

No. 861,266.

PATENTED JULY 30, 1907.

G. M. CONLEY.
FASTENING FOR PLATE GLASS AND SHOW CASES.
APPLICATION FILED MAR. 18, 1907.

Fig. 1.

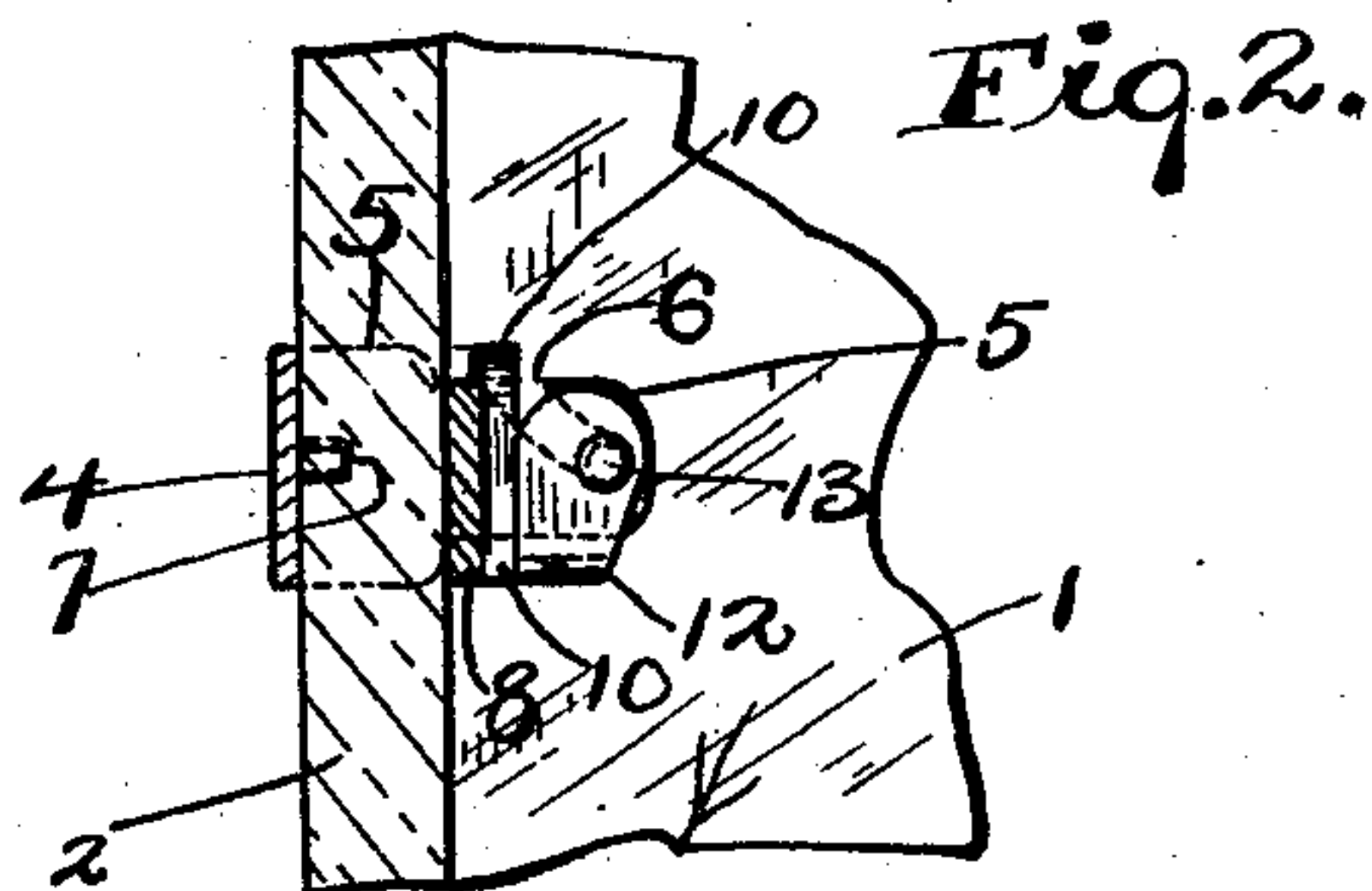
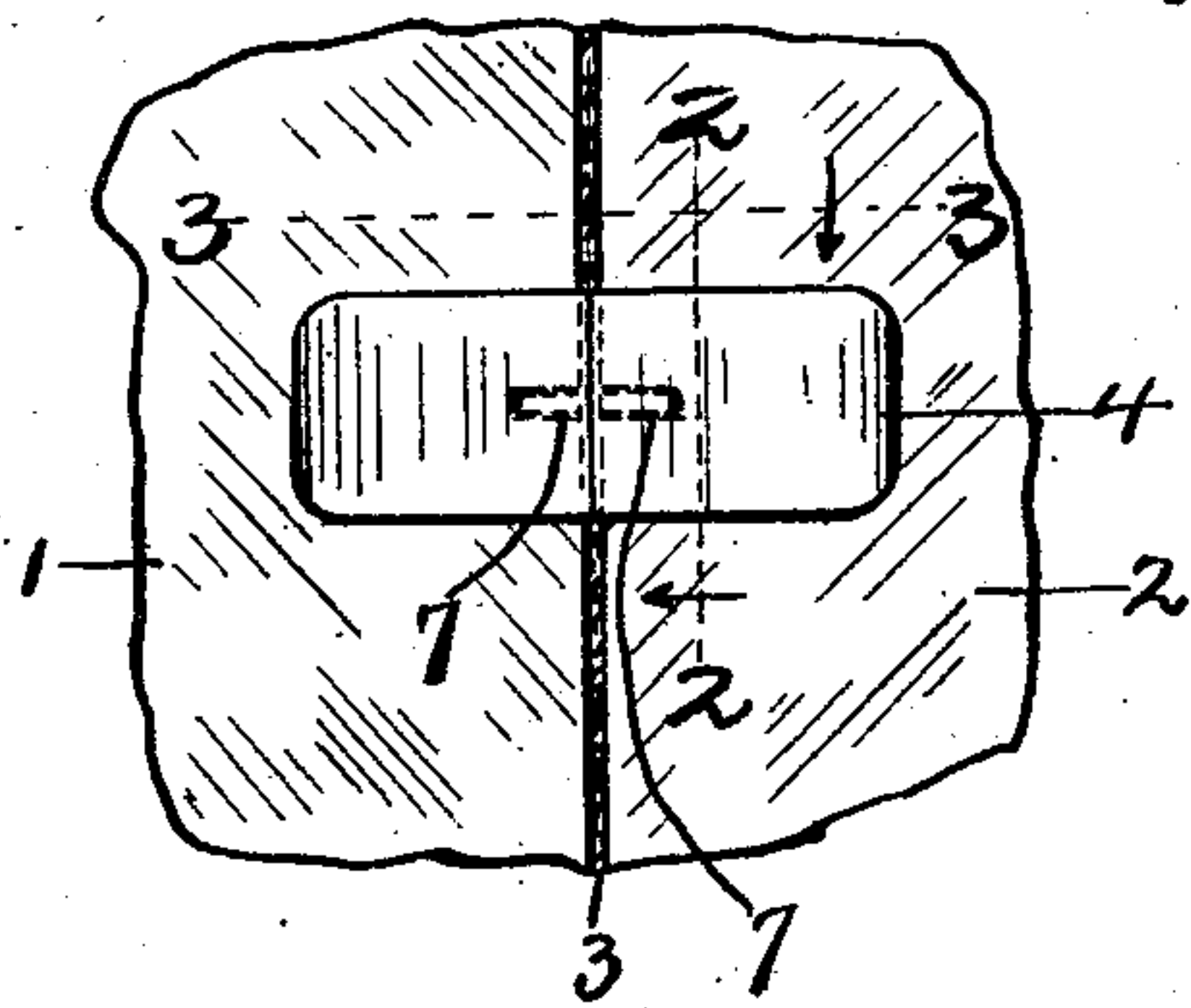


Fig. 3.

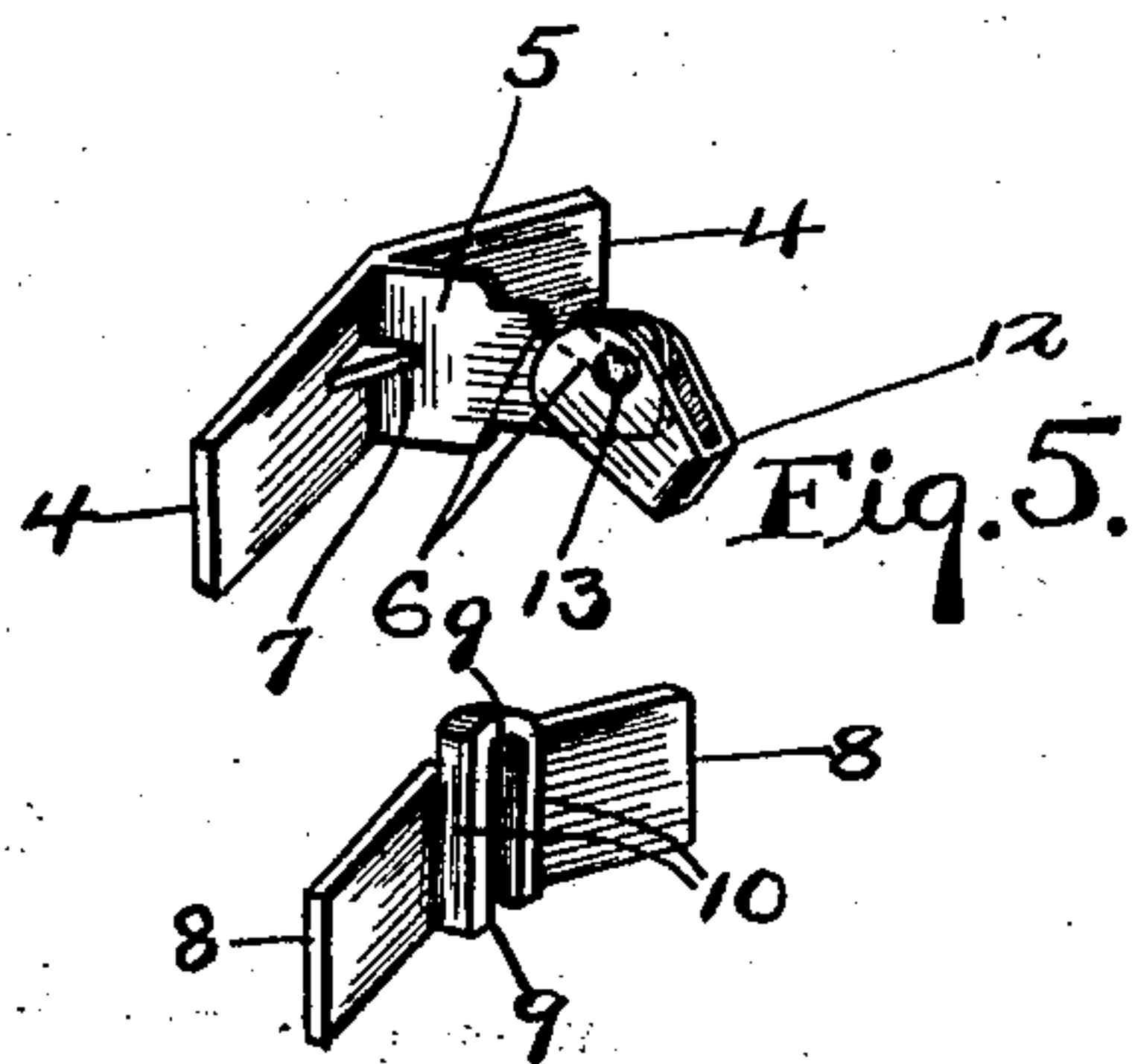
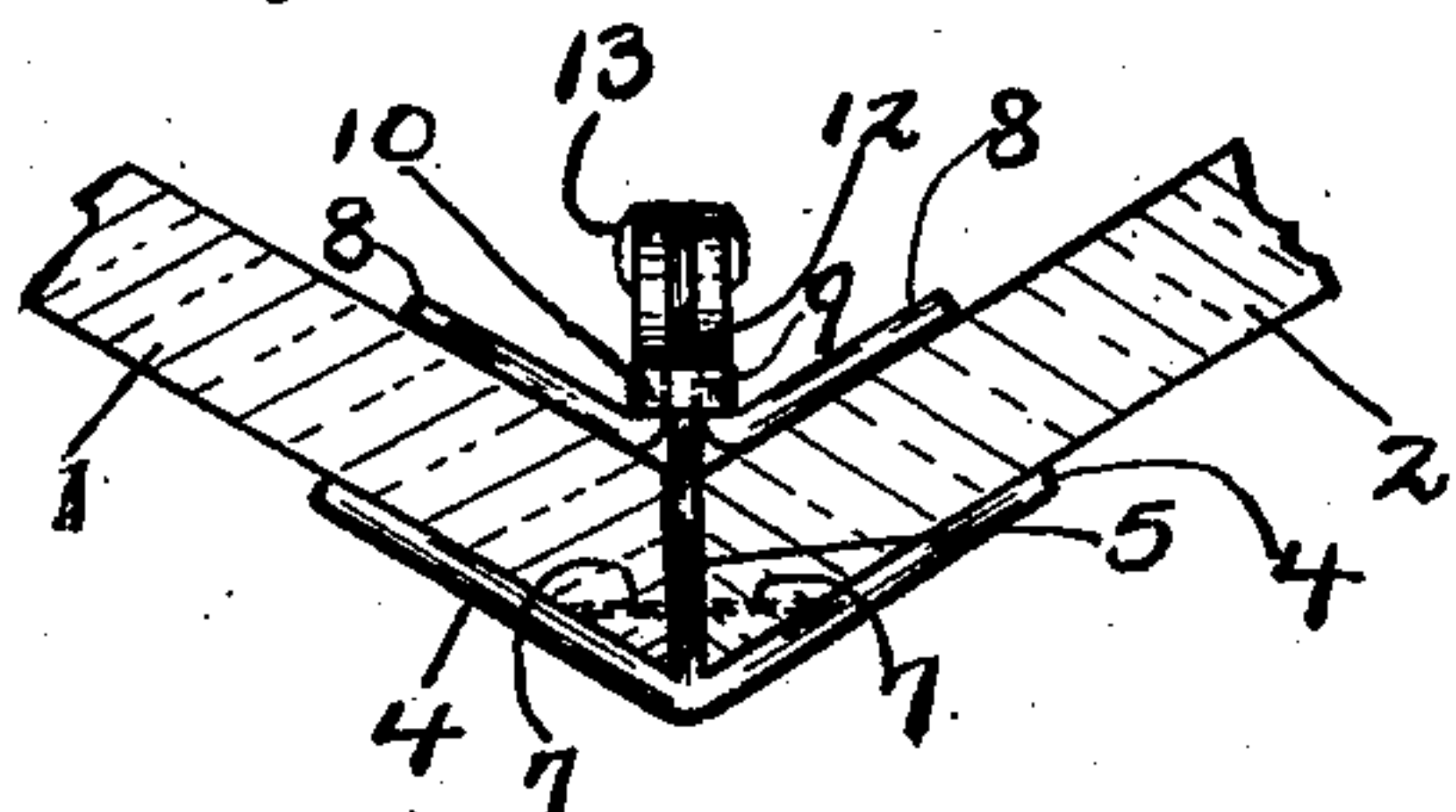


Fig. 4.

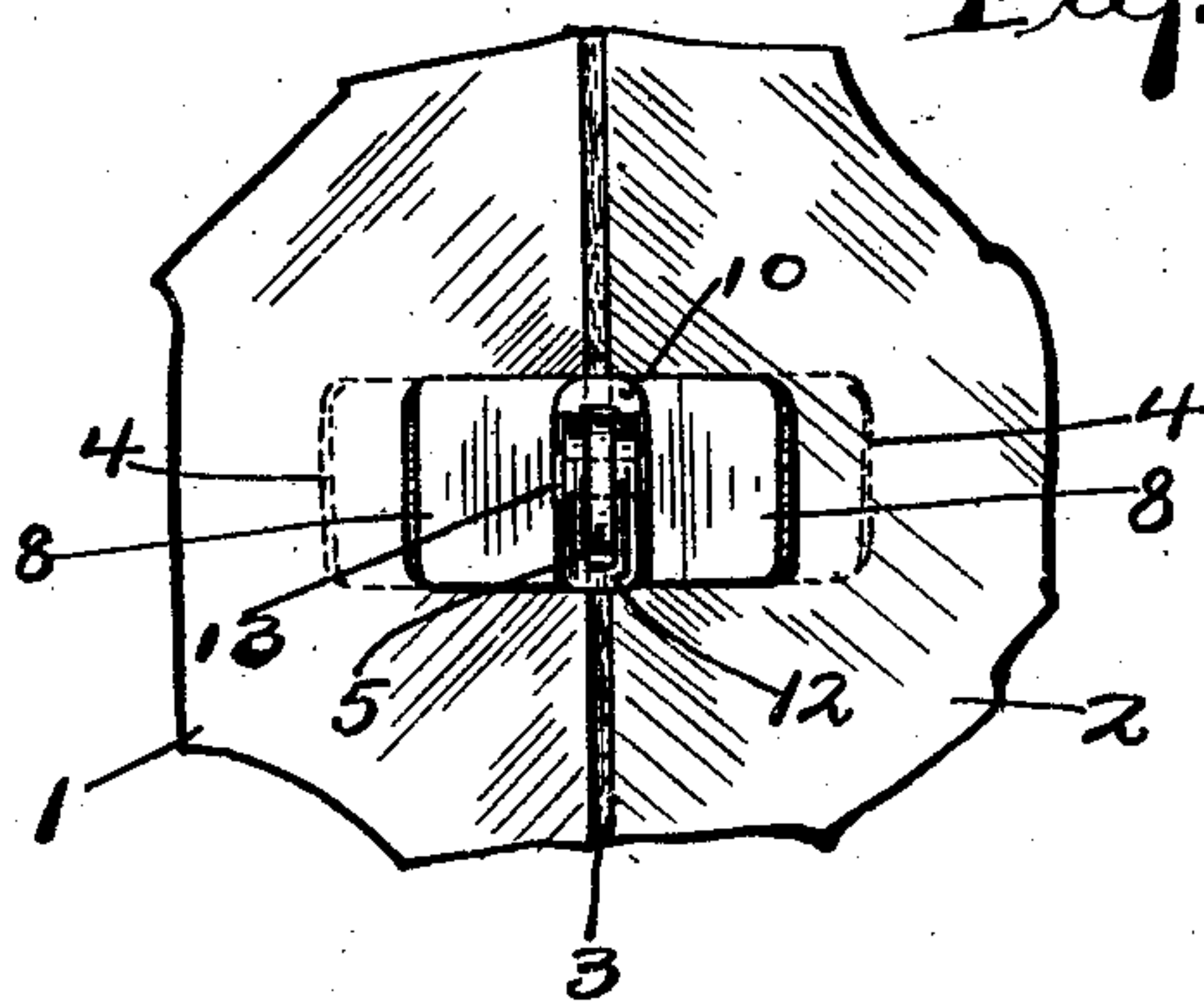


Fig. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

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FASTENING FOR PLATE-GLASS AND SHOW-CASES.

No. 861,266.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed March 18, 1907. Serial No. 363,140.

To all whom it may concern:

Be it known that I, CHARLES M. CONLEY, 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 Fastenings for Plate-Glass and Show-Cases; 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.

10 This invention relates to improvements in fastenings for plate glass and show cases.

The object of this invention is to provide a clamp for securing glass plates together which will have few parts, which can be readily assembled and which can be placed in position without the exercise of any high degree of skill.

With this object in view and to the end of realizing other advantages that will hereinafter appear this invention consists in certain combinations and arrangement of parts as described in the specification, illustrated in the drawings and pointed out in the claims.

In the accompanying drawings, Figure 1 is a front view of a portion of two plates of glass secured together by a clamp embodying my invention. Fig. 2 is a section on line 2—2, Fig. 1. Fig. 3 is a section on line 3—3, Fig. 1. Fig. 4 is a rear view similar to Fig. 1. Fig. 5 shows the two members of the clamp detached.

Again referring to the drawings 1 and 2 represent two plates of glass which are arranged at an angle to each other. Between the meeting edges of the glass plates is preferably arranged a filling 3 of cloth, cement or other suitable material. The clamp comprises an outer member consisting of an angle plate 4 which is provided with a flat stem 5 which extends between the edges of the abutting glass plates. The stem 5 is made a suitable length so that it will project beyond the inner faces of the glass plates. The stem 5 may be formed integral with the angle plate 4 or may be secured thereto in any suitable manner. In the stem 5 near its outer end is formed an inclined slot 6 which extends from a point near the center of the stem rearwardly towards the free end of the stem. A small projection 7 is located on the inner face of the outer clamp member at each side of the stem 5 and the glass plates at the point where the clamp is to be fastened are slightly notched at their outer edges so as to receive these projections. The inner member of the clamp comprises an angle plate 8 arranged to fit into or correspond to the inner angle formed by the glass plates 1 and 2. In the angle plate 8 is formed a slot 9 which extends upwardly from the lower edge of the angle plate at its center and has a width greater than the thickness of the stem 5 so that the angle plate 8 can be slipped down over and rest on said stem. On the inner face of the angle plate 8, around the slot 9, is formed a reinforcing flange 10. The locking member consists of a yoke-

shaped cam device 12 which is arranged to straddle the stem 5 and is rotatably mounted thereon by means of a pin 13 which passes through the slot 6.

When assembling a show-case, show-window or similar construction, with the use of my clamps, the glass plates are arranged at the desired angle with their edges abutting and the outer edge of each plate is slightly notched at the point where the clamp is to be secured. The outer clamp member is then placed in its proper position and the stem 5 is passed between the edges of the glass plates. The inner clamp member 8 is then slipped down on the stem 5 where it projects beyond the inner faces of the plates and the locking member is mounted on the inner end of the stem by inserting the pin in the slot 6 and the locking member is then swung around so as to bring the cam face thereof in contact with the reinforcing flange 10 on the inner clamp member.

My clamp, while combining all the practical features of clamps of this character now in the market, is particularly valuable because it can be assembled, by a person having little or no skill, without danger of breaking the plates. Heretofore great loss has been caused by the breaking of the glass plates through the misjudgment or over zeal on the part of the workmen in attempting to clamp the plates too tightly together. With my clamp when the thickness of the glass is known the length of the slot 6 in the stem 5 can be adjusted and the curvature of the cam face on the locking member can be calculated so as to secure the proper pressure and therefore nothing is left to the judgment of the workmen.

What I claim is:—

1. In a construction of the character indicated the combination with two plates arranged at an angle to each other of an outer clamping member, a stem extending from said outer clamping member and passing between the abutting edges of said plates and projecting beyond the inner faces thereof, an inner clamping member arranged to fit the angle formed by the inner faces of said plates and a cam shaped locking member rotatably mounted on the said stem so as to swing in a plane parallel with said stem and arranged to come in contact with the inner member so as to clamp the glass between the inner member and outer member of said clamp.

2. In a construction of the character indicated the combination with two glass plates arranged at an angle to each other of an outer clamping member, a stem extending from said outer member between the abutting edges of said plates, an inner clamping member arranged to straddle said stem, a reinforcing flange arranged on the inner face of said inner member and a cam device mounted on the inner end of said stem and arranged to come in contact with the reinforcing flange on the inner member so as to clamp the plates between the inner and outer members of the clamp.

3. In a construction of the character indicated the combination with two plates arranged at an angle to each other of an outer clamping member, a stem extending from the outer member between the abutting edges of the glass plates, an inner clamping member having a U-shaped groove of sufficient width to receive said stem, a reinforce-

ing flange formed around the groove in said inner member and a cam shaped locking member pivotally supported on said stem and arranged to come in contact with the flange on the inner clamp member so as to clamp the glass between the inner and outer clamp members.

4. In a construction of the character indicated the combination with two glass plates arranged at an angle to each other of an outer clamp member, a stem extending from said outer clamp member between the abutting edges of the glass plates, said stem being provided with a rearwardly inclined slot, an inner clamping member, a cam-shaped locking member, a pin extending through said locking member and the slot in said stem and the arrangement is such that when the locking member is in its operative position it will clamp the glass plates between the inner and outer members of the clamp.

5. In a device of the character indicated the combination with two glass plates arranged at an angle to each other of an outer angle plate, a stem extending from said angle plate between the abutting edges of the glass plates and provided with a slot, an inner angle plate having a U-shaped slot at its center of sufficient width to receive said stem and provided with a reinforcing flange around said slot, a cam-shaped locking device arranged to straddle the end of said stem, a pin extending through said locking

device and the slot in said stem, and the arrangement is such that when the locking device is in its operative position it will cause the inner and outer members to tightly engage the glass plates.

6. In a device of the character indicated, the combination with two glass plates having notches in their outer edges and arranged at an angle to each other of an outer angle plate, a stem extending from said angle plate between the abutting edges of the glass plates and provided with a slot, a projection arranged on the inner face of said outer angle plate at each side of the said stem, an inner angle plate having a U-shaped slot at its center of sufficient width to receive said stem and provided with a reinforcing flange around said slot, a cam-shaped locking device arranged to straddle said stem, a pin extending through said locking device and the slot in said stem and the arrangement is such that when the locking device is in its operative position it will cause the clamp members to tightly engage the glass plates.

In testimony whereof, I sign the foregoing specification, in the presence of two witnesses.

CHARLES M. CONLEY.

Witnesses:

VICTOR C. LYNCH,
N. L. McDONNELL.