(No Model.)

M. T. MURPHY.

TROLLEY WIRE SUPPORT.

No. 534,613. Patented Feb. 19, 1895.

Fig. 1

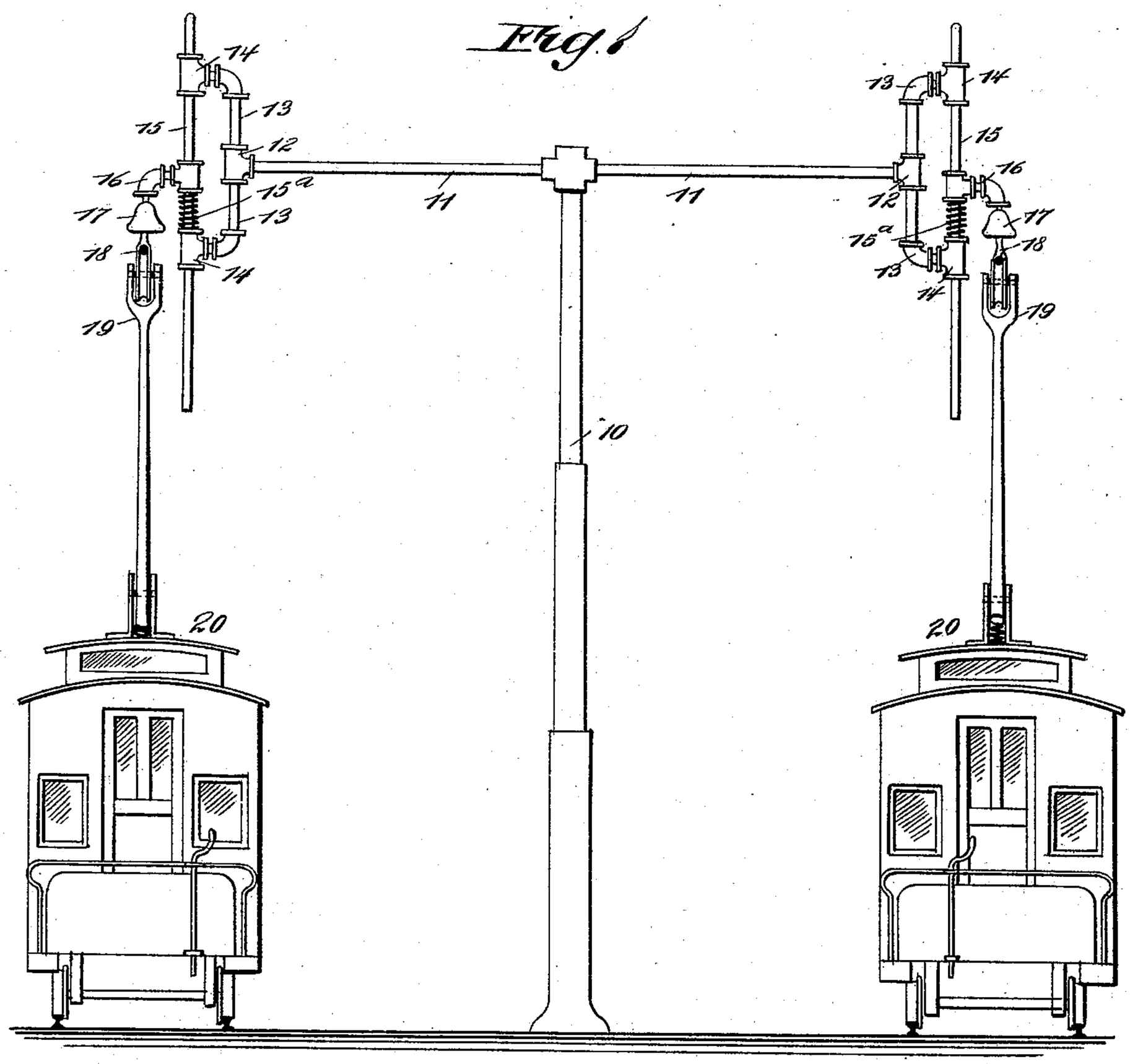
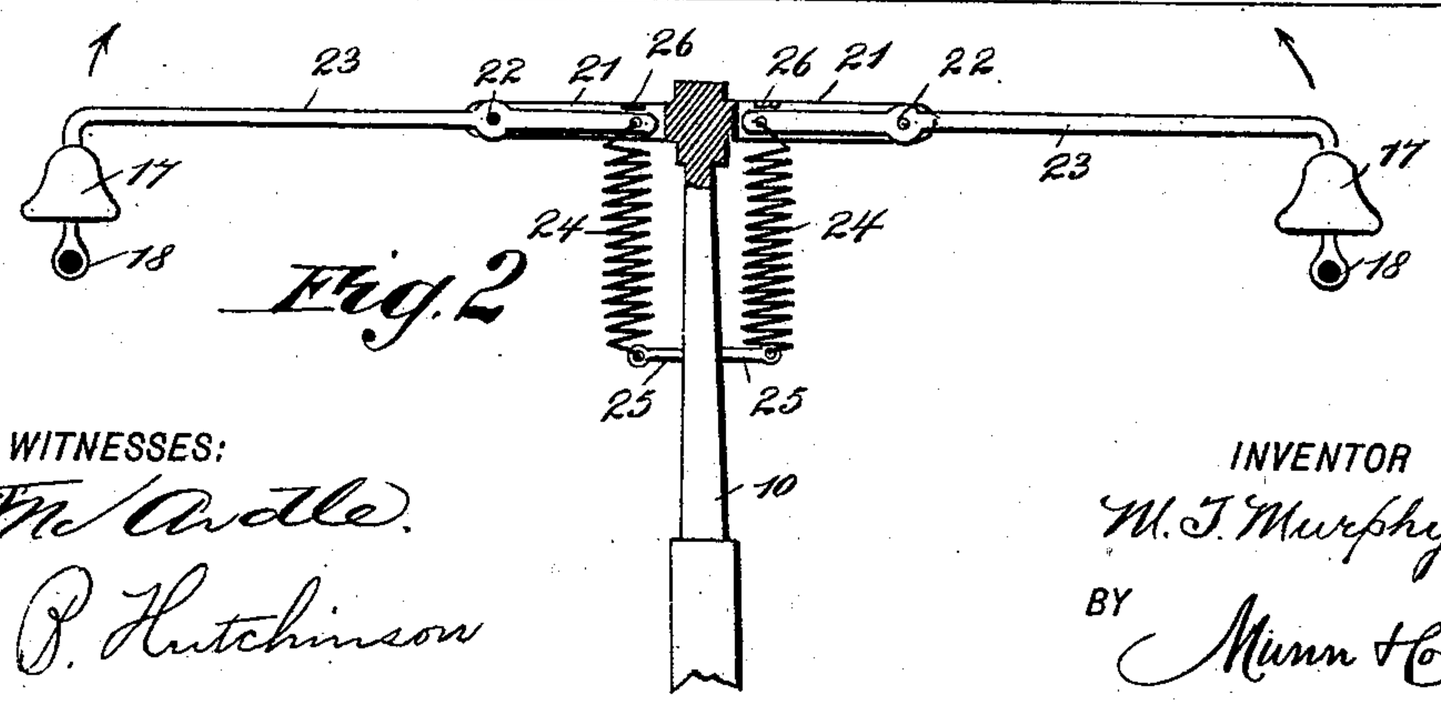


Fig. 2



WITNESSES:

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UNITED STATES PATENT OFFICE.

MARCUS T. MURPHY, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-HALF TO ROBERT BENSBERG, OF SAME PLACE.

TROLLEY-WIRE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 534,613, dated February 19, 1895.

Application filed September 14, 1894. Serial No. 522,992. (No model.)

To all whom it may concern:

Be it known that I, MARCUS T. MURPHY, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Trolley-Wire Support, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of devices which are used for supporting trolley wires; and the object of my invention is to produce a simple and durable support, which costs but little more than the ordinary rigid posts and hangers, and which sustains the trolley wire in such a way that the trolley wheel may run firmly on it but also in such a manner that the wire may yield vertically in case of excessive pressure from beneath, thus preventing the wire from being broken or bent.

A further object of my invention is to produce a support which will normally hold the wire in the correct position and which, while being movable, is substantial and little likely to get out of order.

To these ends my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

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

Figure 1 is a front elevation of a two-armed trolley wire support adapted for a double track and shown supporting two wires; and Fig. 2 is a detail broken front elevation, partly in section, of a modified form of the support.

The support is provided with a post 10 and if it is used in connection with a double track the post has at the top two oppositely-extending arms 11, but of course if it is used in connection with a single track, one arm suffices. The arm 11 terminates, at its outer end, in a T 12 in which is supported a vertically arranged bracket 13, the upper and lower ends of which are curved outward and terminate in vertically aligning slideways or guides 14, in which is held a vertically movable slide rod 15 carrying a hanger 16 to which is secured an insulator 17, which carries a trolley wire 18, and to counterbalance the trolley wire and hanger a spring 15^a is coiled around the rod 15 beneath the hanger 16 and above the lower end of the bracket 13.

The trolley 19, which is carried by the car 20, may be of any usual construction and the trolley wheel runs on the under side of the wire, and when, owing to the irregularity of the track or for any other reason, the trolley is lifted violently upward, the hanger 16 rises with the rod 15, and thus the yielding of the support prevents the wire from being injured.

As illustrated the arms 11, the brackets 13 and the connections between the arms and brackets and the brackets and slide rods are of pipes and pipe T's and elbows, but it will be seen that other material may be used in the construction of the support without affecting the principle of the invention.

In Fig. 2 I have shown a modified arrangement of the supporting arms and in this figure the post 10 has, on opposite sides, projecting parallel arms 21 between the outer ends of which are pivoted, as shown at 22, rods 23 having their outer ends adapted to move vertically upward and carrying the insulators 17 and wires 18, while the inner ends of the rods are secured to springs 24 which are also attached to rigid arms 25 on the post 10, and the tension of the springs counterbalances the rods and trolley wires. The inner ends of the rods 23 are held beneath abutments 26 on the arms 21, and these prevent the outer ends of the rods from tipping down too far.

It will be noticed that when the trolley wheel presses upward against the trolley wire, the tendency is to tilt the rod 23 which carries the wire, and thus the wire cannot be injured.

It will of course be understood that where a single track is used but one arm 11 or 21 and its accessory parts are necessary.

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

1. A trolley wire support, comprising a post adapted to be mounted beside the track, an arm thereon and projecting laterally over the

track, a rod vertically movable on said arm, a spring connected to said rod and adapted to support the same elastically in position, and an insulated wire hanger carried on said rod, substantially as set forth.

2. A trolley wire support, comprising a post, a laterally extending arm thereon, a bracket on the arm, a slide rod movable vertically in the bracket and a wire carrying hanger on the slide rod, substantially as described.

3. A trolley wire support, comprising a post, a laterally extending arm thereon, a bracket secured to the arm and provided with slide-ways at top and bottom, a slide rod to move in the slide ways, a spring to support the slide rod and a wire-carrying hanger secured to the slide rod, substantially as set forth.

4. A trolley wire support comprising a post, a laterally extending arm thereon, a bracket secured to the arm and provided at its top and bottom with slide-ways, a rod mounted to slide through said slide ways, a collar on the central portion of the rod, a spring arranged under said collar, and a wire-hanger connected to the rod, substantially as set forth.

MARCUS T. MURPHY.

Witnesses:
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