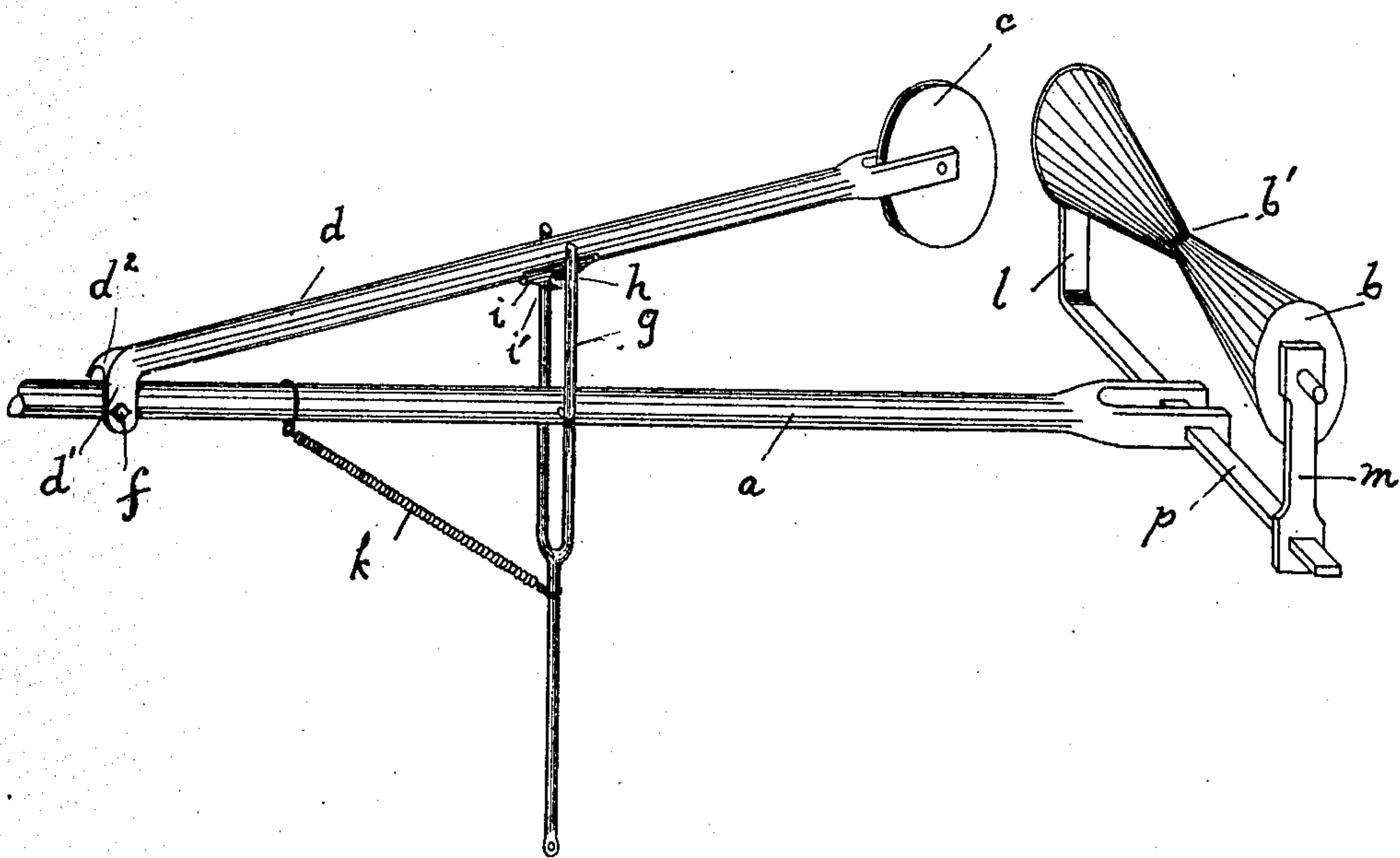


No. 870,755.

PATENTED NOV. 12, 1907.

L. A. ALLEN.
TROLLEY POLE GUIDE.
APPLICATION FILED AUG. 14, 1907.



WITNESSES:

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LEWIS A. ALLEN, OF PASSAIC, NEW JERSEY.

TROLLEY-POLE GUIDE.

No. 870,755.

Specification of Letters Patent.

Patented Nov. 12, 1907.

Application filed August 14, 1907. Serial No. 388,497.

To all whom it may concern:

Be it known that I, LEWIS A. ALLEN, a citizen of the United States, and a resident of the city of Passaic, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Trolley-Pole Guides, of which the following is a specification.

My invention relates to improvements in a trolley pole guide, and the object of my invention is to provide a simple and effective means for quickly restoring the trolley clip to the overhead wire. I accomplish this object by the device shown in the accompanying drawing, in which is shown an elevation of my device complete.

Similar letters refer to similar parts throughout the views.

On the upper end of a trolley pole *a*, secured to a trolley car in the usual manner, I provide a rotatable roller *b* in the form of a double cone, having the larger base at the outer ends and with the apexes of the cones at the center, and in the plane of the trolley wheel *c*, mounted upon the end of an auxiliary pole *d*. This auxiliary pole *d* is provided with a forked end *d'* by which it is hinged to the trolley pole *a* by means of the pin *f*. A knee *d²* is provided in the fork *d'* to restrict the upward play of the pole *d*.

A fork or lever *g* is pivoted to the pole *a* at a point intermediate of the base of the auxiliary pole *d*, and the upper end of the pole *a*, and having an eye at its lower end. At a point near the upper end of the fork or lever *g*, I provide a cross bar *h*. Upon the auxiliary pole *d* on its under side directly above the vertical position of the fork *g*, I provide a catch device *i*, having a depressed central section with a lug *i'* on its lower side. A helical spring *k* is secured at one end to the lower part of the fork *g* and at the other end to the trolley pole *a*, which tends to pull over the lower end of the fork *g*, and to throw the upper end down upon the pole *a*.

The roller *b* may be mounted upon the end of the pole *a* in any desired manner, but I prefer to secure a cross bar *p* upon the end of the pole *a*, and to provide upright arms *l m* upon the ends of the cross bar *k*. A

rod is inserted through the roller *b* and its ends are supported by the arms *l* and *m*. An annular depression *b'* is formed at the center of the roller *b*.

My device being assembled as above described, the auxiliary pole *d* will be held in its normal position as shown in the drawings by the fork *g*, and catch *i*, and the wheel *c* will bear against the overhead trolley wire in the usual manner.

When in the operation of the car, or for any reason the wheel *c* slips from the wire, the wire will strike against the roller *b* which will cause the auxiliary pole *d* to spring away from the fork or lever *g*, whereby the fork will be released from the depression in the catch device *i*, and will be thrown down by the spring *k* upon the pole *a*. The conical shape of the roller *b* will guide the trolley wire into the central depression in the plane of the trolley wheel *c* when a pull upon the lower end of the fork or lever *g* by means of a rope secured in the eye at its lower end will raise the lever *g* to a vertical position as shown in the drawing, where it will be held by the catch *i*, and will hold the auxiliary pole *d* with its wheel *c* restored to the trolley wire in its normal position, which operation may be repeated and the wheel restored to the wire in the same manner whenever it is displaced.

Having thus described my invention, what I claim is:

1. In a device of the character described, the combination of a main trolley pole, an auxiliary pole attached thereto, a trolley wheel upon the end of the said auxiliary pole, a lever upon said main trolley pole to support the said auxiliary pole, and a roller upon the main trolley pole, substantially as shown and described.

2. In a device of the character described, the combination of a main trolley pole having a roller mounted thereon, an auxiliary pole attached to the main trolley pole, a lever upon the main trolley pole having an arm supporting the auxiliary pole, a spring normally acting to throw the said lever and means for holding the lever against the action of the spring, substantially as shown and described.

Signed at Passaic in the county of Passaic and State of New Jersey this fifteenth day of July A. D. 1907.

LEWIS A. ALLEN.

Witnesses:

JUSTIN S. GALLAND,
BERTHA M. PECK.