May 10, 1932. L. E. HENDEE 1,858,045

WIRE SUPPORT

Filed June 13, 1928

Fig. 1.

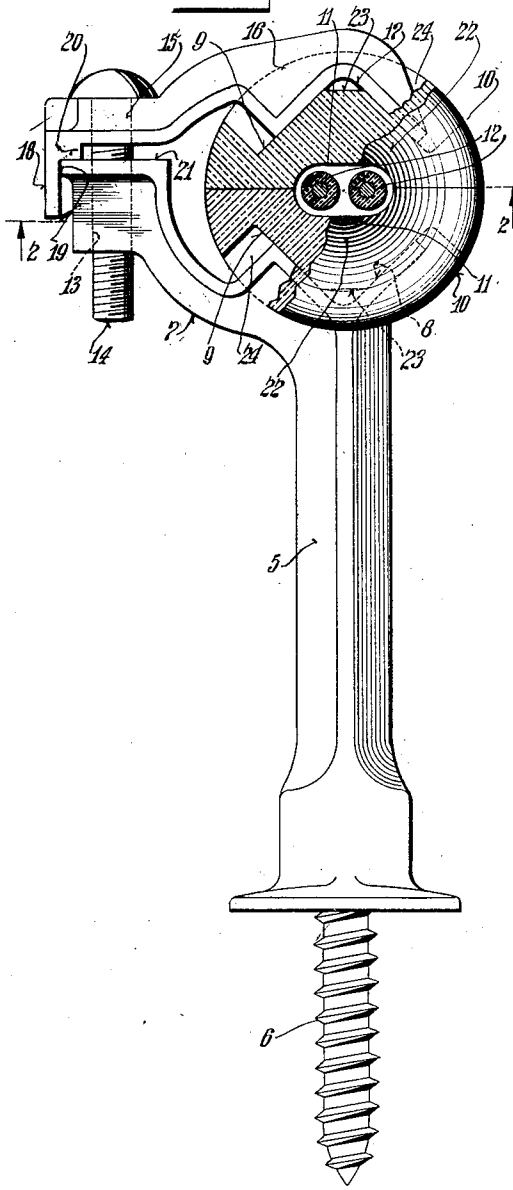


Fig. 2.

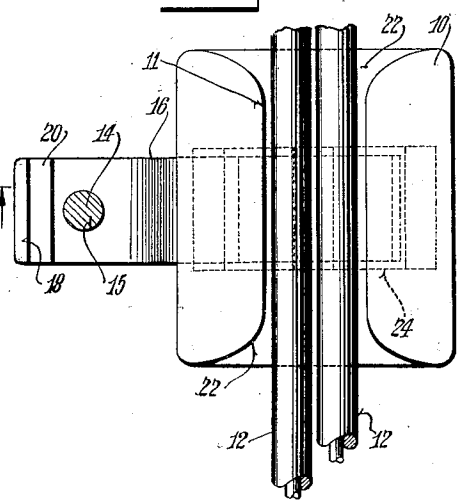
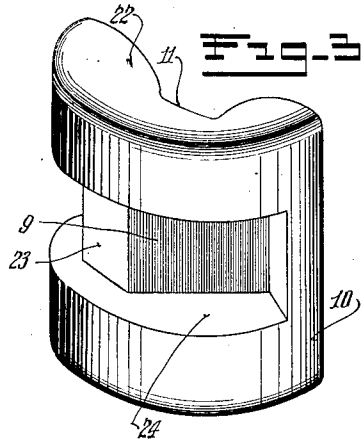


Fig. 3.



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UNITED STATES PATENT OFFICE

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WIRE SUPPORT

Application filed June 13, 1928. Serial No. 284,988.

This invention relates particularly to means for carrying conductor wires known in the art as duplex street lighting cable down poles and the like and has as an object to provide a support of the character described in which the insulator is so shaped that rain and snow will be directed towards the insulated conductors and away from the metal parts of the supporting bracket to pass through the aperture in which they are positioned and then downwardly along the conductors.

Another object of this invention resides in the provision of a support in which the creepage distance between the metal parts thereof and the conductor wires is relatively increased.

Another object of this invention resides in the provision of a support of the character described in which the parts are so constructed as to obviate the necessity of taking the bracket apart to insert the conductors in position.

And a further object of this invention resides in the provision of a support of the character described in which a single screw maintains the parts in their proper assembled position.

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 claims, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claims.

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

Figure 1 is a top plan view of the support embodying my invention, a portion of the insulator being broken away and shown in section;

Figure 2 is a sectional view taken through Figure 1 on the plane of the line 2—2, and

Figure 3 is a perspective view of one of the insulator sections.

Referring now more particularly to the accompanying drawings in which like numerals designate like parts throughout the several views, 5 represents a bracket arm having a screw 6 by which the bracket may be attached to a pole or other support and having an arm 7 substantially arcuate in shape extended laterally from its other end. The end of the bracket 5 adjacent the arm 7 is provided with a substantially V shaped trough or groove 8 which is adapted to engage a correspondingly shaped portion 9 of one of two similar sections 10 of an insulator. Each section 10 of the insulator has its medial portion channeled, as at 11, so that when the sections are arranged with their flat faces engaged, as in Figure 1, the channeled portions 11 form an elongated opening in which conductors 12 are received.

The arm 7 has its outer portion apertured as at 13 to receive a clamping screw 14 which passes through an aperture 15 in a clamping member 16 the outer end of which is provided with a V shaped groove or trough 17 similar to the trough 8 in the bracket 5 to engage the faces of the portion 9 of the other section of the insulator. A lug 18 extended from the end of the member 16 adjacent the clamping screw engages the edge 19 of the adjacent end of the arm 7 to properly align the member 16 with the bracket and a projection or step 20 formed adjacent thereto engages the outer face 21 of the arm to form substantially a fulcrum about which the clamping member 16 pivots as the screw 14 is drawn tight to secure the sections of the insulator in their proper position.

The sections forming the insulator have their ends dished inwardly, as at 22, from their outer periphery towards the elongated opening formed by the adjacent channels 11 so that when the insulator is mounted in position, water from heavy rains and snows is directed inwardly towards the aperture and the conductors away from the metal parts of the support to follow downwardly along the insulated conductors and thus prevent the possibility of a short should a con-

stant stream of water extend from the conductors towards the metal parts of the support. It will be noted that the dished portion 22 at the lowermost end of the insulator acts as a petticoat to maintain the same substantially dry at all times.

The portions 9 of the insulator sections are substantially V shaped in cross section to correspond with the angle of the troughs 8 and 17 and have their apexes flattened, as at 23, and form the bottom of a groove 24 which extends throughout the major portion of the periphery of each section and is of a width slightly greater than the width of the portions 8 and 17 to maintain the sections of the insulator in proper longitudinal alignment.

The insertion of the conductors 12 in the elongated aperture of the insulator is accomplished without the necessity of disassembling the parts, by merely loosening the clamping screw to a degree sufficient to permit the insulator sections to be separated sufficiently to receive the conductors which are passed between their adjacent faces into the elongated opening.

From the foregoing description taken in connection with the accompanying drawings it will be readily apparent to those skilled in the art to which an invention of the character described apertains that I provide a novel and improved device for supporting a pair of duplex conductors in which the possibility of a short due to heavy rains and snows is reduced to a minimum, in which the creepage distance between the conductors and the metal parts is maximum and one in which the conductors may be inserted without entirely disassembling the device.

It is noted that no portion of the bracket or the clamping member engages the insulator at or near the split between its two sections so that the creepage distance between the conductor and the metal parts is not lowered by the existence of the split.

What I claim as my invention is:

1. The combination with an insulator composed of abutting similar sections having longitudinal grooves in their meeting faces to form an axial aperture through the insulator and having flat faced recesses in their outer surfaces, of means for maintaining the sections properly assembled and for mounting the same comprising, a bracket member having one end portion adapted to be received in the flat faced recess of one section, a lateral arm carried by the bracket member, a clamping member having a part receivable in the flat faced recess of the other section, and a means for drawing the clamping member toward the lateral arm to clamp the insulator sections, said end portion of the bracket member and said part of the clamping member engaging the insulator sections at portions spaced considerably from the juncture between the insulator sections to increase the creepage distance between the axial aperture of the insulator and the mounting means.

2. A device of the character described, comprising an insulator having an axial conductor receiving opening and split diametrically to divide the same into complementary sections, a bracket having a part engaged with a flat walled recess formed in one section at its outer central portion so as to be spaced considerably from the extremities of the split between the insulator sections, a clamping member having a part engaged with a flat walled recess formed in the outer central portion of the other insulator section, whereby said part of the clamping member is likewise spaced considerably from the extremities of the split between the insulator sections, and means spaced from the insulator for drawing the clamping member toward the bracket to hold the insulator sections together and the insulator to the bracket.

In testimony whereof I have hereunto affixed my signature.

LEM E. HENDEE.