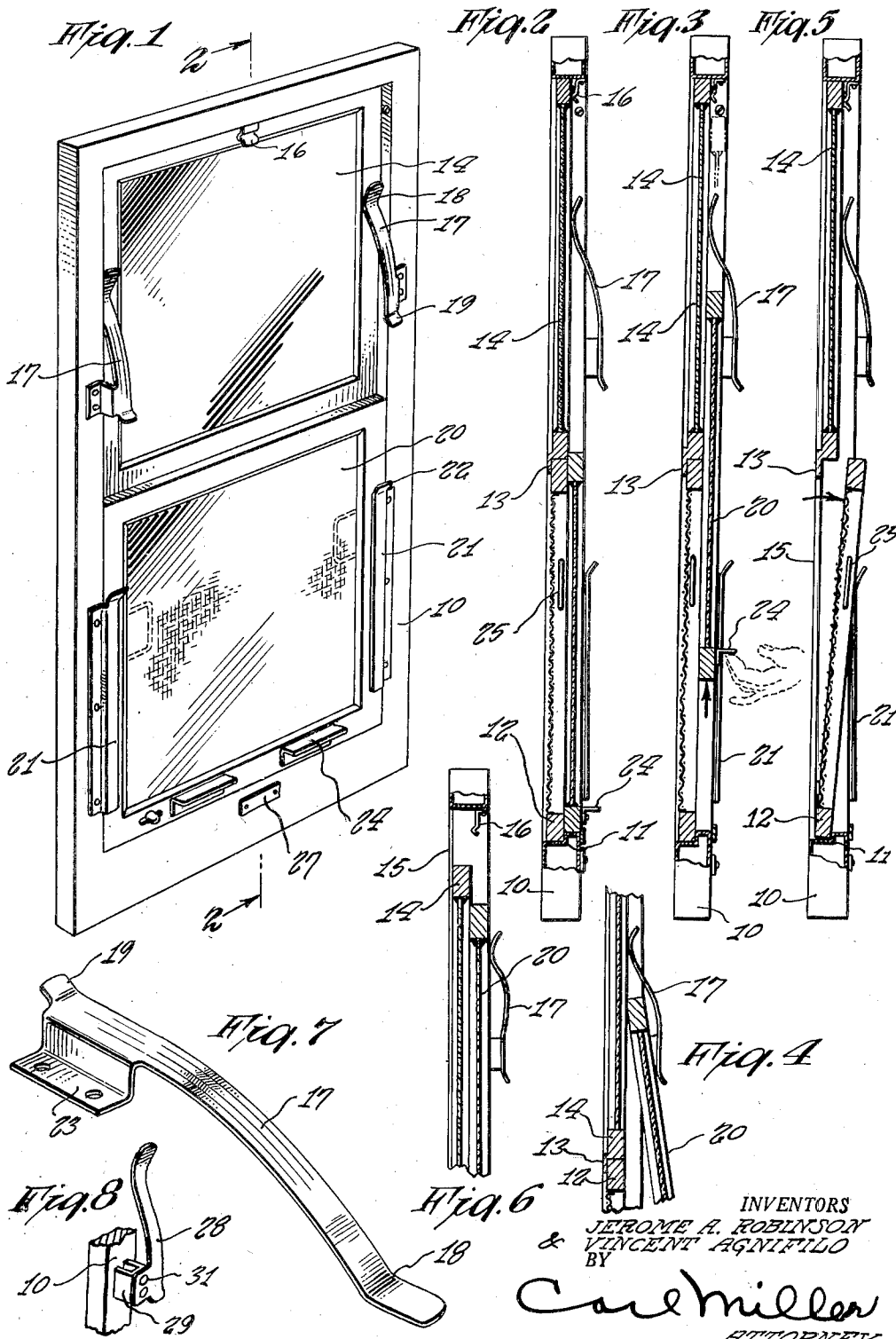


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GUIDE SPRING FOR COMBINATION
STORM WINDOWS AND SCREENS
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GUIDE SPRING FOR COMBINATION STORM
WINDOWS AND SCREENSJerome A. Robinson, Yonkers, and Vincent
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1 Claim. (Cl. 292-76)

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This invention relates to a storm window and screen combination guide spring.

It is an object of the present invention to provide a storm window and screen combination guide spring wherein the insertion of all the inserts can be made more easily than with present structures, and with positive pressure to guide the upper insert under top holding clip or clips.

It is another object of the present invention to exert constant pressure against the upper insert so that the screen which is always under the upper glass insert, can be pulled inwardly and upwardly for removal without the lower part of the upper insert coming in also and preventing raising of the screen.

Other objects of the present invention are to provide a guide spring for a storm window and screen combination which is of simple construction, inexpensive to manufacture, has a minimum number of parts, easy to assemble, compact, convenient to use and efficient in operation.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which

Fig. 1 is a perspective view of the storm window and screen combination embodying the features of the present invention.

Figs. 2, 3, 4, 5 and 6, are respectively fragmentary sectional views taken generally on line 2-2 of Fig. 1, but showing the various upper and lower and screen window elements in different positions.

Fig. 7 is an enlarged perspective view of one of the guide springs.

Fig. 8 is a perspective view of a modified form of the guide spring.

Referring now to the figures, 10 represents the main frame which may be formed of hollow metal, such as aluminum or steel, and is adapted to fill the window opening. The lower transverse portion of the frame is shouldered as indicated at 11. Against this shoulder is held a screen insert 12. The screen insert 12 fills the lower half of the frame. Beading 15 is provided at the opposite sides of the frame to hold both the screen and upper window elements against outward displacement. A depending spring clip 16 retains the upper end of the upper window insert 14 against outward displacement, and holds same from falling down.

On the sides of the main frame 10 are offset inverted spring retaining clips 17 which have a bent upper end 18 resting against the side of the window element 14 and an outwardly offset re-

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ceiving end 19 under which upper window element 14 can be easily and readily extended when being fitted into place and wherein lower window element 20 can be easily passed thereunder to be retained in the manner as shown in Fig. 6. Also as illustrated in Figs. 3 and 4, the lower window insert can be readily extended under the outwardly offset end 19 of the retaining clips 17 and elevated sufficiently so as to be received by slide retaining plates 21. These plates have an inwardly bent end 22 so as to permit the easy insertion and removal of the elements from the frame. The clips 17 are fastened through its bracket portion 23 onto the frame.

The lower window element has hand grips 24 which can be used in effecting the raising and lowering of the window element 20. Handle grips 25 are provided on the screen element 12 to facilitate its removal and insertion into the frame.

The retaining clips 17 point upwardly instead of downwardly as with the usual constructions and are located at the sides of the frame 10. The bracket portions 23 of these clips are at the lower ends thereof. A name plate 27 may be provided on the lower part of the frame 10.

In Fig. 8, there is shown a modified form of spring retaining clip wherein the same is formed of two parts, a spring clip part 28 and a bracket 29 adapted to be connected to the frame 10 and of U-shape, or of solid blocks, to receive the clip part 28 wherein it will be retained upon the bracket 29 by screws or rivets 31. This clip will have the spring part extending laterally offset from the bracket part 29 and will be operated in the same manner as will be the clip 17, above described.

To remove the lower window element 20, it is merely elevated as illustrated in Fig. 3 to a point where it passes over the inwardly bent end 22 of the guide 21 and will be lowered downwardly from the inner side thereof in the manner as shown in Fig. 4. Thereafter the screen element 12 can be removed in the manner as shown in Fig. 5. By tilting this upper part thereof in the manner as shown in Fig. 5, the screen can be drawn upwardly and under the clips 17, and when high enough, can be lowered down and inwardly over ends 22 of guides 21. Thereafter the upper window element 14 can be lowered and drawn inwardly over the ends 22 of the guides 21. The several elements can be returned to the frame 10 in the reverse manner.

It should now be apparent that by having the lower ends of the clips 17 or 28 relieved at their

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lower ends from the element 14 the insertion of the inserts and their removal can be made more easily.

While various changes may be made in the detail description, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claim.

Having thus set forth and disclosed the nature of our invention, what is claimed is:

A guide spring clip for a combined screen and storm window arrangement comprising a bracket having an attaching portion adapted for attachment to a retaining frame of the arrangement, a flat spring including a base portion extending laterally from the bracket and offset from the attaching portion thereof by a distance approximately the thickness of the screen or window element whereby to permit the insertion of a

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screen or storm window element thereunder, said spring trailing from the base portion at one end thereof and adapted to extend toward a screen or storm window element in the retaining frame for engagement therewith, the base portion of said spring at its other end being bent up to facilitate the insertion of a screen or window element thereunder.

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