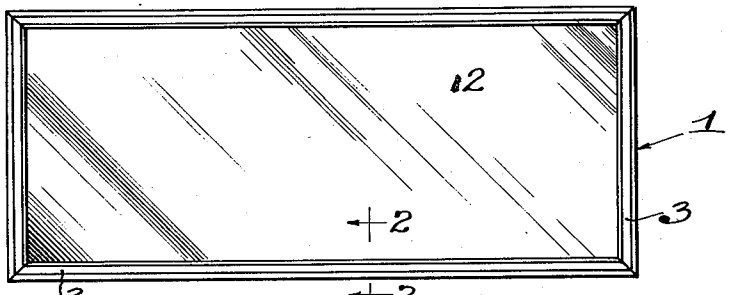
Jan. 2, 1940. V. E. PETERSON 2,185,735

SASH CONSTRUCTION

Filed Aug. 26, 1937

Fig. 1



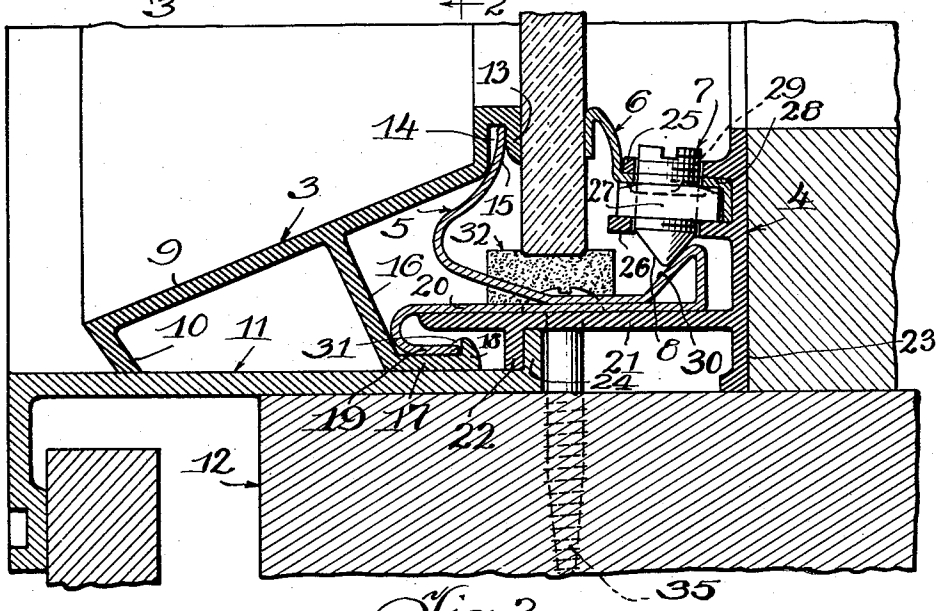


Fig. 2

Fig. 3

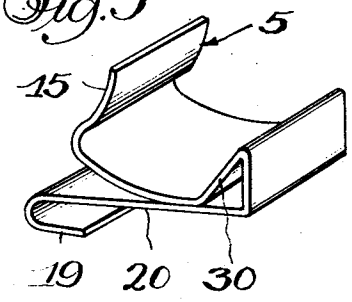
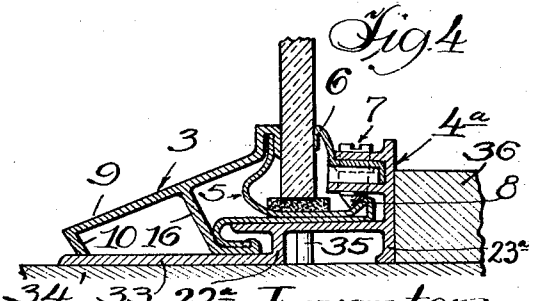


Fig. 4



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UNITED STATES PATENT OFFICE

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SASH CONSTRUCTION

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4 Claims. (Cl. 20—56.4)

The present invention relates to a sash construction and more particularly to a novel sash construction for store fronts and the like whereby to firmly but yieldably retain a pane of glass in a predetermined, adjusted position.

Among the objects of the present invention is to provide a novel sash construction and novel method of adjustably retaining a pane of glass by means of a resilient mounting which firmly retains the glass in its proper position, but due to its inherent resiliency, permits the glass to yield under strains or stresses to which it may be subjected.

Another object of this invention is the provision of a novel means and method of adjustably mounting a pane of glass by resilient members so constructed and arranged as to prevent the breakage of glass and so related that this resiliency will accommodate any irregularities of the glass surface as the pane is fastened in its proper adjusted position.

A further object of the present invention is to provide a novel resilient bracket construction for adjustably mounting or connecting the face piece or moulding, and a novel means for adjusting the bracket and the face piece or moulding carried thereby.

Another object is the provision of a novel gutter construction including a resilient mounting for the rear face of the glass adapted to be interlocked with the back piece or glass supporting section.

Further objects are to provide a construction of maximum simplicity, efficiency, economy and ease of assembly and operation, and such further objects, advantages and capabilities as will later more fully appear and are inherently possessed thereby.

The invention further resides in the construction, combination and arrangement of parts illustrated in the accompanying drawing, and while I have shown therein a preferred embodiment, it is to be understood that the same is susceptible of modification and change, and comprehends other details, arrangements of parts, features and constructions without departing from the spirit of the invention.

In the drawing:

Fig. 1 is a view in front elevation of a store front or window construction provided with the novel sash.

Fig. 2 is an enlarged view in vertical cross section through the sash construction and taken on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the novel bracket construction and arrangement.

Fig. 4 is a view similar to Fig. 2 but of an alternate construction and on a reduced scale.

Referring more particularly to the disclosure in Figs. 1, 2 and 3 of the drawing, the embodiment therein selected to illustrate the invention comprises a store front construction or setting 1 for a pane of glass 2. The novel setting comprises a face piece or moulding 3, an inner sash member or back piece 4 adapted to support the glass, a resilient bracket 5, a resilient glass engaging member 6 carried by the pane seating section 4 and a screw member 7 also carried by this pane seating section and having a cam surface 8 adapted to engage the bracket and move the moulding or face piece 3 into abutting or seating engagement with the glass. In order to properly and adequately drain off condensation, as well as to permit proper ventilation, the moulding and pane seating sections are provided with openings (not shown).

As disclosed in Fig. 2, the face and back pieces or sash members 3 and 4 are preferably constructed of extruded metal such as aluminum, bronze or the like affording sufficient rigidity or firmness to the mounting, while the bracket 5 and member 6 are preferably formed of a resilient metal such as stainless steel or the like, although it is to be understood that the invention is not limited to such metals and comprehends other metals or materials suitable for the purposes disclosed or contemplated.

The outer face piece or mounting 3 is formed to provide a sloping face 9 of suitable design or contour having an outer flange 10 adapted to seat upon a sheathing or covering 11 adapted to cover the sill or base 12, and a glass engaging or abutting portion 13 having an inwardly opening channel 14 for receiving an upwardly projecting leg 15 of the bracket 5. Intermediate the flange 10 and glass abutting portion 13 of the face piece is provided a downwardly projecting leg 16 substantially in the form of an L with the base 17 thereof adapted to seat upon the sheathing or covering 11 and slidable or movable thereover. This base is provided with an upwardly or outwardly projecting rib 18 adapted to form with the leg 16 a channel or groove for the reception of the inwardly turned lip 19 of the projection or base 20.

The rear member or glass seating portion is provided with a base or ledge 21 provided with downwardly projecting legs 22 and 23, the former seating upon and abutting an upwardly

extending projection 24 formed at the rear of the sheathing or covering 11. The leg 23 is shown as directly seating upon the sill 12. This back piece or section is further provided with spaced inwardly extending ledges 25 and 26 formed with aligned openings for the reception of the screw or adjusting member 7 and adapted to receive and retain therebetween a nut 27 threadedly receiving the screw or adjusting member 7 and the extension 28 of the resilient member or moulding 6 which forms part of the gutter and is interlocked with the back piece by means of this nut. This nut is held in place between two ribs 29 on the moulding 6. The cam surface 8 of the screw or adjusting member 7 is adapted to abut the inclined face or surface 30 of the bracket whereby when the member 7 is screwed downwardly, its tapered end or cam surface 8 bears against the inclined surface 30 and thus causes the bracket 5, by reason of the engagement of its ends 15 and 19 with the projection or glass abutting portion 13 and the rib 18 on the face piece or moulding, respectively, to draw the piece into abutting engagement with the outer face of the pane of glass.

It will be clearly evident that this adjustment is all made from the rear of the glass and due to its resiliency both through the connection of the resilient bracket with the outer face piece and the engagement of the resilient member or moulding 6 with the interior of the glass, the glass will be held with a uniform gripping pressure throughout its extent and which gripping pressure is sufficient to hold the glass firmly yet yieldably in place and without undue strains or stresses which would subject the glass to the danger of cracking or splitting. These bracket members 5 and the adjusting screws or members 7 may be suitably spaced along the length of the sash members and each bracket 5 is snapped in place between two lugs 31 on the face piece 3 in a position directly opposite the screws in the rear member. Thus, these brackets will in no way interfere with the seating blocks 32 upon which the lower edge of the pane is positioned at spaced points.

Fig. 4 shows a slightly modified form of the invention in which the sash construction is mounted directly upon the sill or window frame and the back piece or pane seating section 4^a is provided with a base 33 forming a covering over a portion of the sill 34 and a support or extension upon which the face piece or moulding 3 is slidably mounted. It is, of course, to be understood that this inner sash member or back piece may or may not be provided with the base 33, in which latter event the leg 22^a will seat directly upon the sill. In other respects the embodiment shown in Fig. 4 is similar to that disclosed in Fig. 2 of the drawing. The pane seating sections 4 and 4^a may be fastened direct to the sill as by means of screws or the like 35 or connected in any other suitable way to the sill or to the vertical riser 36.

In the assembly of the novel embodiments disclosed in the drawing, the back piece or pane seating section is first mounted in position either upon the sill or frame 12 and sheathing or covering 11 as in Fig. 2 or directly upon the sill or window frame 34 and/or riser 36 as in Fig. 4. The pane of glass 2 is then positioned upon the setting blocks 32 after which the sash piece or moulding with the spaced brackets 5 carried thereby, is slid inwardly toward the glass to a position where the central portion of each bracket is in alignment with the screws or adjusting members 7 suitably spaced along and carried in the rear piece 4 or 4^a. It is, of course, to be understood that at such time, the screws or adjusting members 7 have been unscrewed to a position where the inclined face or surface 30 of the clamp members will pass the tapered end or cam surface 8. A screwing down of these members 7 will then cause the tapered end or cam surface 8 to engage and ride over the inclined surface 30 of the brackets and thereby force these brackets rearwardly to retract or draw the face piece 3 inwardly until it abuts the glass with sufficient or proper gripping pressure to retain it in its desired position. It is to be noted that the face piece, being adjusted to the glass, has an action parallel to the sill and does not tilt in so that mitering of the corners can be held in perfect alignment without the aid of caps or the like.

Having thus disclosed the invention, I claim:

1. A sash construction for store fronts, windows and the like for supporting a pane of glass, comprising in combination a pane seating section adapted to be secured upon the window frame, a moulding adjustable with respect to the seating section, a resilient bracket carried by the moulding, an adjusting screw and nut for the screw carried by the pane seating section, and a resilient gutter member secured in the seating section by the screw and nut, said screw and bracket being so constructed and arranged that when the seating section and moulding are in assembled relation, a screwing downwardly of the adjusting screw retracts the bracket and moulding to resiliently seat the moulding against the outer face of the glass and the gutter member exerts a resilient gripping pressure against the inner face of the glass to firmly yet resiliently retain the glass in adjusted position.

2. In a sash construction for store fronts, the combination of an inner and an outer sash member adapted to be mounted on the window frame for supporting a pane of glass in an adjusted position, a resilient bracket carried by the outer sash member and adapted to move this sash member into abutting engagement with the outer face of the glass, an adjusting screw and nut carried by the inner sash member, complementary cam surfaces on the screw and bracket adapted to retract the resilient bracket and moulding in a plane perpendicular to the face of the pane when the screw is screwed downwardly and to retain the moulding by a resilient grip, and a resilient member mounted on the inner sash member adapted to engage the inner face of the glass and locked in position by the adjusting screw and nut.

3. A sash construction for store fronts and the like, comprising in combination an inner and an outer sash member adapted to be mounted upon the window frame for supporting a pane of glass in a desired adjusted position, resilient brackets carried by the outer sash member at spaced points throughout its extent and so constructed and arranged as to draw this sash member rearwardly in a plane perpendicular to the pane of glass and into abutting relation with the glass, adjusting members carried by the inner sash member, complementary cam surfaces on the brackets and adjusting members so arranged that adjustment of these latter members moved the brackets and the outer sash member into glass retaining position, and a separate resilient member carried by the inner sash member and

retained in position by the adjusting members adapted to apply a uniform resilient gripping pressure to the rear face of the glass.

4. A sash construction for store fronts and the like, comprising in combination an inner and an outer sash member adapted to be mounted upon the window frame for supporting a pane of glass in a desired adjusted position, resilient brackets carried by the outer sash member at spaced points throughout its extent and so constructed and arranged as to draw this sash member inwardly in a plane perpendicular to the pane of glass and into abutting relation with the glass, adjusting screws and nuts carried by the inner sash member in such manner that the end of each screw is adapted to seat against a part of each bracket and by adjustment of the screws, the brackets and outer sash member are moved to a position where this outer sash member contacts the outer face of the glass and retains the glass by a resilient grip, and a separate resilient piece carried by the inner sash member and retained by the adjusting screws and nuts adapted to grip the rear face of the glass with a resilient gripping pressure which, in combination with the outer sash member and brackets, firmly but resiliently retains the glass in a desired position without the danger of cracking or splitting.

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