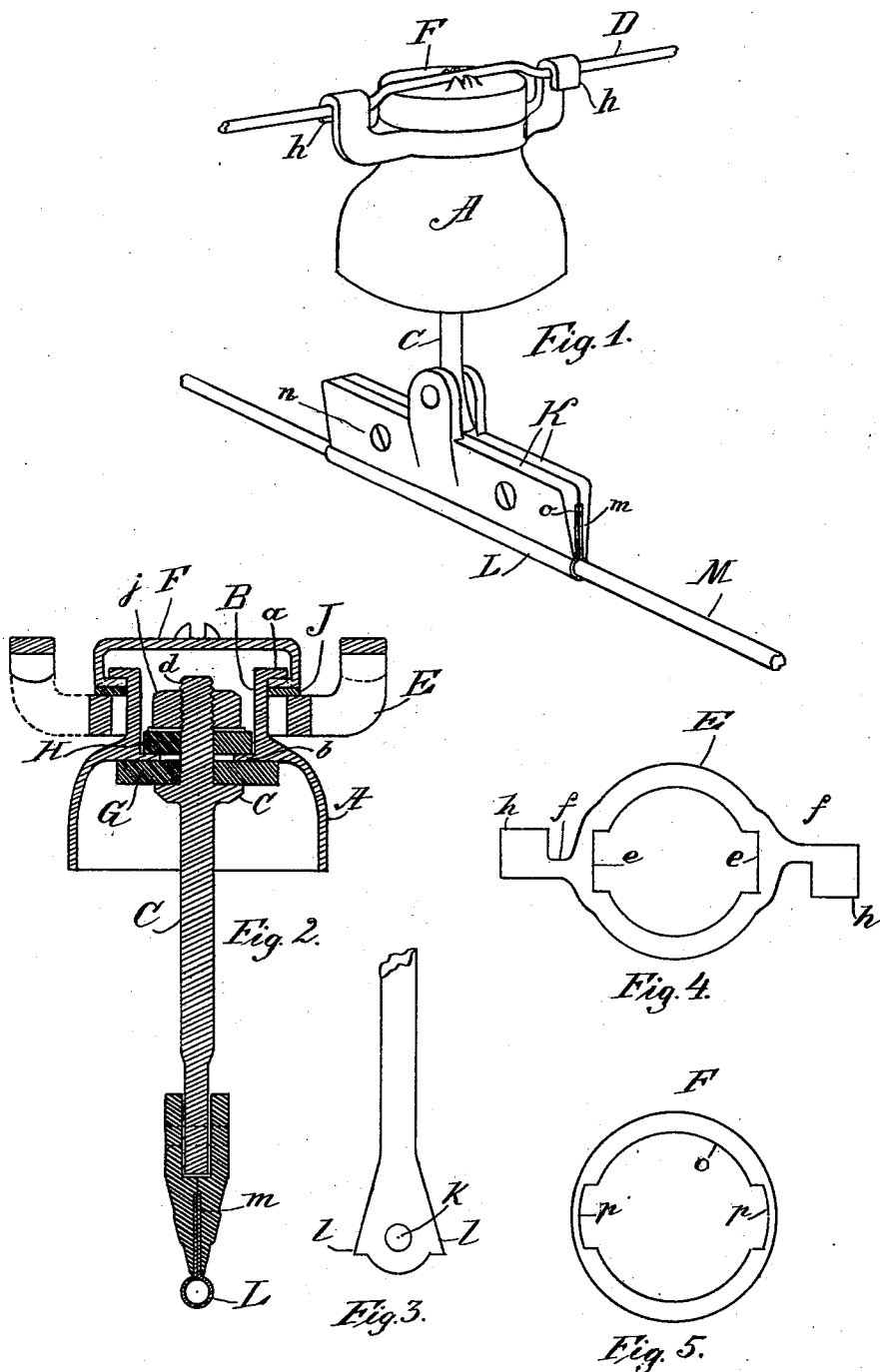


(No Model.)

L. S. PFOUTS.
TROLLEY WIRE SUPPORT.

No. 510,485.

Patented Dec. 12, 1893.



WITNESSES

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LEROY S. PFOUTS, OF CANTON, OHIO.

TROLLEY-WIRE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 510,485, dated December 12, 1893.

Application filed July 19, 1893. Serial No. 480,871. (No model.)

To all whom it may concern:

Be it known that I, LEROY S. PFOUTS, a citizen of the United States, and a resident of Canton, county of Stark, State of Ohio, have invented a new and useful Improvement in Trolley-Wire Supports, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to an improvement in trolley wire supports, the object of which is to provide a support that is strong and durable, that provides a practically perfect insulation that is free from frail parts or soft solder.

With these objects in view my invention consists in certain features of construction and combination of parts as will be hereinafter described and pointed out in the claims.

Figure 1, of the accompanying drawings is a view in perspective of a trolley wire support illustrating my invention. Fig. 2, is a sectional view of the same. Fig. 3, is a side view of the lower end portion of the link connecting the body portion of the support to the clamps; Fig. 4, a plan view of the yoke by which the body is secured to a cross wire or other support, and Fig. 5, a similar view of the under side of the cap.

Similar letters of reference indicate corresponding parts in all of the figures of the drawings.

A represents the body portion of the hanger, the lower portion of which is flared out in bell form to serve as a rain shed and protection to the insulation; the body is provided with an upwardly projected neck portion B, having at its upper end outwardly projected lugs *a* that are diametrically opposite, and at its lower portion of said neck an inwardly projected flange *b*.

The pendent link or coupler C has at its upper end portion an outwardly projected flange *c* and a screw thread *d*.

To secure the body and its attachments to the cross wire D or other supporting device, a yoke as E is provided of the form shown, or substantially so, centrally apertured and having at the sides of said aperture recesses *e*, diametrically opposite, and outwardly projected arms *f*, diametrically opposite, said arms having hook portions *h* to grasp the cross wire, D.

G and H represent insulators, which may

be made of any suitable insulating material. One of the disks or insulators is placed on the link C, resting on the flange *c* and against the flange *b*. The other insulator H, is passed over the end of the link down into the neck B onto the flange *b* in which position they are secured by the nut J'. A rubber insulating gasket J serves to insulate the body from the yoke and to keep water out of the neck portion of the body.

F represents a covering cap having at its lower inside an inwardly projecting flange *o*, in which is provided recesses *p*, diametrically opposite, and adapted to pass down over the lug *a*.

The lower end portion of the link C is provided with an aperture *k* and side extension *l*. Clamps K are pivotally secured to the link as shown in the drawings between which is secured a strip of sheet copper L, that embraces the trolley wire M, the free sides *m* of the strip passed in between the clamps and secured therein by the screws *n*. It is desirable, in fact necessary, that the clamps oscillate a distance about their pivotal connection with the link C, to yield to the pressure of the trolley wheel as it approaches the support to ease it over or by the clamps and prevent a too violent contact of the wheel against the clamps. However desirable or necessary this described oscillation of the clamps, it is as necessary that the movement to be arrested at a given and previously determined point to prevent the trolley wheel striking and destroying the trolley wire supports, and to provide against such violence, side portions *l* are provided at the lower end of the link C, that extend out a distance over and above the clamps K, and will engage and arrest the movement of the clamps at given angle to prevent the trolley wheel striking the body A.

To assemble the upper parts the yoke E is passed down over the neck B, the lugs *a* passing through the recesses *e*, the insulator J placed about the neck and the cap placed in position, the lugs *a* passing through the recesses *p*. The cap is then turned to bring the lugs between the flange *o* and the upper portion of the cap. The upward lift of the yoke is against the insulating gasket, the lower face of the cap flange *o* and the lugs *a*.

To secure the trolley wire support to the cross wire D, the wire is placed under one

hook, over the top of the cap and down under the other hook as shown in Fig. 1.

Having thus fully described the nature and object of my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with a trolley wire of a support having a bell shaped body and upwardly projected neck portion having outwardly projected lugs *a* and an inwardly projected flange *b*, a yoke about the neck portion of the body, having hooks to grasp the cross-wire, a cap to cover the neck, insulators G and H, link C, having a flange *c*, and outwardly projected portions *l*, clamp K, and binding sheet L, substantially as described and for the purpose set forth.

2. The combination with a trolley wire of a support having a bell shaped body A, an apertured neck portion, having an inwardly projected flange, insulators G and H, to grasp said flange, a link to secure said parts in position, and connect them with a trolley wire clamp, substantially as described.

3. The combination in a trolley wire support, of a suspended body portion of a dependent link adapted for pivotal engagements with a wire clamp, and the projections *l* to ar-

rest the vertical movement of the ends of the clamp at a previously determined point, substantially as described and for the purpose set forth.

4. The combination in a trolley wire support of the bell shaped body A, the apertured neck B, having outwardly projected lugs *a*, and an inwardly projected flange *b*, insulators H and J, cap F, and means for suspending said parts, substantially as described and for the purpose set forth.

5. The combination in a trolley wire support of the truncated body A, having an apertured neck portion, provided with outwardly projected lugs *a* of the yoke E, having recesses *e* to correspond with the lugs *a* and hooks *h*, and the cap F, having an inwardly projected flange *o*, having therein recesses *p* to receive the lugs *a* as described and for the purpose set forth.

In testimony whereof I have hereunto set my hand this 15th day of July, A. D. 1893.

LEROY S. PFOUTS.

Witnesses:

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