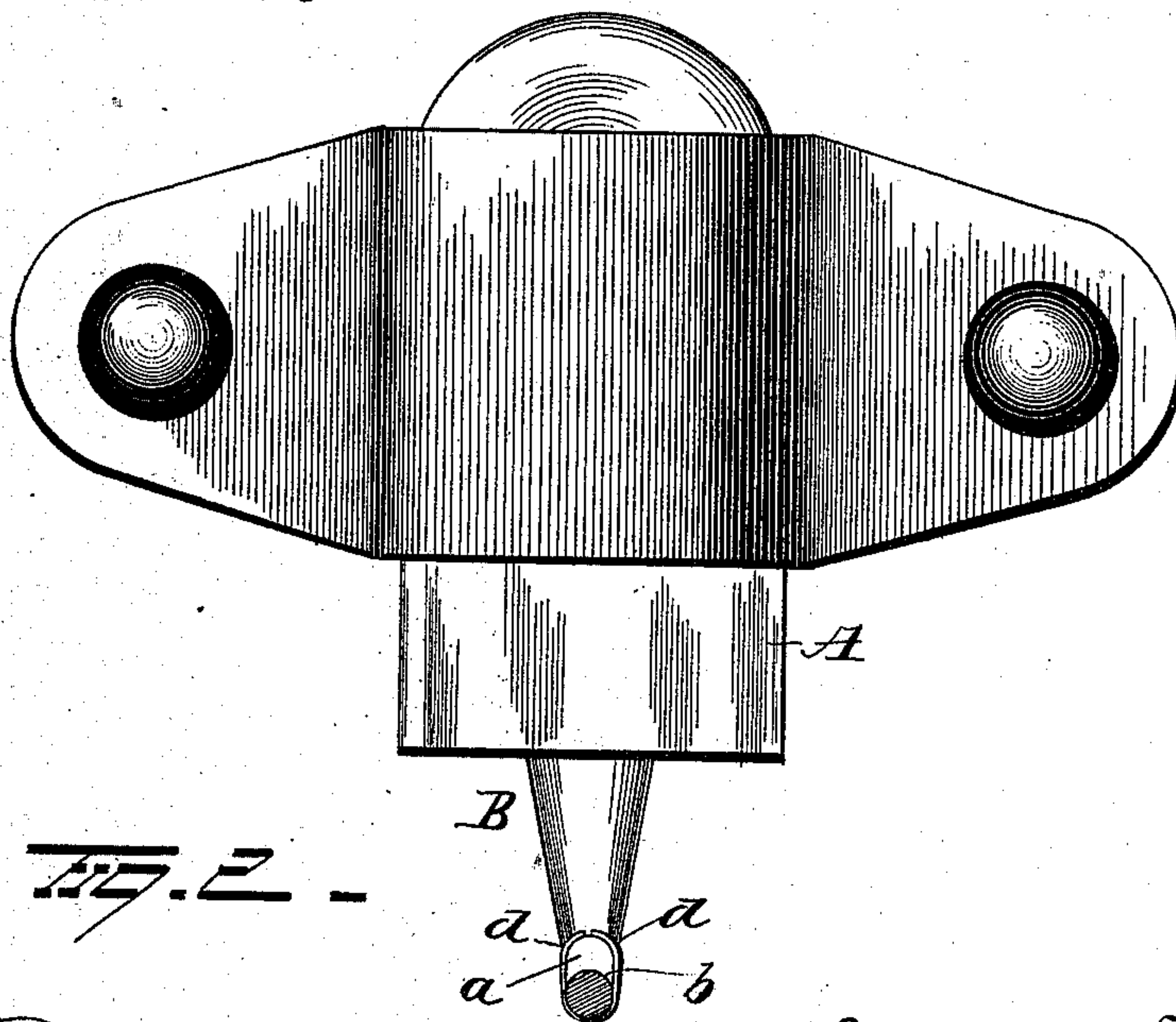
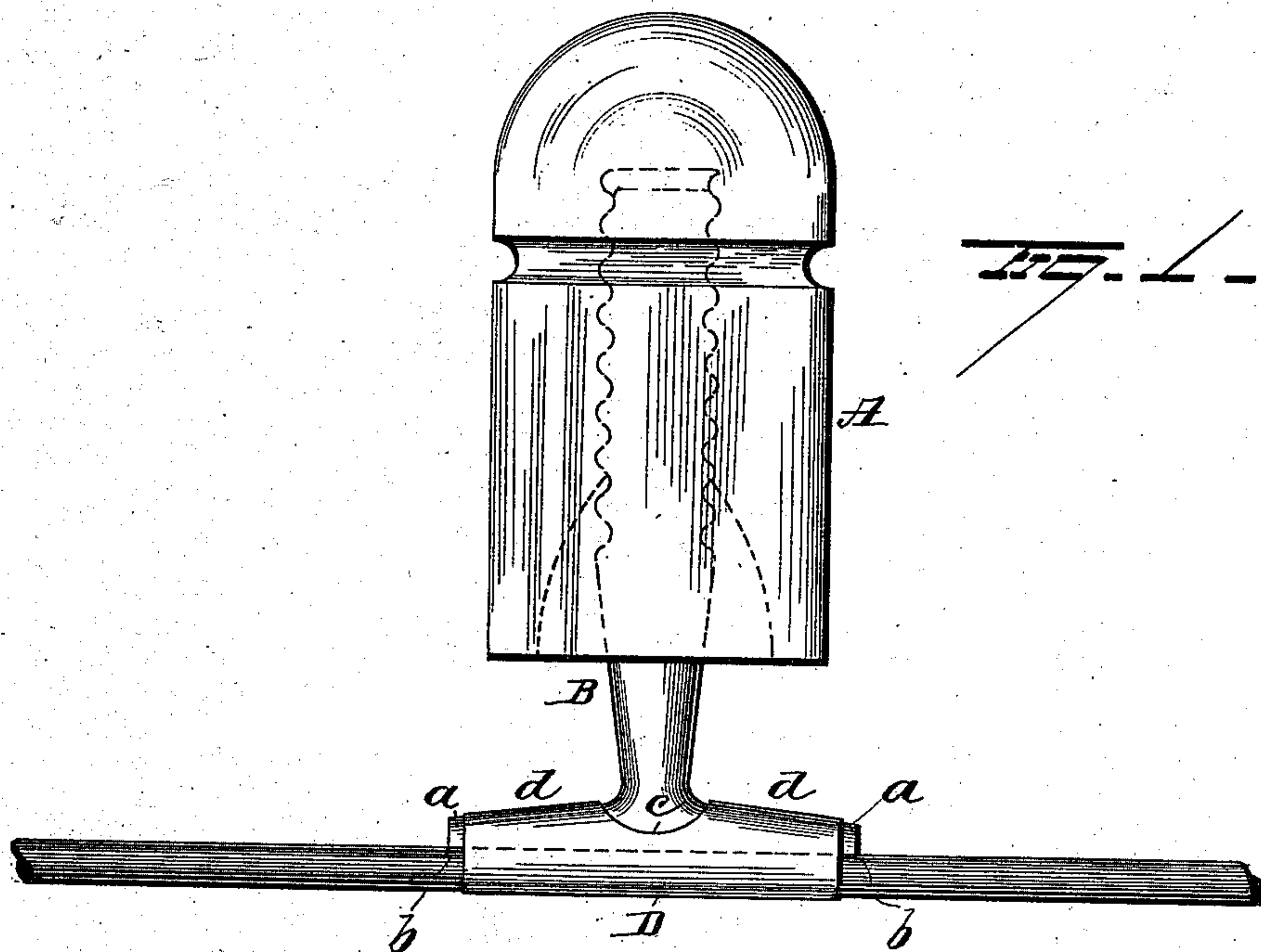


(No Model.)

T. E. ADAMS.
DEVICE FOR SUSPENDING ELECTRIC CONDUCTORS FOR ELECTRIC
RAILWAYS.

No. 413,818.

Patented Oct. 29, 1889.



Witnesses
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By his

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UNITED STATES PATENT OFFICE.

THOMAS E. ADAMS, OF CLEVELAND, OHIO.

DEVICE FOR SUSPENDING ELECTRIC CONDUCTORS FOR ELECTRIC RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 413,818, dated October 29, 1889.

Application filed July 24, 1889. Serial No. 318,553. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. ADAMS, a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Devices for Suspending Electric Conductors for Electric Railways; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in devices for suspending electric conductors for electric railways, its object being to provide a simple and reliable suspending device which will allow of a comparatively thin and extended attachment of the conductor to the hanger, to enable the trolley to pass over such attachment without jumping and sparking; and with this end in view my invention consists in a device for suspending electric conductors, consisting in the combination, with an electric conductor, of a hanger provided with two laterally-projecting arms, which serve as extended bearings for the conductor, and a sheet-metal clip folded around the conductor and the laterally-projecting arms of the hanger.

The invention further consists in certain features of construction and combination of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation of one embodiment of my invention, and Fig. 2 is a transverse section of the same.

A represents an insulator, which may be of any approved construction and be attached to the supporting-wire in any desired manner.

B is a hanger, which is secured at its upper end within the insulator and is provided at its lower end with two laterally-projecting arms *a a*, the lower surfaces of which form a continuous flat or even surface *b*, with which engages the conductor C, the latter being secured to the arms *a a* by means of the sheet-metal clip D. In order that the clip shall not obstruct or interfere with the operation of the trolley, it is preferably made of thin sheet metal, with portions *c* cut out at each side of the blank, thereby forming

four arms or projections *d*, two at each end of the clip-blank. The clip is folded or bent around the conductor, and the projections or fingers are bent around the laterally-projecting arms *a a* of the hanger, and thus serve to securely fasten the conductor to the hanger. By making the clip from thin sheet metal and extending it in length, so as to engage a considerable length of the conductor at the point of its attachment to the hanger, I am enabled to make it of sufficient strength to hold the conductor in place, and still make it so thin that it will not project below the wire to such an extent as will cause it to interfere with the operation of the trolley.

It is evident that the form and construction of the several parts of the improvement may be varied without departing from the invention, and hence I do not restrict myself to the particular construction and combination of parts herein shown and described; but,

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

1. The combination, with a hanger provided with laterally-projecting arms and a conductor, of a sheet-metal clip bent around the conductor and said arms and securing the conductor to the hanger, substantially as and for the purpose specified.

2. The combination, with a hanger provided with laterally-projecting arms and a conductor, of a sheet-metal clip having open slots formed in its sides, and projections or fingers folded around said arms, substantially as and for the purpose specified.

3. The combination, with a conductor and a hanger constructed with laterally-projecting arms, of a sheet-metal clip folded around the conductor and provided with arms bent around the laterally-projecting arms of the hanger, substantially as and for the purpose specified.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

THOMAS E. ADAMS.

Witnesses:

JOHN C. DOLPH,
JOHN E. ERICKSON.