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F. J. BURNS
FRAMELESS SCREEN AND STORM WINDOW
TOP RAIL SECURING MEANS
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2,583,627

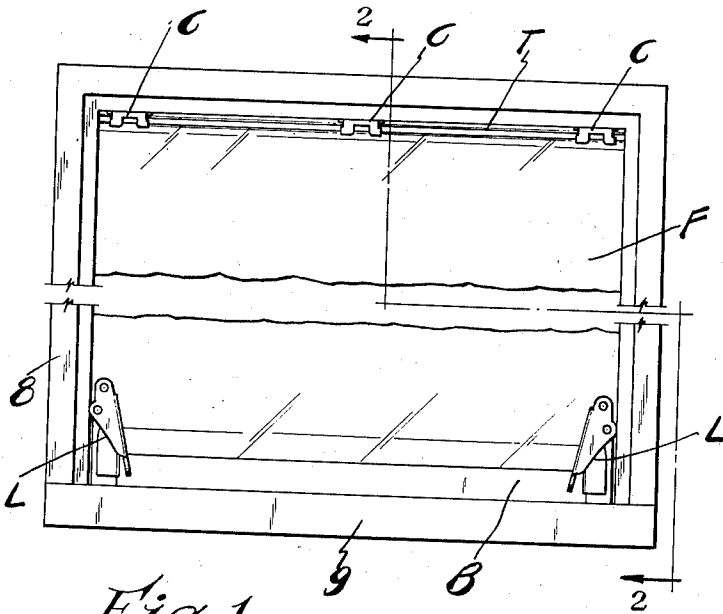


Fig. 1

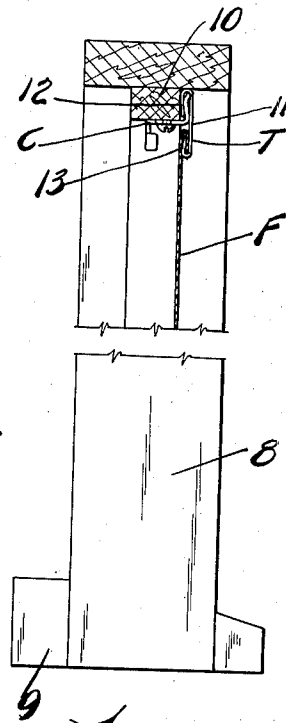


Fig. 2

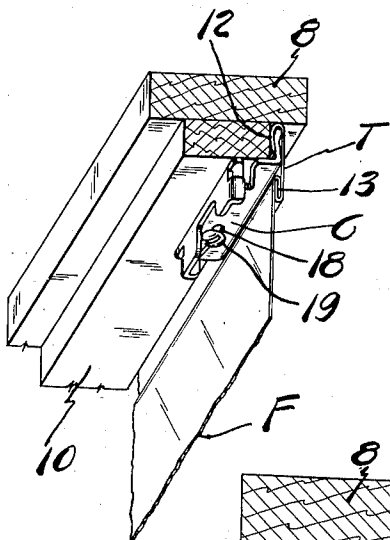


Fig. 3

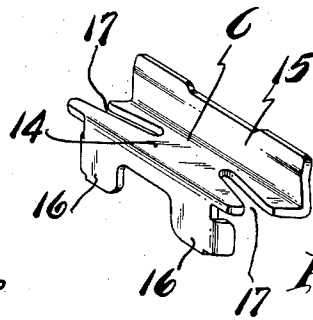


Fig. 4

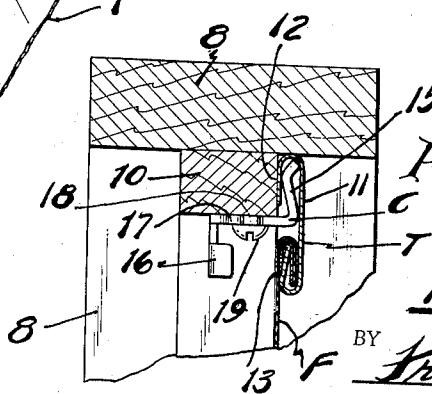


Fig. 5

INVENTOR

Fred J. Burns.

BY Frank C. Learman.
ATTORNEY

UNITED STATES PATENT OFFICE

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FRAMELESS SCREEN AND STORM WINDOW TOP RAIL SECURING MEANS

Fred J. Burns, Saginaw, Mich., assignor to The
Columbia Mills, Inc., Syracuse, N. Y.

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3 Claims. (Cl. 160-327)

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This invention relates to frameless screen and storm windows, and more particularly to a means whereby the screen or storm window strip may be easily and quickly mounted and/or demounted.

One of the prime objects of the invention is to design a very simple, practical and relatively inexpensive top rail and shiftable securing means which can be quickly and easily shifted to locked position for holding the strip firmly in position, and which is also readily shiftable to disengaged position to permit the screen or storm window to be quickly mounted or detached for storage, repair, or for any other purpose.

Another object is to provide easily operable securing means which requires no tools to operate or shift from locked to unlocked position, and which can be adjusted the entire length of the top rail if necessary.

A further object still is to design a simple and practical securing means so designed that it automatically adjusts and forces the screen or storm window inwardly against the window frame as it is being shifted to locked position, thereby simultaneously locking the top rail in position and forcing the edges of the screen or strip into tight facial contact with the blind stops of the window frame.

A further object is to design a very simple, shiftable window screen which can be readily stamped and formed to shape, and which can be easily manufactured and mounted on the window frame by inexperienced labor.

A further object is to provide a screen or flexible storm window strip mounting in which the installation screws remain in set position, and provide locking clips engageable therewith for releasably securing a flexible storm window strip or screen assembly in position in the frame.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts, hereinafter more fully described, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportion, and minor details of construction, without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:

Fig. 1 is a face elevational view of a window opening showing my top rail and securing clips with a flexible storm window strip mounted in the top rail.

Fig. 2 is an enlarged, vertical, part sectional, elevational view taken on the line 2-2 of Fig. 1.

Fig. 3 is an enlarged, fragmentary, part sectional view looking upwardly in the direction of the header on the upper end of the window frame and showing the top rail with the storm window strip and the fastener clip in position thereon.

Fig. 4 is a perspective view of the fastener clip.

Fig. 5 is an enlarged, transverse sectional view through the top rail and upper end of the window frame.

Referring now more specifically to the drawings in which I have shown the preferred embodiment of my invention, the numeral 8 indicates a conventional window frame with the sash omitted, the window opening being covered by a flexible storm window F formed of a strip of flexible plastic material having top and bottom rails T and B respectively, attached to the opposite ends thereof, and tensioning levers L are provided on the sill 9 for tensioning the strip when applied.

The tensioning levers L and bottom rail B are referred to for explanatory purposes only and form no part of the present invention which is directed to the top rail with the quickly and easily operable fastening means for releasably securing the flexible storm window strip to the header 10 of the window frame.

The top rail T is formed as clearly shown in Figs. 1 to 4 of the drawing, and comprise an elongated metal bar 11, the upper and lower edges 12 and 13 of which are turned inwardly toward the inner face of the bar, with the turned portion spaced from the main body as clearly shown in Figs. 2, 3 and 4 of the drawing.

Clips C are mounted on the top rail 10 and are formed as clearly shown in Fig. 4, each clip comprising a horizontally disposed section 14 formed with an upwardly projecting lip 15, which lip is adapted to be accommodated in the track formed between the inner face of the bar T and the turned upper edge 12 of said bar and is slidable therein, and downwardly depending ears 16 are provided on the clip to facilitate the longitudinal adjustment thereof.

Angularly disposed open slots 17 are provided in the body 14 of the clip C and are of a width to accommodate the shank of an installation screw 18 which is mounted in the lower face of the header 10, the body of the clip C being inserted between the face of the header 10 and the head 19 of the screw, thus releasably securing the upper end of the screen or storm window in position.

It will be noted that the clip C is provided with opposed slots 17 so that it can be shifted endwise

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in either direction, for engagement with an installation screw located anywhere intermediate the length of the header 10.

It will be understood that several clips are necessary for each screen or storm window installation, depending on the window size, and while in the present instance I have shown the window frame formed of wood, it will be obvious that it can be formed of metal or any other desired material.

In installing a storm window, the installation screws 18 are first mounted in the header 10, the top bar with the strip F secured thereto and clips C mounted thereon is then placed in facial contact with the front edge of the header 10, and the clips are then adjusted horizontally to bring the shank of the installation screws into register with one of the slotted passages in each clip, and inasmuch as the passages are angularly disposed, engagement of the clip will crowd the strip F inwardly into intimate facial contact with the window frame, making a tight, weatherproof contact where storm windows are employed, and preventing entrance of flies and insects when screens are used.

I also wish to direct attention to the fact that the one turned edge of the clip is directly above and in slight frictional engagement with the material F trained over the upper edge of the turned section 13, and the curtain or screen can be single ply or folded double if desired and to form a reasonably close joint at this point.

From the foregoing description, it will be obvious that I have perfected a very simple, practical and inexpensive top rail and clip securing means for flexible storm windows, screens and the like.

What I claim is:

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1. A top rail and clip for releasably securing a frameless strip of flexible material to the header of a window frame, said header having an installation screw protruding therefrom, comprising a top rail consisting of an elongated strip of material, the top edge being bent back upon the main body to provide an upper overlapping portion, a fastener clip mounted on said top rail and formed with a horizontally disposed section terminating in a vertically disposed lip, said lip being slidably mounted between the main body of the top rail and the upper overlapping edge thereof, and an angularly disposed open passage provided in the horizontally disposed section of the clip for slidable engagement with the shank of said installation screw.

2. The combination defined in claim 1 in which the lower edge of the top rail is also folded back upon the main body to form a lower overlapping section, the upper end section of the flexible strip being secured between the main body and the lower overlapping section.

3. The combination defined in claim 1 in which opposed, angularly disposed slotted passages are provided in the clip, and a depending lip on the front edge of the clip forming a fingerhold for easy adjustment of said clip on said top rail.

FRED J. BURNS.

REFERENCES CITED

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

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