

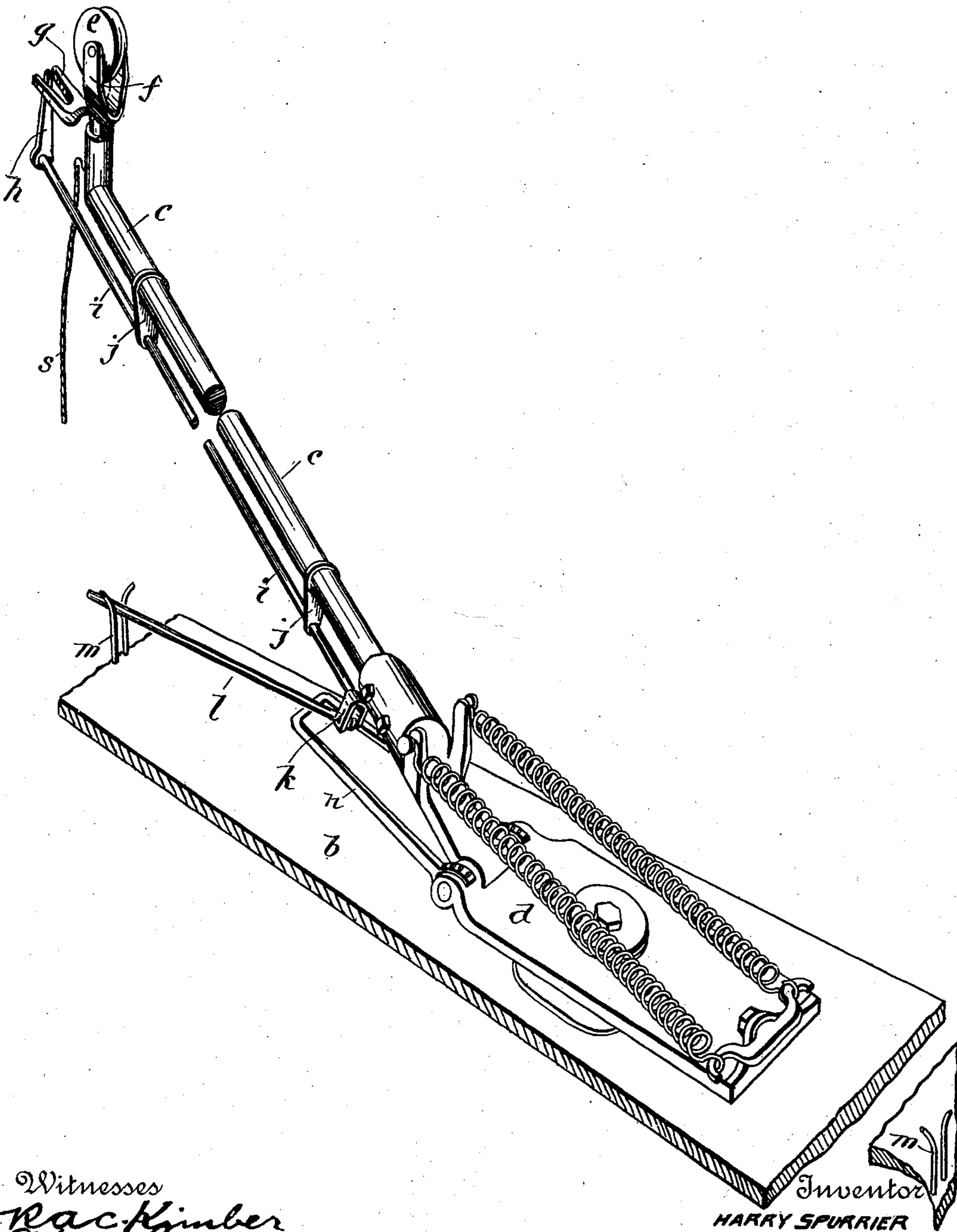
No. 734,442.

PATENTED JULY 21, 1903.

H. SPURRIER.
TROLLEY.

APPLICATION FILED OCT. 2, 1900. RENEWED SEPT. 8, 1902.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

HARRY SPURRIER, OF MONTREAL, CANADA, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

TROLLEY.

SPECIFICATION forming part of Letters Patent No. 734,442, dated July 21, 1903.

Application filed October 2, 1900. Renewed September 8, 1902. Serial No. 122,482. (No model.)

To all whom it may concern:

Be it known that I, HARRY SPURRIER, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Trolleys; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has for its object to provide a trolley that will comprise means for automatically causing its wheel to turn and meet the curves of the trolley-wire simultaneously with the turning of curves in the rails by the car.

To this end the invention may be said, briefly, to consist of a rod oscillatively carried by the trolley-pole and having its lower end connected to the car by means adapted to oscillate said rod, as the car in turning a curve changes its annular position relatively to the pole and means being provided to effect a connection between the upper end of this rod and the trolley-wheel that will cause this oscillation of the rod to turn the trolley-wheel to anticipate the curve in the trolley-wire and meet without being turned by the trolley-wire.

For full comprehension, however, of my invention reference must be had to the accompanying drawing, forming a part of this specification, wherein a portion of the roof of a car and a trolley with my invention applied thereto are illustrated in perspective view.

The car-roof *b*, trolley-pole *c*, its base *d*, and the trolley-wheel *e* are and may be of usual construction. The bracket *f* for supporting the trolley-wheel *e* is formed with a forked projection *g*, which straddles a diagonal arm *h* rigidly upon the upper end of an oscillatory rod *i*, mounted in brackets *j* upon the trolley-pole. The lower end of this rod has a forked bracket *k* rigidly thereupon, between the prongs of which one end of a short rod *l* is pivoted, while a pair of standards *m* are located adjacent to each end of the trolley-base. When in use, the free end of the short rod *l* is located between the pair of standards adjacent to whichever may happen to be the rear end of the car, and as the car

takes a curve in the track the trolley-wheel will be turned correspondingly by the oscillatory rod and intermediate connections.

The trolley is reversed in the usual way by drawing upon the cord *s* and lowering the wheel from the wire, and it can then be swung around and the wheel placed upon the wire at the opposite end of the car. In reversing the trolley in this manner the lowering of the trolley-pole will cause the short rod *l* to bear upon a bracket *n*, carried by the trolley-base, thus raising the outer end of said short rod *l* from engagement with the standards at one end of the car, and the placing of the pole in its opposite position will cause said short rod *l* to engage the opposite pair of standards.

What I claim is as follows:

1. The combination with a car, of a trolley comprising a pole pivoted to said car to swing horizontally relatively thereto, a trolley-wheel bracket pivoted upon the top of said pole to turn horizontally thereupon, and means for causing said bracket to assume an angular position on the same side of the pole as that assumed by the car and said assumed angular position being opposite to the angular position assumed by the car relatively to said pole when rounding a curve.

2. The combination with a trolley-pole, the trolley-wheel carried thereby, and the roof of a car, of an oscillatory rod mounted upon said pole and extending approximately from end to end thereof, means carried by the roof of the car for causing the oscillation of said rod upon the change in horizontal angular position of said car relatively to the pole, and means for causing the oscillation of said rod to change the horizontal angular position of said trolley-wheel relatively to the trolley-pole, substantially as described and for the purpose set forth.

3. The combination with a trolley-pole, the bracket the trolley-wheel carried thereby, and the roof of a car of an oscillatory rod mounted upon said pole and extending approximately from end to end thereof; a forked extension from said trolley-wheel bracket, a diagonal arm rigidly upon the upper end of said rod and taking between the prongs of

said forked bracket; a pair of standards upon the roof of the car, a short rod pivotally connected at one end to the lower end of said oscillatory rod and taking at its other end between said standards; and a bracket upon
5 the said trolley-base near the lower end of said oscillatory rod for at intervals supporting said short rod, substantially as described and for the purpose set forth.

10 4. The combination of a car, a trolley-pole pivotally carried by said car, a bracket pivoted to said pole, a trolley-wheel carried by said bracket, and means controlled by movement of the trolley-pole relatively to the car
15 for turning said bracket so as to cause the

trolley-wheel carried thereby to meet the curves in the trolley-wire.

5. The combination of a car, a trolley-pole carried thereby, a grooved trolley-wheel pivotally carried by the pole, and means controlled by movement of said trolley-pole relatively to the car for turning the trolley-wheel so as to cause its groove to follow curves in the trolley-wire.

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

HARRY SPURRIER.

Witnesses:

WILLIAM P. McFEAT,
FRED. J. SEARS.