

No. 855,195.

PATENTED MAY 28, 1907.

G. C. MARR.
EXPANSION POST AND SHOW WINDOW FASTENER.
APPLICATION FILED FEB. 16, 1907.

Fig. 2.

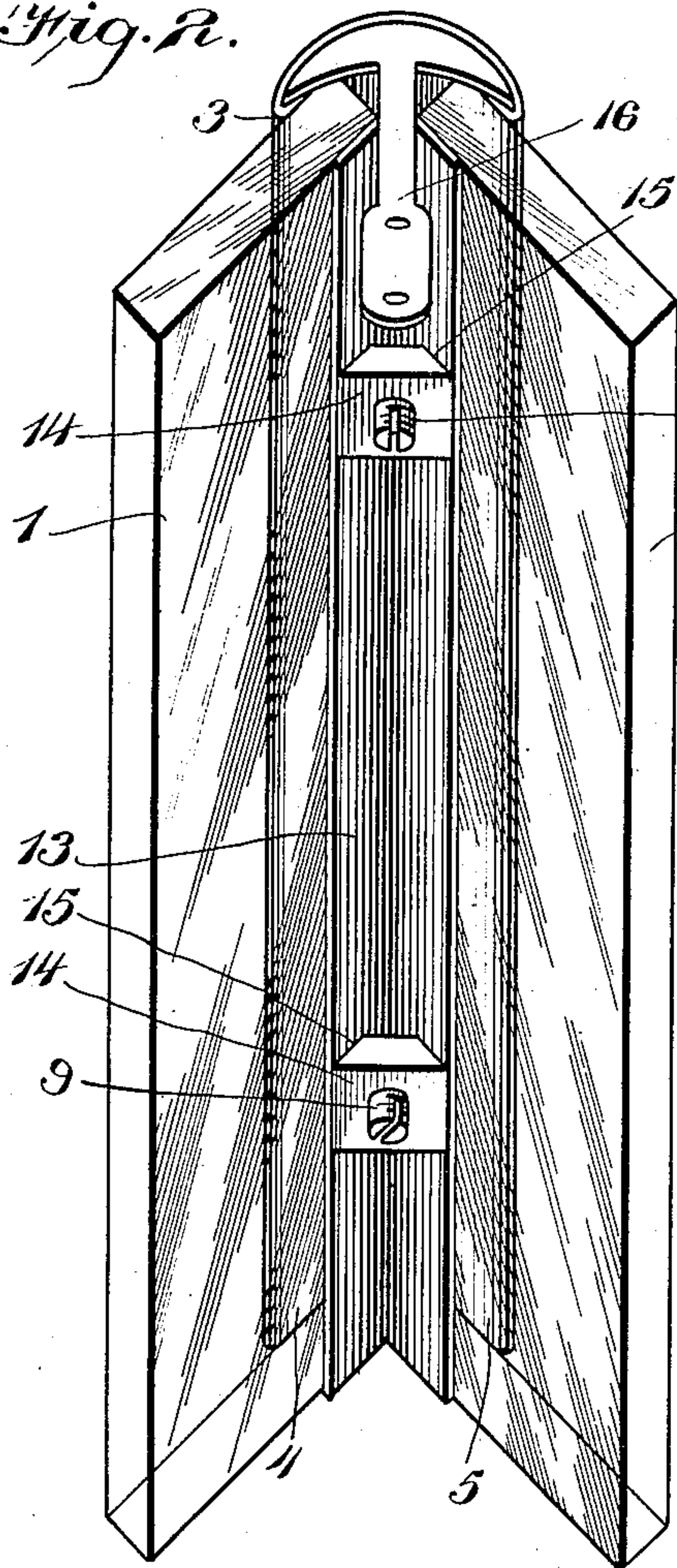


Fig. 1.

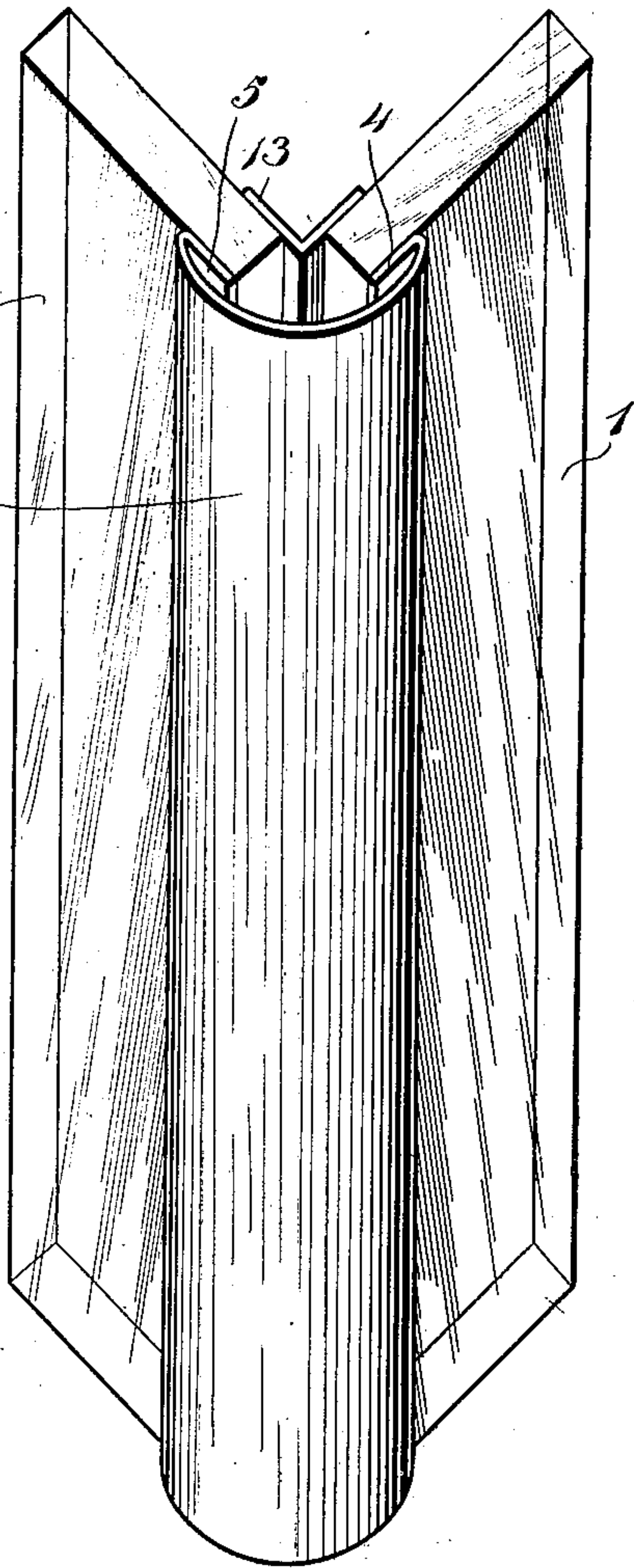


Fig. 3.

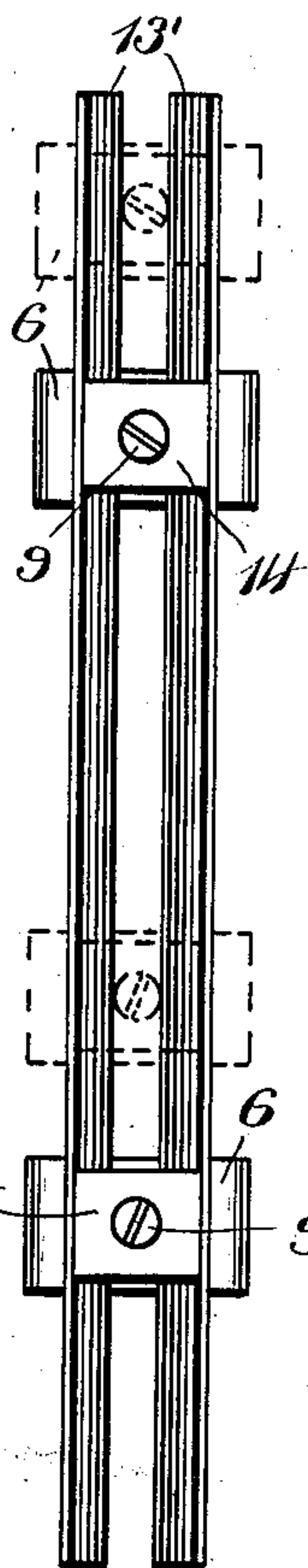


Fig. 4.

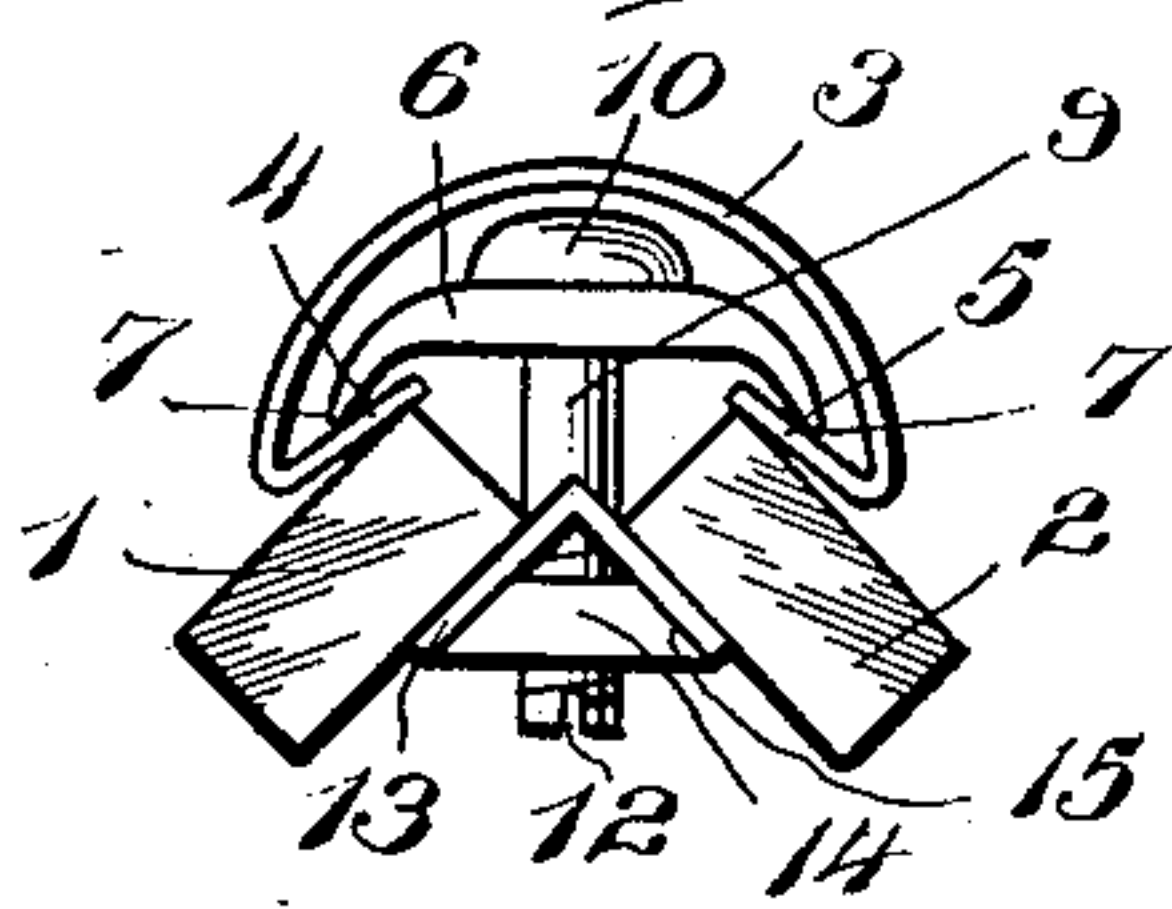


Fig. 5.

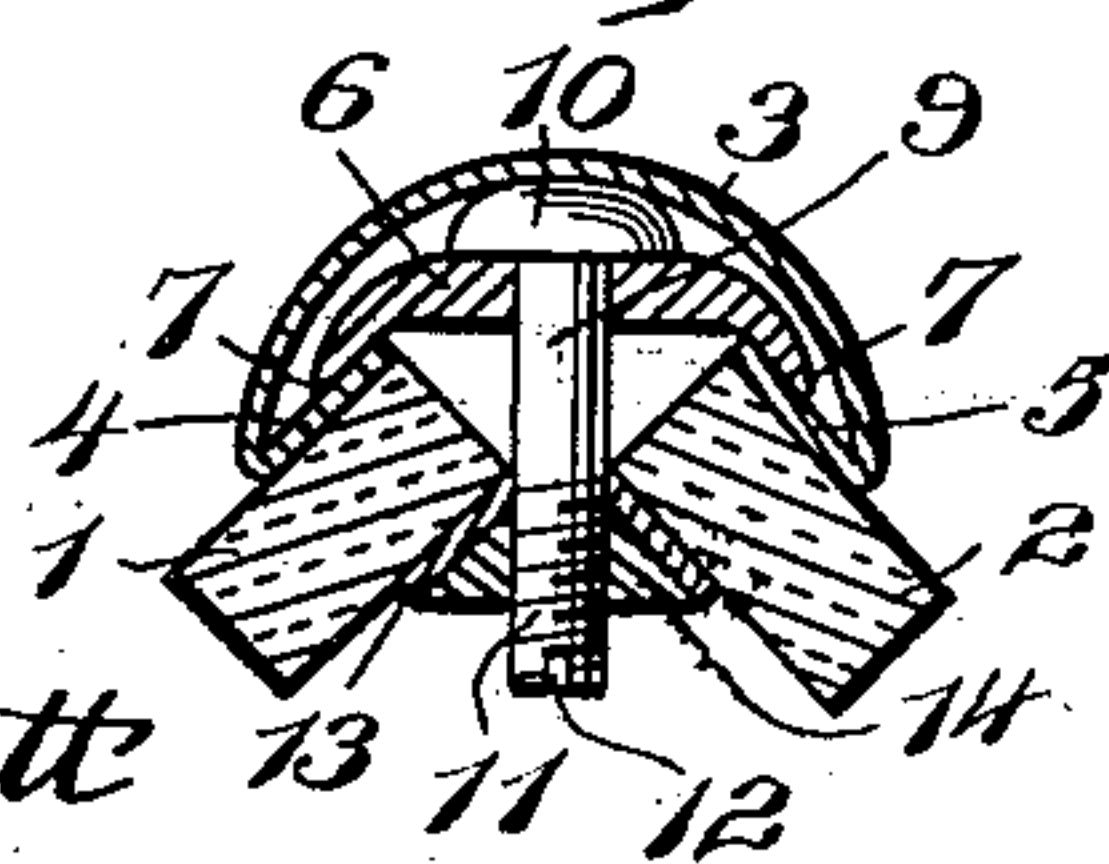
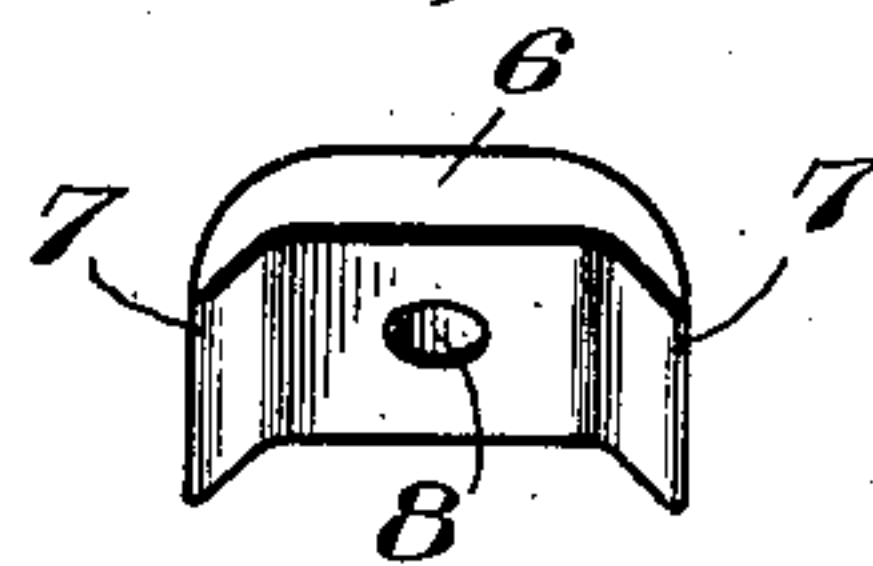


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE C. MARR, OF WASHINGTON, DISTRICT OF COLUMBIA.

EXPANSION-POST AND SHOW-WINDOW FASTENER.

No. 855,195.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed February 16, 1907. Serial No. 357,712.

To all whom it may concern:

Be it known that I, GEORGE C. MARR, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Expansion-Posts and Show-Window Fasteners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to the class of "show cases," but more particularly to an expansion post and show window fastener, and has for its object to provide a fastening means for the contiguous edges of glass which does not require said edges to be polished or beveled.

A further object of my invention is to provide a fastener which will to a great extent protect the glass from breakage, and which will hold the salvage and prevent same from falling should the glass be broken by accident.

A further object of my invention is to provide a post and fastener which will protect the settling of the top of windows and which will hold the glass firmly against the force of wind.

A further object of my invention is to provide a post and fastener which will provide for wiring electric lights in the front corners of the window.

A further object of my invention is to provide a post and fastener which will allow for the expansion and contraction of the glass and which so grips the glass that all danger of breaking the same by pinching or settling is obviated.

A further object of my invention is to provide a post and fastener which yieldingly engages the glass allowing perfect conformation of the post to the glass when set up.

A further object of my invention is to provide a post and fastener so arranged and constructed that the distance between the fasteners or clamps can be regulated to suit the character of the work, the fasteners or clamps being longitudinally movable or adjustable within the post, and not permanently connected thereto.

A further object of my invention is to pro-

vide a post and fastener which requires simply a screw driver to set the same up or take same down.

A further object of my invention is to provide a post and fastener which presents an extremely neat and finished appearance from within as well as from without the show case or window; is cheap and easy to manufacture, simple in its construction, strong, durable and efficient.

With all these objects in view, my invention consists in the novel construction of the expansion post.

My invention further consists in the novel construction of the slidable or adjustable post clamp.

My invention further consists in the novel arrangement and combination of the parts, all of which will be first fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawing: Figure 1 is a perspective view showing the expansion post in position on two pieces of glass. Fig. 2 is a perspective view from the inside of the glass. Fig. 3 is a plan view showing the post engaging clamps in full lines and in dotted lines illustrating the longitudinal adjustability of the same. Fig. 4 is an end view of post and clamping mechanism illustrating position of same before the clamps are set up tight. Fig. 5 is a transverse sectional view showing position of post and clamp mechanism set up tight, and Fig. 6 is a perspective view of one of the post clamps.

Like numerals of reference indicate the same parts throughout the several figures in which,

1 and 2 indicate two pieces of glass, either of an ordinary show case or of a show window, and 3 indicates the expansion post. As shown in Fig. 4 the post is curved describing substantially a semicircle having the edges 4 and 5 thereof turned inwardly and at an angle to each other of slightly more than 90 degrees (this assuming that the two pieces of glass to be fastened are at right angles to each other).

6 indicates the post clamp which as shown in Figs. 4 and 6 has its two ends 7 bent or curved in the direction of the curve or arc of the expansion post 3; while the said post clamp 6 is provided centrally with a perforation or opening 8.

9 indicates the bolt which as shown in

Figs. 4 and 5 is provided with a round flattened head 10, a threaded portion 11 and a kerf 12 in the end of the bolt to receive a screw driver.

13 indicates the inner angle bar which as shown in Figs. 1, 2, 4 and 5 is of a single piece of metal bent at right angles through its longitudinal center, said angle bar being provided at intervals with openings or perforations to receive the clamping bolts 9.

14 indicates the nuts for the bolts 9, which as shown in Figs. 2 and 4, have two opposite sides or edges beveled at 15 to conform to the angularity of the angle bar 13.

Referring to Fig. 3 it will be seen that in place of the angle bar 13 just described the same can be made up of two longitudinal strips or pieces 13', the bolts 9 passing between the inner edges of the said two pieces or strips as clearly shown.

Referring to Fig. 2 it will be seen that when expedient a fastening bracket 16 can be employed at the end of the post for securing the same rigidly in position.

Having thus described the several parts of my invention its operation is as follows: In order to set the post up in position on a show case or show window as illustrated in Figs. 1 and 2 the post clamps 6 are passed into the post at one end thereof, as many clamps being inserted in this manner as will be employed in setting up the post, each of the clamps 6 carrying a bolt 9. The clamps and bolts thus being in position the angle bar 13 is passed over the ends of the bolts and the nuts 14 partially threaded thereon. The parts thus being assembled the two edges of the glass to be fastened are passed between the ends 4 and 5 of the post 3 and the angle bar 13. When in this position a screw driver is inserted in the kerf 12 at the end of the bolts 9, said bolts 9 rotating, thus threading the bolts into the nuts 14; as the bolts are tightened up the curved ends 7 of the post clamps 6 engage the inner sides of the ends 4 and 5 of the post 3 as shown in Fig. 4; and as the said ends 4 and 5 of the post 3 form an angle of more than 90 degrees a portion only of the said edges 4 and 5 engage and grip the glass, as clearly illustrated in Fig. 4. Upon further tightening of the bolts 9 the gripping edges of the post 3 are drawn into position shown in Fig. 5 or until said edges conform absolutely to the surface of the glass; thus a yielding action of the post along the edges of the glass is accomplished, in such manner that all danger of breaking the glass by pinching is obviated, as the action of the edges of the post on the glass is that of a spring and the bolts 9 provide a tension means for increasing the action of the spring.

It is frequently desirable in certain classes of work and under certain conditions to provide either more than the usual number of

fastenings or less than the usual number, and under these conditions I employ the strips or pieces 13' in place of the solid angle bar 13 so that the post clamps 6 are longitudinally adjustable or movable in such manner that any number of fastenings can be employed and at any desired intervals. However, this function can also be accomplished when employing the angle bar 13, for the reason that said bar being of thin sheet metal any number of holes can be punched therein for receiving the bolts 9 at the time the post is being set up; and the post clamp 6 being longitudinally movable or adjustable within the post any desired number of fastenings can be employed.

Having thus fully described the operation of my invention, what I claim as new and desire to secure by Letters Patent of the United States, is,—

1. A device for securing and clamping together the contiguous edges of plates of glass comprising a post having its longitudinal edges turned inwardly to form a resilient or spring gripping surface, a post clamp within said post having its ends in engagement with the inner faces of the said longitudinal edges of the post, a fastening bolt carried in said post clamp, a bar arranged to engage the inner surface of the glass, and a nut for said bolt, substantially as described.

2. A device for securing and clamping together the contiguous edges of plates of glass comprising a post having its longitudinal edges turned inwardly, a post clamp within said post having its ends in engagement with the inner faces of the said longitudinal ends of the post, a fastening bolt carried in said post clamp, a bar arranged to engage the inner surface of the glass, and a nut for said bolt, substantially as described.

3. A device for securing and clamping together the contiguous edges of plates of glass comprising a post having its longitudinal edges turned inwardly, a post clamp within said post having its ends in engagement with the inner faces of the said longitudinal edges of the post, and a fastening means for drawing the said longitudinal edges of the post in engagement with the glass, substantially as described.

4. A device for securing and clamping together the contiguous edges of plates of glass comprising a post having its longitudinal edges turned inwardly, a post clamp within said post having its ends in engagement with the inner faces of the said longitudinal edges of the post, a rotatable bolt carried in said post clamp and a stationary nut for said bolt, substantially as described.

5. A device for securing and clamping together the contiguous edges of plates of glass comprising a post having its longitudinal edges turned inwardly, a post clamp longitudinally movable within said post and hav-

ing its ends in engagement with the said longitudinal edges of the post, and means for holding the post firmly in engagement with the glass, substantially as described.

5 6. A device for securing and clamping together the contiguous edges of plates of glass comprising a post having its longitudinal edges turned inwardly to form a resilient or spring gripping surface, a post clamp longitudinally movable within said post, and
10 means for holding said post in position against the glass, substantially as described.

7. A device for securing and clamping together the contiguous edges of plates of glass
15 comprising a post having a resilient or spring gripping surface for engagement with the glass, a longitudinally movable post clamp within said post, and means for holding said post in position on the glass, substantially
20 as described.

8. A device for securing and clamping together the contiguous edges of plates of glass comprising a post, a longitudinally movable post clamp within said post, and means for drawing said post in contact with the glass, 25 substantially as described.

9. A device for securing and clamping together the contiguous edges of plates of glass comprising a post having its longitudinal edges turned inwardly, a longitudinally movable clamp and a fastening means associated
30 with said post for drawing the said longitudinal edges of said post in contact with the glass, substantially as described.

In testimony whereof, I affix my signature, 35 in presence of two witnesses.

GEORGE C. MARR.

Witnesses:

C. M. FORREST,
C. HUGH DUFFY.