Nov. 24, 1931. M. KATZ 1,833,364

WINDOW GLASS MOUNTING

Filed Feb. 1, 1930

Fig. 1.

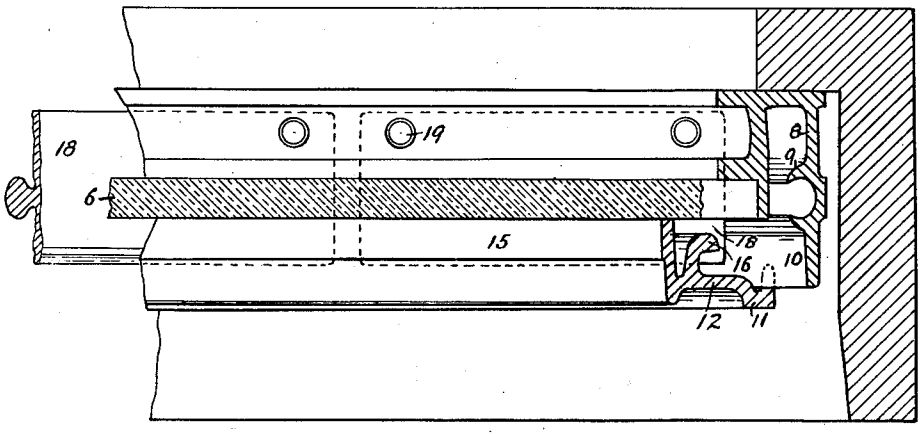
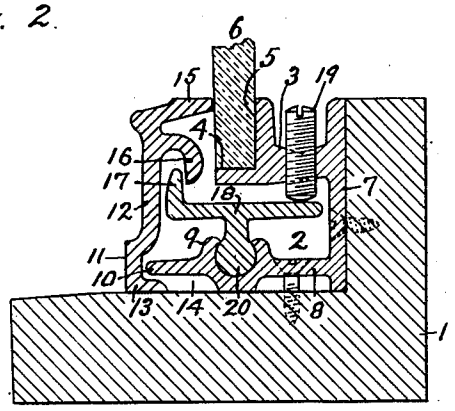


Fig. 2.



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WINDOW GLASS MOUNTING

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The present invention relates to improvements in window glass mountings commonly employed in store front construction for displaying goods.

The main object of the invention is to provide clamping means operable from inside the window for detachably connecting the glass in position.

A further object includes the provision of a mounting having comparatively few separable parts and in which the required clamping force is applied in a direct manner resulting in little or no frictional resistance from the operating parts.

For further comprehension of the invention, and of the objects and advantages thereof, reference is had to the following description and accompanying drawings, and to the appended claims in which the various features of the invention are more particularly set forth.

Referring to the drawings in which similar characters of reference designate like parts throughout the several views:

Figure 1 is a top plan view partly in section of a window construction embodying my invention.

Figure 2 is a vertical cross sectional view of the same.

Referring to the drawings numeral 1 designates a fixed frame section to which is secured a base member generally indicated by 2 and having a glass-supporting web section 3 provided with bearing faces 4 and 5 adapted to respectively seat the marginal edge and adjacent inner face of the glass plate 6. Integrally formed with the web section 3 is a base side flange 7 and to the latter is similarly connected a base web section 8 disposed in spaced relation to the web 3 and provided with a pivot receiving socket 9, the free end 10 of web 8 being arranged in spaced relation with the frame section 1 and serving to engage as a stop a bearing ledge 11 formed on the detachable clamp member 12, the ledge being provided with an inwardly directed flange 13 arranged to pass within the space 14 formed between the frame 1 and the stop-end 10 of the base member. An opposite inwardly directed bearing ledge 15 is also provided for the clamp member 12 and is disposed to engage the outer marginal face of the glass 6 and to securely hold the same against the opposite bearing face 5 of the base member 2.

Integrally formed with the clamp member 12 between the opposite bearing ledges 11 and 15 is a recessed ledge 16 adapted to be entered and engaged by a driving lug section 17 formed on one transverse end of an operating lever member 18, the opposite transverse end thereof being operatively engaged by set-screws 19 threaded through the web section 3 of the base member 2. Intermediate its transverse ends the lever member 18 is provided with a pivot section 20 adapted to turn within the socket 9 of the base member, and by actuating the set-screws 19 in one direction the lever member may be rotated and the lug section 17 thereof caused to engage the ledge 16 of the clamp member and inwardly force the latter into clamping action with the glass, and in which movement the bearing ledge 11 of the clamp engages the stop 10 as a turning abutment, and by the latter's engagement with the flange 13, transverse displacement of the clamp member is avoided. On reversing the movement of the set-screws the clamping action against the glass becomes released and the clamp may be readily displaced for the removal or introduction of the glass.

For securing the operating lever 18 against lateral displacement, the pivot-socket 9 is cylindrically shaped lengthwise of the base member 2 and provided with inwardly extending marginal edges contracted to form a pivotal space for the endwise reception and adjustment of the pivot sections 20 of the operating levers 18.

The irregularly shaped separable members comprising the base, clamp and operating levers are each provided with integral working parts formed of extruded metal having throughout their respective lengths uniform cross sections and constituting a construction adapted to reduce the cost of manufacture and simplify the assemblage of the relatively few parts.

It is to be understood that the structure shown in the drawings, for the lower edge of the glass, is to be duplicated for the sides and upper edges thereof, with the base and clamp members formed in single lengths for each of the several edges, and with mitered corner joints of regular construction, the members forming the operating levers being herein shown of relatively shorter lengths depending upon the window spans and the thickness of the metal used in construction.

As herein set forth it will be obvious that the clamping means is adapted for securing in position glass of variable thickness and that the operating means therefor has the recognized advantage of being invisible from the exterior of the window.

An additional obvious advantage in the operation of the above described clamping action upon the glass is the direct manner in which the screws act to transfer their pressure in a right angular direction through the lever members to the clamp members in order to avoid frictional operating resistance, thus quickly obtaining the required clamp action with comparatively little force, and also effecting a correspondingly quick releasing action of the clamp by the reverse movement of the screws.

As shown in Fig. 2, the free upper edges of the pivot-receiving socket 9 extend slightly beyond the center of the engaging pivot section 20 and in contracted relation therewith to provide a free rocking movement for the lever 18 and secure the same against displacement. As thus constructed the lever members are introduced into the base member 2 endwise of the continuous pivot-receiving socket and into alinement with the set-screws 19, a wall of the socket being preferably set in at the opposite ends of the lever members a slight amount to avoid possible lengthwise displacement of the latter. In this assembled condition the base member may be shipped and installed for the reception of the glass in the usual manner, and by adjusting the screws 19 the lever 18 may be readily opened and closed for respectively admitting and clamping the outer member 12.

What I claim as my invention and desire to secure by Letters Patent, is:

1. In a glass mounting having a fixed base member and a detachable clamp member between which the glass is adapted to be secured, a screw-actuated lever pivotally mounted in said base member for longitudinal adjustment and against lateral displacement, and an arm extending from said lever and operatively engaging said clamp member.

2. In a glass mounting having a fixed base member and a detachable clamp member between which the glass is adapted to be secured, a lever pivotally mounted in said base member against lateral displacement, means extending from said lever for operating said clamp member, and means for actuating said lever.

3. In a glass mounting having a fixed base member and a detachable clamp member between which the glass is adapted to be secured, a pivot-socket formed in said base member, a screw-actuated lever having a pivot section engaging said socket, the marginal walls of the latter extending inwardly of and contracted relatively to the pivotal diameter and disposed against lateral displacement with respect to the pivot section of said lever, and means for actuating said lever.

Signed at New York, in the county of New York and State of New York this 30th day of January A. D. 1930.

MARTIN KATZ.