

No. 754,245.

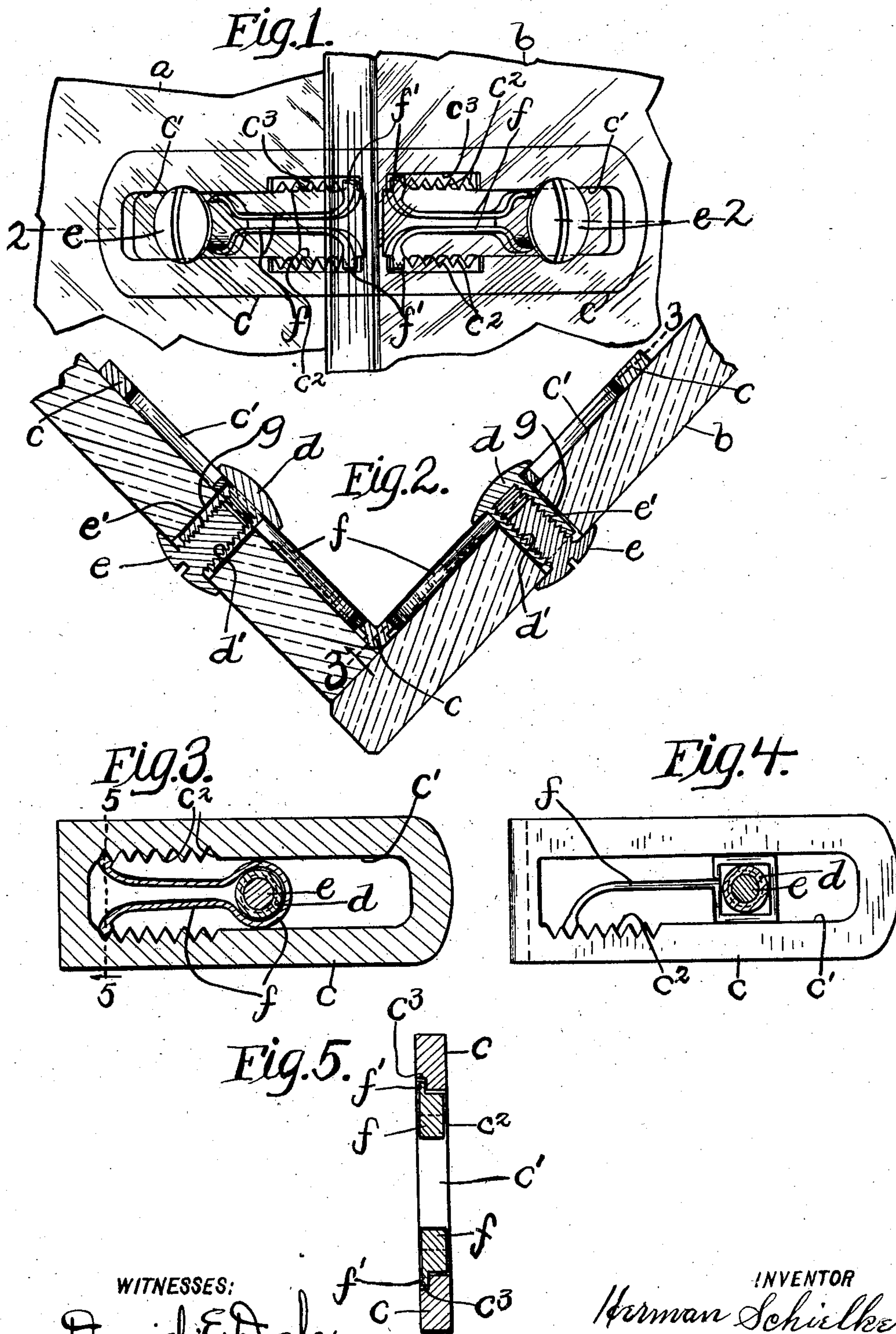
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H. SCHIELKE.

CORNER CLAMP FOR SECURING GLASS PLATES TOGETHER.

APPLICATION FILED AUG. 8, 1903.

NO MODEL.



WITNESSES:

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CORNER-CLAMP FOR SECURING GLASS PLATES TOGETHER.

SPECIFICATION forming part of Letters Patent No. 754,245, dated March 8, 1904.

Application filed August 8, 1903. Serial No. 168,780. (No model.)

To all whom it may concern:

Be it known that I, HERMAN SCHIELKE, a citizen of the United States of America, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Corner-Clamps for Securing Glass Plates Together; and I hereby 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 pertains to make and use the same.

This invention relates to corner-clamps for securing together plates of glass in the formation of show-cases or show-windows.

The object of this invention is to provide a clamp of this kind which will brace the plates at their intersecting angles or corners and having such an arrangement of parts that it will hold the plates against ordinary strain, but when the plates are subjected to extraordinary strain, such as might be caused by the settling of the building, casing, or any foundation upon which the plates are supported, then the clamping device will yield and allow the plates to adjust themselves to the changed condition.

My invention therefore consists in the features of construction and combination of parts, as hereinafter described in the specification, pointed out in the claims, and illustrated in drawings.

In the accompanying drawings, Figure 1 is an exterior view of a portion of a show-front, showing one of my clamping devices in position. Fig. 2 is a horizontal section on line 2 2, Fig. 1. Fig. 3 is a section on line 3 3, Fig. 2. Fig. 4 is a view of one arm of a clamp, showing a modified form thereof. Fig. 5 is a section on line 5 5, Fig. 3.

Again referring to the drawings, *a* and *b* designate two upright glass plates of a show-window, show-case, or similar construction that are arranged at an angle to each other and are tightly fitted together. The meeting or adjacent edges of said plates are ground and polished, and the edges may be straight or beveled, according to the angle at which the plates meet. *c* represents an angle-plate which is arranged to fit on the inside of the

glass plates. In each arm of the angle-plates *c* is formed a longitudinal slot or opening *c'*. The sides of each opening or slot *c'* are corrugated or serrated to form teeth *c''*, which project into the slot *c'*. The edges of the slot *c'* on the face of the angle-plate next to the glass are depressed or recessed, as at *c'''*, so as to form a small space between the glass and the teeth. The locking devices for securing the clamp to the plates comprise two members—the member *e*, which is provided with a screw-threaded shank portion *e'*, and the member *d*, in the shank portion of which is formed a screw-threaded bore *d'*, arranged to receive the shank *e'*. The locking devices are passed through the slots in the arms of the angle-plates and through bolt-holes *g*, formed in the glass plates. A flat strip of spring-steel or similar material *f* is bent or doubled around the locking device in each slot, and its ends are arranged to engage with the teeth *c''*. Ears or lugs *f'* are formed at the ends of the metallic strips *f* and are arranged to travel in the recess *c'''* between the teeth *c''* and the glass and serve to hold the said strip *f* in the slot *c'*.

In Fig. 4 is shown a modified form in which only one side of the slot *c'* is corrugated and only one end of the resilient strip *f* engages with the teeth *c''*.

The operation of my clamping device is as follows: After the plates have been set in position one of the plates will often sink at one side, owing to the settling of the building or other causes. Now when the clamp is composed of rigid members the uneven strain causes a fracture of one or both of the glass plates in the vicinity of the clamp. In the case of my device when such a strain comes upon the glass plates one or both of the strips *f* will yield and move along the teeth until the strain is equalized and the plates have adjusted themselves; but the plates will still be locked as firm as they were originally—that is, as firm as they were before they shifted.

What I claim is—

1. In a corner-clamp for glass plates, the combination with the glass plates of an angle-plate adapted to fit the angle formed by said glass plates, each arm of said angle-plate hav-

ing a longitudinal slot formed therein, teeth arranged to project into the slot in each arm, a bolt passing through the slot in each arm and through a bolt-hole formed in the glass plate adjacent thereto and a strip of resilient material doubled around said bolt and having its ends arranged to engage with the teeth in said slot, substantially as described and for the purpose set forth.

2. In a corner-clamp for glass plates, the combination with the glass plates of an angle-plate adapted to fit the angle formed by said glass plates, each arm of said angle-plate having a longitudinal slot formed therein, teeth arranged to project into the slot in each arm, a bolt passing through the slot in each arm and through a bolt-hole formed in the glass plate adjacent thereto, a strip of resilient material doubled around said bolt and having its ends arranged to engage the teeth in said slot and means for holding the ends of said strip of resilient material in engagement with the teeth, substantially as described and for the purpose set forth.

3. In a corner-clamp for glass plates, the combination with the glass plates of an angle-plate adapted to fit the angle formed by said glass plates, each arm of said angle-plate having a longitudinal slot formed therein and a recess formed in its face next to the glass plate, a bolt passing through each slot in each arm and through a bolt-hole formed in the glass plates adjacent thereto and a metallic strip arranged in said slot and forming a yielding connection between the angle-plate and the bolt therein, said strip being provided with

an ear arranged to extend into the aforementioned recess.

4. In a corner-clamp for glass plates, the combination with the glass-plates, of an angle-plate adapted to fit the angle formed by said glass plates, each arm of said angle-plate having a longitudinal slot formed therein, teeth arranged to project into the slot in each arm, a bolt passing through the slot in each arm and through a bolt-hole formed in the glass plate adjacent thereto, and a strip of resilient material secured to said bolt and arranged to engage with the teeth formed in said slot.

5. A corner-clamp for glass plates comprising an angle-plate having a longitudinal slot formed in each arm, bolts arranged to move freely in said slots and flexible strips arranged in said slots and engaging with the walls of said slots and with said bolts so as to form a yielding connection between said bolts and said angle-plate.

6. A corner-clamp for glass plates comprising an angle-plate having a longitudinal slot formed in each arm, teeth arranged to project in the respective slots, a bolt arranged to move freely in each of said slots, and a flexible strip arranged in each slot and forming a yielding connection between said teeth and the bolt therein.

In testimony whereof I sign the foregoing specification, in the presence of two witnesses, this 28th day of July, 1903, at Cleveland, Ohio.

HERMAN SCHIELKE.

Witnesses:

VICTOR C. LYNCH,
G. M. HAYES.