Nov. 5, 1940. F. HIMMEL ET AL 2,220,569

STORE FRONT CONSTRUCTION

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Fig. 1.

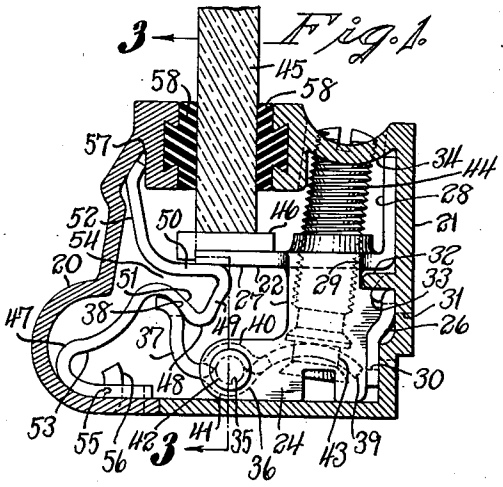


Fig. 2.

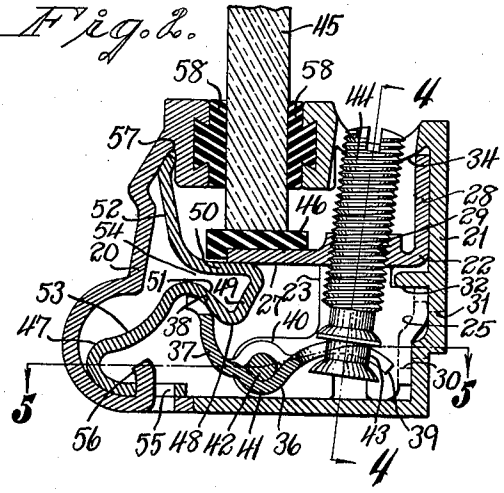


Fig. 3.

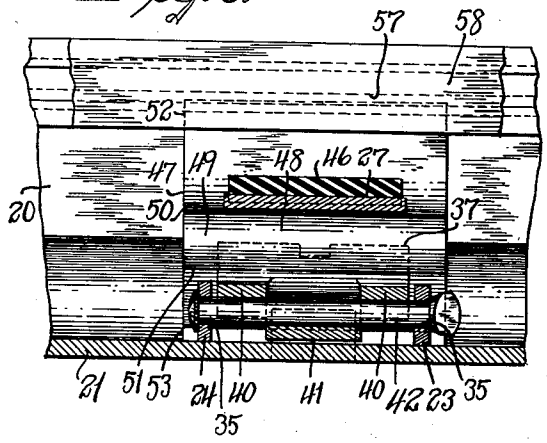


Fig. 5.

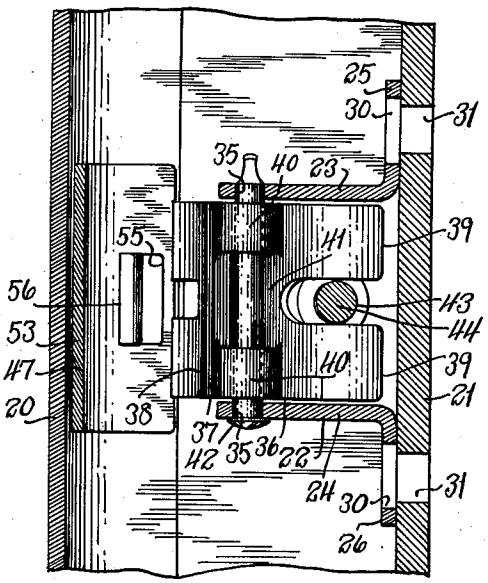
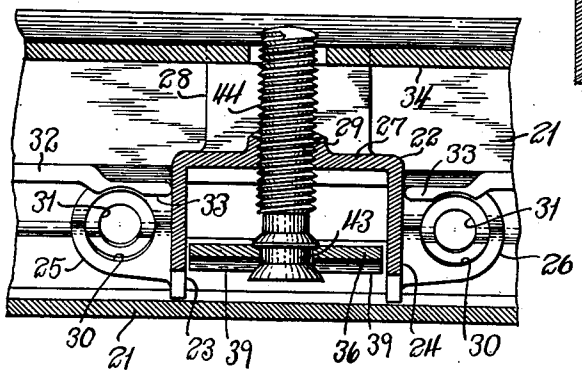


Fig. 4.



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Fig. 6.

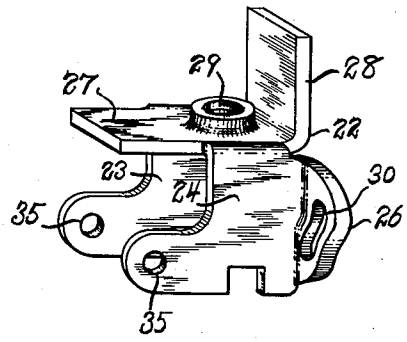


Fig. 7.

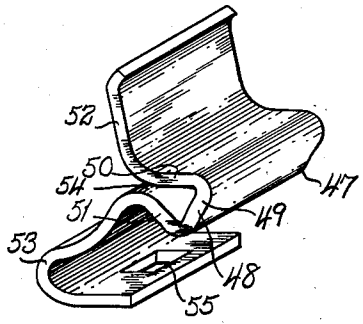


Fig. 8.

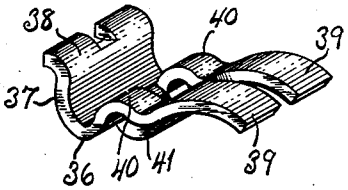


Fig. 10.

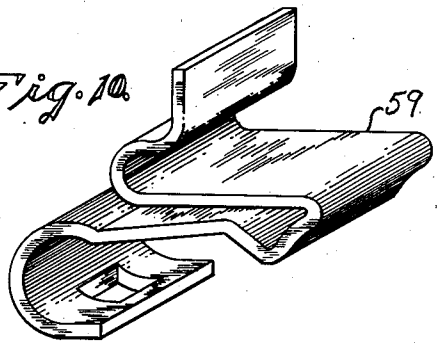
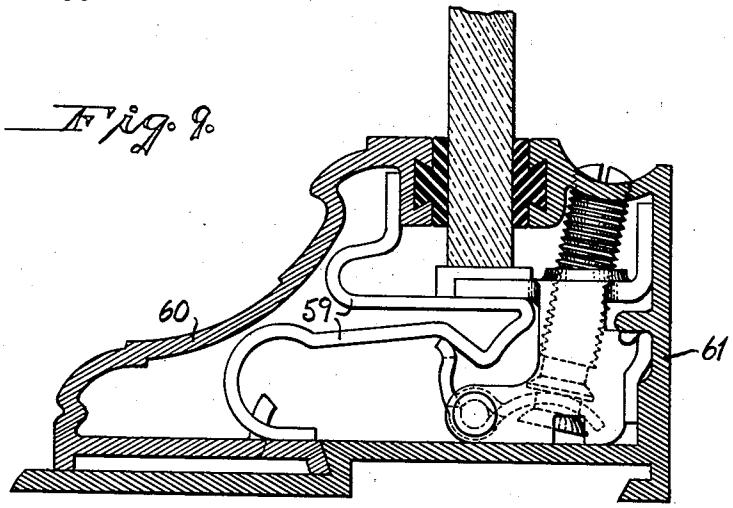


Fig. 9.



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UNITED STATES PATENT OFFICE

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STORE FRONT CONSTRUCTION

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Application January 31, 1940, Serial No. 316,490

2 Claims. (Cl. 20—56.4)

This invention relates to improvements in store-front constructions, and particularly to means for holding sheets or panes of glass in store windows and the like.

One object of this invention is to provide an improved store-front construction embodying improved spring-means for resiliently forcing the outer strip or molding against the glass.

With the above and other objects in view, as will appear to those skilled in the art from the present disclosure, this invention includes all features of the said disclosure which are novel over the prior art.

In the accompanying drawings forming part of the present disclosure, in which certain ways of carrying out the invention are shown for illustrative purposes:

Fig. 1 is a transverse sectional view through the outer and inner strips or moldings and related parts in the region of the lower edge of the glass being supported in a store front;

Fig. 2 is a cross-sectional view similar to Fig. 1 but at a location a short distance longitudinally therefrom;

Fig. 3 is a sectional view on line 3—3 of Fig. 1;

Fig. 4 is a sectional view on line 4—4 of Fig. 2;

Fig. 5 is a sectional view on line 5—5 of Fig. 2;

Fig. 6 is a perspective view of the mounting-block;

Fig. 7 is a perspective view of the spring-member or clamping-member;

Fig. 8 is a perspective view of the rocker;

Fig. 9 is a sectional view similar to Fig. 1 of a modified form of construction; and

Fig. 10 is a perspective view of the spring-member shown in Fig. 9.

In the description and claims the various parts are identified by specific names for convenience but they are intended to be as generic in their application as the prior art will permit.

In carrying out the invention as illustrated in Figs. 1 to 8 in the drawings, we employ outer and inner strips or moldings or members 20 and 21. Connected with the inner molding 21 is a series of mounting-blocks 22 each preferably formed with a single piece of sheet metal and comprising two spaced-apart side flanges 23 and 24, two oppositely-extending wings 25 and 26, a shelf 27, and an upwardly-extending arm 28, the shelf 27 being provided with a screw-threaded hole 29. The wings 25 and 26 (Figs. 5 and 6) are provided with openings 30 adapted to permit the passage of screws (not shown) which also extend through the holes 31 in the inner molding 21 for securing the said inner molding and mounting-block in place in a usual way. To additionally secure or interlock the mounting-block 22 with the inner molding 21, a rib 32 integral with the latter has portions thereof folded over the upper edge of the wings 25 and 26, as at 33, adjacent the spaced-apart side flanges 23 and 24, to thus more firmly clamp the mounting-block to the inner strip or molding 21. The arm 28 of each mounting-block extends up into engagement with the upper portion 34 of the member 21.

The forward ends of the flanges 23 and 24 are provided with holes 35 for a purpose to be presently described. A rocker 36, preferably of sheet-metal has a forwardly-and-upwardly-projecting arm 37 provided with a rounded surface portion 38, and rearwardly-projecting fingers 39, and has raised central knuckles 40 and an intermediate depressed knuckle 41 together providing a pivot to be presently described. A pintle or pivot-pin 42 extends through the holes 35 in the flanges 23 and 24 and between the knuckles 40 and 41 thus serving to pivot the rocker 36 to the mounting-block 22 between the flanges 23 and 24 thereof. The fingers 39 engage opposite sides of the neck 43 of an adjusting-screw 44 which is mounted in the screw-threaded hole 29 of the mounting-block 22.

The pane or sheet of glass 45 rests upon a pad 46 of rubber, leather or other suitable material, which pad 46 rests upon the top of the shelf 27 of the mounting-block 22.

To support the outer strip or molding 20, we employ a spring-clip or clamping-member 47 preferably formed of spring sheet-metal such, for example, as bronze sheet-metal which has been partly hardened, such, for example, as quarter-hardened by cold-working prior to its being bent to shape to form the spring-member 47 illustrated in the drawings. The spring-member 47 has an open-throated loop 48 formed by an inner end 49 and upper and lower side portions 50 and 51 whose outer ends respectively form the upper and lower end portions 52 and 53 of the spring-member 47. In its preferred form the loop 48 has the upper and lower side portions 50 and 51 diverging from one another from the throat 54 of the loop 48 toward the inner end 49 of the loop. The lower end portion 53 of the spring-member 47 has an opening 55 to receive a finger 56 struck out from the base portion of the outer strip 20, and the upper end portion 52 of the spring-member 47 engages in the V-shaped channel or recess 57 of the upper portion of the outer strip 20.

By suitably adjusting the screw **44**, the fingers **39** are forced downwardly about the pivot **42** thus swinging the arm **37** upwardly and causing the surface **38** thereof to engage against the lower side portion **51** of the loop **48**, and through the resilient lower side portion **51** and resilient inner end **49** of the loop **48**, resiliently forcing the upper side portion **50** of the loop **48** against the underside of the shelf **27** and also causing the upper end portion **52** of the spring-member **47** to resiliently force the outer strip **20** against the pane of glass **45**, thus resiliently and yieldably clamping and holding the pane of glass **45** between the outer and inner strips **20** and **21** which, in the form of the construction illustrated in the drawings, actually have resilient rubber cushion-strips **58** in actual direct engagement with the glass **45**.

In the form of the invention illustrated in Figs. 9 and 10 the parts and their mode of operation are generally similar to the corresponding parts illustrated in Figs. 1 to 8. Thus the spring-member **59** is essentially the same as the spring-member **47**, differing therefrom mainly in the particular proportions and conformations of the various portions thereof. And similarly, the outer and inner strips or moldings **60** and **61** respectively correspond to the outer and inner strips **20** and **21**, differing therefrom mainly in the particular conformations and proportions thereof.

While our improved spring-clip construction is especially desirable in connection with extruded outer and inner strips, it is also useful in connection with sheet metal outer and inner strips, and it is also useful in combination with the resilient rubber cushion strips mounted between the outer and inner strips and the glass plate.

The invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention, and the present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes coming within the meaning and equivalency range of the appended claims are intended to be embraced therein.

We claim:

1. A store-front construction comprising: a pane-supporting shelf; a pane supported on said shelf; outer and inner strips engaging opposite faces of said pane; a sheet-metal spring-clip having an open-throated loop formed by an inner end, and upper and lower side portions whose outer ends respectively form upper and lower end portions; said upper end portion of the spring-clip engaging the upper portion of said outer strip; an adjustable member engaging against said lower side portion of the loop, and through said lower side portion and said inner end of said loop resiliently forcing said upper side portion of the loop against the underside of said shelf with the throat of said loop normally remaining open, and causing said upper end portion of the spring-clip to resiliently force said outer strip against said pane.

2. A store-front construction comprising: a pane-supporting shelf; a pane supported on said shelf; outer and inner strips engaging opposite faces of said pane; a sheet-metal spring-clip having an open-throated loop formed by an inner end, and upper and lower side portions whose outer ends respectively form upper and lower end portions, said upper and lower side portions of the loop diverging from one another from said throat toward said inner end of the loop; said upper end portion of the spring-clip engaging the upper portion of said outer strip; an adjustable member engaging against said lower side portion of the loop, and through said lower side portion and said inner end of said loop resiliently forcing said upper side portion of the loop against the underside of said shelf with the throat of said loop normally remaining open, and causing said upper end portion of the spring-clip to resiliently force said outer strip against said pane.

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