

No. 725,436.

PATENTED APR. 14, 1903.

H. GEISENHÖNER.
TROLLEY WIRE CLAMP.
APPLICATION FILED JULY 28, 1902.

NO MODEL.

Fig. 1.

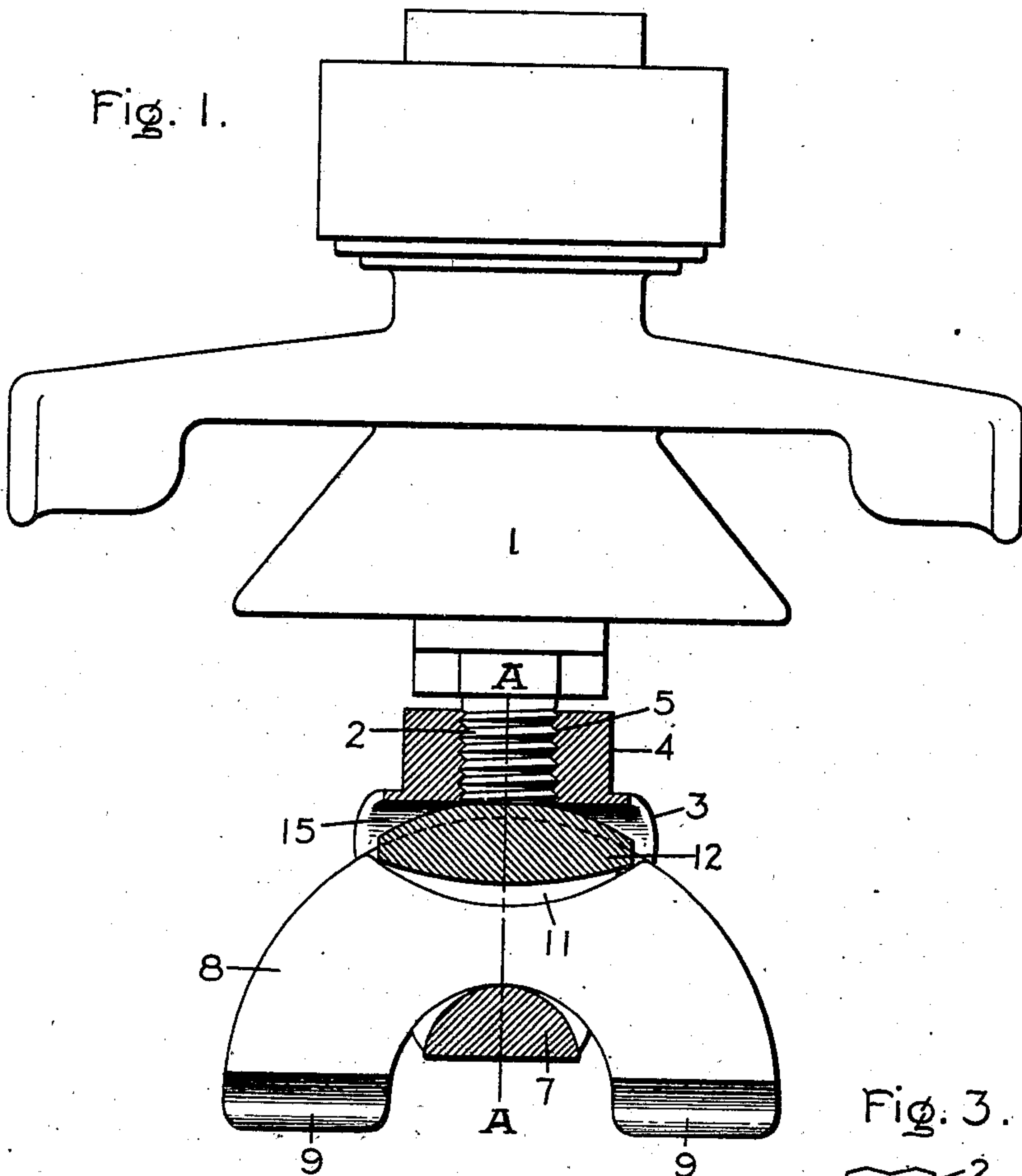


Fig. 2.

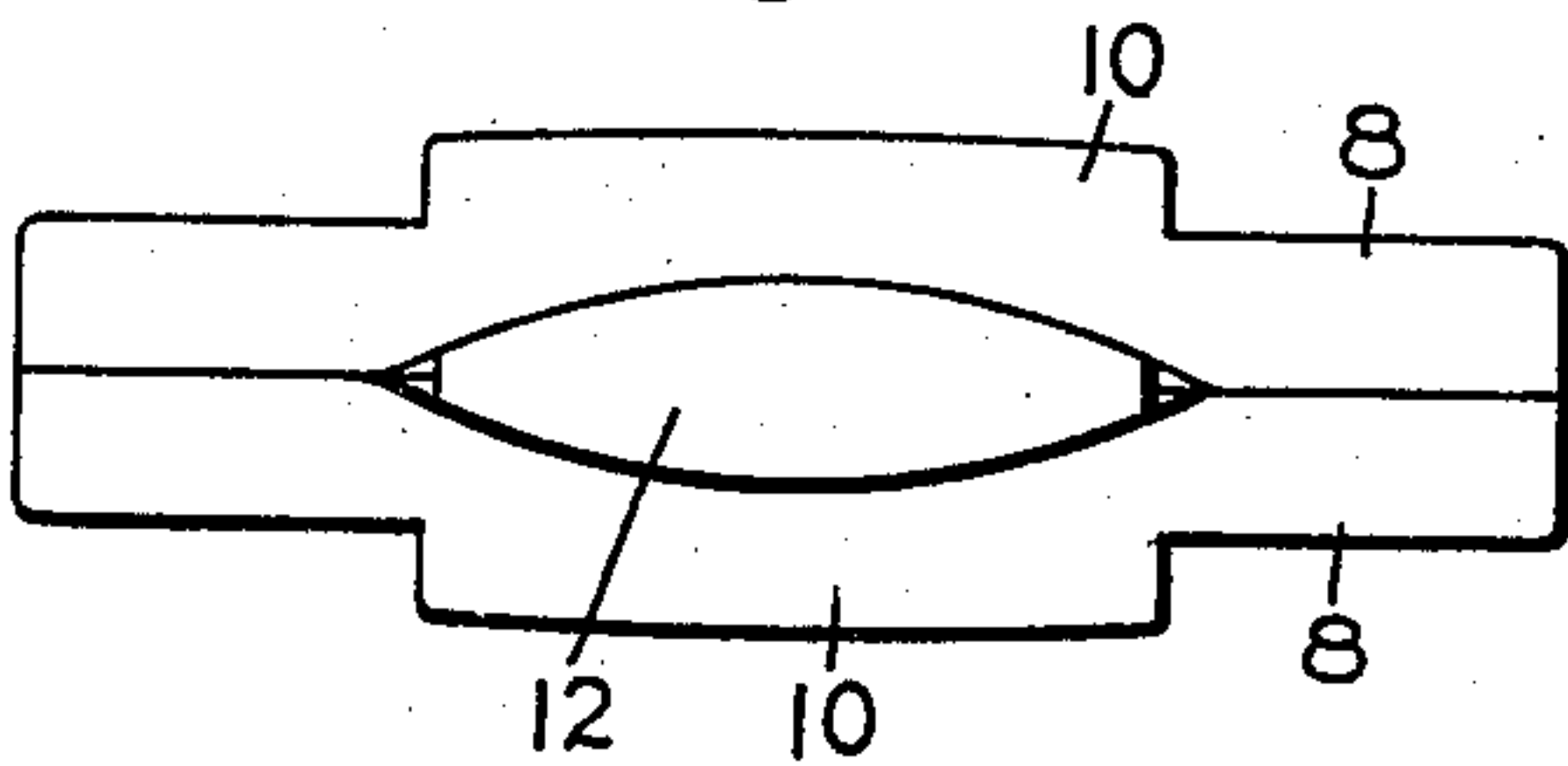
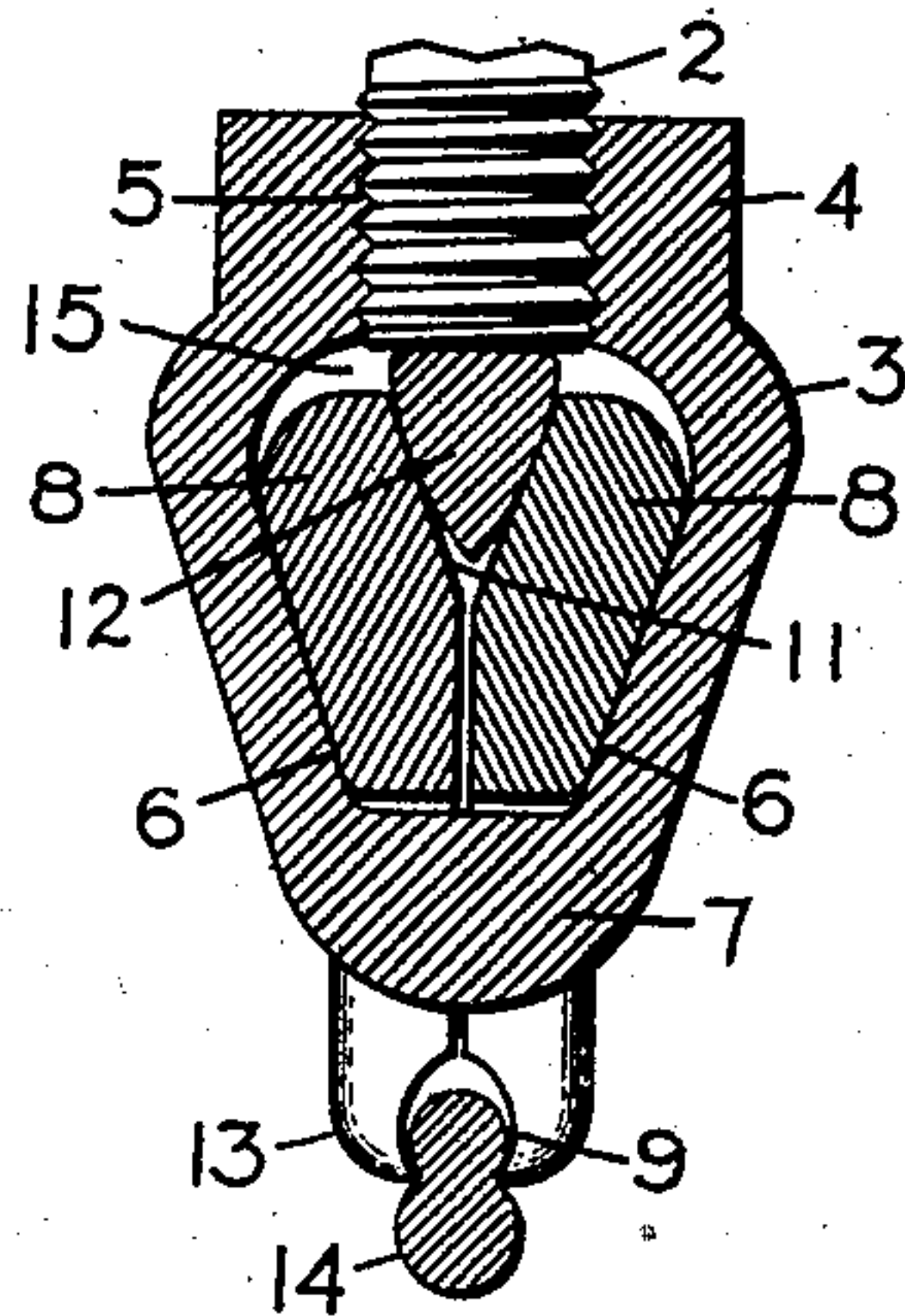


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

HENRY GEISENHÖNER, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

TROLLEY-WIRE CLAMP.

SPECIFICATION forming part of Letters Patent No. 725,436, dated April 14, 1903.

Application filed July 28, 1902. Serial No. 117,291. (No model.)

To all whom it may concern:

Be it known that I, HENRY GEISENHÖNER, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Trolley-Wire Clamps, of which the following is a specification.

The object of my invention is the production of a simple and efficient clamp for holding trolley-wires; and it consists in certain details of construction to be more fully pointed out in the claims.

Figure 1 is an elevation, partially in section, showing a clamp embodying my invention secured to an appropriate hanger. Fig. 2 is a plan view showing the clamping members and the wedge in the relative positions which they occupy when in use, and Fig. 3 is a detail sectional view taken on the line A A of Fig. 1.

A hanger of the usual construction is conventionally shown at 1 and is provided with a depending threaded bolt 2. A member 3, which supports the clamping-jaws, is provided with a cylindrical portion 4, in which a threaded opening 5 is formed to receive the bolt 2. Below the portion 4 the member 3 is bifurcated to form an eye or slot 15, in which the clamping members 8 are inserted. The members 6, forming the side walls of the eye, have flat interior faces which are set at an angle with respect to one another, being more separated at their tops—that is, adjacent the part 4—than they are at the bottom. The side walls 6 are also wider at the top than at the bottom, as clearly shown in Fig. 1. The bottom wall 7 of the eye has a cylindrical upper surface, so that the cross-section is substantially hemispherical, as shown in Fig. 1. The clamping members 8 are arc-shaped, the angle of the arc being about one hundred and eighty degrees, and are made out of flat pieces of brass, copper, or other good conducting material. The clamping members are passed through the eye with the ends pointing down. These ends are cut away to form gripping-jaws, (indicated at 9.) On the outer side of each of the clamping members 8 a wedge-shaped enlargement or offset portion 10 is formed.

The wedge-shaped enlargement 10 is of a width substantially equal to that of the sides

6 at their upper portion. The taper or inclination to the vertical of the enlargement 10 is equal to the taper of the side pieces 6, so that when the clamping members are inserted in the eye with the outer surface of the enlargement 10 in contact with the inner surface of the side member 6 the inner plane surface of each clamping member 8 is substantially vertical and parallel to the corresponding face of the other member 8.

A depression 11 is formed in the inner surface of each clamping member 8 opposite to the enlargement 10. A wedge-shaped block 12 is seated in and is shaped to fit the recess formed by the two depressions in the clamping members 8. The block is substantially triangular in section, with the sides of triangle slightly convex, and the lines marking the junction of its three surfaces are all convex curves. The lower portions of the edges formed by the intersection of the outer flat side and inner curved side of each clamping member 8 are chamfered, as indicated at 13.

The operation of the device is as follows: The clamping members 8 being inserted in the eye of the holder 3, the wire 14, which in this case is shown as having a figure-8 section, is inserted between the jaws 9. The clamping members 8 approach the bottom 7 of the yoke as closely as the size of the wire will allow them to. The rod or bolt 2 is then threaded into the top of the holding member, forcing the wedge 12 into the recess formed in and between the upper portions of the clamping members 8, spreading them apart until the outer surfaces of the wedge portion 10 contacts with the inner surface of the sides 6 of the holding member.

The upper portion of the clamping member 8, between the wall of the recess 11 and the outer surface of the enlargement 10, is tapered, with the thinner portion at the top. In consequence of this wedge-shape construction there is no tendency of the clamping members 8 to rise in the holder under any vibration imposed upon the wire.

Instead of making the clamping members arc-shaped, as shown, it will be readily seen that any bowed form would operate.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination of a supporting member provided with an eye or slot, arc-shaped clamping members provided with gripping-jaws passing through said eye or slot, and
5 means for forcing said gripping-jaws together.

2. The combination of a supporting member provided with an eye or slot, the walls of which are tapered, clamping members passing
10 through said eye or slot with surfaces tapered to correspond to said tapered walls, and means for forcing the tapered surfaces of the clamping members into contact with the tapered walls of the eye.

15 3. The combination of a holding member provided with an eye or slot, clamping members provided with gripping-jaws passing through said eye, the walls of said eye encircling said clamping members, and means
20 comprising a wedge and screw for forcing said gripping-jaws together.

4. A wire-clamp, comprising a holding member provided with an eye or slot, and a pair of arc-shaped clamping members passing
25 through said eye.

5. A wire-clamp, comprising a holding member provided with an eye or slot, and a pair of arc-shaped clamping members passing through said eye, the ends of said arc-shaped members being provided with gripping-jaws. 30

6. A wire-clamp, comprising a holding member provided with an eye or slot, and bowed clamping members passing through said eye.

7. A wire-clamp, comprising a holding member provided with an eye or slot, and a pair of
35 bowed clamping members passing through said eye, the ends of said bowed members being provided with gripping-jaws.

8. The combination of a holding member provided with an eye or slot, clamping mem- 40
bers provided with gripping-jaws passing through said eye, the walls of which encircle said clamping members, and means for forcing said gripping-jaws together.

In witness whereof I have hereunto set my 45
hand this 26th day of July, 1902.

HENRY GEISENHÖNER.

Witnesses:

BENJAMIN B. HULL,
HELEN ORFORD.