Sept. 13, 1932. D. B. PALMER 1,877,035

INSULATOR

Filed Aug. 17, 1931

Fig. 1.

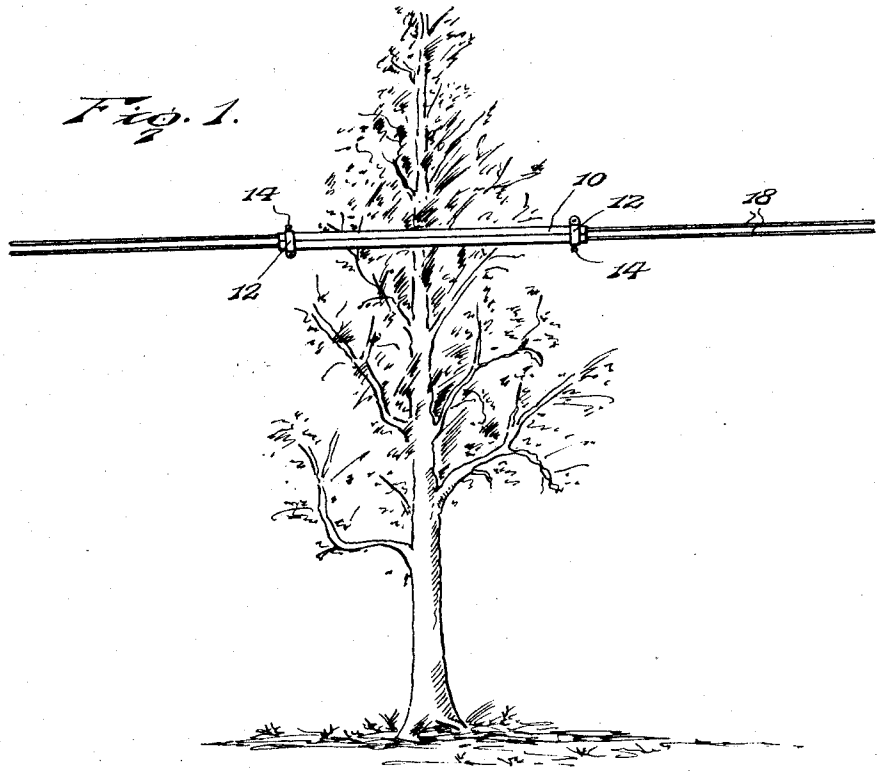


Fig. 2.

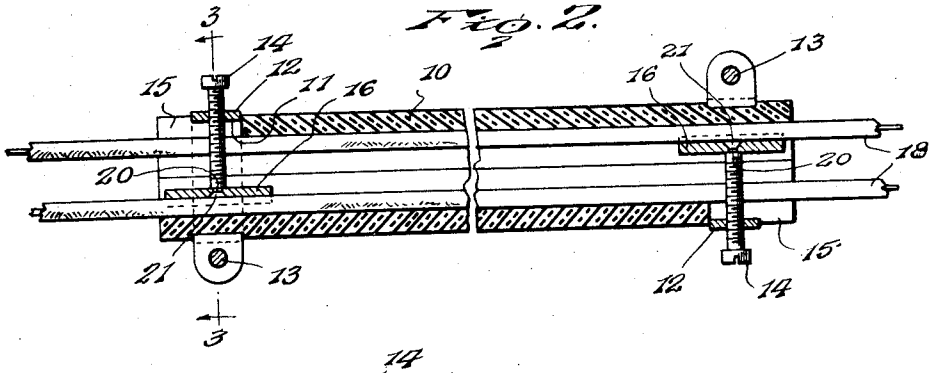
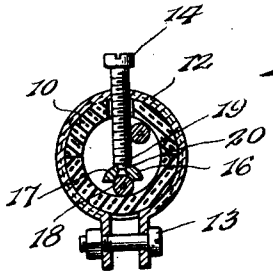


Fig. 3.



Inventor

D. B. Palmer.

By Lacey & Lacey, Attorneys

Patented Sept. 13, 1932

1,877,035

UNITED STATES PATENT OFFICE

DEWARD B. PALMER, OF AURORA, ILLINOIS

INSULATOR

Application filed August 17, 1931. Serial No. 557,621.

This invention relates to insulators of that type particularly adapted to deflect current-carrying cables of electrical distribution systems past trees or other objects intervening in the direct line of the cables.

Ordinarily, such insulators are objectionable in that in some instances they necessitate kinks or bends being formed in the cables and, in other instances, being sectional, are prone to become loose, and even the sections become separated, while, in other instances, where cable clamps are employed, injury to the cables themselves often results.

To obviate the above and other objects, the present invention provides an insulator in which one or more cables, or even stranded two-wire cables, may be carried past obstructing objects safely without bends or kinks and without injury to the cables while, at the same time, positive clamping means are provided for holding the sections of the insulator in permanent assembly.

With the above and other objects in view the invention consists in certain novel details of construction and combinations of parts hereinafter fully described and claimed, it being understood that various modifications may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing forming part of this specification,

Figure 1 is a side elevation showing the insulator in applied position,

Fig. 2 is a longitudinal sectional view through the insulator, and

Fig. 3 is a cross sectional view taken on the line 3—3 of Fig. 2.

Referring now to the drawing in which like characters of reference designate similar parts in the various views, 10 designates the insulator tube which is preferably formed of wood or other suitable insulating material. The tube is cylindrical in cross section, as best shown in Fig. 3, and is divided longitudinally to provide separable, semi-cylindrical sections which permit of the tube being applied to a single stranded two-wire cable or to a pair of cables or a plurality of cables, as desired.

As best shown in Fig. 2, the tube 10 is provided near the ends with a pair of annular countersinks 11 which form seats for split ring clamps 12, best shown in Fig. 3. The ends of each clamp are directed parallel with each other and removably secured together by a bolt 13. The seats 11 prevent the clamps from slipping longitudinally of the tube. When the bolts 13 are tightened, the ring clamps 12 are contracted tightly in the seats and hold the semi-cylindrical sections of the tube in rigid, permanent assembly.

Each ring clamp 12 is provided, opposite the terminals thereof, with a set screw 14 which is threaded through the clamp and passed through a longitudinal slot 15 formed in the tube 10. The tip of the set screw is equipped with a clamp plate 16 which is provided with a rounded face 17 to receive the cable 18. The plate is swivelly attached to the set screw by means of a pin 19 which is integral with the set screw and is received in an opening 20 in the plate and may be then headed up, as shown at 21, to prevent escape of the plate. The swivel plate 16 permits of the set screw being advanced or retracted without disturbing the position of the plate 16 on the cable, so that the cable insulation is not injured during application or removal of the set screw.

It will be observed that when the set screws 14 are in operative position, the walls of the slots 15 form stops which hold the set screws against any radial movement should the clamps become accidentally loosened, so that the cables are at all times maintained by the set screws in proper spaced relationship in the insulator 10.

While the invention, in Fig. 1, is shown as a tree insulator, it will be understood that such use is purely illustrative and in no way limiting.

Having thus described the invention, I claim:

1. A cable deflector comprising a tubular insulator formed of longitudinal sections adapted to receive the cable between them, a pair of split ring clamps surrounding the

sections, a set screw carried by each clamp, and a clamp plate swivelly mounted on the end of each set screw for clamping the cable against movement in the insulator, there being annular seats formed in the sections of the insulator to receive the split rings and prevent longitudinal creeping of the rings upon the insulator, there being slots formed longitudinally in the sections of the insulator receiving the set screws, the walls of the slots forming stops to prevent radial movement of the set screws should the split rings become loose whereby the set screws permanently maintain the cables in position in the insulator.

2. A cable deflector comprising a tubular insulator provided with longitudinal slots at the ends and being formed of a plurality of longitudinal semi-cylindrical sections, a plurality of split ring clamps seated in annular grooves formed in the sections and adapted to hold the sections assembled in intimate contact with each other, each clamp having the terminals disposed parallel and connected together by a bolt, a set screw passed through each clamp diametrically opposite said bolt and passed through one of said longitudinal slots in the insulator, and a swivel plate operatively connected to the end of each set screw for clamping the cable stationary in the bore of the insulator, said clamp plate having a rounded face adapted to engage the cable, the walls of the slots forming stops to prevent radial movement of the set screws should the split ring clamps become loosened.

3. A cable deflector comprising a tubular insulator divided longitudinally to provide semi-tubular sections, spaced split ring clamps encircling the sections and binding the sections together, a set screw threaded through each clamp and passing into the bore of the insulator, and a swivel plate on the tip of each set screw having a rounded face to engage the cable and clamp the cable against the inner surface of the insulator.

In testimony whereof I affix my signature.

DEWARD B. PALMER. [L. S.]