April 30, 1935. E. F. TONEY 1,999,219

STORE FRONT CONSTRUCTION

Filed May 29, 1934

Fig. 1.

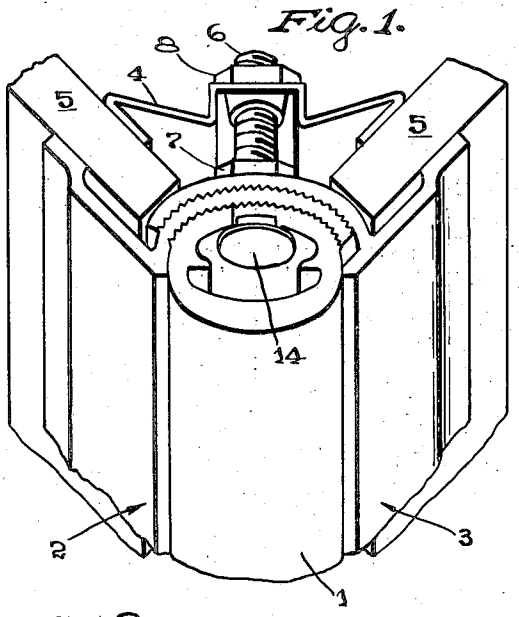


Fig. 4.

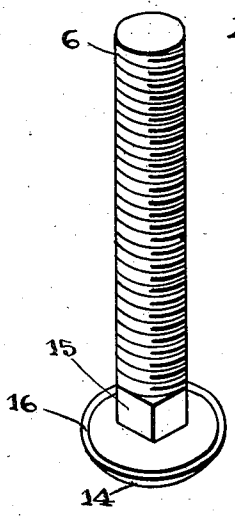


Fig. 2.

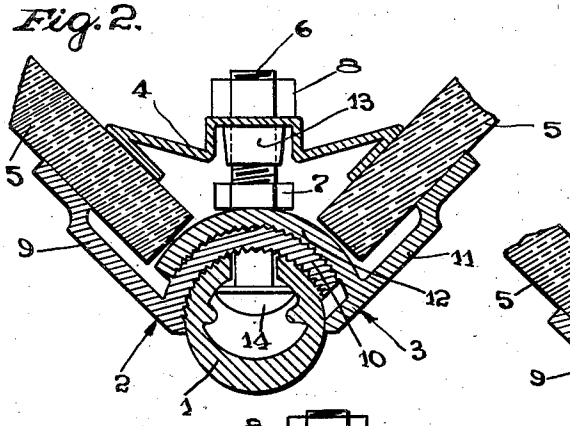


Fig. 5.

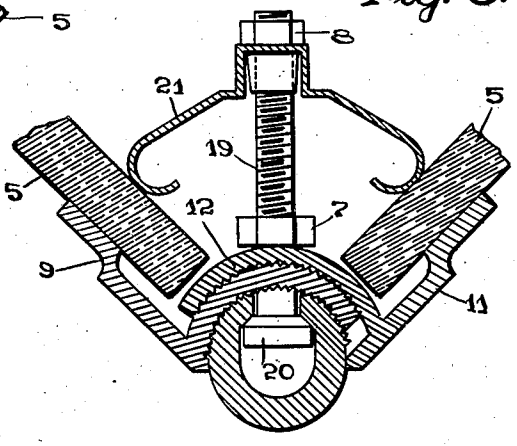
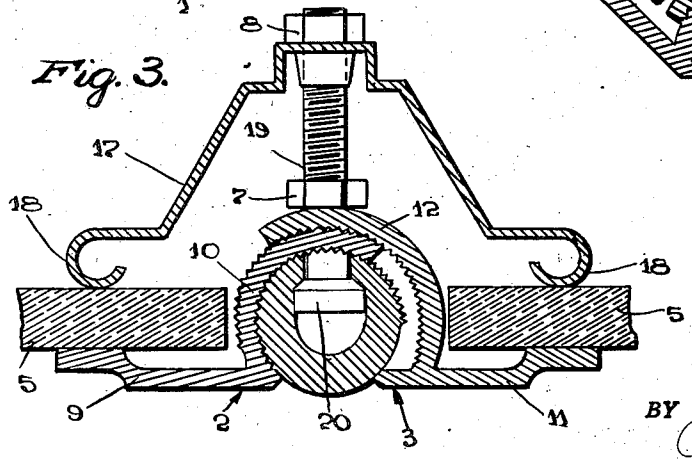


Fig. 3.



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Patented Apr. 30, 1935

1,999,219

UNITED STATES PATENT OFFICE

1,999,219

STORE FRONT CONSTRUCTION

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Application May 29, 1934, Serial No. 728,088

5 Claims. (Cl. 189—78)

The invention relates to store front construction and particularly to the corner and division bars. The invention has for its principal objects the provision of an improved device which is of simple and secure construction, and one which is capable of adjustment from an angle of 90 degrees or less to 180 degrees. Certain embodiments of the invention are illustrated in the accompanying drawing, wherein:

Figure 1 is a perspective view of one end of the construction. Fig. 2 is a horizontal section through the construction with the glass sheets lying at 90 degrees from each other. Fig. 3 is a section through a slightly modified construction with the glass sheets lying at an angle of 180 degrees from each other. Fig. 4 is a perspective view of the bolt used in the construction of Figs. 1 and 2. And Fig. 5 is a section similar to that of Fig. 3, but with the device adjusted so that the glass sheets lie at an angle of 90 degrees.

Referring to the construction of Figs. 1, 2 and 4, 1 is a hollow post; 2, 3 are the front strips of the construction; 4 is the back strip of the construction; 5, 5 are the glass sheets; 6 is the securing bolt; and 7 and 8 are securing nuts threaded upon the bolt. The members 1, 2 and 3 are preferably of extruded metal, while 4 is preferably of sheet metal pressed or drawn to the desired cross section.

The hollow post 1 is slotted along its inner side throughout its length and it will be understood that a plurality of clamping bolts 6 are employed, the number depending upon the length of the construction. The front strip 2 comprises a flat flange 9 opposing the outer face of the glass sheet 5 and a curved flange 10 which fits around the inner face of the post. The opposing surfaces of this flange and the post are provided with teeth as shown to reduce the tendency of these parts to slip. The front strip 3 is similarly provided with a flat flange 11 engaging the front face of the glass sheet 5 and a curved flange 12 similar in curvature to the flange 10, the inner surface of such flange and the outer surface of the flange 10 being toothed to provide for the more secure engagement. The flanges 10 and 12 are clamped to the post 1 by the nut 7, thus holding these parts securely in any position to which they may be adjusted. The nut 8 preferably has a conical portion 13 extending through the back strip 4 and when this nut is screwed in, the back strip 4 is pulled toward the flanges 9 and 11 of the front strips 2 and 3, thus securely clamping the glass sheets. The inner end of the bolt 6 next to its head 14 (Fig. 4) is made square, as indicated at 15, to prevent its turning while the nuts 7 and 8 are being tightened. The head 14 is also preferably beveled, as indicated at 16, so that when the nut 7 is tightened, it tends to spread the post and increase the clamping action.

When the glass sheets are arranged at an angle of 180 degrees, as indicated at Fig. 3, a different form of back strip 17 is employed, such back strip having curved end portions 18 engaging the inner faces of the glass sheets. This form of curved end permits proper engagement between the back strip and the glass sheets when such sheets are adjusted through a considerable angular range, so that when this form of back strip is used, a less number of different shapes may be employed than if the type of back strip shown in Fig. 2 is employed. The bolt 19, as shown in Fig. 3, is slightly modified as compared with that of Fig. 4 as this bolt has a square head 20 which fits into the slot in the post, so that it is not necessary to square the shank of this bolt to correspond to the square portion 15 shown in Fig. 4. The slot through the post 1 is also slightly different in the contruction shown in this figure.

Fig. 5 illustrates the construction of Fig. 3 adjusted so that the glass sheets lie at an angle of about 90 degrees. The details of the structure here are the same as that of Fig. 3, except that it has been necessary to substitute a different back strip 21 for the back strip 17 of the Fig. 3 construction.

What I claim is:

1. In combination in a store front construction, a pair of glass sheets having their edges in opposition, but spaced apart, a hollow post between said edges circular in cross section and slotted longitudinally of its rear side throughout its length, a pair of front strips each having a flange adapted to engage the outer face of one of said sheets and each having another flange of curved shape arranged so that the curved flanges overlap and fit around the curved inner side of the post, said last flanges being slotted for the passage of a clamping bolt, a back strip having flanges engaging the rear faces of the glass sheet opposite the first mentioned flanges, a clamping bolt having a head lying inside said post and extending through the slots in said curved flanges and through said back strip, a nut threaded on the bolt intermediate the curved flanges and back strip for clamping the curved flanges and the post together, and a nut threaded on the bolt on the inner side of the back strip for causing the flanges on the front and back strips to clamp the glass

sheets lying therebetween, said clamping bolt having its shank adjacent its head of non-circular cross section fitting the slot in the post so that the bolt will not rotate.

2. In combination in a store front construction, a pair of glass sheets having their edges in opposition, but spaced apart, a hollow post between said edges circular in cross section and slotted longitudinally of its rear side throughout its length, a pair of front strips each having a flange adapted to engage the outer face of one of said sheets and each having another flange of curved shape arranged so that the curved flanges overlap and fit around the curved inner side of the post, said last flanges being slotted for the passage of a clamping bolt, a back strip having flanges engaging the rear faces of the glass sheet opposite the first mentioned flanges, a clamping bolt having a head lying inside said post and extending through the slots in said curved flanges and through said back strip, a nut threaded on the bolt intermediate the curved flanges and back strip for clamping the curved flanges and the post together, and a nut threaded on the bolt on the inner side of the back strip for causing the flanges on the front and back strips to clamp the glass sheets lying therebetween, the opposing surfaces of the curved flanges being provided with teeth to add to their security against relative movement, said clamping bolt having its shank adjacent its head of non-circular cross section fitting the slot in the post so that the bolt will not rotate.

3. In combination in a store front construction a pair of glass sheets having their edges in opposition, but spaced apart, a hollow post between said edges circular in cross section and slotted longitudinally of its rear side throughout its length, a pair of front strips each having a flange adapted to engage the outer face of one of said sheets and each having another flange of curved shape arranged so that the curved flanges overlap and fit around the curved inner side of the post, said last flanges being slotted for the passage of a clamping bolt, a back strip having flanges engaging the rear faces of the glass sheet opposite the first mentioned flanges, a clamping bolt having a head lying inside said post and extending through the slots in said curved flanges and through said back strip, a nut threaded on the bolt intermediate the curved flanges and back strip for clamping the curved flanges and the post together, and a nut threaded on the bolt on the inner side of the back strip for causing the flanges on the front and back strips to clamp the glass sheets lying therebetween, the opposing surface of the post and of the curved flange next to the post being provided with teeth to add to their security against relative movement, said clamping bolt having its shank adjacent its head of non-circular cross section fitting the slot in the post so that the bolt will not rotate.

4. In combination in a store front construction, a pair of glass sheets having their edges in opposition, but spaced apart, a hollow post between said edges circular in cross section and slotted longitudinally of its rear side throughout its length, a pair of front strips each having a flange adapted to engage the outer face of one of said sheets and each having another flange of curved shape arranged so that the curved flanges overlap and fit around the curved inner side of the post, said last flanges being slotted for the passage of a clamping bolt, a back strip having flanges engaging the rear faces of the glass sheet opposite the first mentioned flanges, a clamping bolt having a head lying inside said post and extending through the slots in said curved flanges and through said back strip, a nut threaded on the bolt intermediate the curved flanges and back strip for clamping the curved flanges and the post together, and a nut threaded on the bolt on the inner side of the back strip for causing the flanges on the front and back strips to clamp the glass sheets lying therebetween, the opposing surfaces of the curved flanges and the opposing surface of the post and of the curved flange next to the post being provided with teeth to add to their security against relative movement, said clamping bolt having its shank adjacent its head of non-circular cross section fitting the slot in the post so that the bolt will not rotate.

5. In combination in a store front construction, a pair of glass sheets having their edges in opposition, but spaced apart, a hollow post between said edges circular in cross section and slotted longitudinally of its rear side throughout its length, a pair of front strips each having a flange adapted to engage the outer face of one of said sheets and each having another flange of curved shape arranged so that the curved flanges overlap and fit around the curved inner side of the post, said last flanges being slotted for the passage of a clamping bolt, a back strip having flanges engaging the rear faces of the glass sheet opposite the first mentioned flanges, a clamping bolt having a head lying inside said post and extending through the slots in said curved flanges and through said back strip, a nut threaded on the bolt intermediate the curved flanges and back strip for clamping the curved flanges and the post together, and a nut threaded on the bolt on the inner side of the back strip for causing the flanges on the front and back strips to clamp the glass sheets lying therebetween, said bolt having its face which engages the inner surface of the post bevelled so that it tends to spread the post when the first mentioned nut is tighened.

EDWARD F. TONEY.