J. H HUBBARD.

WIRE CLAMP FOR INSULATORS.

APPLICATION FILED DEC. 6, 1911.

**1,067,246.** Patented July 15, 1913.

*Fig. 1.*

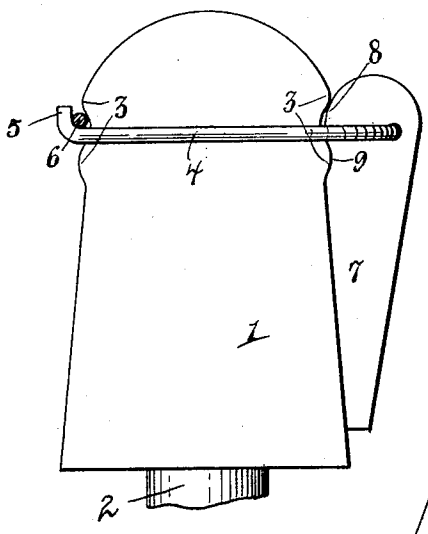



*Fig. 2.*

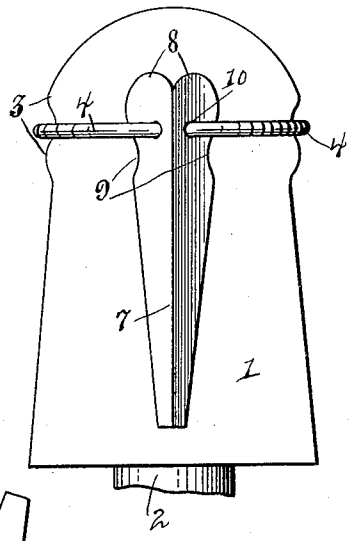



*Fig. 3.*

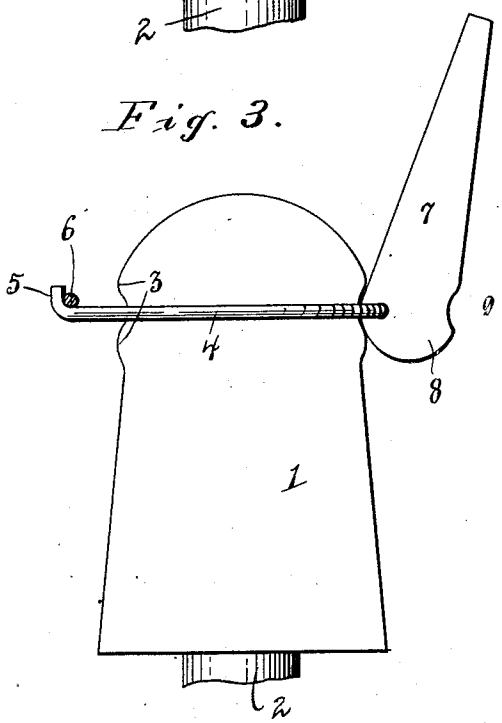
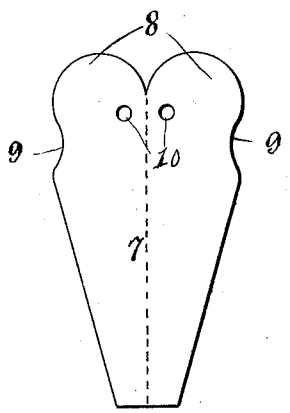



*Fig. 4.*




*WITNESSES*

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# UNITED STATES PATENT OFFICE.

JOHN H. HUBBARD, OF IRON RIVER, MICHIGAN, ASSIGNOR OF ONE-HALF TO H. A. DUSKY, OF GREEN BAY, WISCONSIN.

## WIRE-CLAMP FOR INSULATORS.

1,067,246. Specification of Letters Patent. Patented July 15, 1913.

Application filed December 6, 1911. Serial No. 664,177.

*To all whom it may concern:*

Be it known that I, JOHN H. HUBBARD, a citizen of the United States, residing at Iron River, in the county of Iron and State of Michigan, have invented new and useful Improvements in Wire-Clamps for Insulators, of which the following is a specification.

My invention relates to means whereby an electric wire may be secured to the ordinary glass insulator which is used in connection with telephone poles and the like.

An object of my invention is to provide means whereby an electric wire may be held to the ordinary glass insulator, which is simple and easy to manufacture, the same being constructed of but two parts.

Another object of my invention is to provide means whereby an electric wire or the like may be held to the ordinary glass insulator the said means adapted to give slightly when pressure is applied to the wire and thereby prevent the wire from snapping or otherwise breaking.

With the foregoing and other objects in view my invention relates to such details of construction and in the arrangement and combination of the several parts as will be hereinafter more fully described and specifically pointed out in the appended claims.

In describing my invention in detail reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views and in which,

Figure 1 is a side elevation of my device the same being shown closed, that is, showing the wire locked to the insulator. Fig. 2 is a rear elevation of the device as in Fig. 1. Fig. 3 is a side elevation of my device, the same being shown open. Fig. 4 is a detail view.

In the accompanying drawings which fully illustrate the preferred type of my invention, 1 is applied to the glass insulator which is supported by the means 2 of any suitable type. The insulator 1 has the usual offset portions or annular ribs 3 formed thereon.

My invention consists of the wire 4 which is bent to conform with the curvature of the insulator 1. The wire 4 has its end bent upwardly as at 5 whereby a wire 6 may be held against the insulator 1 as shown in Fig. 1. I also provide a clamping lever 7 which is preferably stamped from sheet metal and bent on the dotted line as in Fig. 4 so as to be V-shaped in cross section and thus have two portions or leaves at an angle to each other. The lever 7 is provided with the curved cam faces 8 and the cut out portions, 9.

In Fig. 3 my device is shown attached to the insulator 1 but in an unlocked position. When the device is as in Fig. 1, the wire 6 is locked to the insulator 1. The cam faces 8 of the lever 7 engage the portion between the offset portions 3 and the cut out portion engages one of the offset portions 3.

The lever 7 may be provided with the openings 10 whereby the wire 4 may be inserted therethrough.

The sides of the lever 7 are bent to the V-shape as referred to shown in Fig. 2 whereby the lever will have a spring action and will thereby accomplish a result which will greatly add to the utility of the device, that is, minimizes the liability of breaking or shaping of the parts. As is obvious the said edges of the lever bear against the insulator and the center thereof is spaced or deflected from the insulator so that the yielding action referred to is had by spreading of the angular portions or leaves of the lever.

It is thought that the advantages and novel features of my device will be appreciated.

I desire it to be understood that I may make slight changes in the construction without departing from the spirit of my invention provided such changes fall within the scope of the subjoined claims.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a device of the class described, in combination with an insulator, means to clamp a wire to said insulator comprising wire-engaging means and a yieldable cam lever to clamp against the insulator.

2. In a device of the class described, in combination with an insulator, means to clamp a wire to said insulator comprising wire-engaging means and a yieldable cam lever to clamp against the insulator, said lever intermediate its ends being deflected away from the insulator.

3. In a device of the class described, in combination with an insulator, means to

clamp a wire to said insulator comprising a wire-engaging member and a yieldable cam lever to clamp against the insulator, said lever being substantially V-shaped in cross section, thereby providing portions on opposite sides of the center thereof to engage the insulator at their edges, one of said portions provided with a cam face to engage the insulator.

4. In a device of the class described, in combination with an insulator having a rib and a groove, means to clamp a wire to said insulator having a cam lever provided with a convexly curved portion to engage the groove of the insulator and a concavely curved portion adjacent said convexly portion to engage the rib of the insulator.

5. In a device of the character described, in combination with an insulator, a wire bent intermediate its ends and adapted to extend partly around said insulator, said wire having an upturned end adapted to engage a second wire, a lever, said lever being bent intermediate its ends and provided with cam faces adapted to engage said insulator, openings formed in said member adapted to receive said first named wire whereby when said member is operated said second named wire will be yieldingly clamped to said insulator.

6. In a device of the class described, in combination with an insulator having a rib and a groove, means to clamp a wire to said insulator comprising a wire member having an upturned end to engage the wire to be clamped and a cam lever mounted on said wire member, said cam lever being bent intermediate its said edges, to provide leaves or portions bearing against the insulator at the edges, each portion provided with a convexly curved face to engage the insulator and with a concavely curved face adjacent the convexly curved face to engage the rib of the insulator.

JOHN H. HUBBARD.

Witnesses:
HERBERT HAGELIN,
P. O'BRIEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."