

(No Model.)

J. R. FLETCHER.
MEANS FOR CONNECTING TROLLEY AND FEED WIRES.

No. 454,903.

Patented June 30, 1891.

Fig. 1.

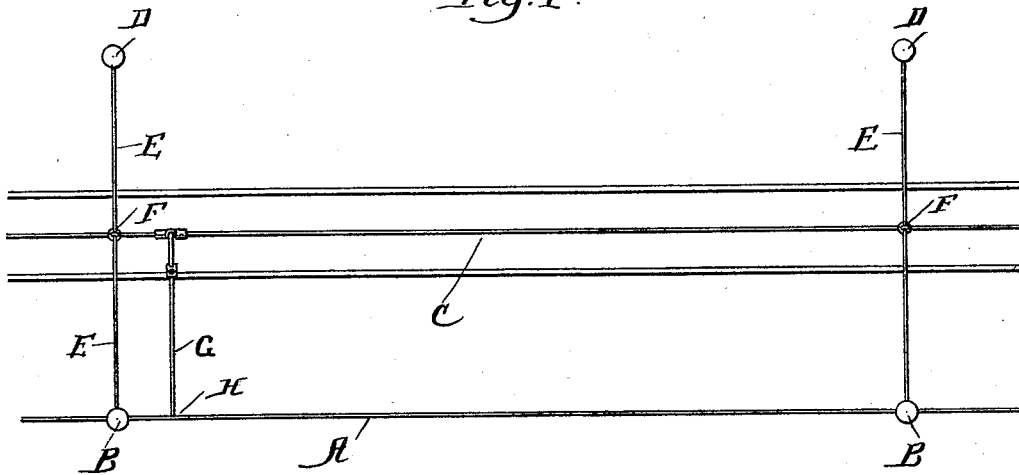
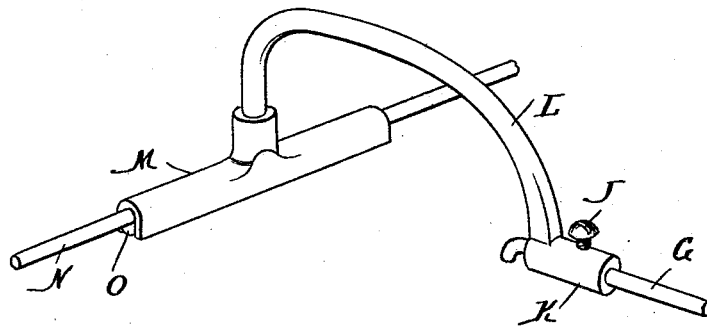


Fig. 2.



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MEANS FOR CONNECTING TROLLEY AND FEED WIRES.

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Application filed September 30, 1890. Serial No. 366,690. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. FLETCHER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Means for Connecting Feeder and Trolley Wires in Electric-Railway Systems, of which the following is a full and clear specification.

My invention relates to feeder-wire connectors for use in electric-railway systems and designed especially to provide means for perfectly connecting the feed wire or conductor over which the current is supplied to the trolley-wire, and has for its object to provide convenient and simple means therefor.

In my invention, Figure 1 is a plan view of a section of an electric railway. Fig. 2 is a detail of the connector proper.

Like parts are indicated by the same letters in both figures.

A is the feeder-wire, suitably supported on the poles B B.

C is the trolley-wire.

D D are the opposite poles.

E E are the supporting-wires connected from pole to pole; F F, the trolley-wire insulators by which the trolley-wire is connected so as to be supported from the supporting-wires and at the same time be insulated therefrom.

G is a short conductor electrically connected with the wire A at the point H. This connection may be made by scraping the insulation off the wire A and making a joint at H and afterward covering the joint. This wire G is connected, for example, by means of the set-screw J with the connector-shank K, from which proceeds the curved arm L, on the outer extremity of which is secured, preferably by a screw connection, a depending trolley-contact M, into which is received the trolley-wire N, being permanently secured in the lower grooved portion of the part M by the solder O. Any other desired connection can be made between the curved portion L and the contactor M, as may be desired, and the joint may be made loose so as to permit the two parts to occupy a different position with reference to each other, as may be thought proper.

The use and operation of this device are as follows: It is extremely desirable in all such work to distinguish so far as may be possible the supporting-wires from the conducting-wires, and one, among other reasons for this, is that the supporting-wires are preferably made of iron or similar material and strong and heavy, while the conductor-wires are made of copper, and the least possible quantity is of course employed. Moreover, it is also desirable to avoid difficult joints and the making of conductor-lines of different materials. In my apparatus the current is permanently supplied by the feeder-wire and the trolley-wire sometimes composed of sections, and to each section a short conductor G of the same material as the feeder-wire A leads. The contact between the two is made conveniently, as at H, and the joint may be again thoroughly insulated and the length of the conductor G may be adjustably varied so as to accommodate itself to the distance between the trolley and feed wire at the point at which it is applied by means of the set-screw J. The arm L then rises up so as to be out of the way of the trolley and a simple and convenient contact is made in the usual manner between this arm and the trolley-wire by the contactor M.

The device is equally applicable whether the trolley-wire is composed of sections or not.

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

1. In an electric-railway system, the combination of a trolley-wire suitably supported and insulated from its supports, with a feed-wire also supported and insulated, and a connector from the feed-wire to the trolley-wire, consisting of a short conductor in contact with the feed-wire, a curved piece connected with such short wire, and a downwardly-depending contactor from such curved piece to the trolley-wire.

2. In an electric-railway system, the combination of a trolley-wire suitably supported and insulated from its supports, with a feed-wire also supported and insulated, and a conductor from the feed-wire to the trolley-wire, consisting of a short conductor in contact with the feed-wire, a curved piece connected with such feed-wire, and a downwardly-depending

contactor from such curved piece to the trolley-wire, such short conductor adjustably connected with said curved piece.

3. In an electric-railway system, the combination of a trolley-wire suitably supported and insulated from its supports, with a feed-wire also supported and insulated, and a conductor from the feed-wire to the trolley-wire, consisting of a short conductor in contact with the
10 feed-wire, a curved piece connected with such

feed-wire, a downwardly-depending contactor from such curved piece to the trolley-wire, such short conductor adjustably connected with said curved piece and connected to the feed-wire, and the contactor permanently connected to the trolley-wire.

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