

(No Model.)

G. H. WINSLOW.  
SUPPORT FOR ELECTRIC CONDUCTORS.

No. 459,168.

Patented Sept. 8, 1891.

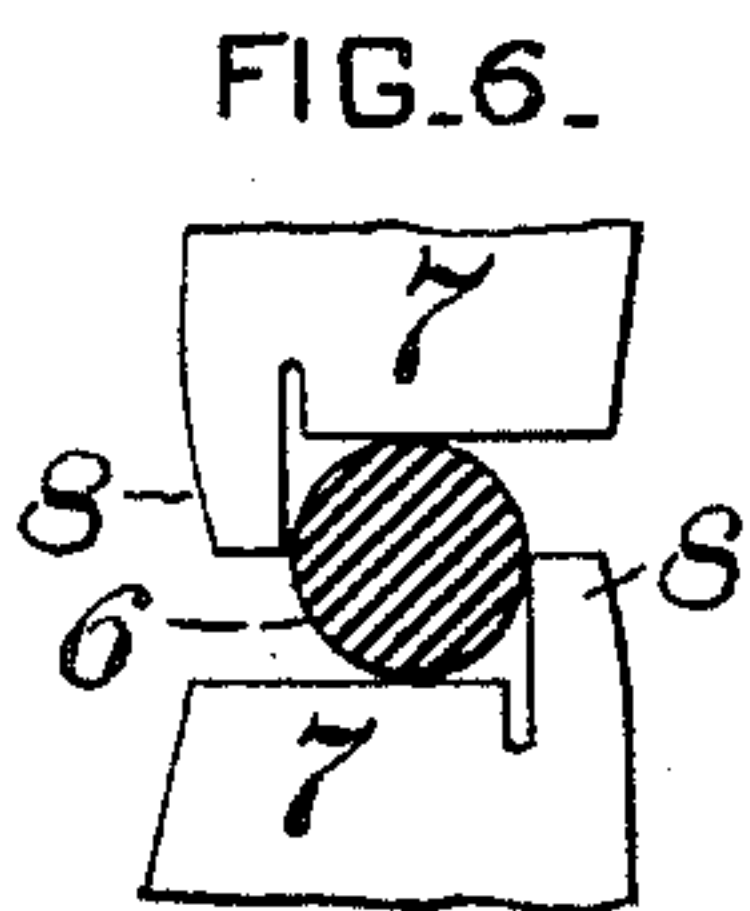
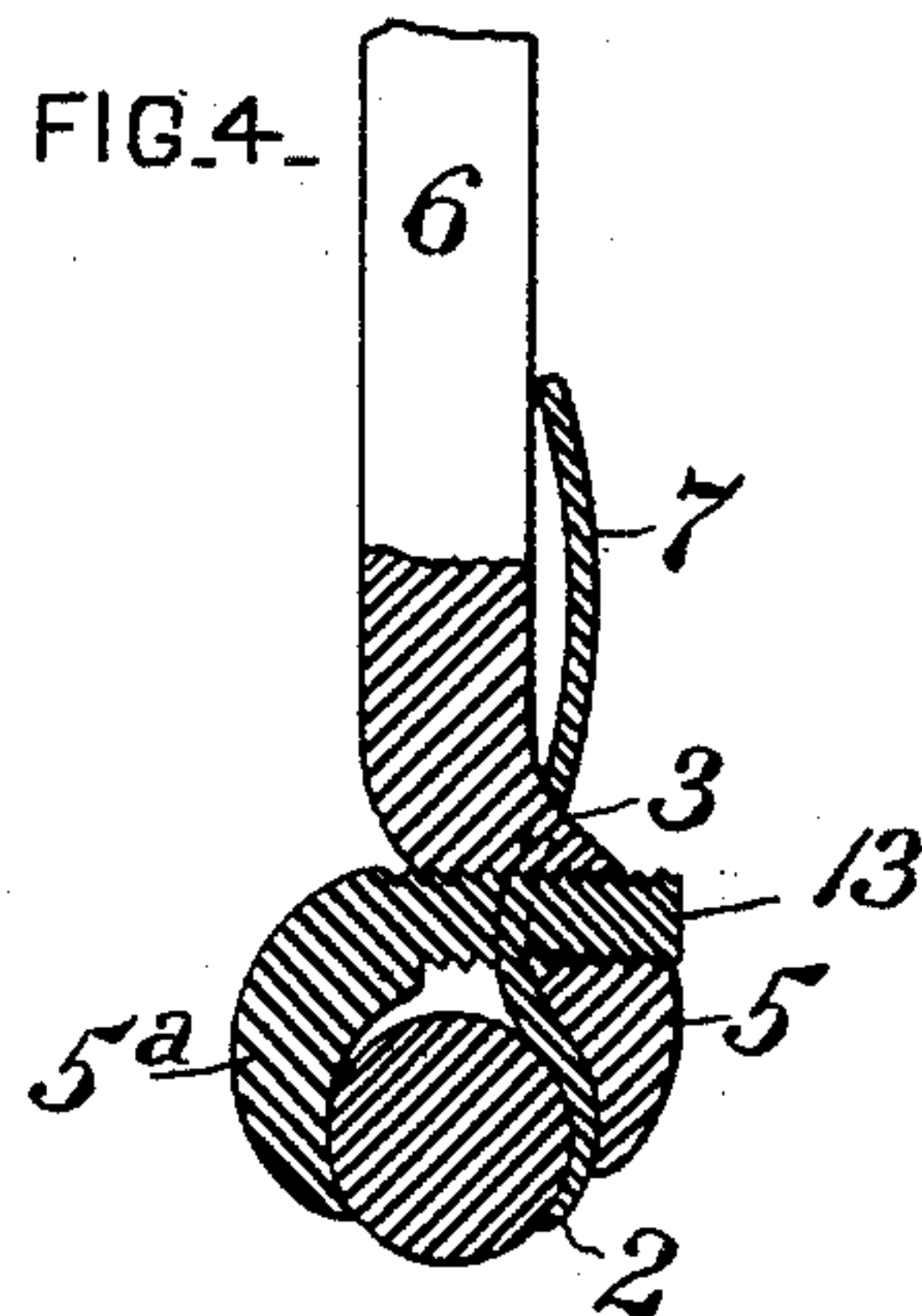
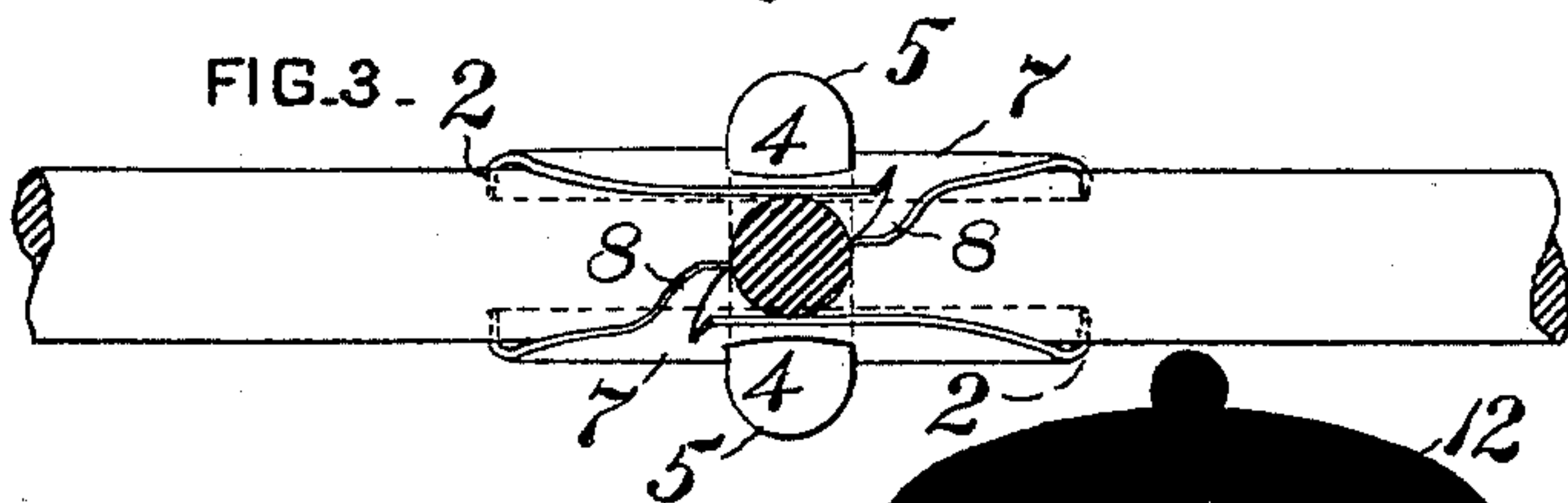
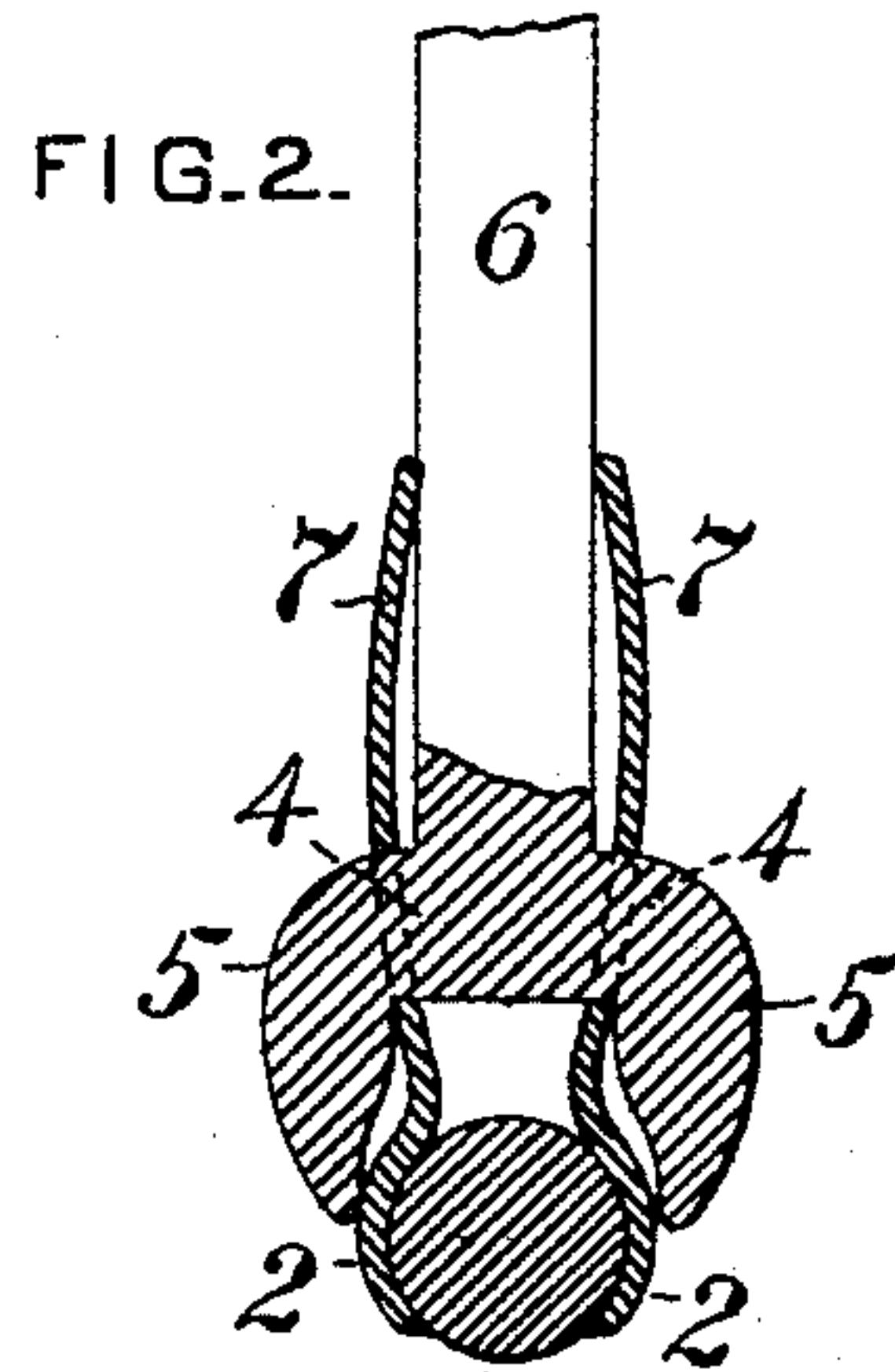
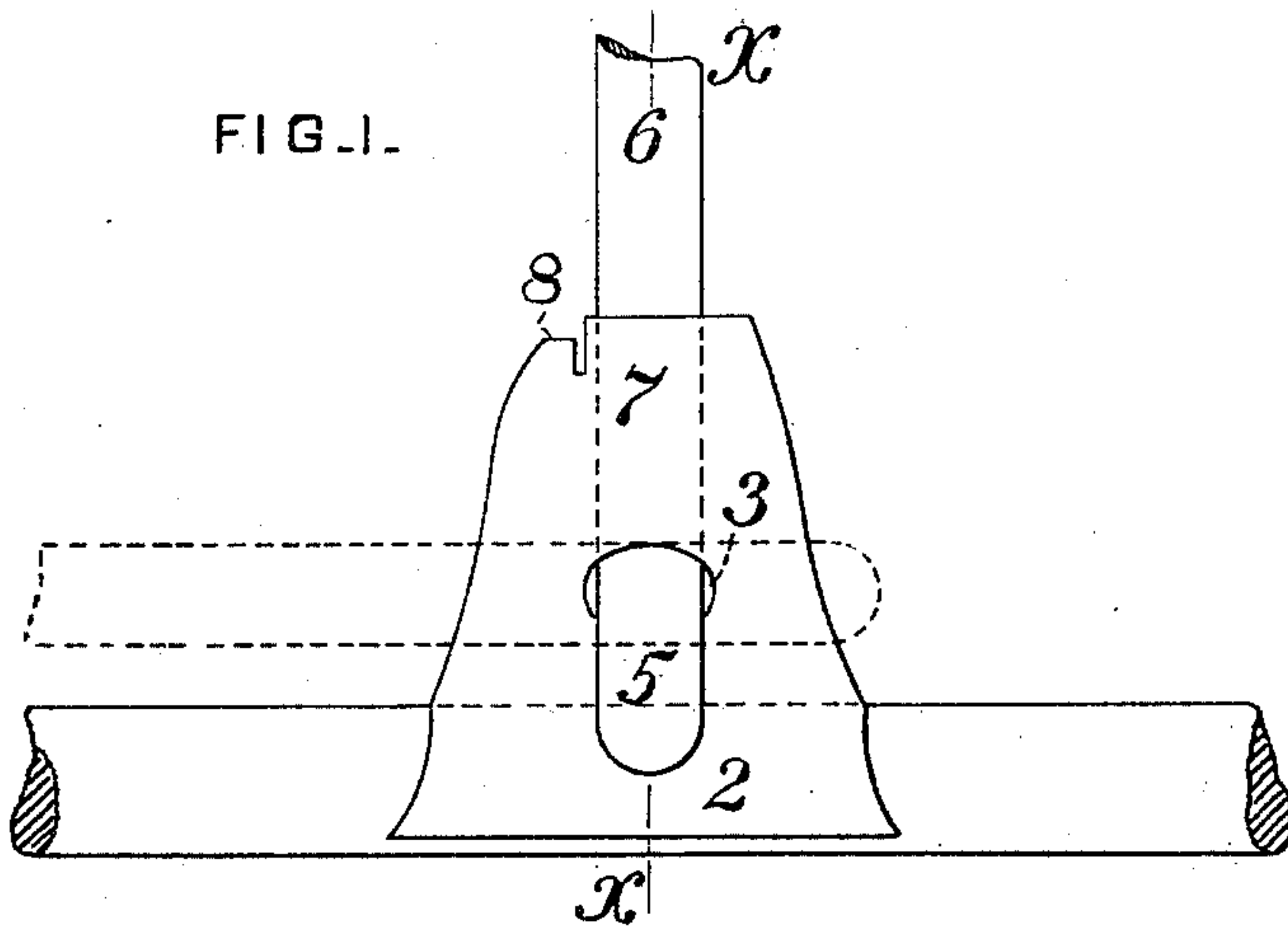


FIG. 5.

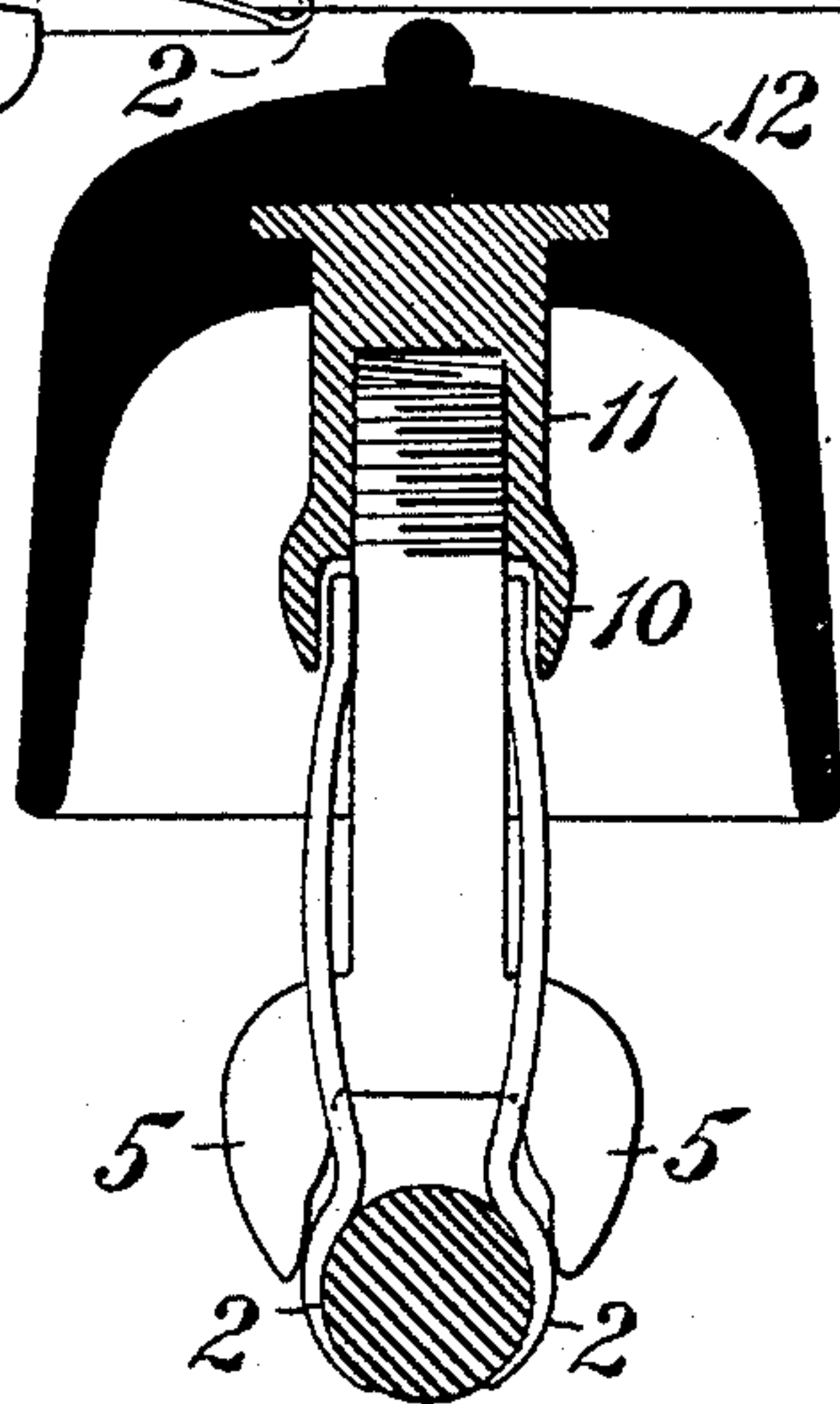


FIG. 10.

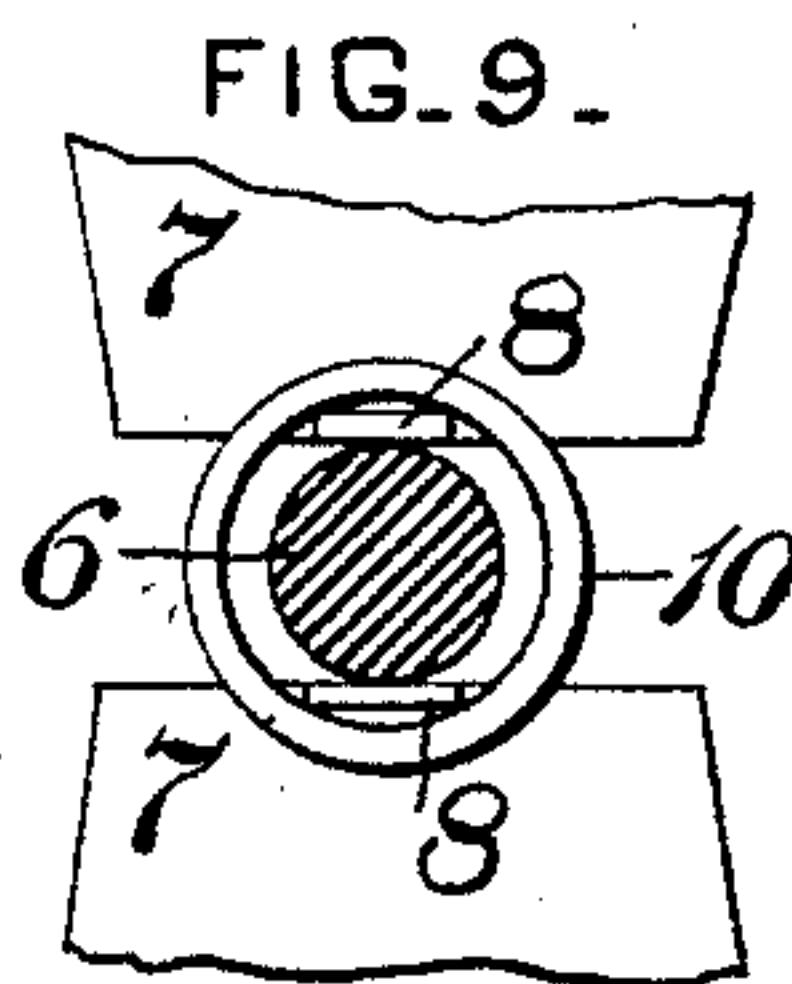
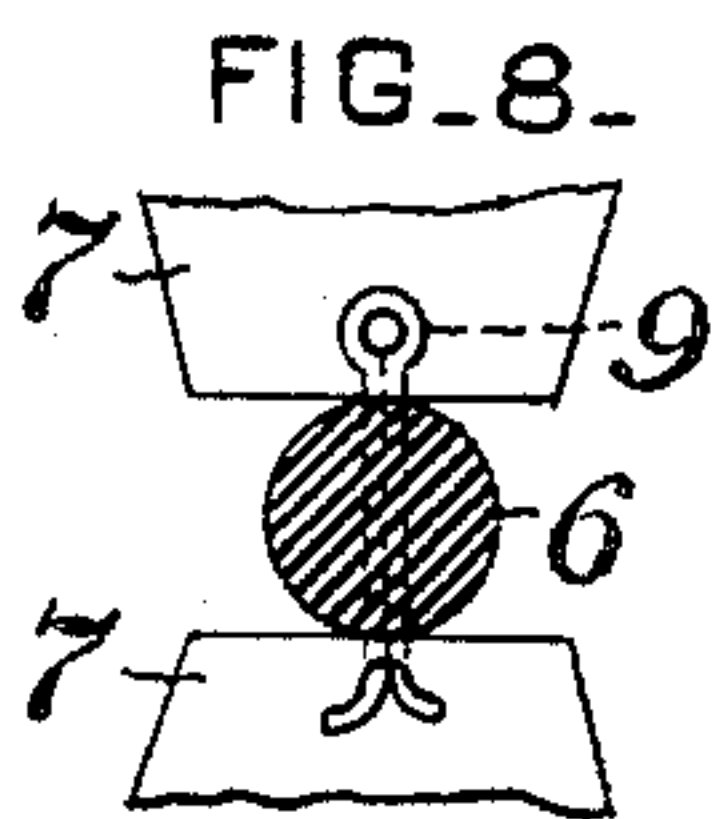
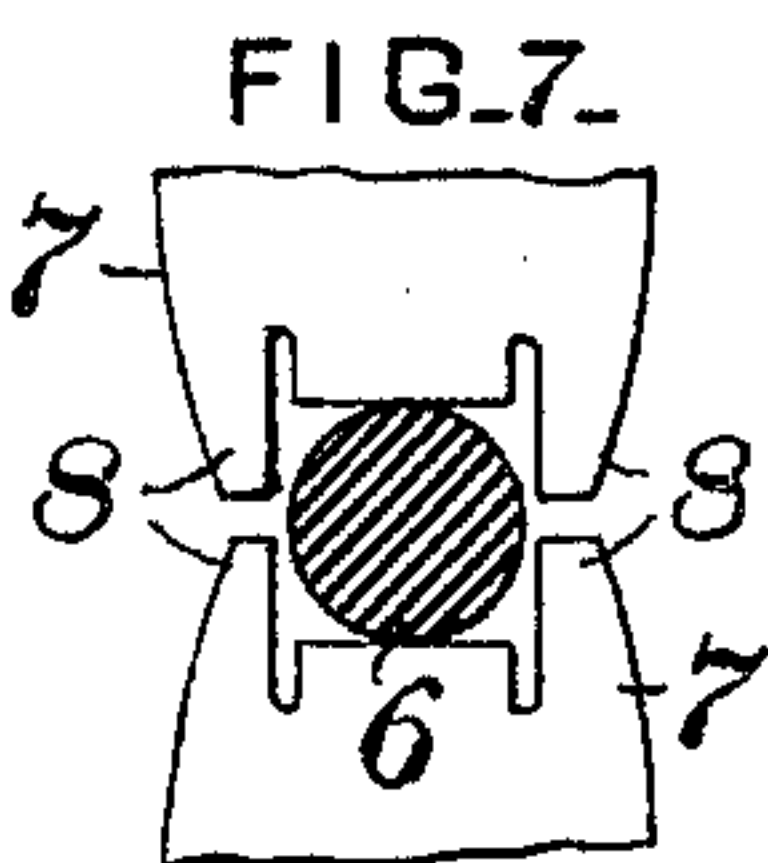
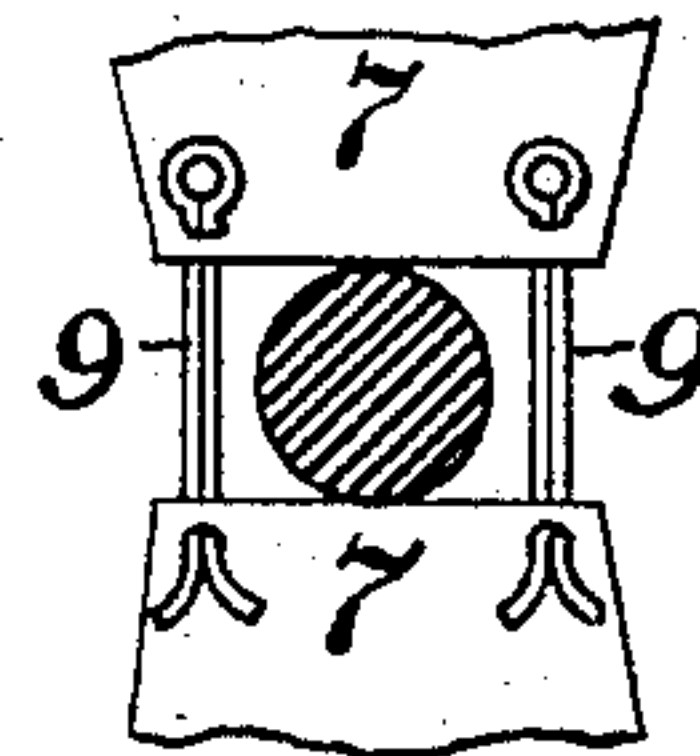
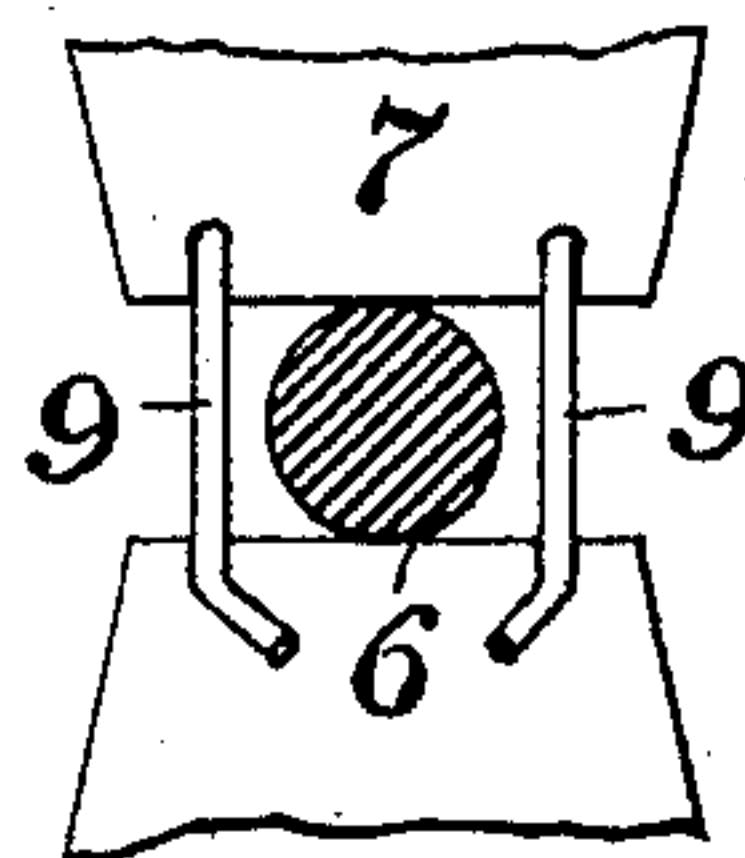


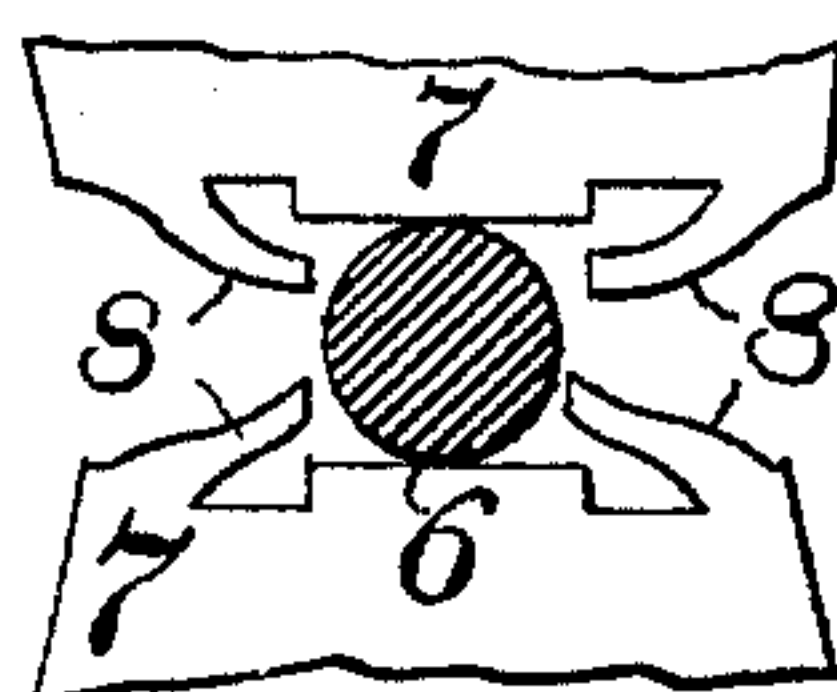
FIG. 11.



WITNESSES:

Danvers S. Wolcott  
F. E. Gaither.

FIG. 12.



INVENTOR,

George H. Winslow  
by George H. Christy  
Att'y.



# UNITED STATES PATENT OFFICE.

GEORGE H. WINSLOW, OF PITTSBURG, PENNSYLVANIA.

## SUPPORT FOR ELECTRIC CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 459,168, dated September 8, 1891.

Application filed May 19, 1891. Serial No. 393,259. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. WINSLOW, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Supports for Electric Conductors, of which improvements the following is a specification.

The invention described herein relates to certain improvements in devices for supporting overhead electric conductors, especially such as are used in electric railways, and has for its object a construction which can be easily and quickly applied to the conductor and will so grasp the latter as to present but slight obstruction to the movement of the trolley along the conductor.

In general terms the invention consists in the construction and combination substantially as hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a view in side elevation of a clamp or support applied to a conductor. Fig. 2 is a sectional view of the same on the line *x x*, Fig. 1. Fig. 3 is a top plan view of the same. Fig. 4 is a view similar to Fig. 2 of a modification of the clamp. Fig. 5 is a sectional elevation showing the clamp attached to a supporting bell or hood; and Figs. 6 to 12, inclusive, illustrate various forms of lock for preventing a displacement of the clamping-jaws.

In the practice of my invention I provide two plates, preferably formed of resilient material and of a sufficient length to permit the concavo-convex jaws 2 at one end of the plates to have a comparatively long grasping surface on the conductor. These plates are provided with openings or holes 3 at a suitable distance above the jaws for the reception of journals 4, formed on prongs 5 near their points of junction with the rod or bar 6, which at its opposite end is provided with suitable means, as a hook or eye, whereby it may be attached to a supporting-arm or wire.

In applying the device the rod or bar 6 is turned to an angle to the stems 7 of the jaws 2 until the bar has passed from between the upper ends of the stems 7 and the jaws have passed from between the prongs 5, as represented by dotted lines in Fig. 1. When the bar and its prongs or projections are in this position,

the upper ends of the stems can move in toward each other, thereby throwing the jaws apart, so as to permit of their being placed in opposite sides of the conductor. The bar or rod is then turned up into parallelism, or approximately so, with the stems 7, passing between said stems, forcing them apart and causing the jaws to close around the conductor. During this movement of the bar the prongs, which have cam-like inner faces, are caused to bear against the jaws and close them around the conductor, and subsequent to this closing action the bar passes between the stems 7, forcing them apart and causing the jaws to tightly grasp the conductor, the prongs serving as fulcrums for the stems and jaws. In order to prevent the displacement of the rod and its prongs, the rod is locked between the ends of the stems, as shown in Fig. 3. The lock for holding the rod and the stems of the jaws in proper position by tongues 8, formed integral with the stems, as shown in Figs. 3, 6, 7, and 12, or by bolts 9, is passing through or on opposite sides of the rod 6, as shown in Figs. 8, 10, and 11. The tongues 8 may be so constructed as to either spring by the rod when turned to normal position or to be bent down onto opposite sides of the rod.

In lieu of tongues adapted to be turned down on opposite sides of the rod 6, as shown in Figs. 3, 6, 7, and 12, the tongues may be made so as to lie parallel alongside of the rod when in normal position, as shown in Figs. 5 and 9, and held in place by a ring 10, as shown in Fig. 9, or by a socket formed at the lower end of the nut 11, into which the rod 6 is screwed, said nut being attached to the bell 12, formed of insulating material.

In lieu of the construction shown in Figs. 1, 2, and 3, I may employ that shown in Fig. 4, wherein the rod 6 has one prong 5 formed integral therewith, while the other prong 5<sup>a</sup>, having its inner face constructed to grasp the conductor, is provided with a threaded stem 13, screwing into a threaded opening in the rod at or about the point of junction of the other prong 5 therewith. In this construction only one jaw 2 is employed, said jaw being held against one side of the conductor by the prong 5 and the pressure of its stem against the rod 6. In applying this form of support 6 to a conductor the prong 5<sup>a</sup> is adjusted to-



ward or from the prong 5 until in proper relation to the jaws 2 when in operative position. The rod 6 is then turned down to an angle with the stem of the jaw 2. The conductor is then placed in position between the prong 5<sup>a</sup> and jaws 2 and the rod turned up into normal position, as shown in Fig. 4.

I claim herein as my invention—

1. A support for electric conductors, having in combination one or more plates provided with clamping-jaws adapted to engage the conductor, and a rod or bar provided with prongs journaled in said plates and constructed, when turned to normal position, to press the jaws against the conductor, substantially as set forth.

2. A support for electric conductors, having in combination one or more plates provided with clamping-jaws adapted to engage the conductor, a rod or bar provided with prongs journaled in said plate or plates and con-

structed, when turned to normal position, to press the jaws against the conductor, and a lock to hold the rod in such normal position, substantially as set forth.

3. A support for electric conductors, having in combination a rod or bar provided with prongs, plates provided with clamping-jaws and having the prongs on the rod journaled therein, said parts being so constructed that by the movement of the rod to normal position between the plates the jaws are pressed against the conductor by the conjoint action of the prongs and the outward movement of the upper ends of the plates, substantially as set forth.

In testimony whereof I have hereunto set my hand.

GEORGE H. WINSLOW.

Witnesses:

R. H. WHITTLESEY,

DARWIN S. WOLCOTT.