

(No Model.)

R. MUIR.
OVERHEAD TROLLEY CONDUCTOR.

No. 520,329.

Patented May 22, 1894.

Fig. 1

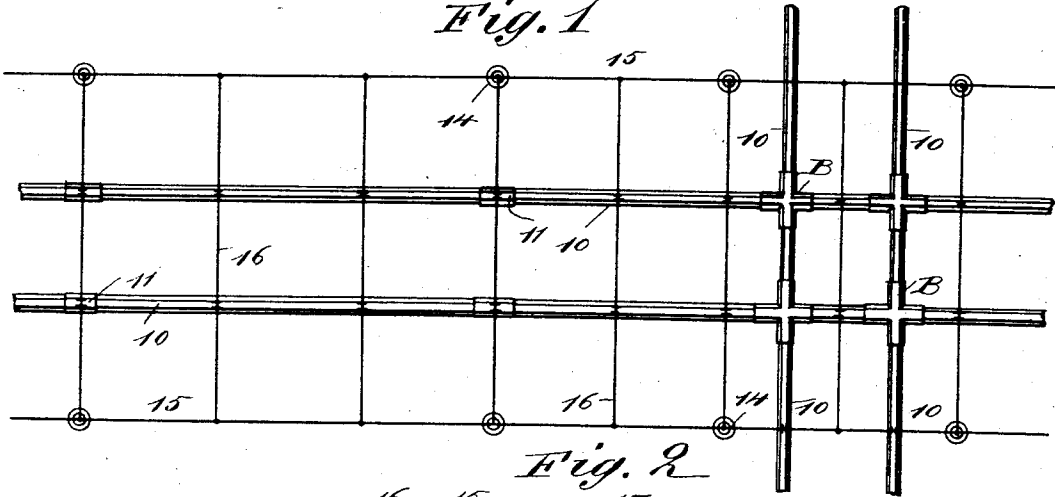


Fig. 2

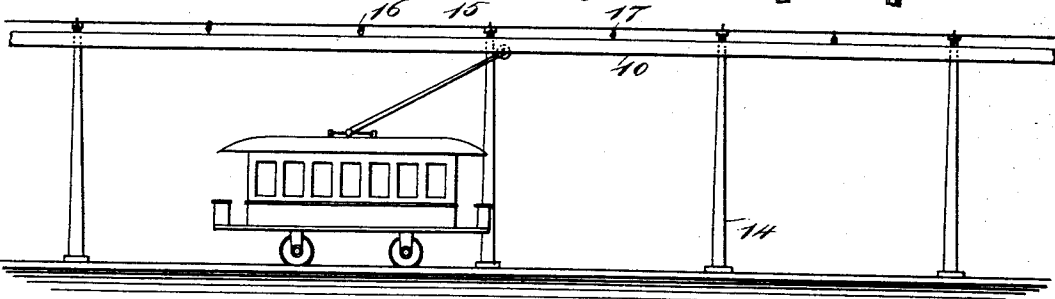


Fig. 3

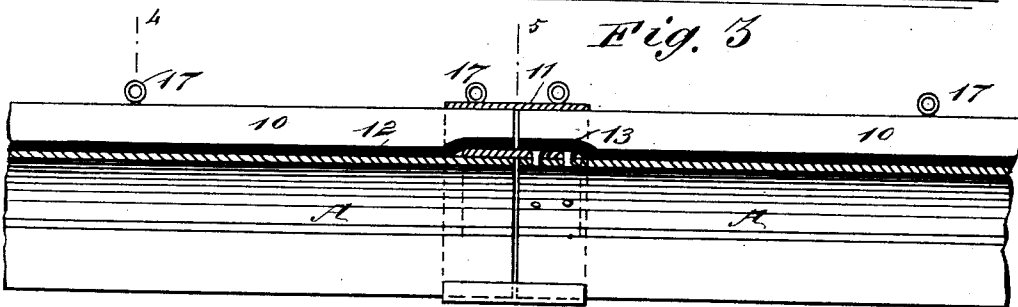


Fig. 4

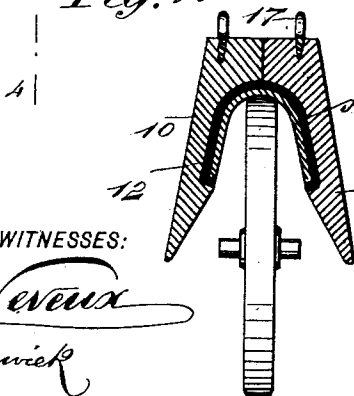
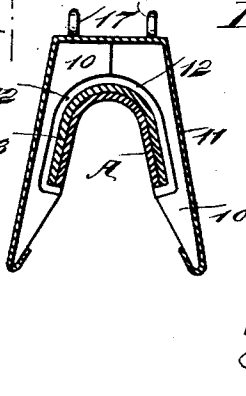


Fig. 5



WITNESSES:

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ROBERT MUIR, OF BROOKLYN, NEW YORK.

OVERHEAD TROLLEY-CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 520,329, dated May 22, 1894.

Application filed March 3, 1894. Serial No. 502,218. (No model.)

To all whom it may concern:

Be it known that I, ROBERT MUIR, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved
5 Overhead Trolley-Conductor, of which the following is a full, clear, and exact description.

My invention relates to an over-head trolley conductor, and it has for its object to provide a device through the medium of which
10 electricity may be conducted to the trolley of an electrically propelled car, and whereby the trolley will not leave the conductor of its own accord, and when the shifting of the trolley is
15 necessary the trolley wheel may be brought in contact with the conductor in a convenient and in an expeditious manner.

Another object of this invention is to provide an over-head trolley conductor which may be run in any manner that may be required, and from which branches may be run
20 in any direction, connecting with the main conductor either on a curve or at an angle.

The invention consists in the novel construction and combination of the several parts, as
25 will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the improved over-head trolley conductor, illustrating the manner in which it is supported. Fig. 2 is a
35 side elevation of the over-head conductor and the supports therefor. Fig. 3 is a longitudinal section through a portion of a conductor, illustrating the manner in which joints are made. Fig. 4 is a transverse section through
40 the conductor, taken practically on the line 4—4 of Fig. 3; and Fig. 5 is a similar section taken essentially on the line 5—5 of Fig. 3.

In carrying out the invention the conductor A is made of any suitable material, metal usually being employed, and it is shaped substantially as an inverted trough, being preferably made somewhat U-shaped in cross section, as is best shown in Fig. 4. The conductor is covered and protected by a casing
50 10, which casing is of substantially similar shape, and is usually made of wood and in two sections, connected at the top in any ap-

proved manner, or the two sections may be simply made to engage with one another over the conductor A proper, as shown in Fig. 4, 55 being tied together wherever a joint is made in the conductor A by means of a shoe or clamp 11, as illustrated in Figs. 3 and 5. The casing 10 is made to extend below the members or lower edges of the conductor A, and 60 the inner walls of the casing are flared outwardly in opposite directions.

Between the conductor A and its casing 10, a packing 12 of an insulating material such as rubber is located. Where it is necessary 65 to join together two sections of the inverted U or horse-shoe shaped conductor A, this is accomplished as shown in Figs. 3 and 5 by bringing the two sections nearly end to end and placing at the top of both of the sections a plate 13, the said plate crossing the joints 70 between the sections, thus establishing electrical communication between the two. At this point in the construction of the trolley conductor the clamp or shoe 11 heretofore referred to is located, and this clamp or shoe is made of metal, and is so constructed that it extends over the top of both sections of the casing 10, down the sides thereof and up to an engagement with the inner wall at the bottom. 80

The conductor may be supported in any improved manner. Usually series of posts 14 are erected at each side of the track, and these poles are made to support longitudinal wires 15 and transverse wires 16, the latter wires 85 being employed directly as supports for the conductor. To that end the casing 10 of the conductor is provided at various intervals in its length with eyes 17 or their equivalents, and eyes are likewise placed upon the upper portion of the clamps or shoes 11, the transverse wires being passed through these eyes. 90

Branches may be carried off from the main conductor in any direction, as shown in Fig. 1, in which it will be observed that branches 95 are carried off at right angles to the main conductors, and where the two lines cross the casing, and consequently the conductor is of cruciform shape, said cruciform section being designated by the reference letter B. But 100 it will be understood that the connecting sections may be made either Y, V or U shaped as may be required.

It is evident that when a trolley conductor

is constructed as above set forth the trolley wheel will travel continuously in contact with the conductor and can not jump therefrom or leave the conductor in any manner unless
5 purposely withdrawn, and that when so withdrawn the trolley wheel may again be placed in position in contact with the conductor in an exceedingly convenient manner, and almost as readily in the dark as in the light.
10 Having thus described my invention, I claim as new and desire to secure by Letters Patent—
1. A trolley conductor comprising a casing having a concaved recess upon its inner face,
15 and diverging flanges extending from the ends of the said recess, an insulating material held in the said recess, and a hollow conductor proper arranged within the recess and in contact with the insulating material, the inner
20 face of the conductor being essentially paral-

lel to the concave face of the recess, substantially as described.

2. The combination, with two sections of the conductor casing, the insulating material therein, and the conductor sections held in
25 the insulating material, of a conducting plate placed over the ends of the adjacent sections of the conductor and interposed between them and the insulating material, substantially as
30 described.

3. The combination, with two sections of the conductor casing provided with projecting flanges, of a clamp extending over both
sections and provided with angular ends to engage the flanges of the casing sections, sub-
35 stantially as described.

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Witnesses:

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