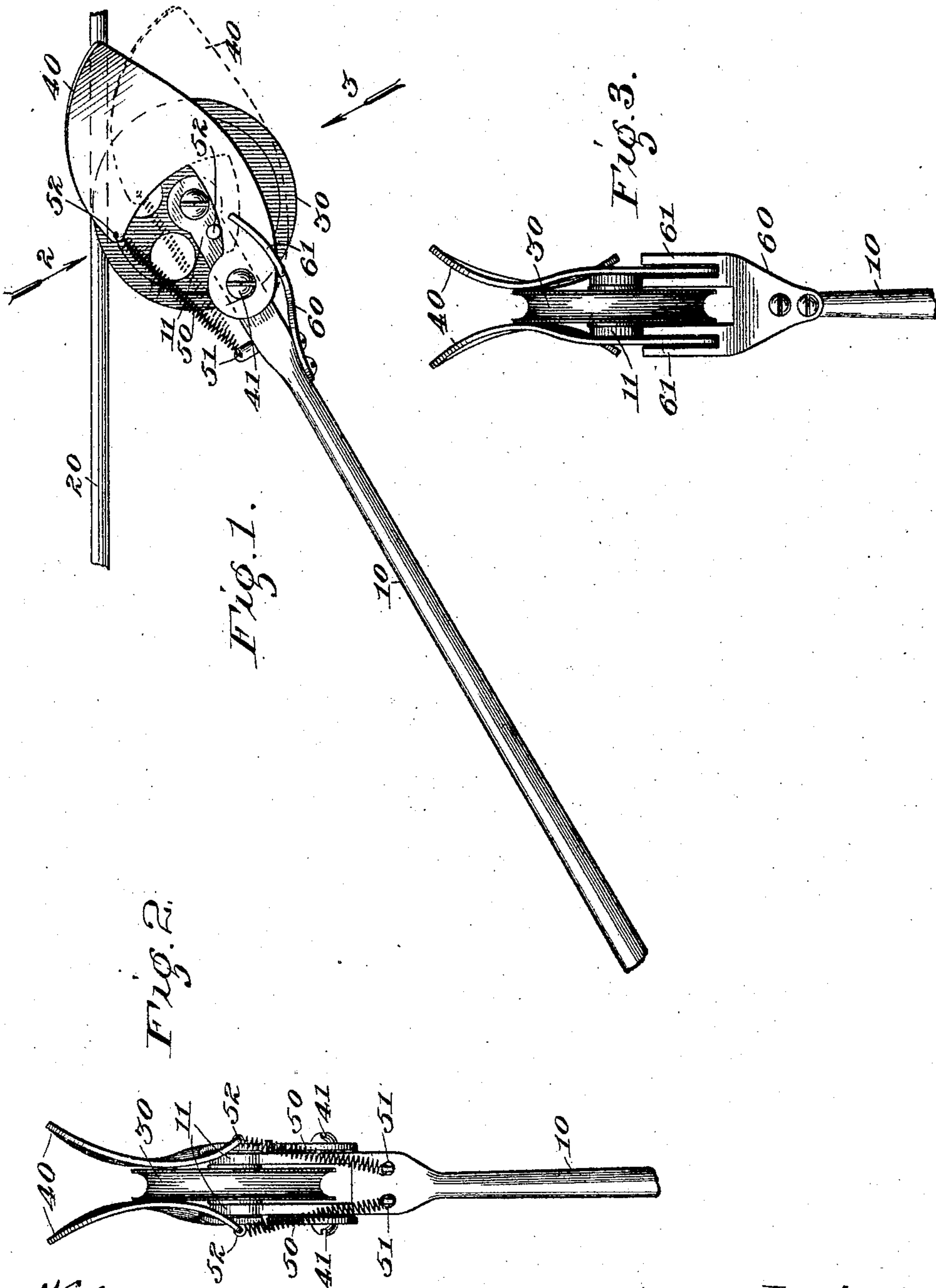


No. 848,601.

PATENTED MAR. 26, 1907.

E. T. PLATT.  
ELECTRIC TROLLEY RETAINER.

APPLICATION FILED MAY 21, 1906.



Witnesses:

Robert Mickey  
J. A. Piatt

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by

W. G. Shuman, Atty.



# UNITED STATES PATENT OFFICE.

EDWARD T. PLATT, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO  
HERMAN FELDMANN, OF CHICAGO, ILLINOIS.

## ELECTRIC-TROLLEY RETAINER.

No. 848,601.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed May 21, 1906. Serial No. 318,080½.

*To all whom it may concern:*

Be it known that I, EDWARD T. PLATT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric-Trolley Retainers, of which the following is a specification.

My invention relates to certain new and useful improvements in electric-trolley retainers; and its object is to provide means for retaining trolley-wheels of electrically-operated cars and the like upon the conducting-wires on which the trolleys run.

It frequently happens that the trolley-wheel slips off the conducting-wire, and it must then be returned to place upon the wire before the car can proceed, thus often taking up considerable time and causing extra labor and care for the attendant. This is usually caused by the swaying of the wire or car, and very frequently in passing around curves obstructions are met with which throw the wheel off the wire.

To such end my invention relates to certain novel features of construction, a description of which will appear in the following specification and the essential features more definitely pointed out in the appended claim.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a trolley pole and wheel provided with my invention and showing the same in working relation with a conductor-wire. Fig. 2 is an edge view thereof looking in the direction of the arrow 2 in Fig. 1, and Fig. 3 is a similar view looking in the direction of the arrow 3 in Fig. 1.

Referring to these drawings, 10 represents the ordinary trolley-pole, which is pivotally connected to the car and spring-pressed toward the conducting-wire, which is shown at 20. The construction of this spring connection is well known and requires no further description. The trolley-wheel 30 is journaled in the forked end 11 of the pole and is formed with a groove in its face, on either side of which are flanges to assist in maintaining the trolley-wheel in position upon the wire. Under usual circumstances this is sufficient; but regardless of the same it frequently happens that the wheel slips off the wire. To avoid this difficulty, I have provided two retaining plates or arms 40 on the sides of the trolley-wheel, which ex-

tend considerably above the latter and are pivoted to the fork 11 of the trolley-pole at 41, so that they may swing down in case they meet with any obstruction which will not yield as they pass by it. The upper ends 60 of the arms 40 flare outward to provide a large opening between them, which greatly facilitates the replacement of the trolley-wheel whenever it has been removed from the wire.

The arms 40 are bowed inward to bring a portion of their inner faces close to the trolley-wheel, so as to avoid any danger of the wire slipping in between the wheel and arm. The arms are held up in their normal position by springs 50, which are attached to the pole at 51 and to the arms at 52. This particular arrangement of spring connection is immaterial to my invention, broadly speaking, and any other arrangement can be employed which will return the arms to their normal position. Pins 52 upon the fork 11 limit the movement of the arms in one direction—that is, the one in which the spring tends to move them—and a forked plate 60 limits their movement in the other direction. The plate 60 is secured to the fork of the pole and is formed with two forked members 61, each of which embraces one of the arms 40 and assists in guiding them in any movement caused by obstructions along the wire. In operation the arms swing down whenever any obstruction is met, and the wheel passes on without disturbance. The swaying of the wire cannot cause it to slip off the wheel, because of the arms 40, which embrace the sides of the wire.

I claim as new and desire to secure by Letters Patent—

In a device of the class described, the combination of a trolley pole and wheel, retaining-arms pivoted to the pole and having outwardly-flared portions extending above and beyond the wheel, springs for yieldingly holding the arms in one direction, stops arresting the movement of the arms in one direction, and a forked plate secured to the pole and forming guides and stops for the arms and limiting the movement of the arms in the opposite direction.

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Witnesses:

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