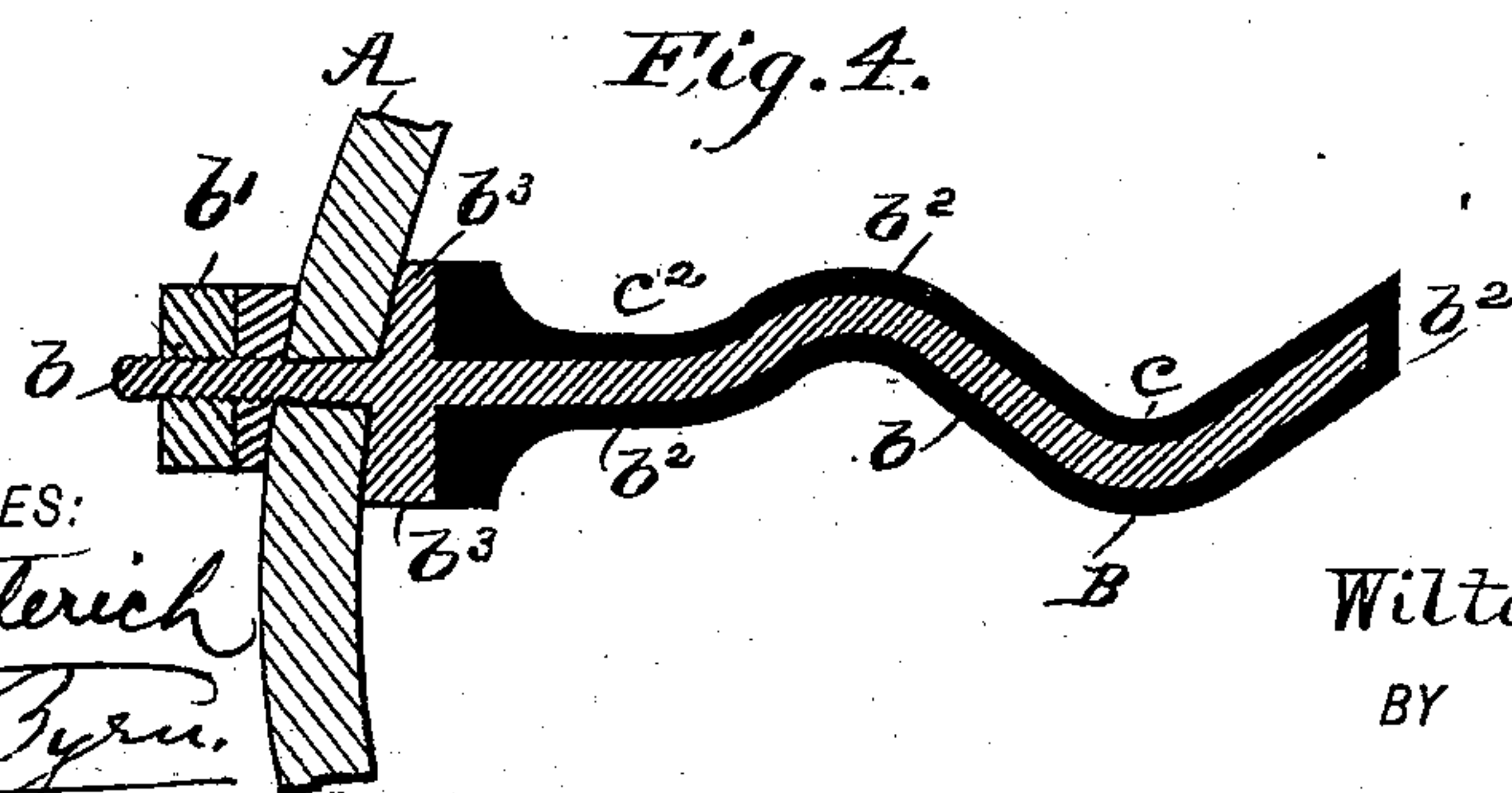
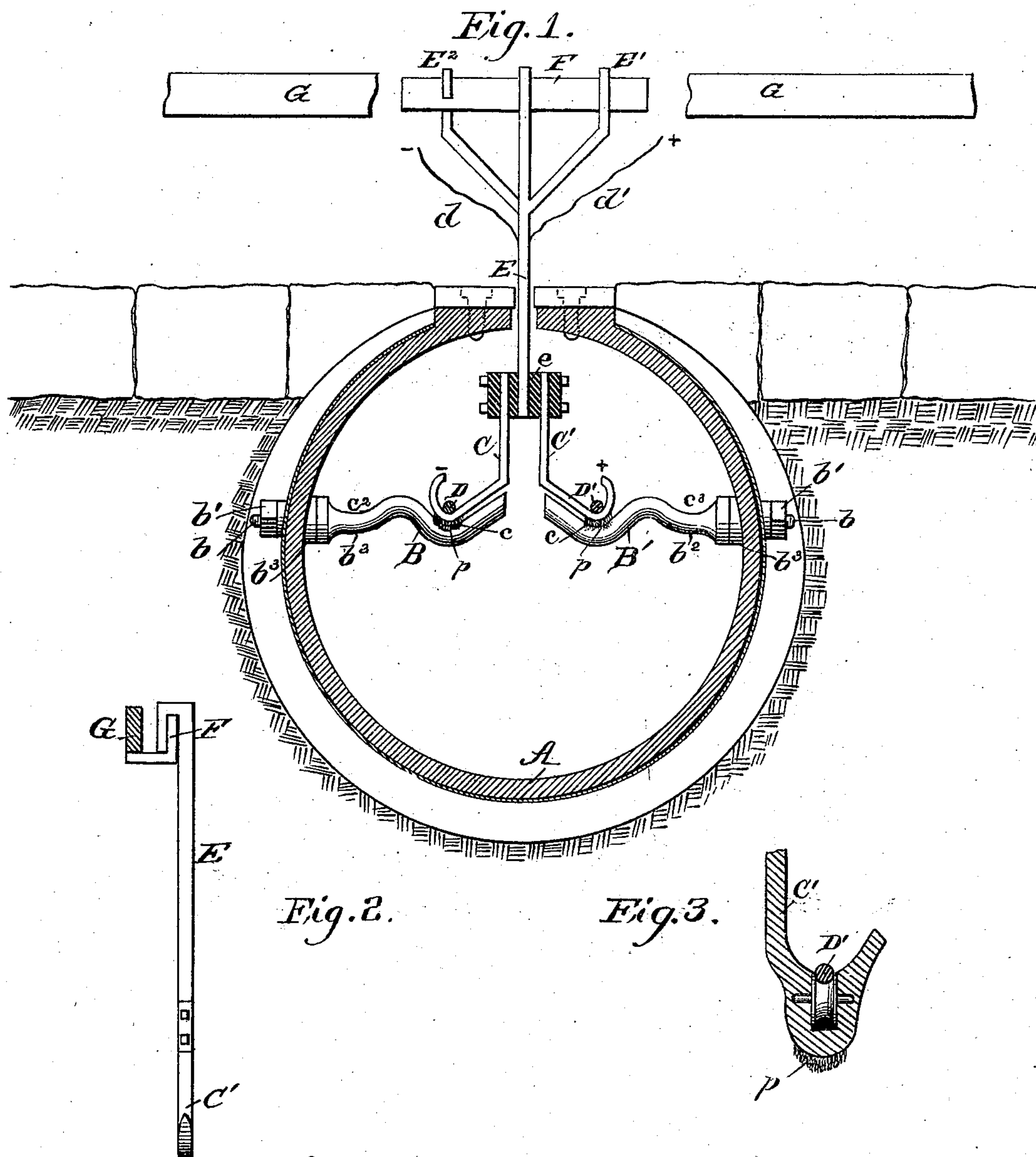


(No Model.)

W. F. JENKINS.
CONDUIT ELECTRIC RAILWAY.

No. 517,804.

Patented Apr. 3, 1894.



WITNESSES:

Fred G. Dietrich
Edw. W. Byrum

INVENTOR

Wilton F. Jenkins

BY *Munn & Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILTON F. JENKINS, OF RICHMOND, VIRGINIA.

CONDUIT ELECTRIC RAILWAY.

SPECIFICATION forming part of Letters Patent No. 517,804, dated April 3, 1894

Application filed August 10, 1892. Renewed July 26, 1893. Serial No. 481,552. (No model.)

To all whom it may concern:

Be it known that I, WILTON F. JENKINS, of Richmond, in the county of Henrico and State of Virginia, have invented a new and useful Improvement in Electric Railways, of which the following is a specification.

My invention is in the nature of an improved underground electric railway, and it consists mainly in the peculiar construction and arrangement of the conductor supports in the conduit and a peculiar hook shaped trolley with cleaning attachment for the conductor supports as will be hereinafter fully described.

Figure 1 is a vertical transverse section through the conduit showing the conductors, their supports, and the trolley. Fig. 2 is an edge view of the trolley showing the manner of hanging the same. Fig. 3 is a detail showing a modification of the trolley and Fig. 4 is a sectional view of one of the conductor supports.

Referring to the drawings, A represents the conduit, from the opposite sides of which there projects the arms or conductor supports B B' sustaining the two continuous copper wire conductors D and D'. These supports are composed of a central core b made of metal with a shoulder or flange b³ resting against the inner wall of the conduit, and its outer end is screw threaded and passes through the conduit and is clamped thereto by a nut b'. This metal core has an insulating jacket or envelope b² of porcelain, hard rubber, or other non-conducting material which completely surrounds the sides and ends thereof. These arms or supports are bent near their outer ends to form depressions c c' in which the conductors D and D' are supported and loosely lie and said arms preferably have other depressions c² and c³ nearer the conduit which may serve to carry other conducting wires, to be utilized for feeders or for any other purpose. The trolley consists of two metal hooks C and C' which slide under the conductors and lift them slightly above the supports so as to clear the latter. These hooks rub against the conductors with a sliding contact, but to reduce wear they may have the inner bend of the hook shaped

portion formed by a grooved metal pulley as in Fig. 3, or this part of the hook may be made in the form of a brush. To the bottom of the hook is attached a pad p of felt or cloth a brush or a tuft of cotton or wool whose function is to wipe off the surface of the support on which the conductor lies, so as to keep it always clean and dry, and thus avoid the leakage of the current which would otherwise follow the film of dust and vapor that condenses and accumulates on the arms. The two hooks C C' are insulated from each other and also from the supporting shank E of the trolley by hard rubber or other non-conducting plates at e, and the opposite polarity of the two conductors is transmitted through the insulated hooks C C' to the two conducting wires d d' which lead to the motor on the car.

For connecting the trolley to the car a short bar F is detachably fixed to the car truck G so that it will pull off in case the car leaves the track, and over this short bar the hooks or bent ends E' E² at the top of the shank are hung from opposite sides of the bar. By lifting the shank E at a point between the supports B B' and then giving it a turn, and lowering it, the lower trolley hooks may be disconnected from the conductors.

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

1. The combination with a conduit; of a horizontally projecting arm consisting of a metal core having its sides and end completely covered or incased in a non-conducting material and bent to form depressions as described, and conducting wires laid loosely upon said arms within the depressions substantially as shown and described.

2. The combination with a conduit; of two horizontally projecting arms covered with insulation and bent to form depressions, the two conducting wires loosely laid therein, and a trolley having two terminal hooks at its lower end resting beneath the conducting wires substantially as shown and described.

3. The combination with conductor supports and electric conductors laid loosely thereon; of a trolley having a wiping pad or

brush arranged to wipe off the bearing point of the support under the conductor at each passage of the trolley substantially as shown and described.

- 5 4. The combination with the car truck of the detachable bar F, and the trolley having shank E with hooks E' and E² at its upper

end facing in opposite directions and hung upon the bar F substantially as shown and described.

WILTON F. JENKINS.

Witnesses:

BEN BABER,

JOSEPH A. JOHNSTON.