

W. J. DUKRO.
TROLLEY WIRE SPLICE.
APPLICATION FILED MAY 24, 1912.

1,061,992.

Patented May 20, 1913.

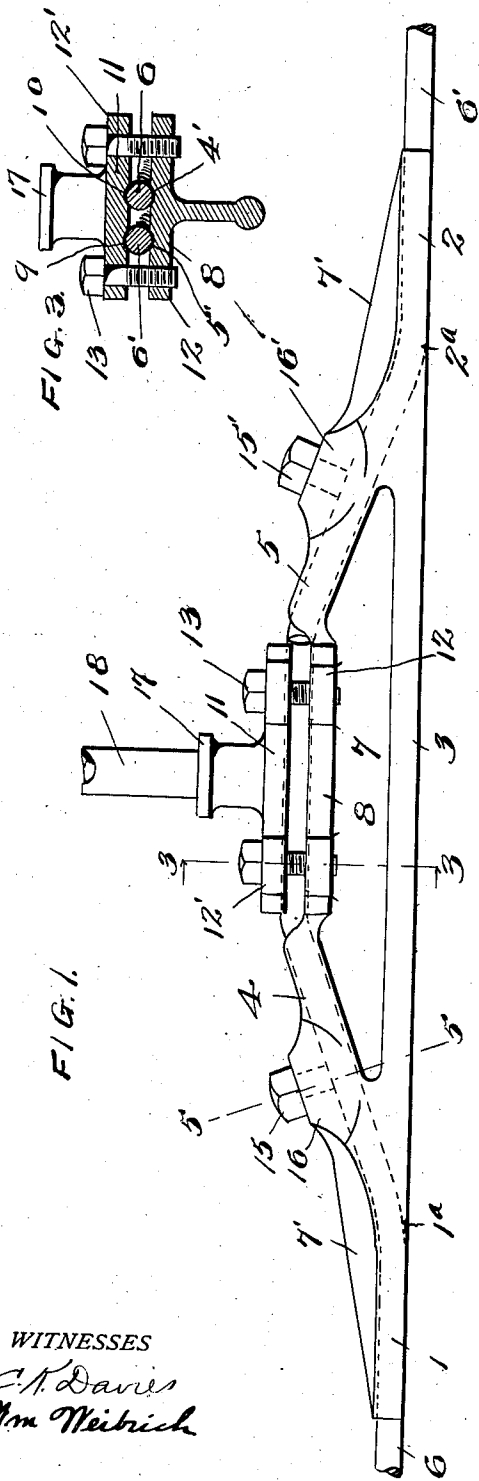


FIG. 1.

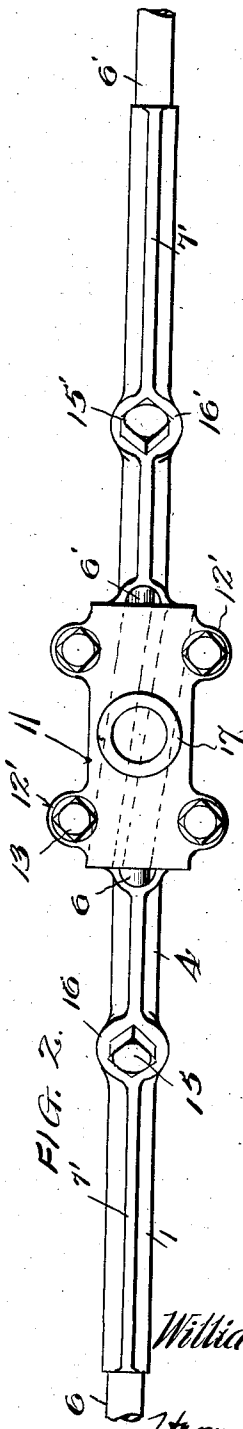


FIG. 2.

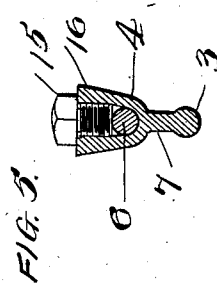


FIG. 3.

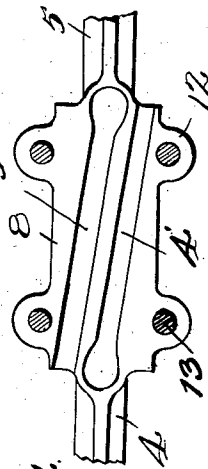


FIG. 4.

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TROLLEY-WIRE SPLICE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM J. DUKRO, a citizen of the United States, residing at Lima, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Trolley-Wire Splices, of which the following is a specification.

My invention relates to an improved trolley wire splice, and is designed for the purpose of connecting the ends of conductor wires in such manner that the wires may be held taut and slacking of the wires prevented. In case of breaking of the splice or coupler the wire ends are prevented from falling to the ground, thus avoiding possibility of danger from charged wires.

Further advantages and meritorious features will appear from the following specification and claims.

The invention consists essentially in certain novel combinations and arrangements of parts as are hereinafter pointed out in 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.

Figure 1 is a side elevation of the device embodying my invention. Fig. 2 is a top plan view of Fig. 1. Fig. 3 is a sectional view on line 3—3 Fig. 1. Fig. 4 is a detail view of a portion of the splice or coupler. Fig. 5 is a sectional view on line 5—5 Fig. 1.

In the preferred embodiment of my invention, the splice bar or coupler is a metallic casting comprising the tubular end portions 1 and 2, which under usual conditions are open at the lower side from their extreme ends to approximately the points 1^a and 2^a respectively. Between these points 1^a and 2^a the coupler is formed with a bead or rounded lower edge 3, and the end portions of this bead merge into the separate sleeves 4 and 5 which form continuations of the tubular members 1 and 2 respectively. The tubular members and the sleeves are of an inner bore suitable to accommodate and receive the ends of a conductor wire as 6, 6' and the bead 3 is of the same size as the wire. The wire ends 6 and 6' are entered into and passed through the tubes 1 and 2

and the sleeves 4 and 5, and the edges of the open bottom tubes are turned under and made flush with the under side of the wires or conductors.

For strengthening the coupler, webs 7 and 7' may be employed by filling in the space between the bead and sleeves, and forming the latter webs above the tubes 1 and 2.

Midway the coupler and at its upper side, a plate 8 is formed integral with the splice bar, and it will be noted that the sleeves 4 and 5, open at the respective ends of the plate, and merge into grooves 4' and 5' respectively formed in the upper face of the base plate 8. These grooves 4' and 5' extend diagonally across the face of the base plate, and their counterparts, as indicated at 9 and 10 in Fig. 3, are formed in the under face of the cap plate 11.

The base plate and cap plate are formed with perforated ears or lugs 12 and 12' respectively in which the bolts 13 are secured, it being understood that the perforations in the base plate are threaded for the reception of the bolts.

In assembling the parts of the splice or coupler, the ends of the wire are passed through the tubular and sleeve portions of the coupler, and a sufficient length of wire pulled through the sleeve to lie in one of the grooves and extend from one end of the base plate to the opposite end. By means of the set screws 15, 15' which are threaded into the perforated bosses 16, 16' integral with the sleeve portions of the coupler, the wire ends are securely held in position. To complete the joint however, and to insure against falling of the wires should the splice bar become broken under certain conditions, the cap plate 11 is employed. Before the cap plate is positioned, the overlapping ends of the wire are bent down and laid in the grooves in the base plate. The cap plate is then placed in position on top of the ends of the wire, and the bolts 13 screwed into the perforated lugs 12 of the base plate. By this means the ends of the wire are securely clamped between the plates and held rigidly against displacement, even should one of the set screws 15 or 15' become loosened.

It will be understood that the splice may be used between hangers or poles to secure the ends of wires, but in the drawings I have

illustrated on the cap plate a socket 17 into which the hanger 18 is screwed for the purpose of suspending the splice bar or coupler.

From the above description taken in connection with my drawings it will be apparent that I have provided a device which fulfils the purposes set forth as the object of my invention.

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

1. A splice comprising an integral member formed with tubular end portions open at the bottom and having their edges adapted to be bent flush with wire ends, an upwardly inclined sleeve forming an extension of each tubular portion and formed with an open end and a set screw adapted to secure

a wire in each sleeve, a base plate adapted to receive the wire ends, and means for clamping said ends on the base plate.

2. A splice comprising an integral member formed with slotted tubular end portions and open end sleeves, a base plate having in its upper face a groove extended from each sleeve and the wire ends arranged parallel in said grooves, combined with a complementarily grooved cap plate and bolts securing said cap plate to the base plate.

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

WILLIAM J. DUKRO.

Witnesses:

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