may be let down to its interlocking position, thus accounting for the space in the top channel 42. The sash 41 carries its channel member 47 and sets finally in position shown in Figure 1. The latch 55 may then be bolted in position and the storm window is completely installed.

In this construction the whole of the window frame is protected and there is no possibility of draft entering around the sides and top of the window frame. This construction also permits the easy removal of the window frames and there may be substituted for them corresponding screens in the summer time.

The material for the various parts of the storm windows may be varied within suitable range of materials and in place of felt strips, other forms of insulating materials may be used such as rubber stripping or wood with felt between or metal lined with some insulating material.

Having now described my invention, I claim:

1. In a storm window adapted to fit into a window frame of the type described, a channel member lining the window frame on both sides and the top thereof forming side and top channels, a plurality of window sashes having overlapping edge surfaces in adjoining sides along the supporting edges of the sashes, the lower window sash on one side carrying a portion of the side channel and the window frame carrying the other portion, and means latching said lower window to the frame on said side.

2. In a storm window adapted to fit into a window frame of the type described, a channel member lining the window frame on both sides and the top thereof forming side and top channels, a plurality of window sashes having overlapping edge surfaces in adjoining sides along the supporting edges of the sashes, the lower window

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sash on one side carrying a portion of the side channel and the window frame carrying the other portion, and means latching said lower window sash to the frame on said side, said portions being divided into outer and inner portions with said lower window sash carrying the outer portion of said channel and said window frame carrying the inner portion of said channel.

3. A storm window adapted to fit into a window frame having a plurality of independent window sashes with each sash resting on the sash beneath it, comprising a channel member having front and back portions lining the window frame in which the window sashes are to be placed, said channel member extending around one side, the top and the other side of the window frame to a point just above the top of the lowest sash member, said window sashes adapted to fit into the channel member to fill out the window frame, overlapping means fitting the adjoining sides of one sash with the other along the supporting edge of the sash, and means forming a channel member, part thereof being attached to the lower window sash and part to the side of the frame on the side where the first mentioned channel member stops, and means for latching the lower sash to the frame on said last mentioned side.

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