July 12, 1932. H. C. POWERS 1,866,723

BRACKET FOR SIGNS AND THE LIKE

Filed July 23, 1931

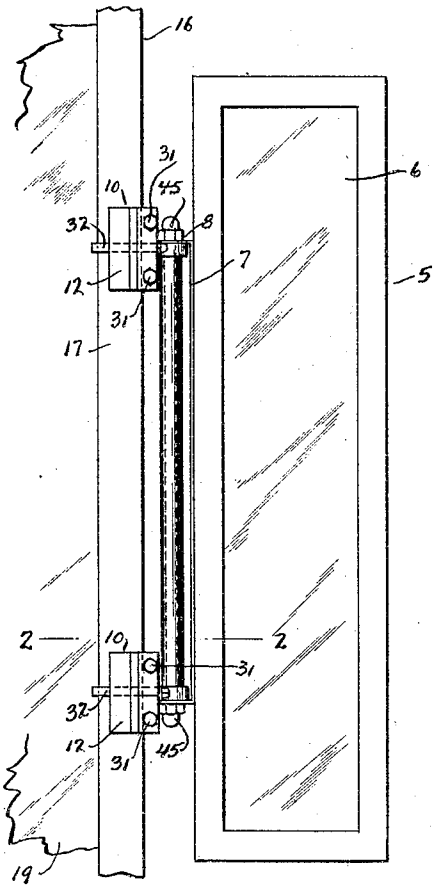


Fig. 1.

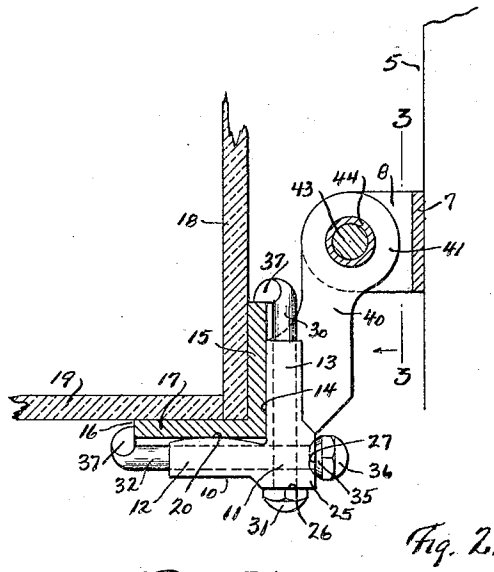


Fig. 2.

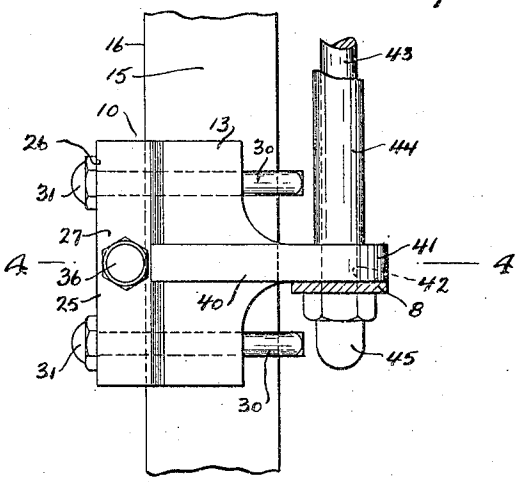


Fig. 3.

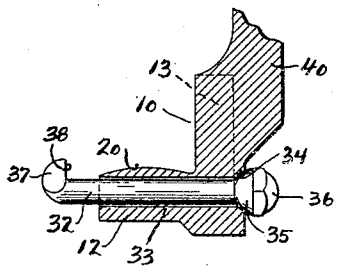


Fig. 4.

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UNITED STATES PATENT OFFICE

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BRACKET FOR SIGNS AND THE LIKE

Application filed July 23, 1931. Serial No. 552,662.

My invention relates in general to brackets for signs, and in particular to brackets used in connection with the corner angles of glass windows for the support of a sign.

One of the objects of my invention has been to provide brackets which will permit signs to be located at the corners of show windows which are adjacent the entrance to the place of business where they are most readily seen.

Another object has been to provide a bracket which may be readily secured in any position to the metal angle iron at the corner of glass show windows without the necessity of drilling or tapping any holes, or otherwise altering the angle iron.

Moreover, my brackets may be quickly and easily assembled, and may be easily removed and changed, if desired, to another position upon the same angle iron or to the angle iron of another window.

Furthermore, my clamp is sturdy in construction and may be securely clamped in place without distorting the window angle or placing a strain upon the glass of the window.

The above objects and advantages have been accomplished by the device shown in the accompanying drawing, of which:

Fig. 1 shows a side elevation of a sign held to a window by the use of my clamps.

Fig. 2 is an enlarged, fragmentary, sectional view, taken on line 2—2 of Fig. 1.

Fig. 3 is an enlarged, fragmentary, sectional view, taken on line 3—3 of Fig. 2, showing one of the faces of one of the brackets.

Fig. 4 is a fragmentary, enlarged, sectional, view taken on line 4—4 of Fig. 3.

In the accompanying drawing, the sign which is shown as being supported by my brackets is represented by the numeral 5. This sign may be of any desired size or shape and is one which preferably has three sides fitted with glass sheets 6, one of which being shown in Fig. 1, upon which is placed the desirable letters in any well known manner. Secured to the back of the sign 5 is a strap 7 which extends longitudinally for considerable of the length of the sign 5 and which is provided at each end with a right-angled arm 8.

One of my brackets 10 is located adjacent each of the arms 8 of the strap, and each comprises a body 11 having legs 12 and 13 arranged preferably at right angles to each other. The leg 13 is preferably formed with a flat inner face 14 for engagement with one of the legs 15 of the angle 16 at the corner of the show window. This angle is, of course, provided with another leg 17 and these legs are cemented or otherwise fastened to the glass panes 18 and 19, respectively, of the show window. The leg 12 of the bracket is preferably formed with a curved inner surface 20 where it contacts with the leg 17 of the window angle 16. This curved face is provided so that the bracket will adapt itself and may be closely drawn into contact with the window angle which may have its legs arranged at an angle which is slightly greater or less than a 90° angle.

The body 11 is provided with a reinforced portion 25 at the outer corner and opposite each of the legs 12 and 13. This reinforced portion provides surfaces 26 and 27, arranged preferably at right angles to each other. Passing through the reinforced portion 25 and through the leg 13 are two clamping bolts 30 which are screw-threaded at their outer ends and provided with suitable nuts 31. Also passing through the reinforced portion 25 is a single clamping bolt 32 which also passes through the leg 12. The hole 33 (see Fig. 4) through which the clamping bolt 32 passes is slightly larger than the diameter of the bolt so that the bolt may have some movement within the hole. The surface 27 of the reinforced portion 25 through which the bolt 32 passes is provided concentrically with the

hole 33 with a spherical surface 34 with which a spherical washer 35 is engageable. A nut 36 is carried by the end of this bolt and is engageable with the washer 35. By means of the washer and enlarged hole, the bolt 32 may adjust itself slightly to inequalities or inaccuracies in the window angle or to the position of the bracket and thus produce a firm gripping and clamping action upon the window angle. Each of the clamping bolts 30 and 32 is provided with a hook 37 at its outer end. Each of these hooks is arranged at right angles to the axis of the bolts and is provided with a bearing surface 38 which contacts with the edge of the legs 15 and 17 of the window angle. If the edge of the window angle is other than at right angles to the legs of the angle, then the surface 38 is made to suit such engaging surface and is shaped so that the hook will firmly grip the edge of the angle and prevent the same from becoming disengaged. The hook 37 of each bolt is preferably square, as shown in the drawing, so as to increase the area of the surface 38 and to add strength to the bolt.

Carried by one of the legs of the bracket 11, and preferably by the leg 13 is an attachment arm 40 which has at its outer end an enlarged lug 41 having a central aperture 42. As shown in Fig. 1, the brackets are spaced apart a considerable distance and a bolt 43 is passed between them and through the apertures 42 of the attachment arms and through the arms 8 of the strap 7. A spacing tube 44 is disposed about the bolt 43 and bears against the opposite faces of the enlarged lugs 41 of the attachment arms of the brackets, thereby keeping the brackets at a definite predetermined distance and permitting the arms 8 to be tightly clamped together by means of the bolt and nuts 45 located on the outer ends thereof.

When my device is to be installed, one of the brackets, preferably the upper one, is placed in position against the window angle 16, with the legs 12 and 13 in contact respectively with the legs 17 and 15 of the window angle, as clearly shown in Fig. 2. The hooks 37 of the clamping bolts are then placed in contact with the edges of the legs of the window angle and the nuts of such bolts are tightened up so as to firmly and securely hold the body 11 of the bracket in place against the window angle. The sign with its strap 7 is now put in place and the arm 8 at the upper end of the strap is supported by the attachment arm 40 of the upper bracket. The lower bracket is now positioned so that its attachment arm is in contact with the lower arm of the strap 7 where it is secured in place in a manner similar to that above described. The bolt 43 with its spacer tube 44 is now put in place and clamped in position. Instead of assembling the device as above described, it is obvious that the brackets may be assembled to the sign and such assembled structure then fastened in place on the window angle. It will be obvious that while I have shown the sign 5 as arranged parallel with the window pane 18, it may be tipped at an angle, if desired, the bolt 43 and arms 8 providing a pivotal connection for the sign. After the sign has been moved to the desired angle, it is securely fastened in its adjusted position by tightening the nuts 45.

Instead of securing the attachment arm 40 to the leg 13, as shown in the drawing, it is obvious that this arm may be secured to the leg 12 or it may be secured to the reinforced portion 25 and extend outwardly away from each of the legs and at substantially the same angle with each of them. It is desirable to have the legs 12 and 13 of the bracket extend out toward the outer hooked ends of the bolts 30 and 32 so as to give maximum resistance to outward bending of the bolts. Furthermore, so as to make the bracket adaptable to all sizes of window angles, slots (not shown) may be formed in the inner faces of the legs 12 and 13, extending into the outer ends of the bolt holes so as to allow the hooked ends 37 of the bolts to pass in flush with or below the edge surfaces of the legs 12 and 13.

These and other modifications of the details herein shown and described may be made without departing from the spirit of my invention or the scope of the appended claims, and I do not, therefore, wish to be limited to the exact embodiment herein shown and described, the form shown being merely a preferred embodiment thereof.

Having thus described my invention, what I claim is:

1. The combination with the angle of a show window, of a bracket, comprising a body having legs arranged at substantially right angles to each other, bolts passing through the body, the outer ends of the bolts being provided with hooks for engagement with the edges of the legs of the window angle, and means carried by the bracket for securing a sign thereto.

2. The combination with the angle of a show window, of a bracket, comprising a body having legs arranged at substantially right angles to each other, bolts passing through the body and legs, the outer ends of the bolts being provided with hooks for engagement with the edges of the legs of the window angle, and means carried by the bracket for securing a sign thereto.

3. The combination with the angle of a show window, of a bracket comprising a body having legs arranged at substantially right angles to each other, bolts passing through the body, the outer ends of the bolts being provided with hooks for engagement with the edges of the legs of the window angle, and an attachment arm carried by the bracket for securing a sign thereto.

4. The combination with the angle of a show window, a pair of brackets each comprising a body formed with two legs arranged at substantially right angles to each other, bolts passing through said legs and formed at their outer ends with hooks for engagement with the edges of the legs of the window angle, an attachment arm carried by each bracket, a spacer arranged between each attachment arm, a bolt passing through the arms and spacer, and means secured to the bolt for attaching a sign to the brackets.

In testimony whereof, I have hereunto signed my name.

HOWARD C. POWERS.