(No Model.)

I. P. CORNOG.

INSULATOR FOR ELECTRIC WIRES.

No. 419,642. Patented Jan. 21, 1890.

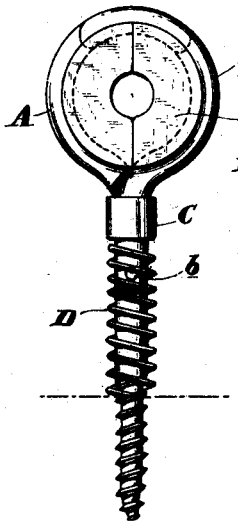

FIG. 1.

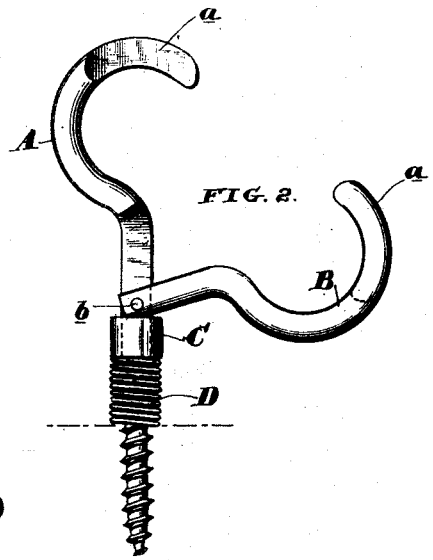

FIG. 2.

FIG. 4.

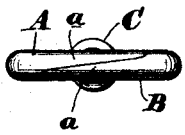

FIG. 5.

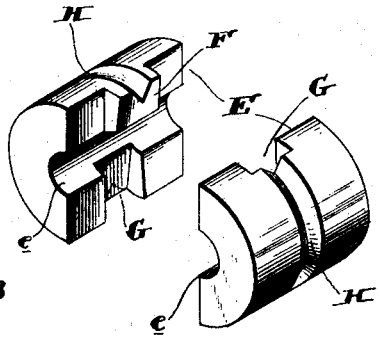

FIG. 3.

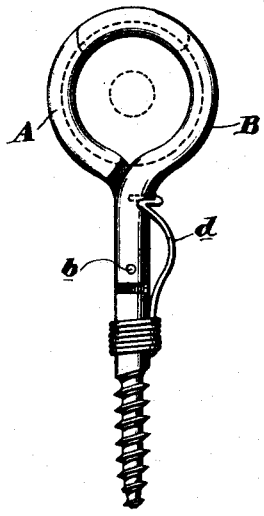

FIG. 6.

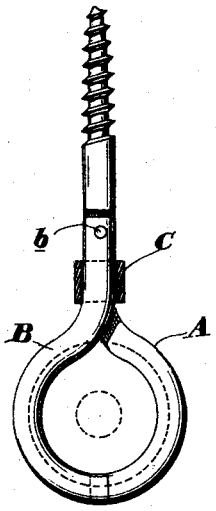

FIG. 7.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ISAAC P. CORNOG, OF PHILADELPHIA, PENNSYLVANIA.

INSULATOR FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 419,642, dated January 21, 1890.

Application filed July 8, 1889. Serial No. 316,745. (No model.)

To all whom it may concern:

Be it known that I, ISAAC P. CORNOG, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Insulators for Electric Wires, of which the following is a specification.

My invention relates to insulators for electric wires; and it consists of certain improvements which are fully set forth in the following specification, and shown in the accompanying drawings, which form a part thereof.

The object of my invention is to construct a convenient insulating support for electric wires and one in which the wires may be easily inserted and from which they may readily be removed when desired.

In carrying out my invention I employ a metallic clamping-piece, which is secured to the supporting-pole or other object from which the wires are to be suspended, and clamped between the jaws of which is a tubular piece of glass or other suitable insulating material provided with a central hole, through which the wire is inserted. This tubular piece is constructed in halves, and to insure the two pieces being firmly held together the abutting faces are each provided with a lug and a recess, the lug of one piece fitting into the recess of the other piece when the two are clamped together.

In the drawings, Figure 1 is a side elevation of my improved insulating-support. Fig. 2 is a similar view of the opened clamping-jaws without the tubular insulating-piece. Fig. 3 is a side elevation of an insulating-support embodying a modification of my invention. Fig. 4 is a plan view looking down upon the closed clamping-jaws. Fig. 5 is a perspective view of the detached tubular insulating-piece with the parts separated. Fig. 6 is a side elevation of an insulating-support embodying a second modification of my invention; and Fig. 7 is a plan view looking down upon the closed clamping-jaws, showing a slight modification therein.

A is a metallic jaw having a straight end adapted to be secured to the pole or other object from which the wire is to be suspended.

B is a similar jaw having a shorter straight end, by which it is pivoted at *b* to the jaw A.

C is a collar fitting over the ends of the jaws and adapted, when raised over the pivot-point *b*, to clamp the two jaws A and B together. I prefer to form the inner faces of the straight portions of the jaws A and B flat, as shown, so as to fit against each other, that the collar may easily be moved up and down over the ends.

D is a spring which normally forces up the collar C, as shown in Fig. 1.

I prefer to construct the jaws A and B with their free ends *a* beveled or inclined, so that they will overlap when the jaws are closed, to prevent them being too easily opened. In place of making these ends beveled or inclined, one may be recessed and the other made with a projection or point to fit into the recess, as shown in Fig. 7; or both ends may be made straight, though I prefer one of the former constructions.

E is the tubular insulating part formed in halves, each provided with a groove *e*, which, when the parts are clamped together, forms the hole for the wire. Each of these pieces is provided with a lug F and a recess G upon their abutting faces, the lug of one piece fitting into the recess of the other when the parts are clamped together. By this means the tubular pieces E may be easily and quickly put into place within the clamping-jaws A and B by the lineman, because as the parts are all identical there is no necessity of selecting any particular two parts to be fitted together, as is necessary in many of the insulators now in use.

H is a circular groove upon the outer surface of the insulator E, in which the jaws A and B are adapted to fit. To release the wire, the collar C is pushed down to release the pivoted end of the jaw B, as shown in Fig. 2, and the tubular piece E is separated to free the wire. It is apparent that the tubular piece E may be employed without the jaws A and B, any other suitable means being employed to hold the parts together.

In Fig. 6 is shown a modification in which the collar C is used alone without the spring D. In this construction the ends of the jaws should be made slightly tapering, so that the collar will be held in position when raised above the pivot-point *b*.

In Fig. 3 is shown a modification in which the spring is used without the collar being made with an extending arm *d* pressing against the jaw B to normally close it.

While I prefer the details of construction which are here shown, I do not limit my invention to them, as it is apparent that they may be varied in a number of ways without departing from my invention.

What I claim as new, and wish to secure by Letters Patent, is—

1. In an insulator-support, the combination of two pivoted jaws having their outer ends free, and clamping devices acting only upon the pivoted ends of said jaws to force their outer or free ends together.

2. An insulator-support consisting of a rigid jaw adapted to be attached to a fixed object, a movable jaw pivoted thereto, and clamping devices carried by the fixed jaw and bearing upon the pivoted jaw to normally clamp the two together.

3. An insulator-support for electric wires, consisting of two pivoted jaws, a collar adapted to move over the pivoted ends of said jaws to clamp them together, and an insulating-piece made in two parts clamped together between said pivoted jaws to hold the wire.

4. An insulator-support for electric wires, consisting of two pivoted jaws, a collar adapted to move over the pivoted ends of said jaws, a spring to normally force the collar over said ends to clamp them together, and an insulating-piece made in two parts clamped together between said pivoted jaws to hold the wire.

5. An insulating-piece for electric wires, formed of two similar pieces of insulating material (the two pieces thereof being adapted to be clamped together) having a groove to contain the wire and having correspondingly irregular abutting surfaces to prevent said surfaces slipping upon each other when the parts are clamped.

In testimony of which invention I have hereunto set my hand.

ISAAC P. CORNOG.

Witnesses:
ERNEST HOWARD HUNTER,
S. T. YERKES.