D. H. SWINTON

ART GLASS WINDOW MOUNTING

Filed July 14, 1923
To all whom it may concern:

Be it known that I, DAVID H. SWINTON, a citizen of the United States of America, residing at Toledo, Lucas County, Ohio, have invented new and useful Art-Glass-Window Mountings, of which the following is a specification.

This invention relates to multiple piece windows and their mountings.

This invention has utility when incorporated in brace rods and their mounting and anchoring in connection with art or leaded glass windows.

Referring to the drawings:

Fig. 1 is a view from the inside of an art glass window, during installation, embodying features of this invention:

Fig. 2 is a fragmentary section, on an enlarged scale, on the line II—II, Fig. 1;

Fig. 3 is a section on the line III—III, Fig. 1, looking in the direction of the arrow;

Fig. 4 is a detail view of the one-piece blank for the brace-bar anchoring sleeve; and

Fig. 5 is a perspective view of the one-piece sheet metal brace-bar anchoring sleeve.

Window frame 1 is shown as having outer holding flanges 2, determining therebetween a light opening. Against this endless flange 2 there is assembled in the frame 1 a window comprising plates or panes 3 anchored as a unit by leaden joints 4 herein disclosed as lead joints. As a substantial reinforcement to such a multiple piece window, steel or other reinforcing brace bars 5 are assembled therewith, as by soldering to the lead joint, and preferably by following a joint or joints in the extent of the brace bar transversely of the window.

As herein disclosed, these brace bars 5 have their termini or ends 6 extend just short of fully spanning the opening, or inward from the margin of the window of multiple glass as a clearance 7 for stops. The soldering or attaching of the brace bars 5 with the joints 4 may be at intervals, or continuous, but stops to leave a clear region 7 a short distance inward from the ends 6.

In these clear regions 7 of the bars 5, in the course of assembling an art glass window in its frame, are placed bar embracing members or sockets 8 having a pair of oppositely extending flanges 9 with openings 10 therein for receiving anchoring pins or screws 11. Each bar end 6 is equipped with a socket 8 loosely thereon, as permitted by the clearance regions 7, and each socket is shoved back on the bar 5 so as not to project beyond the bar end. The lead glass window 50 may be then placed in the frame 1 against the flange or weatherstrip 2, and so mounted by the glazier, who may insure the fitted window being held in such position by blocks 12, fixed to be held with the frame 1 by nails 13. The carpenter may follow the glazier and place the finish stops 14 directly in position, by having such stops 14 fitted only terminally as to the frame 1. For the region of each stop 14, the blocks 12 are removed by withdrawing the partially driven nails 13. Such stop 14 is firmly and finally positioned, as by screws 15. The socket or sockets 8 on the bars 5 may be in the region of such stop 14, are telescoped outward, for the ends 6 of the bars 5 are such as to clear the stops 14. These sockets 8 as shifted outward bring their flanges 9 against the stop 14, and the screws 11 are inserted through the openings 10 into the stop 14, thereby positively anchoring the socket and brace bar with the art window in the frame. The stop 14 is of full strength as to its cross-section throughout its length, and the whole assembly is such as may be accomplished expeditiously in the production of a sighted construction in keeping with art glass environment. As the sockets 8 are snug fitting, the anchoring by the screws 11 is firm against any rattle or weaving of the window, thus being a material factor in maintenance of installed condition of the window, against the entrance of stresses to buckle, weaken or destroy the installation. The installation is completed by the disposal of the stops 14 to replace all of the blocks 12.

What is claimed and it is desired to secure by Letters Patent is:

1. A window having margins, a brace bar for said window extending short of the window margins toward which the bar projects, bar engaging members shiftable along the bar adjacent said margins, stops for the window disposed at the window margins, and means for anchoring the members with the stops in installing the window.

2. A window frame, glass sections, means assembling said sections with each other, bars anchored with said means and extending short of engaging said frame when the window is seated in said frame, stops seated
between the ends of said bars and said frame for engaging the assembled glass sections, bar embracing slidable members on each end of said bars shiftable to engage the stops, and means for anchoring the bars with said stops.

3. A window frame comprising a seat having an inturned flange, a multiple glass window having margins thereof mounted in said frame against said flange, brace bar means extending transversely of said window and anchored thereto on the side of the window away from said inturned flange, said bar means extending short of the margins of said window, embracing members on the ends of said means and shiftable toward the frame seat, and stops for holding the window in said seat, which stops are engageable by said embracing members for effecting reinforced holding of the window in said frame.

In witness whereof I affix my signature.

DAVID H. SWINTON,