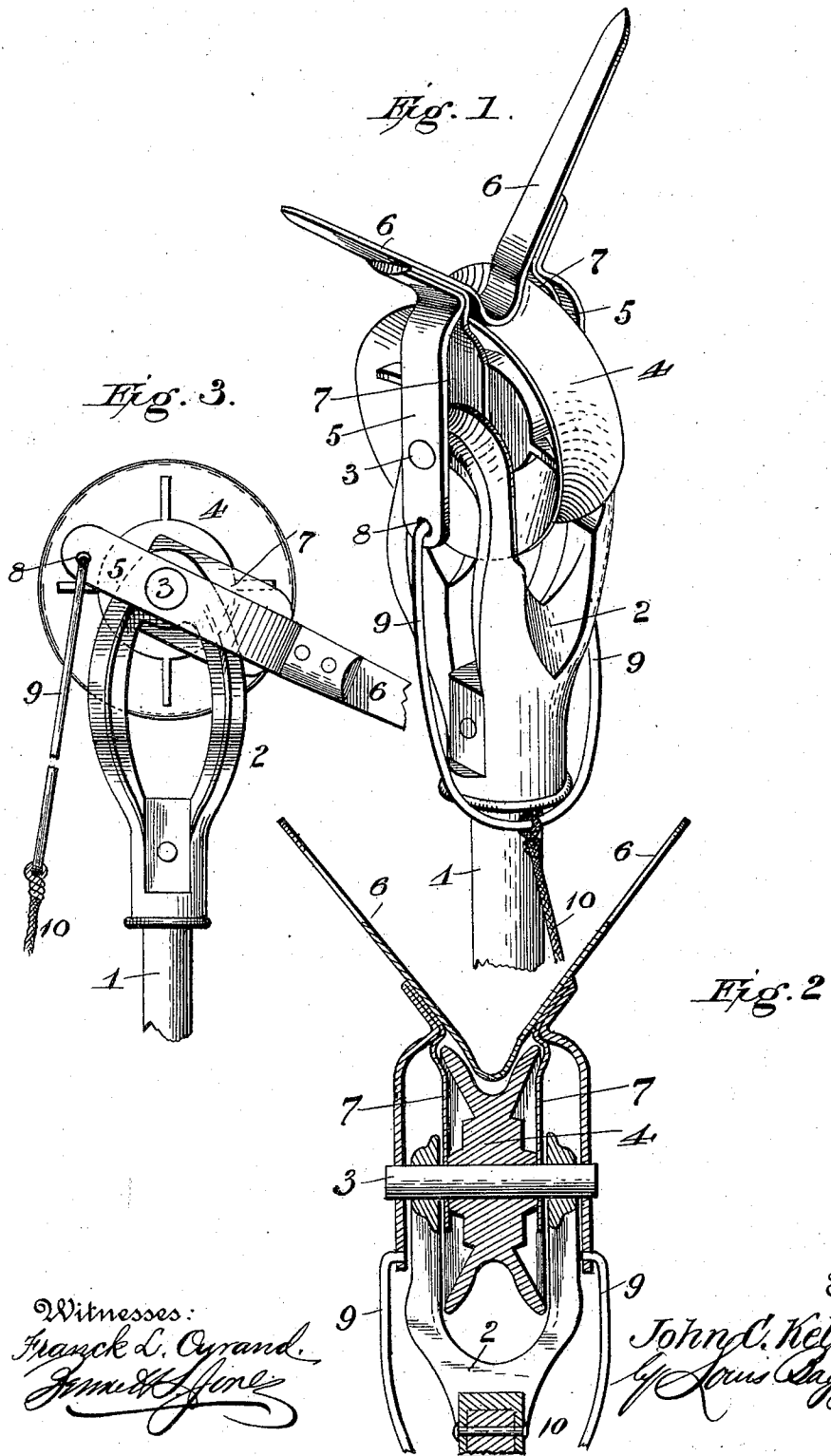


(No Model)

J. C. KELLOGG.
TROLLEY FOR ELECTRIC CARS.

No. 585,579.

Patented June 29, 1897.



Witnesses:
Frank L. Cyrand.
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UNITED STATES PATENT OFFICE.

JOHN C. KELLOGG, OF LEXINGTON, KENTUCKY, ASSIGNOR OF ONE-HALF
TO ALFRED L. HARTING, OF SAME PLACE.

TROLLEY FOR ELECTRIC CARS.

SPECIFICATION forming part of Letters Patent No. 585,579, dated June 29, 1897.

Application filed September 25, 1896. Serial No. 606,931. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. KELLOGG, a citizen of the United States, and a resident of Lexington, in the county of Fayette and State of Kentucky, have invented certain new and useful Improvements in Trolleys for Electric Cars; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in trolleys for electric cars; and its object is to provide an improved construction of the same whereby the conducting-wire is guided to the trolley-wheel, so as to insure its quick engagement therewith, and in case the wheel should jump the wire it is easily caught and in catching the wire it cannot become entangled with the wire.

The invention consists, essentially, in a flaring fork having two parallel arms which are journaled to the axle of the trolley-wheel and extending down below the same and provided with a yoke or bail with which the rope by which the trolley is depressed and elevated is secured, the construction being such that when said rope is pulled down the forks will be thrown up, so as to guide the wire to the wheel, and when the rope is released the forks will be thrown back, so that the wheel will contact and engage with the wire.

It also consists in providing said forks with two downwardly-extending spring-arms located between the harp and wheel, which by their frictional contact with the inner sides of the wheel hold the fork in place when thrown back, all as hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the harp and trolley-wheel of an electric trolley-car, showing my improvements applied thereto. Fig. 2 is a central cross-sectional view of the same. Fig. 3 is a side elevation.

In the said drawings the reference-numeral 1 designates a rod which engages with the upper end of a trolley-pole, (not shown,) which is pivotally connected with the top of

a car, as usual. The numeral 2 designates the harp secured thereto, provided at the upper end with a transverse shaft 3, upon which is journaled the trolley-wheel 4. These parts may be of any ordinary or suitable construction and form no part of the present invention. Journaled on said shaft at each side of the harp is an arm 5, which extends above and below the shaft. At the upper ends these arms are securely connected with a fork 6, consisting of a flat metal bar bent over at the center, forming two outwardly-extending or flaring arms at an acute angle to each other. A space of about eight inches, more or less, is thus formed between the ends of said arms. Also secured to said fork are two spring-arms 7, having apertures through which the shaft 3 passes. The tendency of these arms is to spring inwardly and clasp the wheel, so that when the wheel rolls back it will throw the forks back and hold them down by the friction on the sides of the wheel.

Formed near the lower ends of the arms 5 and a little to one side of a line drawn vertically through the center of the fork is a hole 8, with which is pivotally connected a bail or yoke 9, to which the rope 10, by which the trolley-wheel is raised and lowered, is secured.

The operation is as follows: When the trolley pole and wheel are pulled down and away from the conductor or wire, the rope, drawing upon the lower ends of the arms 5, will turn the same on the axle to which they are journaled, throwing the fork up, as seen in Fig. 1. The rope is held tight until one or both of the flaring arms catch the wire and conduct it to the wheel. Then let go the rope and the wire forces the forks back, and the springs hold it back by the friction of the wheel. In other words, it is a shield when catching the wire, so that the harp and wheel cannot get fast, as they often do.

The spring-arms will hold the fork in place and prevent it from jumping up and engaging with the wire. They will also hold the fork in position, when the rope is released after throwing it up to serve as a guide for the wire.

From the above it will be seen that the wheel can be very quickly engaged with the wire, as there is a comparatively large space

between the divergent ends of the fork-arms. The fork also acts as a shield for preventing the wire from becoming entangled with the harp and wheel. The object in making the
5 holes in the arms with which the bail is connected at one side of the axial line of the fork is to allow the latter to be thrown a little forward of the center when elevated by the rope. This will prevent the fork from being thrown
10 back until the wire is seated in the center thereof.

The device can be readily applied to the trolley now in common use.

Having thus fully described my invention,
15 what I claim is—

1. The combination with the harp and trolley-wheel and axle, of the arms pivotally connected intermediate their ends to said axle, the flaring fork at the upper ends of said
20 arms, the bail or yoke pivotally connected with the lower ends of said arms and the

spring-arms secured to the fork and bearing against said wheel, substantially as described.

2. The combination with the harp and trolley-wheel and axle, of the flaring fork, the
25 downwardly-extending arms secured thereto and journaled intermediate their ends to said axle, and having holes near their lower ends at one side of the axial line thereof, the bail connected with said holes and the down-
30 wardly-extending spring-arms having their upper ends secured to said fork and their lower ends bearing against the trolley-wheel, substantially as described.

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

JOHN C. KELLOGG.

Witnesses:

J. W. BUCKLEY,
J. R. SMITH.