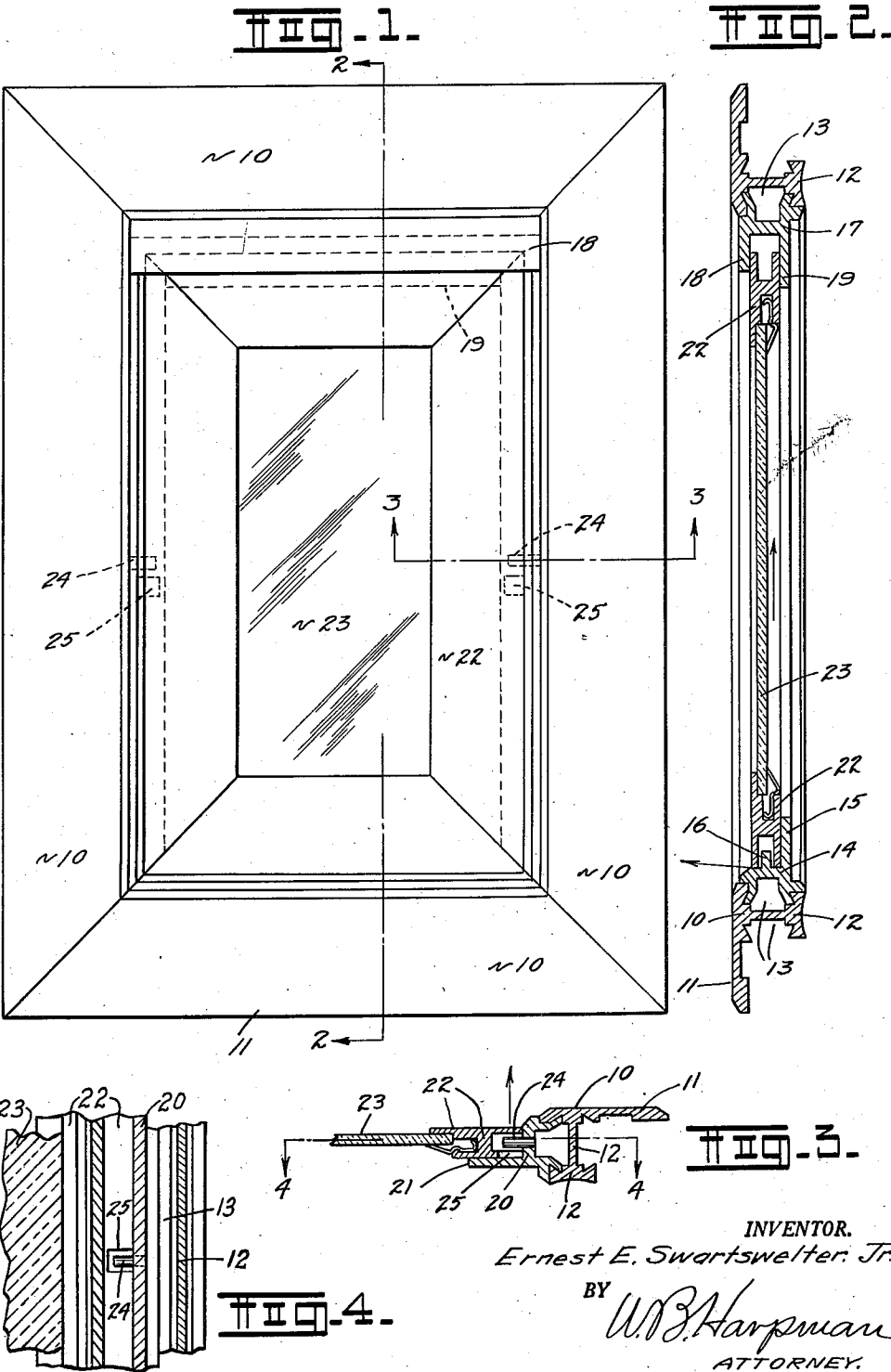


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SINGLE SASH STORM WINDOW MOUNTING

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SINGLE SASH STORM WINDOW MOUNTING

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1 Claim. (Cl. 189—76)

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This invention relates to storm windows and more particularly to a single sash storm window such as used for forming so-called picture windows and the like wherein a relatively large single sash storm window is mounted on the exterior of a relatively large picture window and the sash portion thereof arranged for positioning and removal from the exterior side of the window.

The principal object of the invention is the provision of means for mounting and securing a single sash storm window in a mounting frame.

A further object of the invention is the provision of a single sash storm window and mounting frame providing means for securing the single sash thereto at various places.

A still further object of the invention is the provision of a simple and inexpensive means of securing a storm sash directly to a mounting frame at various locations along the sash to insure the suitable registry of the sash with the frame.

The single sash storm window mounting means shown and described herein advantageously overcomes the heretofore common problem of securing a single storm window sash in a mounting frame on a large window in that it provides means for directly engaging the storm window sash with the frame at as many locations about the sash as are deemed necessary to secure the sash in suitable registry with the mounting frame. It is well known in the art that many of the newer homes are constructed with relatively large so-called picture windows in which stationary window sash are positioned. In providing storm sash installation for these relatively large picture windows it is obviously necessary to mount the storm sash on the exterior thereof and provide for the placement of the actual storm sash in the mounting frame from the exterior of the window and at the same time secure it to the mounting frame so that a relatively air-tight closure is effected between the mounting frame and the storm window thereby rendered effective.

It is obvious that the mounting frame itself can be effectively secured to the window casing by attaching the same thereto with screws or other fasteners as desired, and calking the mounting frame to insure its air-tight positioning on the window. In the past, single sash storm windows for picture windows have generally been loosely positioned in their various mounting frames due to the lack of means for securing the sash easily and inconspicuously.

The single sash storm window and mounting means disclosed herein accomplishes these several objects.

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With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawing, wherein—

Figure 1 is a plan view of a single sash storm window and mounting.

Figure 2 is a vertical section taken on line 15—2 of Figure 1.

Figure 3 is a horizontal section taken on line 3—3 of Figure 1.

Figure 4 is a horizontal section taken on line 4—4 of Figure 3.

By referring to the drawings and Figures 1 and 2 in particular it will be seen that a mounting frame is disclosed as comprising a plurality of cut and mitered sections 10 secured to one another at their corners by suitable corner keys as is customary in this art, the sections 10 of the mounting frame having surface flanges 11 formed thereon and longitudinally extended ribs 12 formed thereon. Each side of the longitudinal ribs 12 is provided with a longitudinally extending dovetailed channel 13, respectively, and, as best shown in Figures 2 and 3 of the drawings a modifying section 14 is positioned on the bottom section 10 of the mounting frame and provided with a relatively tall upstanding flange 15 located adjacent the innermost edge thereof and a relatively short upstanding flange 16 located midway between the outer and innermost edges thereof. A similar modifying section 17 is mounted by dovetail engagement with the inwardly facing channel 13 across the top of the storm window mounting frame and is provided with spaced depending flanges 18 and 19, respectively.

By referring to Figures 1 and 3 of the drawings it will be seen that the vertical side sections 10 of the mounting frame are provided with modifying sections 20 each of which has a longitudinally extending flange 21 formed thereon.

It will thus be seen that a storm sash comprising a sash frame 22 of approximately H shape in cross section having a section of glazing material 23 secured therein may be positioned in the opening defined by the mounting frame 10 and more particularly by the opening defined by the modifying sections 14, 17 and 20. In such position, as shown in Figures 1, 2 and 3, the inner edge of the sash 22 will rest against the flanges 15, 19

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and 21, respectively, and the sash itself will rest on the modifying section 14 with the lower channeled edge of the sash 22 in registry with the relatively short upstanding flange 16 on the modifying section 14. In order that the sash can be positioned in this manner in the mounting frame, it is formed so that it is slightly shorter in height than the opening defined between the modifying section 14 and the modifying section 17 as best shown in Figure 2 of the drawings. This enables the sash 22 and the glazing material 23 therein to be first positioned with its uppermost edge against the depending flange 19 which, it will be observed, is slightly longer than the depending flange 18 and then moved upwardly until the lower edge of the sash 22 clears the relatively short vertically standing flange 16. It may then be passed over the same and brought into engagement with the flange 15 and then lowered into position on the modifying section 14. Obviously, this section secures both the upper edge and the lower edge of the sash 22 in the mounting frame.

In single sash storm windows it is essential that additional means be provided for securing the sash 22 along the vertical side sections of the mounting frame 10, for example, in order that it may be held in proper registry thereagainst. The disclosure herein, therefore, primarily relates to means for securing the said sash to the said frame and is illustrated in connection with Figures 1, 3 and 4 of the drawings.

By referring to Figures 3 and 4 of the drawings in particular it will be seen that at each side of the mounting frame 10 and more particularly at each side of the modifying sections 20 secured thereto, a pin 24 is positioned in the modifying section 20 in spaced relation to the flange 21 so that it will normally register in the channel in the edge of the sash 22. The sash 22 is notched as indicated by the numeral 25 so that when the sash 22 is in elevated relation, as heretofore described and with respect to its normal position in the mounting frame and on the modifying section 14, notches 25 will register with the pins 24 and thereby permit the sash 22 to be moved into engagement with the flanges 21. When the sash 22 is lowered, as heretofore described, so that the channel in its lowermost edge engages the upstanding flange 16, the notches 25 move out of registry with the pins 24 and thereby maintain the sides of the sash 22 in suitable registry with

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the modifying sections 20 and more particularly the flanges 21 thereon. It will be obvious to those skilled in the art that as many pins and notches as desired may be positioned around the edge of the mounting frame and sash, respectively, so that the side sections of the sash may be secured at closely spaced intervals to the mounting frame, if desired.

It will be seen that the several objects of the invention are met by the mounting means for single sash storm windows herein disclosed and that the same may be formed economically to operate efficiently at all times.

Having thus described my invention, what I claim is:

Means for securing a single storm sash in a flanged mounting frame, the said flanged mounting frame having an inverted channel at its uppermost edge and a rib at its lowermost edge and the sash adapted for vertical movement in the said channel to clear the said rib, and pins positioned in the sides of the said flanged mounting frame and spaced with respect to said flange, channels formed in the edges of the innermost surfaces of the said sash and notches in the said sash communicating with the said channels and for registry with the said pins whereby the sash may be engaged upon the said pins by elevating the same in the said channel in the uppermost edge of the mounting frame and lowered to engage the said pins in the said channels and the rib at the lowermost edge of the mounting frame simultaneously, whereby the sash is held at its uppermost edge by registry with the said channel, at its lowermost edge by registry with the said rib and at its sides by registry with the said pins.

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