

A. J. SILER.
INSULATOR.
APPLICATION FILED DEC. 10, 1909.

954,350.

Patented Apr. 5, 1910.

Fig. 1.

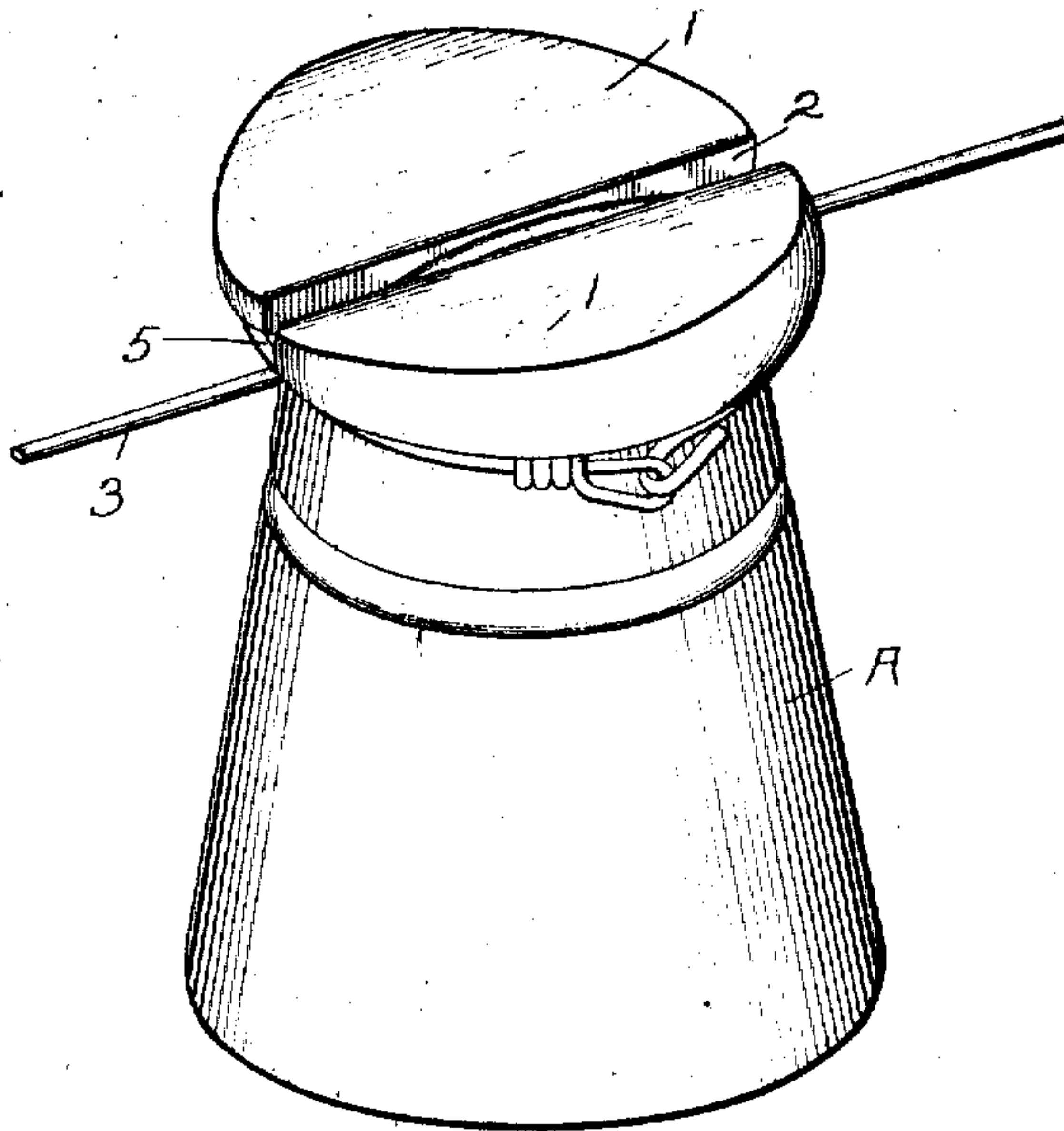
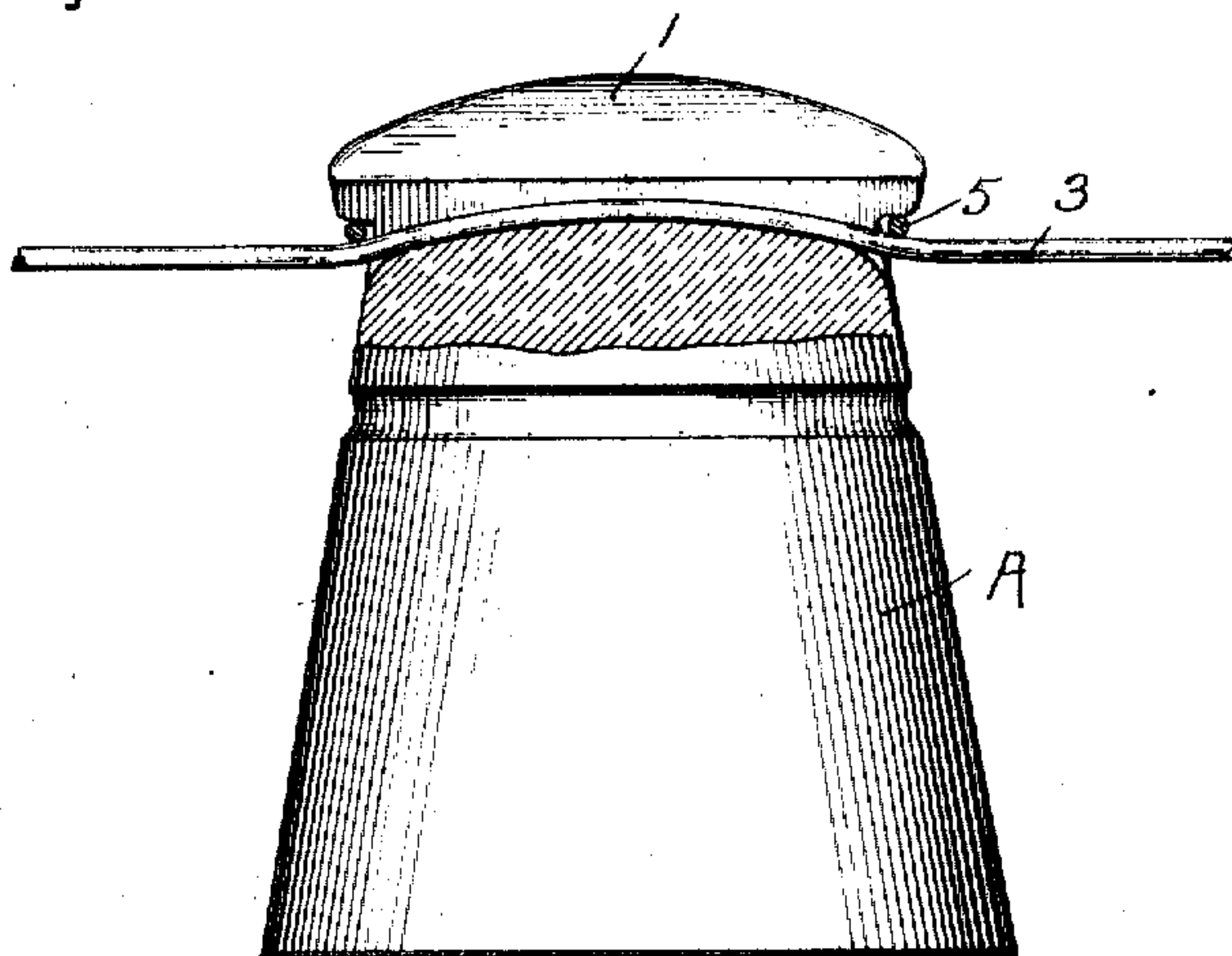


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

ANDREW J. SILER, OF MASSILLON, OHIO, ASSIGNOR OF ONE-THIRD TO AARON V. SILER
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INSULATOR.

954,350.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed December 10, 1909. Serial No. 532,362.

To all whom it may concern:

Be it known that I, ANDREW J. SILER, a citizen of the United States, residing at Massillon, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Insulators, of which the following is a specification.

My invention relates to an improvement in insulators for holding electric line wires, the object being to provide an insulator which will hold the line wires securely in place without the use of the usual tie wire, and by this is meant, a smaller wire which is passed around the insulator and bent around the line wire, frequently doing great damage to the latter. After years of practical experience in this line of work, I have found that by the use of the tie wire, the main wire is burned while wrapping it, causing it to become weak at that point which is the first place to break. If the line is not wrapped tight with the tie wire, and the line wire breaks, it will run back practically one-half mile, leaving a slack in the wire, and in order to re-adjust the wire, the tie wires from all the insulators for that distance must be removed to draw up the slack, and then be tied. This often happens after the wires have been up sometime, and the tie wires have loosened up. It might be further stated that when copper wire is used, the companies prohibit the use of pliers in tying, the linemen being required to use only their hands, in order to avoid getting it too tight. It is the purpose of this invention to overcome this difficulty, as each span is held by itself by the aid of a convex curve in the crown slot of the insulator, and the line wire is held against this curve by the pressure from beneath, that is, of the convex curve, and on top at each end of the curve by means of a lock wire.

With these objects in view, my invention consists in certain novel features of construction and combinations of parts which will be hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective, and Fig. 2 is a vertical longitudinal section.

In the drawings, A, indicates the insulator, the crown of which is enlarged and subdivided into two parts 1, 1, by the centrally located longitudinal groove 2, the bottom of which is convex, as shown in Fig.

2. The two parts of the crown extend, preferably, so as to overhang the adjacent body portion of the insulator, and the upper surfaces of which part preferably slope toward the central groove. The line wire 3 extends through the groove, and the ends of the groove are beneath the lower edge of the overhanging of the crown portion.

A lock wire 5 encircles the insulator just below the crown, and overlies the line wire at the ends or outlets of the groove, so that a double pressure is exerted upon the line wire, namely by the upward convex surface of the bottom of the groove, and downwardly by the encircling lock wire, above the line wire at the two points where it extends outwardly from the ends of the groove. In this way, the lock wire may be drawn as tight as possible, whether by hand or instrument.

A minimum amount of wire is required to form the locking wires, as they do not encircle the line wire, and at the same time, a definite location is provided for the locking wire, and furthermore, the combined effect of the convex bottom and the two points of engagement of the locking wire upon the line wire makes a simple, secure, and effectual fastening, which is easy to apply, and which prevents the line wire from drawing through and becoming slack, while at the same time, preventing the burning out alluded to hereinbefore.

It might further be mentioned that the insulator itself is of such a construction that it may be easily cast of glass, (porcelain, or even rubber, and while the form illustrated is desirable, it is evident that it might be more or less changed in shape, and design, without departing from the spirit and scope of my invention; hence I do not wish to limit myself to the exact construction herein set forth, but:—

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

1. An insulator made of a single piece of material comprising a body portion having a crown at one end which overhangs the body portion, and which is subdivided by a convex groove through the longitudinal center.

2. An insulator made of a single piece of material comprising a body portion having a crown at one end which overhangs the

body portion, and which is subdivided by a convex groove through the longitudinal center, the upper surfaces of the two parts of the crown sloping downwardly to the groove.

3. The combination with an insulator having an overhanging subdivided crown at the top, the groove subdividing the crown being convex, and a line wire passed in contact with the convex groove, of a lock wire encircling the insulator immediately below the

overhanging portion of the crown and holding the line wire at each end of the groove by engaging between the overhanging portions of the crown and the line wire.

In testimony whereof I affix my signature, 15
in the presence of two witnesses.

ANDREW J. SILER.

Witnesses:

FAY ARTHUR,
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