J. W. J. EGELUND.

CORNER CLAMP FOR SHOW CASES OR THE LIKE.

APPLICATION FILED JUNE 21, 1912.

1,067,511. Patented July 15, 1913.

Fig. 1.

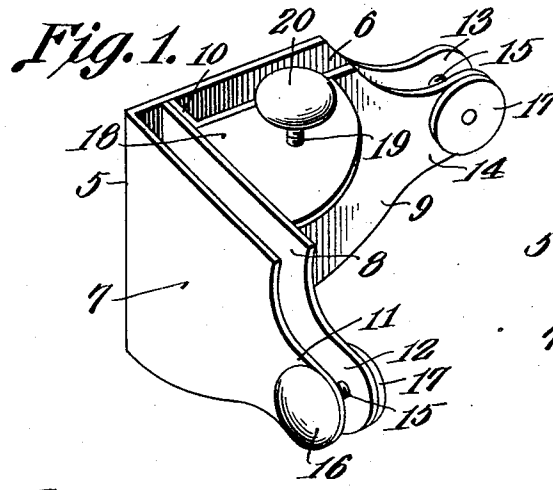
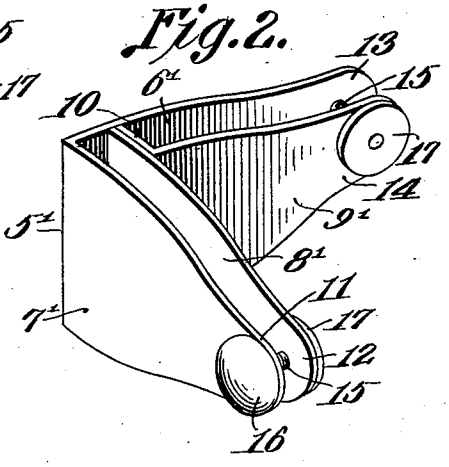


Fig. 2.



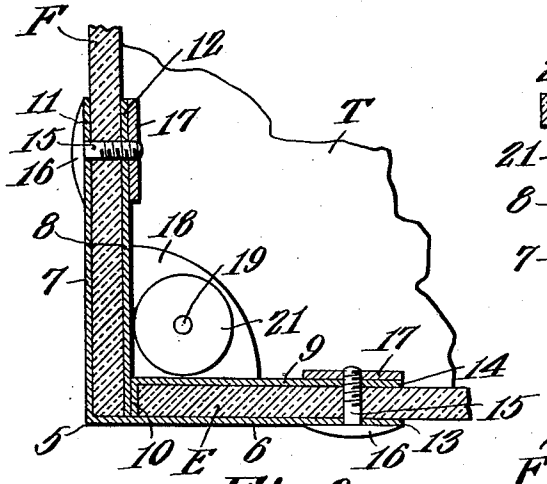


Fig. 3.

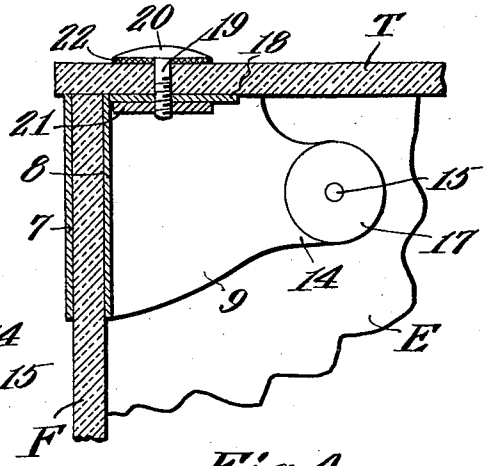


Fig. 4.

Witnesses

J. Tunein

G. Ridlow.

John W. J. Egelund,
Inventor

by C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

JOHN WINTHER JENSEN EGELUND, OF LOS ANGELES, CALIFORNIA.

CORNER-CLAMP FOR SHOW-CASES OR THE LIKE.

1,067,511. Specification of Letters Patent. Patented July 15, 1913.

Application filed June 21, 1912. Serial No. 705,146.

To all whom it may concern:

Be it known that I, JOHN W. J. EGELUND, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Corner-Clamp for Show-Cases and the Like, of which the following is a specification.

This invention relates to corner clamps for showcases and the like, such as are employed for connecting the plate glass panels of a showcase or other structure.

The present invention aims to provide a clamp of the character indicated which is a unit, or has all of its parts rigidly connected together, which is simple, substantial and inexpensive in construction, and which is convenient and efficient in use.

With the foregoing general objects outlined, and other objects in view, which will be apparent as the invention is better understood, the present invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention hereindisclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The invention has been illustrated in its preferred embodiment in the accompanying drawings, wherein like reference characters have been employed to denote corresponding parts and wherein:—

Figure 1 is a perspective view of a corner clamp for clamping the end, front or rear, and the top panels together. Fig. 2 is a perspective view of a clamp for securing the end and front or rear panels together. Fig. 3 is a bottom sectional view taken through the former clamp as in use. Fig. 4 is a vertical section through the former clamp as in use.

Referring specifically to the drawings, the clamp shown in Figs. 1, 3 and 4 embodies an outer flexible angle plate 5 having the respective flanges 6 and 7, an inner flexible plate 8 parallel with the flange 7 and a second inner flexible plate 9 parallel with the flange 6. The plate 8 has an inner angular portion 10 which is soldered or otherwise secured to the inner portion of the plate 8, the inner ends of the plates 8 and 9 being soldered or otherwise secured to the flange 6.

The flange 7 and the plate 8 are of like contour and are provided with the respective and complementing ears 11 and 12 projecting from their outer ends, while the plate 9 is similar in contour with the plate 6 from the plate 8 outward, the flange 6 and the plate 9 being provided with the respective and complementing ears 13 and 14 projecting from their outer ends.

Bolts 15 having the outer enlarged or ornamental heads 16 are passed loosely through the outer ears 11 and 13 of the respective flanges 7 and 6 and are screw-threaded through the corresponding ears 12 and 14 of the inner plates 8 and 9, respectively, it being preferable to engage disk nuts 17 on the inner ends of the bolts 15 to bear against the inner faces of the corresponding ears 12 and 14.

A sectoral gusset plate 18 is attached to the upper edges of the inner plates 8 and 9 within the corner formed by the said plates, and a bolt 19 having an upper enlarged or ornamental head 20 is screw-threaded through the gusset plate 18 and projects upwardly therefrom, the said bolt 19 having preferably a disk nut 21 engaged on its inner end and bearing against the underside of the gusset plate 18.

The angle plate 5, the inner flanges 8 and 9 and the gusset plate 18 are all constructed of suitable sheet metal and of suitable gage and quality to provide comparative rigidity and allow for a sufficient resiliency or flexibility. The particular sizes, proportions or designs of the various parts may be altered at will to conform to the dictates of convenience or efficiency.

In applying the clamp shown in Fig. 1, it being understood that the bolts 15 and 19 have been removed, the ends, and the front or rear panels are received between the respective flange 6 and plate 9 and the flange 7 and plate 8, the web or bridge formed by the inner portions of the inner plates 8 and 9 separating the edge of the end panel from the other panel. In practice, a layer of felt or other suitable material is disposed between the panels of glass, excepting where the inner portions of the plates 8 and 9 pass between the panels. The top panel is then laid upon the upper edges of the panels which have been clamped together, felting being disposed between the upper edges of the said panels and the top panel, if desired. When the respective panels have been set in place, the corresponding bolts may be again engaged to the various parts so as to

clamp the panels in position. If desired, a washer of felt or like material 22 may be disposed between the head 20 and the bolt 19 and the upper face of the top panel, so as to relieve the top panel from any breaking strain due to the contact of the head 20 therewith.

The present clamp is of advantage for the reason that the same is a unit in itself, and may be readily applied to the panels of glass by a single person, and the plates in being flexible are clamped firmly against the panels of glass, the respective bolts passing through openings or holes provided in the panels, so that the draft created by tightening the bolts will cause the strain to be transmitted over an area sufficiently great, or possibly equal to the area of the plates, so as to relieve the panels of glass of any breaking strain around the bolt holes. It will also be noted, that each panel of glass is clamped independent of the other, and that a firm hold on each panel is had, there being no liability for the panels to slip or shift relative to each other.

The form shown in Fig. 2 is similar to the form shown in Fig. 1 with the exception that the gusset plate 18 is removed and that the flanges 6′ and 7′ of the angle plate 5′ and the plates 8′ and 9′ are of slightly different contour, this form being designed to secure the end, and front or rear panels together intermediate the upper and lower edges or below the top panel. The general construction of the two forms are identical, with the exception of the arrangement for holding the top panel which is embodied in the first form.

Particular attention is directed to the fact that the inner plate 9 having its inner end bent angularly, and the inner ends of the inner plates being secured flatly against each other, being flush and being secured to the flange 6 of the outer angle plate, serves to provide a substantial web to fit between the end of one panel and the face of another. This web rigidly secures the outer and inner plates together, and it is in this particular arrangement, that the novelty of the present invention relies.

From the foregoing, taken in connection with the drawings, it will be apparent that the objects above outlined, are attained in an efficient manner, and that the present clamp is a desirable one for the purposes to which it is designed.

Having thus described the invention, what is claimed as new is:—

A corner clamp for showcases comprising an outer sheet metal angle plate, an inner sheet metal plate parallel and congruent with one flange of the angle plate, another sheet metal angle plate parallel with the other flange of the angle plate and having its inner end bent angularly, the inner ends of the inner plates being secured flat faced against each other, being flush and being secured to the latter flange of the angle plate, so as to provide a substantial web connecting the outer and inner plates and designed to fit between the end of one panel and the face of another, and bolts passing loosely through the free ends of the flanges of the angle plate and screw threaded through the inner plates.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN WINTHER JENSEN EGELUND.

Witnesses:
CHAS. A. WALLACE,
DAVID M. CARROLL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."