No. 848,473.

PATENTED MAR. 26, 1907.

T. B. LEE.

INSULATING CLAMP.

APPLICATION FILED MAY 15, 1906.

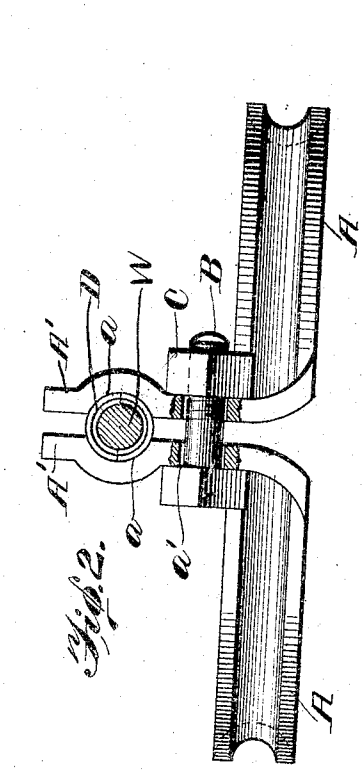


Fig. 2.

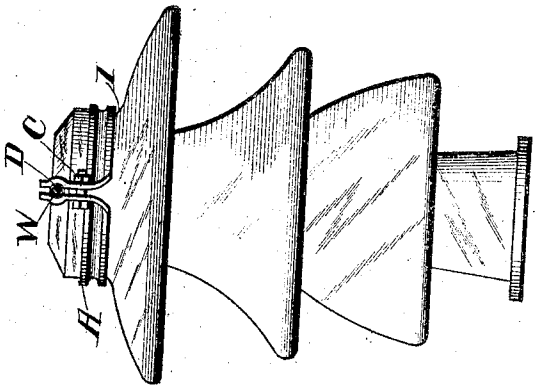


Fig. 4.

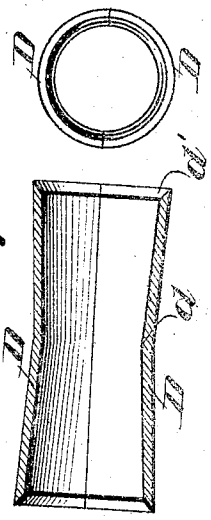


Fig. 3.

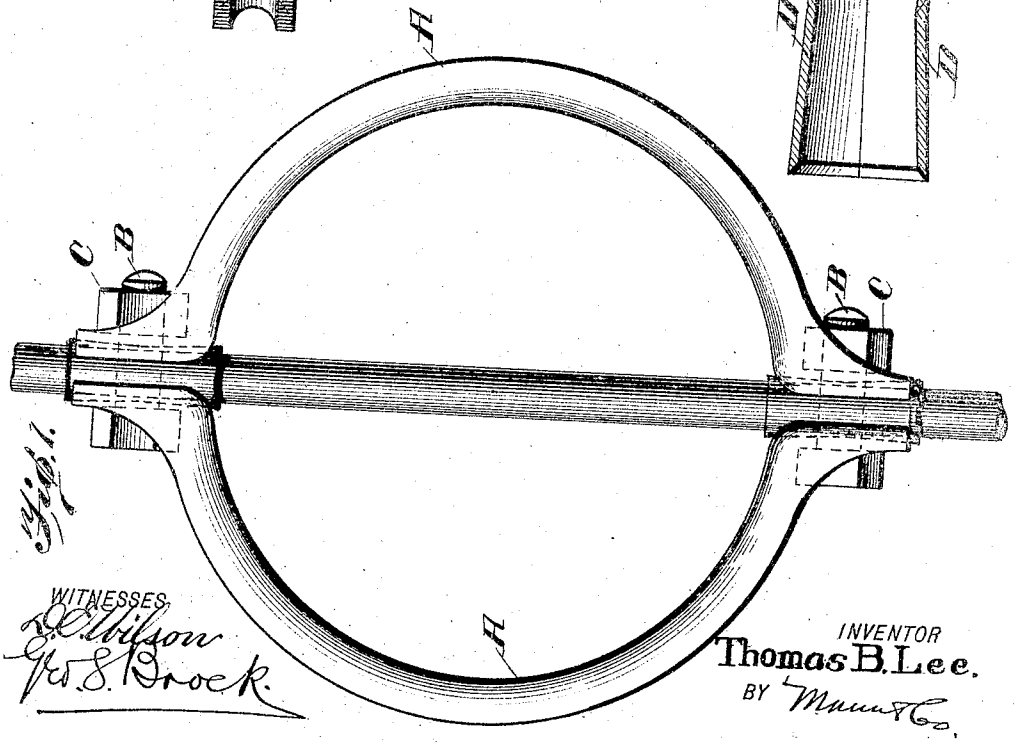


Fig. 1.

WITNESSES:

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INSULATING-CLAMP.

No. 848,473. Specification of Letters Patent. Patented March 26, 1907.

Application filed May 15, 1906. Serial No. 316,905.

To all whom it may concern:

Be it known that I, THOMAS B. LEE, a citizen of the United States, and a resident of Charlotte, in the county of Mecklenburg and State of North Carolina, have invented certain new and useful Improvements in Insulator-Clamps, of which the following is a specification.

My invention relates to improvements in devices for clamping electric transmission-wires to insulators.

The main object of my invention is to improve upon the construction and efficiency of such devices now in use, and to provide a clamp upon which as much strain may be put as may be necessary to hold the wire from slipping and to give it such clamping effect as to throw a required amount of friction on the wire, and to allow for more or less slipping over the top of the insulator.

With these and other objects in view my invention consists, broadly, of an insulator-clamp comprising two separate sections to embrace the insulator-neck and suitable means for clamping said sections together.

My invention consists, further, in certain novel features of construction, arrangement, and combination of parts as will be hereinafter fully described, and pointed out in the accompanying drawings, in which—

Figure 1 is a bottom plan view of my improved clamp, showing transmission-wire in place. Fig. 2 is a projection on line 2 2 of Fig. 1. Fig. 3 is a section through the bushing to be used on wire. Fig. 4 shows application of my clamp to an insulator.

In carrying out my invention I use two similar semicircular sections or plates A of semicircular cross-section of such size as to slip on the neck of an insulator I, each semicircular section or plate having a lug A′ at each end projecting upwardly and having a semicircular groove *a*, the grooves of each section or plate at each end facing each other and forming an approximately circular groove within which the wire W rests and is held. Below the grooves each lug has an opening *a*′, through which are passed the bolts B, on the threaded ends of which are screwed the nuts C.

In Fig. 3 I have illustrated a bushing, said bushing consisting of upper and lower halves D D, so that when their longitudinal edges are brought together they form a tubular bushing which tapers inwardly from its ends to its center *d*, at which its diameter is the least. The outer edges of each half of the bushing is beveled, as shown at *d*′. The bushing is made from a different metal than that of the clamp members in order to protect the wire from abrasion should it slip away.

In applying my improvement the two-part bushing is placed around the wire and the bushings then laid, one on each side of the insulator, in the grooves of the two members of the clamp before its opposing faces are drawn closely together. The semicircular parts of the clamp members are now easily slipped into and around the groove of the insulator and the nuts C then screwed up on the bolts, drawing the opposing faces of the clamp members toward each other and tightly clamping the wire and the members of the clamp on the neck of the insulator.

From the above it will be seen that I provide a simple and inexpensive device and one which will resist a pull or lift of the wire in any direction when the clamp is tightly assembled around the insulator-neck and one in which in ordinary cases will prevent any movement of the wire or clamp backward, forward, downward, or upward and will in cases of extreme tension permit the wire to slip through the clamp to prevent breaking.

The nuts C on the bolts B may be prevented from turning off by some simple and suitable form of nut-lock. While I have shown bolts and nuts for holding the sections of the clamp together, yet I may use any suitable means for this purpose.

I claim—

1. An insulator-clamp comprising two separate inflexible sections adapted to clamp a transmission-wire and engage the neck of an insulator, and means for securing said sections together.

2. An insulator-clamp comprising two separate semicircular inflexible sections adapted to clamp a transmission-wire and engage the neck of an insulator, and means for securing said sections together on the insulator.

3. An insulator-clamp comprising two separate semicircular inflexible sections adapted to engage the neck of an insulator, lugs at the ends of said sections adapted to clamp a transmission-wire, and means for drawing said lugs together to clamp the wire and secure the clamp to the insulator.

4. An insulator-clamp comprising two separate semicircular inflexible sections adapted to engage the neck of an insulator, vertical

lugs at each end of each section, said lugs having semicircular grooves in their opposing faces to receive a transmission-wire, and means for drawing the opposing faces of said lugs together to clamp the wire and secure the clamp to the insulator.

5. An insulator-clamp comprising two separate semicircular sections adapted to clamp a transmission-wire, and engage the neck of an insulator, and means for securing said sections together.

6. The combination with an insulator, of a clamp comprising two separate body portions encircling said insulator, and wire-holding means projecting from said body portions, and a bushing fitting in said wire-holding means and surrounding the wire.

7. The combination with an insulator, of a clamp comprising two separate body portions encircling said insulator, and wire-holding means projecting therefrom, and a separable bushing held by said wire-holding means and surrounding the wire.

8. The combination with an insulator, of a clamp comprising two separate body portions encircling said insulator, and wire-holding means projecting therefrom, a double-tapered bushing held by said wire-holding means and surrounding the wire.

9. The combination with an insulator, of a clamp comprising two separate body portions encircling said insulator, and wire-holding means projecting therefrom, a separable double-tapered bushing held by said wire-holding means and surrounding the wire.

10. The combination with an insulator, of a clamp comprising two separate semicircular sections having lugs projecting upwardly from each end, said lugs constituting wire-holding means, a separable bushing held by said lugs and surrounding the wire, and means for forcing the opposing faces of the lugs toward each other.

11. The combination with an insulator, of a clamp comprising two separate semicircular sections having lugs projecting upwardly therefrom, said lugs consisting of wire-holding means, a bushing held by said lugs, said bushing flaring toward each end from its center, and means for forcing the opposing faces of the lugs toward each other.

12. The combination with an insulator, of a clamp comprising two separate semicircular sections having lugs projecting upwardly therefrom at each end, said lugs having grooves in their opposing faces, a separable bushing held in said grooves, and flaring toward each end from its center, and means for forcing the opposing faces of the lugs toward each other.

THOMAS B. LEE.

Witnesses:
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