No. 731,954. PATENTED JUNE 23, 1903.

G. T. ROBERTS.

TROLLEY FINDER.

APPLICATION FILED FEB. 24, 1903.

NO MODEL.

Fig. 1.

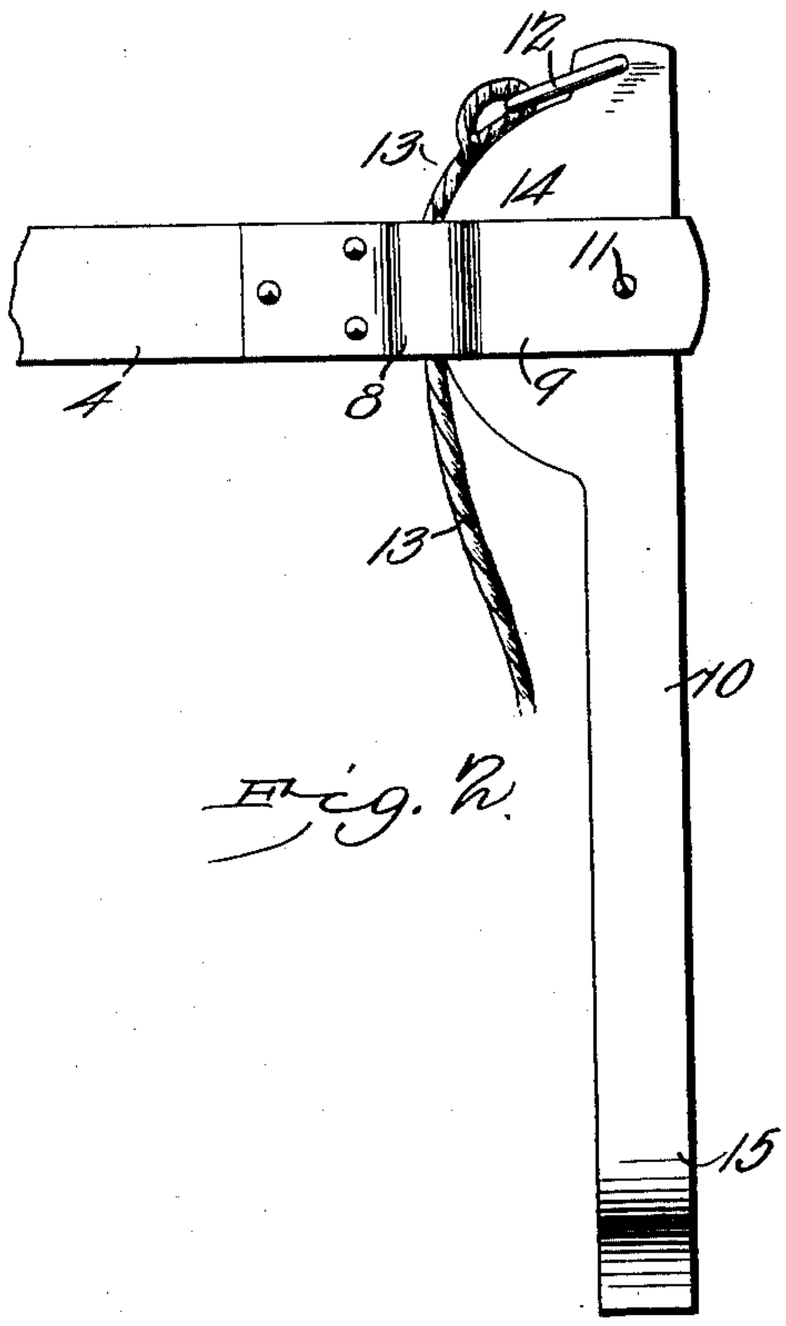

Fig. 2.

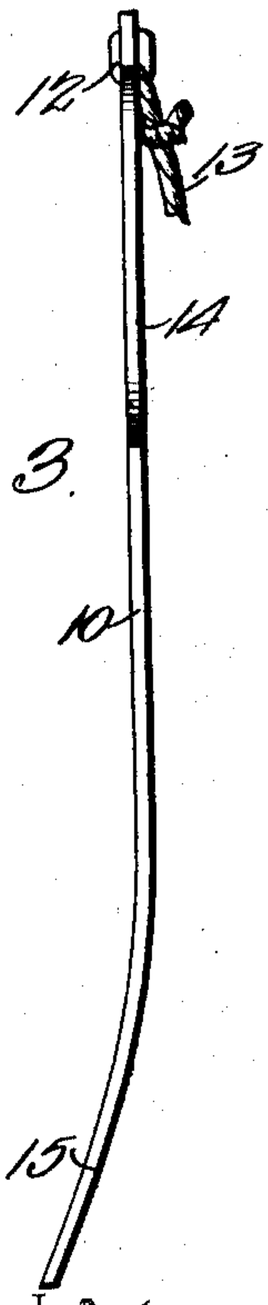

Fig. 3.

Witnesses
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No. 731,954. Patented June 23, 1903.

UNITED STATES PATENT OFFICE.

GUY TYLER ROBERTS, OF SAN DIEGO, CALIFORNIA.

TROLLEY-FINDER.

SPECIFICATION forming part of Letters Patent No. 731,954, dated June 23, 1903.

Application filed February 24, 1903. Serial No. 144,755. (No model.)

To all whom it may concern:

Be it known that I, GUY TYLER ROBERTS, a citizen of the United States, residing at San Diego, in the county of San Diego and State of California, have invented a new and useful Trolley-Finder, of which the following is a specification.

My invention relates to trolley-finders, and has for its objects to produce a device of this character which will be simple of construction, efficient in operation, and one which when the trolley-pole becomes disengaged from the wire while shifting the pole or from other causes will in again returning the pole to the wire engage the latter and guide it into the groove of the trolley-wheel.

To these ends the invention comprises the details of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view of the device, illustrating its wire-engaging position. Fig. 2 is a detailed view illustrating the normal position of the wire-engaging finger. Fig. 3 is an edge view of the finger.

Referring to the drawings, 1 indicates the upper end of the trolley-pole, 2 the harp or fork carried thereby, and 3 the wheel journaled in the harp and provided with a peripheral groove, as usual, to receive the trolley-wire. These parts may all be of any suitable or desired construction and material, inasmuch as they constitute no part of the present invention.

My improved attachment comprises an arm 4, of sheet metal or the like, attached to the pole by means of a clip 5, which embraces the pole near its upper end and has projecting flanges 6, which receive the end of the arm between them and to which it is securely riveted. The inner end of the arm, which lies against the pole, is beveled to permit the arm extending away from the pole at an angle and near its outer end is provided with a transverse groove 7 and with a supplemental end plate similarly grooved, as at 8, these grooves conjointly forming a cylindrical guideway transversely of the arm near its outer end. The supplemental plate 9 is riveted or otherwise secured to the arm and outside of the guideway is spaced from the arm to receive a finger 10, which is seated between them and pivoted, as at 11. The finger 10 normally hangs downward by gravity in the position shown in Fig. 2 and has secured to its pivoted end by a link 12 a rope 13 for manipulating the trolley-pole. The plate has formed on one side concentric with its pivot a curved enlargement 14, which when the finger is in its normal position lies inward, with the rope 13 embracing it, whereby the same serves as a guide for the rope during the manipulation of the finger. The finger near its outer end is laterally curved, as at 15, for the purpose presently described.

The operation of the device is as follows: Supposing the parts to be in their normal position, with the finger 10 swinging downward to the position shown in Fig. 2, and that it is desired to seat the trolley-wheel upon the wire, the operator grasps the rope 13 and pulls downward on the same, which action swings the finger 10 upward and into the groove of the trolley-wheel, as shown in Fig. 1. The trolley-pole is then swung laterally toward the wire until the finger contacts with the same, when the pole is permitted to swing upward into engagement with the wire, the finger 10 during this operation performing the function of guiding the wire into the groove of the trolley-wheel, the accurate seating of the wire in the wheel being insured by the finger resting in the groove of the wheel. During the swinging of the finger on its pivot the rope 13 passes through the cylindrical guideway formed near the end of the arm.

From the foregoing description it will be seen that I produce a device which is extremely simple of construction, one which may be readily applied to the pole, and which will be efficient in operation, and in attaining these ends I do not limit or confine myself to the precise details herein shown and described, as various minor changes may be made therein without departing from the spirit or scope of my invention.

It is to be particularly noted that owing to the arm 4 being attached to the under side of the pole and the finger normally hanging downward by gravity the parts occupy a position wholly unobstructing and free from entanglement with the wire-sustaining devices.

Having thus described my invention, what I claim is—

The combination with a trolley-pole provided with a grooved wheel, of an arm carried beneath the same and provided near its outer end with a transverse groove, a supplemental end plate secured to the arm and provided with a transverse groove coöperating with the groove in the arm to form a guideway, a finger pivoted between the arm and plate and adapted to normally hang downward by gravity and to be swung upward into engagement with the groove in the wheel, and a rope, or the like, for manipulating the finger and traveling in the guideway.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GUY TYLER ROBERTS.

Witnesses:

WM. H. HOLCOMB,

WALTER M. EDWARDS.