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GLAZING STRIP FOR WINDOW SASHES

Filed May 25, 1928

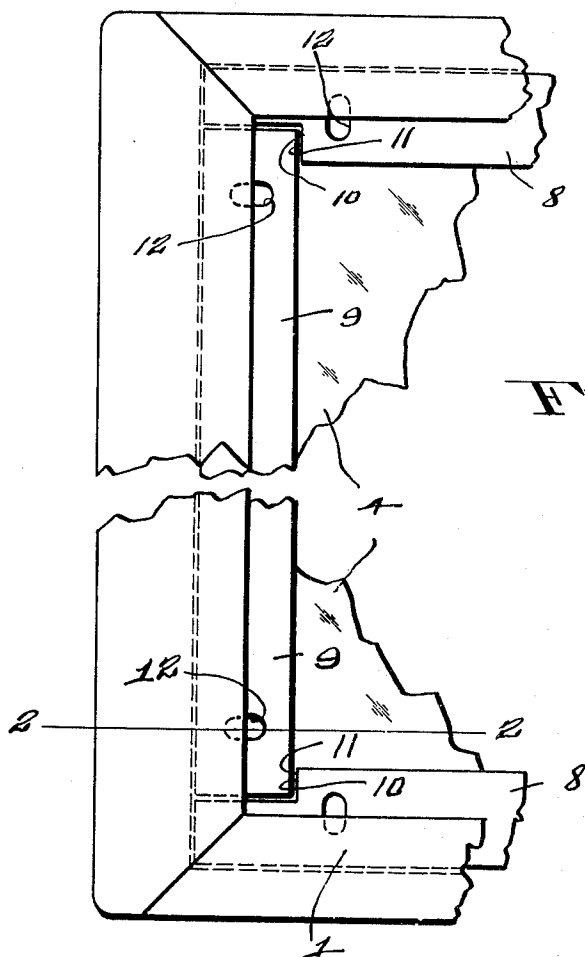


Fig. 1.

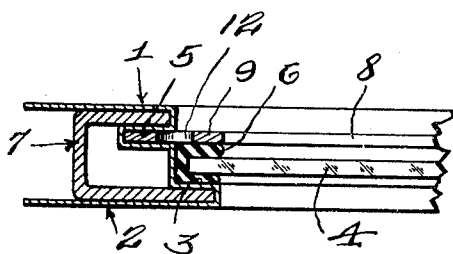


Fig. 2.

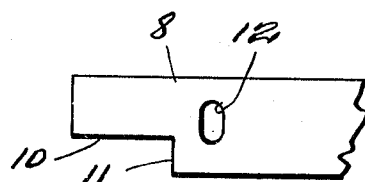


Fig. 3.

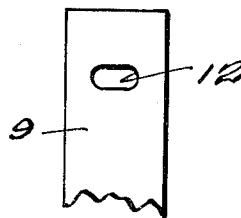


Fig. 4.

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GLAZING STRIP FOR WINDOW SASHES

Application filed May 25, 1928. Serial No. 280,625.

This invention relates to window sashes, particularly sashes such as are used in railway cars, busses and other vehicles and has for its object a particularly simple and efficient construction and arrangement of the glazing strips by which glazing strips are readily removed and replaced for the purpose of removing and replacing the glass pane.

The invention consists in the novel features, and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawings in which like characters designate corresponding parts in all the views.

Figure 1 is a fragmentary elevation of a window embodying my invention.

Figure 2 is a sectional view on line 2—2, Figure 1.

Figures 3 and 4 are enlarged fragmentary detail views of the ends of two of the glazing strips arranged at an angle to each other.

The sash may be of any suitable form, size and construction, that here shown being formed of sheet metal frame members or stiles and rails which are joined together at their corners in any well known manner. Each member or stile or rail is formed up to have front and rear flanges 1, 2, a re-entrant channel 3 for receiving the margin of a glass pane 4 and a re-entrant groove 5 at one side of the channel for receiving the glazing strips. The margin of the pane of glass 4 is preferably encased in a protecting wrapper or channel 6 of rubber, felt or any other suitable material.

7 is a corner iron located in each of the corners of the sash and secured to the sash member in any suitable manner as by welding.

The construction of the sash forms no part of this invention and insofar as the glazing strip is concerned, it may be of any suitable, form, size and construction.

8 and 9 designate the glazing strips, the base portions of which extend into the groove 5. The glazing strips 8 are duplicates and interchangeable and constitute a pair, also the strips 9 are duplicates and interchangeable and constitute a pair. The strips 8, 9

are shaped to interlock with a snap action upon movement of one of them, as the strip 9, rectilinearly along the ends of the strips 9 toward the stile. The glazing strips 8 along the members of the sash on opposite sides of the sash, as the top and lower rails have their end portions extending into the grooves of the interposed sash members or stiles and across the ends of the interposed strips 9 so that each strip 9 abuts at its ends against the ends of the strips 8. The strips 8 are formed with shoulders against which inner edges of each strip 9 abuts when in its normal position.

The strip 8 moves rectilinearly toward its stile into its operative position and into engagement with said shoulders with a snap action. The strips 8 and 9 are preferably formed of resilient sheet metal as brass.

In the illustrated embodiment of my invention, the strips 8 are associated with the top and bottom rails of the sash and the strips 9 with the stiles. As the sash is symmetrical and both halves the same, but one stile and one strip 9 is shown.

The strips 8 as here shown are formed with square or rectangular recesses or notches 10 at their ends and the ends of each glazing strip 9 are square or rectangular and fit the notches which are also square or rectangular. These notches are of substantially the same width as the strips 9 so that portions 8 (substantially one half) of these notches are exposed on the face of the sash.

The wall 11 of each notch which coacts with the inner edge of the strip 9 at the end thereof, in this form of my invention, constitutes the shoulder on the strip 8 with which the strip 9 interlocks with a snap action. The strips 8 and 9 are also formed with perforations 12 along the median line thereof near their ends for facilitating the removal and replacing of the strip by a tool insertable in the perforations. The strips 8 are reversible and interchangeable with each other and also the strips 9 are reversible and interchangeable with each other; and in any position substantially one half of each strip in a widthwise direction extends into the groove 5. The perforations 12 are so located

that a portion of them is accessible in any position of the strips.

In operation, the glazing strips 8 are first placed in the groove 5 of the top and bottom rails with their end portions 8^a extending into the groove 5 of the stile. The strips 9 are then placed in the groove 5 of the stiles with their ends partly overlapping the inner lengthwise margins of the strips 8. Then the strip 9 is pushed fully into its groove 5 and during this operation, the ends of the strip 9 snap into engagement with the shoulders 11. To remove the glazing strips, a suitable prying tool may be inserted in any one of the holes 12 to pull the strip outwardly, and before the strips 9 can be pulled outwardly, their end portions must be lifted up so as to clear the shoulders 11. As the strips, particularly the strips 9, are sheet metal and resilient, their ends are capable of yielding to clear the shoulders 11, and to snap into engagement therewith.

What I claim is:

1. A window sash comprising frame members formed with a channel for receiving the margin of a glass pane and with a groove at one side of the channel for receiving the glazing strips, reversible glazing strips having base portions extending into the groove, the glazing strip along one of the members of the sash being interposed between and abutting at its ends against the glazing strips on the contiguous sash members, said glazing strips having means for interlocking with a snap action when the interposed glazing strip is moved into the groove, the strips having tool receiving perforations along their median line so that portions of the perforations are always exposed on the face of the sash regardless of which edges of the strips are placed on top or on the inside as the strips are assembled in the sash.

2. A window sash comprising frame members formed with a channel for receiving the margin of a pane of glass encased in a protecting wrapper, a groove at one side of the channel extending below the bottom of the channel for receiving flat glazing strips having base portions extending into the groove, the glazing strip along one of the members of the sash being interposed between and abutting at its end against the glazing strip on the contiguous sash members, said glazing strips having means for interlocking with a snap action upon movement of the interposed strip flatwise along the other strip in its groove, said glazing strip being removable with a similar reversed movement, whereby the glass pane and the protecting wrapper are both removable from the channel intact.

3. A window sash construction comprising frame members formed with a channel for receiving the margin of a glass pane encased in a protecting wrapper, a groove at one side of the channel for receiving flat glazing strips,

the top of said groove terminating at the bottom of the channel, whereby upon removal of the glazing strips, the glass pane and the protecting wrapper may be readily removed from the channel, the glazing strips associated with the rails of the frame member and those associated with the stiles of the frame member being respectively pairs and the strips of each pair being duplicate and interchangeable, the strips of one pair having notches at their ends and the strips of the other pair having ends for fitting the notches, one pair of strips being movable flatwise along the other pair until the ends thereof snap into the notches.

4. A window sash construction including a sash member formed with a recess therein for receiving the margin of a pane of glass and formed with a groove around the recess near the forward side thereof for receiving glazing strips; a pane of glass mounted in the recess; flat glazing strips inserted in the groove and overlapping the margin of the pane of glass, the glazing strips at the top and bottom of the sash being interchangeable and reversible and the glazing strips at the sides of the sash being interchangeable and reversible, said glazing strips being held against lateral displacement by snapping the ends of one pair of interchangeable strips over the ends of the other pair of interchangeable strips to interlock therewith.

In testimony whereof, I have hereunto signed my name, at Syracuse, in the county of Onondaga, in the State of New York, 1928.

ROY T. AXE.