

(No Model.)

J. I. CONKLIN.

CONDUCTOR AND GUIDE FOR ELECTRIC RAILWAY TROLLEYS.

No. 463,715.

Patented Nov. 24, 1891.

Fig. I.

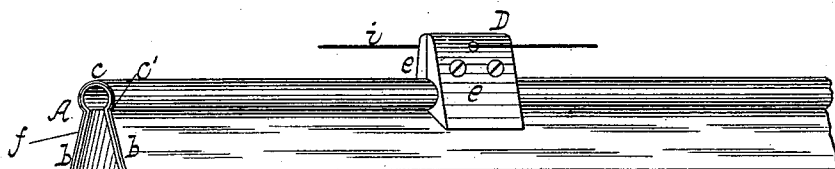


Fig. II.

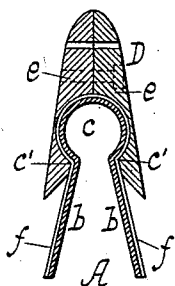
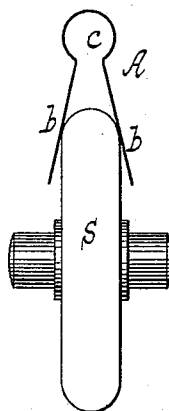


Fig. III.



WITNESSES:

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CONDUCTOR AND GUIDE FOR ELECTRIC-RAILWAY TROLLEYS.

SPECIFICATION forming part of Letters Patent No. 463,715, dated November 24, 1891.

Application filed February 10, 1891. Serial No. 380,948. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH I. CONKLIN, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Trolley Chargers and Guides for Electric Railways, of which the following, taken in connection with the accompanying drawings, is a full, clear, and accurate description.

The common objection to the trolley system of operating electric railways at the present time is that the wire now used for charging and guiding the trolley is so heavily charged with the electric current that when a wire used for any other purpose falls upon or comes in contact with the same there is great danger to life and property. Another objection met with is in the practical operation of the road, the annoyances and delay caused by the accumulation of snow and sleet during the cold season forming icicles, which, depending from the wire, obstruct the passage of the electric currents from the wire to the trolley-wheel, thus cutting off the electrical energy necessary to operate the motor.

The chief aim of my invention is to overcome these dangers and obstacles; and to that end it consists of the novel features of construction hereinafter described.

In the accompanying drawings, Figure I represents an end perspective view of a trolley charger and guide embodying my invention. Fig. II represents a cross-section thereof on a larger scale than in Fig. I. Fig. III represents an end view thereof with a trolley-wheel in position therein.

Similar letters of reference represent similar parts.

The letter A indicates the body of the device, which consists of an inverted trough the two sides *bb* of which flare or diverge outward from the base *c* thereof, usually in straight lines. Said trough A is formed of metal for adapting it to the purpose of an electrical conductor, and it is entirely covered upon the outside, or at *f*, with a layer of non-conducting material, which may be molded or cemented thereupon. The base *c* of the trough is round in cross-section and contracted at the points of its junction with the diverging sides *b b*, as indicated by the letters *c' c'*, and on this base is fitted a hanger D, which is preferably made in two parts or sections *e e*, in order to

facilitate its being conveniently put on the sides of the trough. This hanger serves as a device to be attached to a supporting arm or wire—for example, the wire *z*, as shown in the drawings.

In applying my invention to use the trough A is arranged to receive the trolley S, Fig. III, between its sides *b b*, thus affording a double contact therefor, and by the diverging shape of the trough-sides the device readily accommodates itself to the trolley irrespective of the width of the trolley, and it is also adapted to prevent water, sleet, or snow reaching the metal where the trolley makes contact.

By the non-conducting cover *f*, cemented upon the exterior of the trough, the device is absolutely insulated or protected from metallic contact with foreign wires, and by the round base *c*, with its contracted parts *c' c'*, a simple and effective means is obtained for attaching the hangers D to the trough.

By the use of the trough A no breaking of contact with the trolley S is liable to take place, due to the absence of uneven joints.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. An insulated trolley charger and guide for electric railways, consisting of an inverted trough of metal the sides of which diverge from the base thereof, substantially as and for the purposes described.

2. An insulated trolley charger and guide for electric railways, consisting of an inverted trough of metal the sides of which diverge from the base thereof and which is covered upon the outside with a non-conducting material, substantially as and for the purpose described.

3. An insulated trolley charger and guide for electric railways, consisting of an inverted trough of metal with diverging sides and a round base contracted at its junction with the sides, in combination with a hanger fitted on said base of the trough, substantially as and for the purpose described.

4. The trolley-wheel, in combination with an inverted-V-shaped conductor, said wheel making an electric connection with both sides of said conductor, substantially as and for the purposes described.

J. I. CONKLIN.

Witnesses:

ISAAC B. JOHNSON,
JOHN A. ANDERSON.