No. 746,424. PATENTED DEC. 8, 1903.

T. F. WETTON.

TROLLEY POLE.

APPLICATION FILED AUG. 29, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

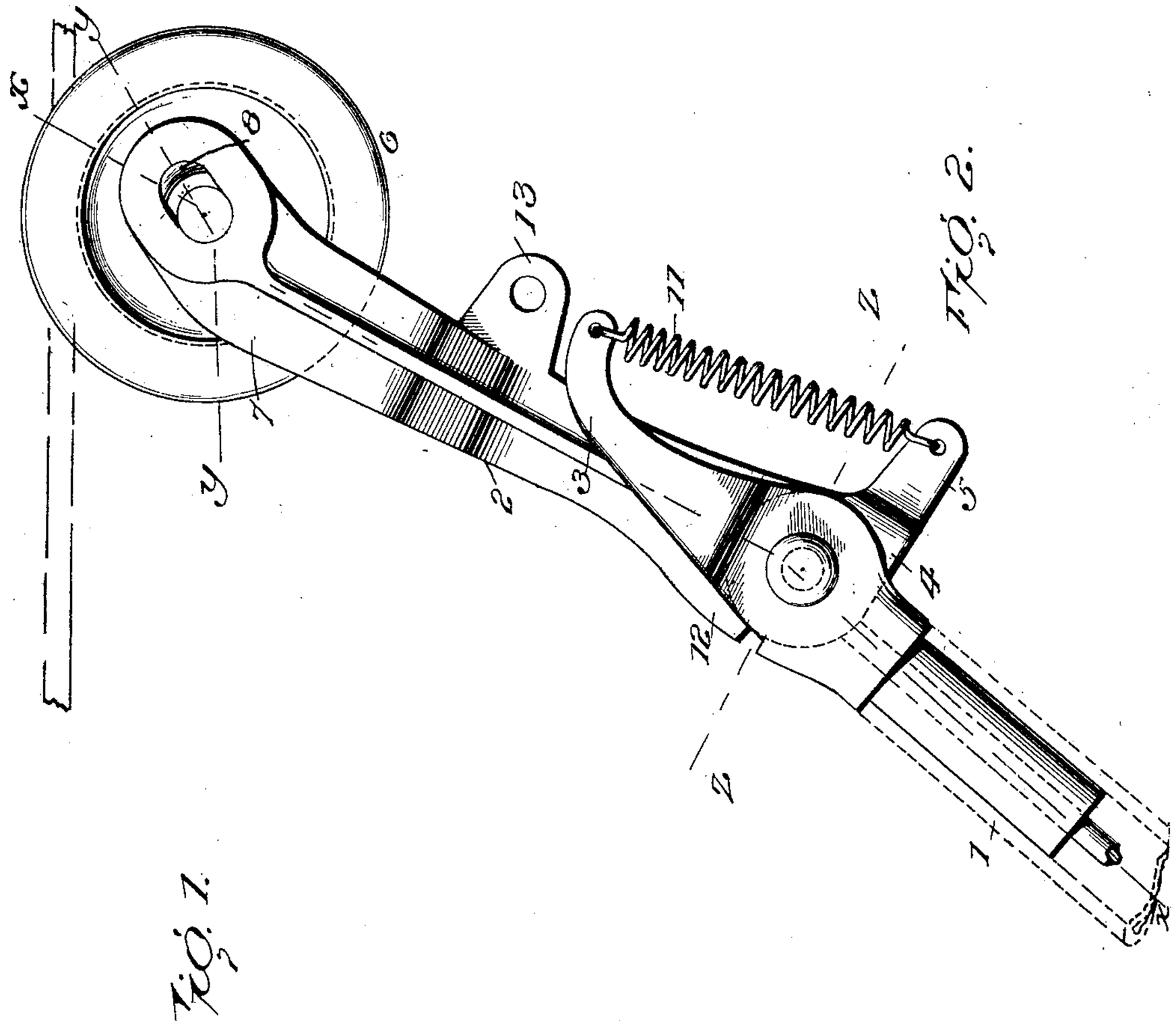

FIG. 1.

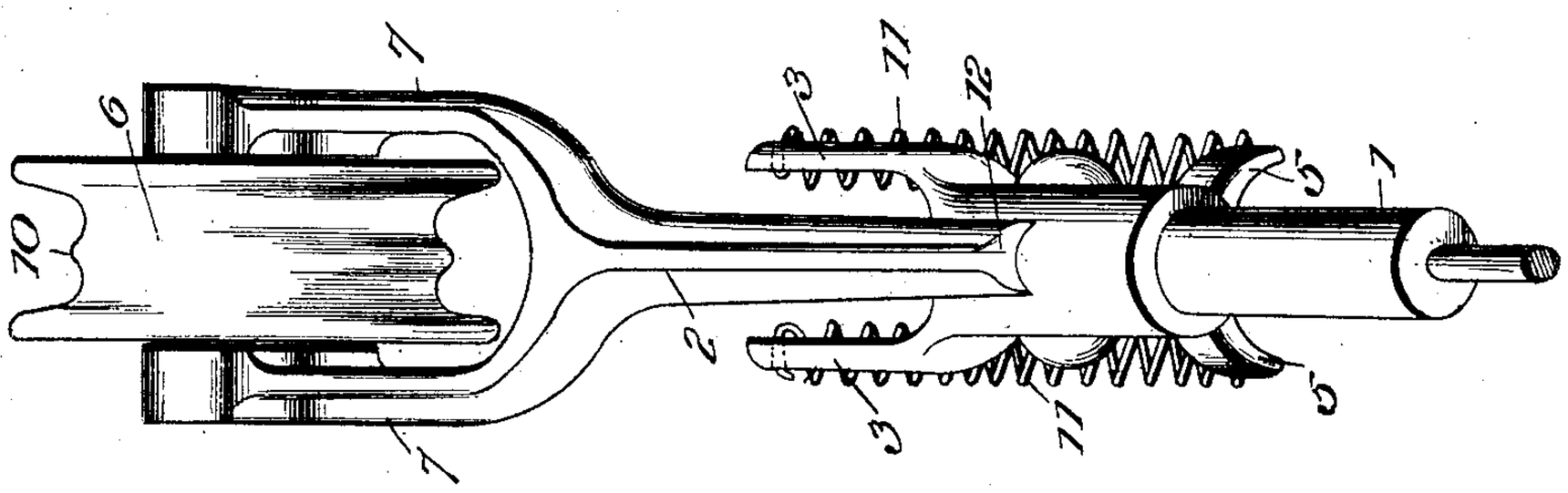

FIG. 2.

Witnesses
Jas. Imrie
Geo. C. Foote.

Inventor
T. F. Wetton
By R. S. & A. B. Lacey, Attorneys.

No. 746,424. PATENTED DEC. 8, 1903.

T. F. WETTON.

TROLLEY POLE.

APPLICATION FILED AUG. 29, 1903.

NO MODEL. 2 SHEETS—SHEET 2.

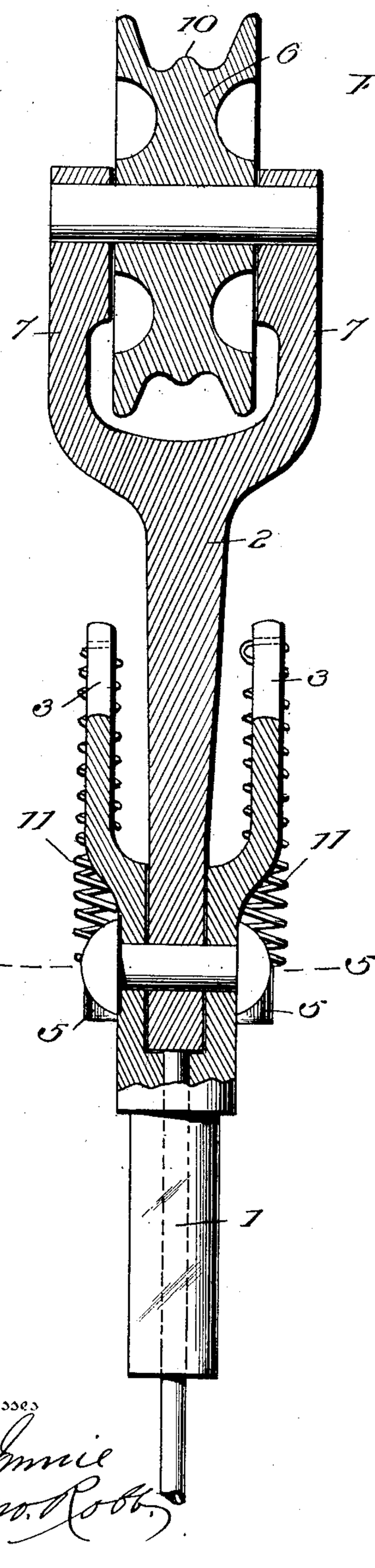

FIG. 3.

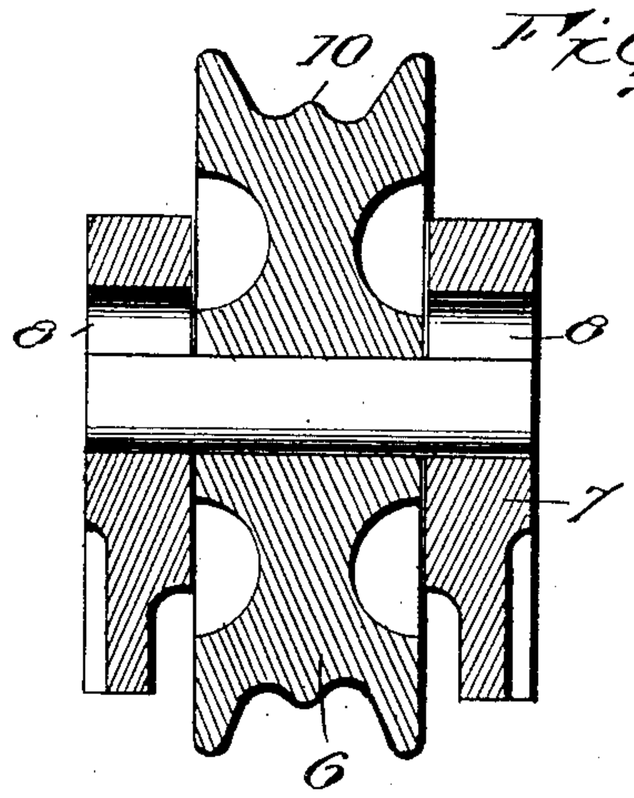

FIG. 4.

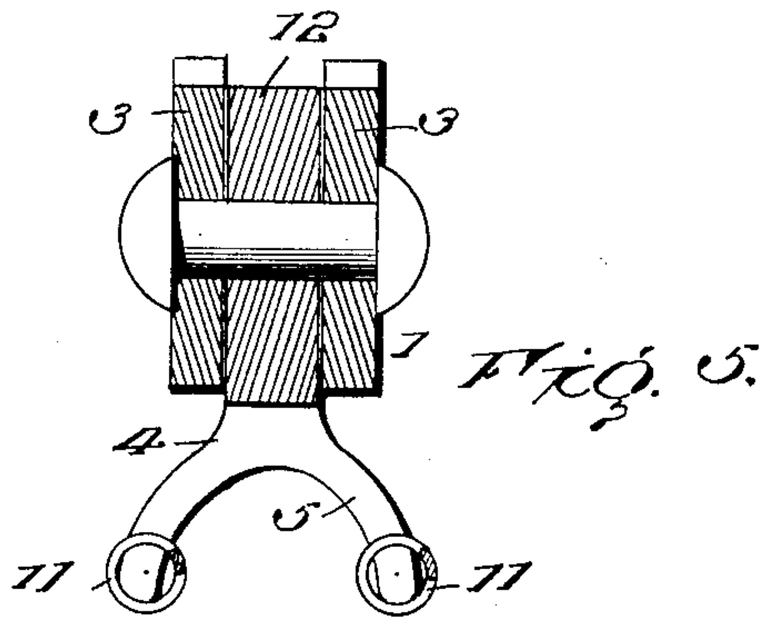

FIG. 5.

Witnesses
Jas. Innis
Geo. Roby.

Inventor
T. F. Wetton.
By
R. L. Lacey, Attorneys.

No. 746,424. Patented December 8, 1903.

UNITED STATES PATENT OFFICE.

THOMAS F. WETTON, OF NEWARK, OHIO, ASSIGNOR OF ONE-HALF TO CHARLES E. KREBS, OF NEWARK, OHIO.

TROLLEY-POLE.

SPECIFICATION forming part of Letters Patent No. 746,424, dated December 8, 1903.

Application filed August 29, 1903. Serial No. 171,234. (No model.)

To all whom it may concern:

Be it known that I, THOMAS FRANKLIN WETTON, a citizen of the United States, residing at Newark, in the county of Licking and State of Ohio, have invented certain new and useful Improvements in Trolley-Poles, of which the following is a specification.

This invention provides a trolley-pole constructed in sections, with the special object of providing means for preventing displacement of the trolley-wheel from the trolley-wire upon movement of the pole actuated by vibration or other abnormal movement of the car to which the pole is attached. The section of the pole carrying the trolley-wheel is independently actuated by spring means, so as to hold the wheel in contact with the wire, though the major portion of the pole be subjected to independent movement, due to the causes above described.

The further object of the invention is to provide a peculiar mounting of the trolley-wheel whereby the same may automatically adjust itself angularly as the car passes around curves or other deflections in the track, the wheel itself being also of peculiar form to more readily prevent displacement of the wire therefrom as the car turns.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is an end view of a pole embodying the invention. Fig. 2 is a side elevation. Fig. 3 is a vertical sectional view on the line X X of Fig. 2. Fig. 4 is a horizontal sectional view on the line Y Y of Fig. 2. Fig. 5 is a horizontal view on the line Z Z of Fig. 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

As premised hereinbefore, the trolley-pole is of sectional structure, constituting the pole proper, 1, and the wheel-carrying arm 2. The pole 1 is provided at its outermost end with spaced arms 3, the pole otherwise being of ordinary structure, provided with the usual spring means at the lower end thereof for holding the same in an uppermost position extended from the top of the car. The arm 2 is pivoted at a lowermost portion between the spaced arms 3 upon the upper portion of the pole 1 and is provided at its lower end with an extension 4, disposed at approximately a right angle to the body of the arm and having bifurcated end portions 5, which diverge from the extension 4, before mentioned. The trolley-wheel 6 is mounted in spaced arms 7, integrally formed upon the upper portion of the pivoted arm 2, and is mounted in elongated openings 8, which constitute bearings for the journals projected laterally from the said trolley-wheel. The elongated bearings 8 permit the trolley-wheel to adjust itself to a certain degree at an angle to its normal position. as the car progresses upon a straight course. As the car turns, much difficulty is often incurred because the trolley-wire frequently rides out of the grooved portion of the trolley-wheel, thereby shutting off the power and necessitating the delay consequent to replacing the wheel in contact with the wire. For the purpose, therefore, of preventing this displacement of the trolley-wheel from the wire an annular rib 10 is disposed centrally of the grooved portion of the trolley-wheel, which portion serves to resist the tendency of the wire to ride from the trolley-wheel as the car is turning in a manner which will be clearly understood. Springs 11 connect the arms 3 with the bifurcated portions 5 and normally serve to hold the pivoted arm 2 under independent influence in such a position as to hold the trolley-wheel in contact with the trolley-wire. The springs 11 thus are adapted to actuate the trolley-arm 2 toward the trolley-wire independently of the movement of the pole 1, so that a jarring movement of the car, causing the pole 1 to move downwardly, will not throw the trolley-arm in a corresponding direction; but the latter will, to the contrary, be actuated upwardly, so as to maintain its normal position with the trolley-wire 10, engaging the trolley-wire.

In order to prevent the trolley-arm 2 from being disposed at a right angle to the pole 1, thereby impeding the movement of the trolley-pole when same is being disposed in reversed position at the end of a run, an engaging portion 12, provided upon the arm 2, abuts against the upper portion of the trolley-pole at a point approximately intermediate the spaced arms 3, to thereby limit the upward movement of the said arm 2. As aforesaid, the arm 2 is thus held from assuming a position at approximately right angles to the pole 1 to thereby make it difficult to throw the pole into reverse, due to the engagement of the arm 2 with the trolley-wire in this movement.

The perforated lug 13, projected from the trolley-arm 2, connects the trolley-arm to the car by means of an ordinary pull-cord, which is utilized to manipulate the trolley-pole to adjust its position.

Having thus described the invention, what is claimed as new is—

1. In a trolley-pole, the combination with spaced arms provided at the outer end portion of the pole, a trolley-arm pivoted intermediate the aforesaid arms, spaced arms disposed upon the trolley-arm, a trolley-wheel carried by the aforesaid trolley-arm, and spring means connecting the spaced arms, carried by the trolley-pole and the trolley-arm, for independent actuation of the latter.

2. In a trolley-pole, the combination with spaced arms provided at the upper end of the pole, a trolley-arm pivoted intermediate the said spaced arm and provided with an angular extension, spring means connecting the spaced arms with the angular extension aforesaid, and a trolley-wheel carried by the trolley-arm.

3. In a trolley-pole, the combination with spaced arms provided at the upper end of the pole, a trolley-arm pivoted intermediate the spaced arms aforesaid and provided with an angular extension bifurcated to form divergent members, springs connecting the spaced arms of the pole and the divergent members of the trolley-arm for independent actuation of the latter.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS F. WETTON. [L. S.]

Witnesses:
LAURA G. RENZ,
JOSEPH RENZ.