Dec. 5, 1933. W. D. KYLE 1,937,764

INSULATOR

Filed Sept. 12, 1929

Fig. 1

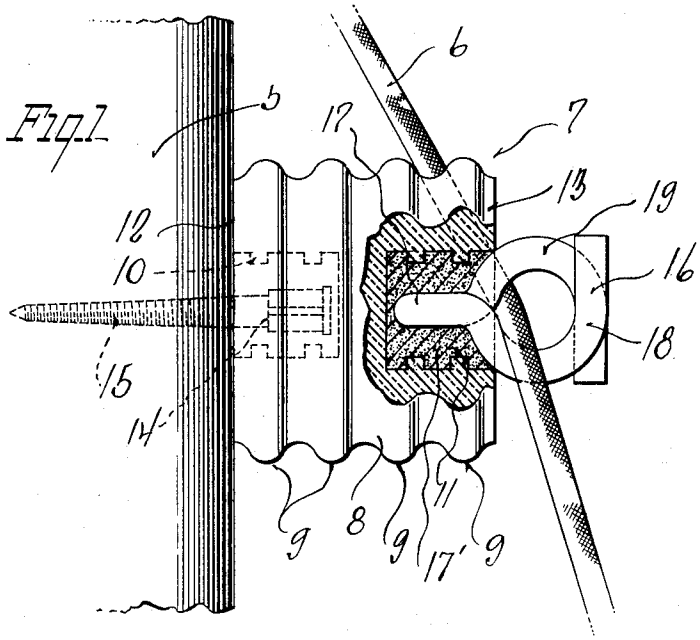
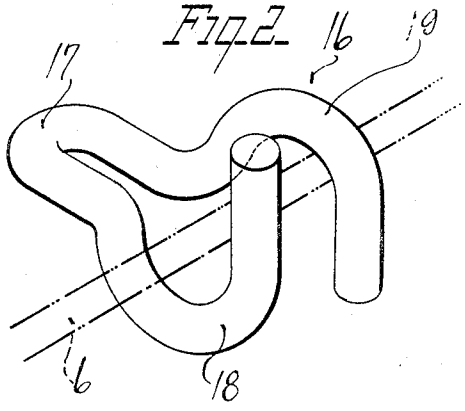


Fig. 2



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INSULATOR

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Serial No. 392,115

1 Claim. (Cl. 173—313)

This invention relates to certain new and useful improvements in insulators and refers more particularly to that type known in the art as a tree insulator. Insulators of this type are designed to be applied to a tree or other obstruction in the path of a line wire to hold the wire spaced therefrom.

In insulators of the character described, heretofore in use, it has been common practice to provide a porcelain member with which the wire was engageable and which was adapted to be secured to the limb of the tree or other obstruction by a screw or the like fixed to the porcelain member. This construction had several objections, principle of which was the fact that they were mechanically weak and fragile, likewise because of their particular construction it was impossible to form them of wet process porcelain which consequently considerably lowered their dielectric factor.

The present invention overcomes these objections and has as one of its objects to provide an insulator of this character which is so constructed that its mechanical strength and insulating qualities are exceptionally high.

Another object of this invention resides in the provision of an insulator of the character described which is so constructed that its porcelain member may be formed of wet process porcelain.

And a more specific object of this invention is to provide an insulator of the character described having a porcelain body provided with an attaching screw at one end and a metal wire engaging member at its other end, substantially constructed and designed to permit a line wire to be connected thereto without necessitating cutting or tying.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claim, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claim.

In the accompanying drawing, I have illustrated one complete example of the physical embodiment of my invention constructed according to the best modes I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is an elevational view of an insulator embodying my invention, illustrating the manner of use and having a portion broken away and in section; and

Figure 2 is a perspective view of the wire engaging member shown apart from the porcelain body.

Referring now more particularly to the accompanying drawing in which like numerals designate like parts throughout the several views, numeral 5 represents the trunk of a tree or other obstruction in the path of the line wire 6. To prevent the wire 6 from coming in contact with the tree trunk, an insulator indicated generally as at 7, is secured to the tree and engaged with the wire.

The insulator 7 consists of a substantially cylindrical block 8 preferably of wet process porcelain having peripheral ribs 9 and recesses 10 and 11 extended inwardly from its flat ends 12 and 13. The recess 10 has the head 14 of an attaching screw 15 fixed therein by embedding it in cement or the like and the recess 11 mounts a wire engaging member 16.

The wire engaging member is formed from a heavy piece of wire and is bent, as best illustrated in Figure 2, at its medial portion 17 to substantial U shape with the legs of the U looped in opposite directions as at 18 and 19. The looped ends 18 and 19 together form a complete ring as shown in Figure 1, and as they are spaced from each other it is obvious that the wire 6 may be inserted in the closed ring or circle by being first passed between the ends and then permitted to assume its natural position.

As the medial portion 17 of the wire engaging member which is embedded in the cement 17' filling the recess 11, forms substantially a hook, pulling out of the member is practically impossible.

Forming the wire engaging member of metal greatly increases the mechanical strength of the device without resorting to a cumbersome design. The insulator is also considerably less fragile.

From the foregoing description taken in connection with the accompanying drawing it will be readily apparent to those skilled in the art to which this invention appertains that I have provided a novel tree insulator of greatly increased mechanical strength, and in which the dielectric factor is improved by the use of wet process porcelain shaped so as to reduce its fragility.

What I claim as my invention is:

In combination with an insulating member having an aperture in the outer end thereof, a conductor engaging member comprising a U-shaped member of stiff wire having parallel arms extending outwardly from the connecting member of the U, the outer ends of said arms being bent in oppositely directed U's in parallel planes substantially perpendicular to the plane of said first named U, and means to retain said conductor engaging member in said aperture.

WILLIAM D. KYLE.