(No Model.)

C. F. L. ORTH.

SUPPORT FOR TROLLEY WHEELS.

No. 572,940. Patented Dec. 8, 1896.

FIG. 1.

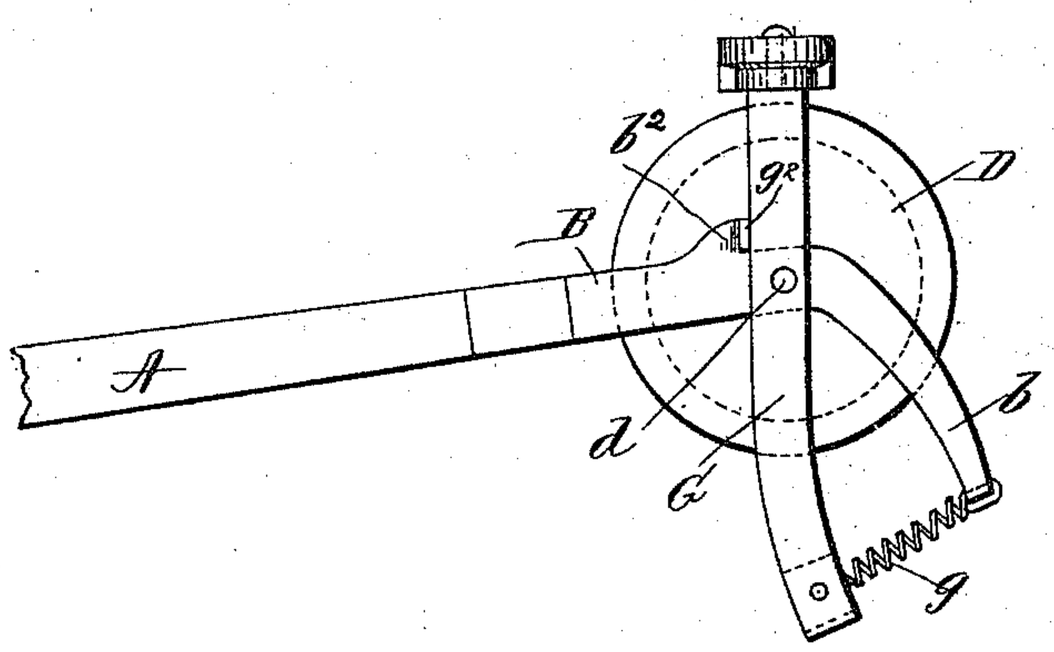
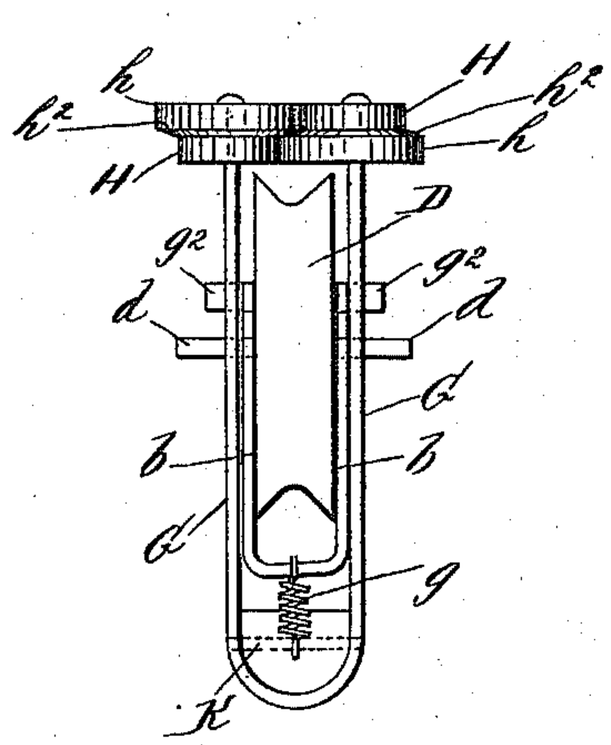


FIG. 2.



WITNESS:

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SUPPORT FOR TROLLEY-WHEELS.

SPECIFICATION forming part of Letters Patent No. 572,940, dated December 8, 1896.

Application filed April 16, 1896. Serial No. 587,779. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN F. L. ORTH, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Supports for Trolley-Wheels, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to trolley-wheels such as are usually employed in connection with trolley-cars, and by means of which connection is made with the main trolley-wire or conductor; and the object of the invention is to provide a safety attachment for devices of this class which is designed to prevent the trolley-wheel from being disconnected with the trolley-wire or conductor, and the invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of my improved trolley-wheel support, and Fig. 2 an end view thereof.

In the drawings forming part of this specification, A represents the usual trolley-arm, which in practice is secured to the car in the usual manner, and connected with the end thereof is a yoke B, the sides of which are downwardly curved, as shown in Fig. 1, and said sides are provided with upwardly-directed shoulders or projections b^2 on the parallel portions thereof.

The trolley-wheel D is mounted in the yoke B on the shaft d, which projects through said yoke to a predetermined distance at each side thereof, as shown in Fig. 2, and mounted on the ends of said shaft is a supplemental yoke G, the sides of which are upwardly directed and the lower end of which is connected with the downwardly-curved ends of the sides b of the yoke B by a spring g.

The upper ends of the side of the yoke G are each provided with revoluble wheels or heads H, each of which is provided with an annular flange or shoulder h, and said annular flanges or shoulders are beveled on their inner surfaces, as shown at h^2, and these beveled surfaces are adapted to come in contact, and the annular flange or shoulder on one wheel or head comes in contact with the main portion of the other wheel or head, as clearly shown in Fig. 2, or, in other words, the annular shoulders or flanges h overlap, and thus close the space between the ends of the yoke G.

Secured to or formed on the sides of the yoke G above the shaft d are projecting stops g^2, which are adapted to abut against the shoulders or projections b^2 on the yoke B, and the yoke G is composed of spring metal and the separate sides thereof may be pressed apart or separated, so as to admit of the passage of the main trolley-wire or conductor between the circular heads or wheels H, which are mounted on the ends of the sides of said yoke G, and when thus in position the main trolley-wire or conductor will be retained in connection with the trolley-wheel D by said wheels or heads and cannot be separated from said trolley-wheel without spreading apart the sides of the yoke G, so that said wire or conductor can pass between the circular heads or wheels H.

The ends of the curved sides b of the yoke B are connected as shown in Fig. 2, and the spring g is secured to the cross-piece which forms this connection and to a pin K, which passes through the lower end of the supplemental yoke, and the normal operation of the spring g is to force the upper end of the yoke G or the sides thereof against the shoulder or projection b^2 of the yoke B, and thus always retain said yoke in proper position, and although the position of the yoke G may be varied by striking an object or in turning corners the said parts will naturally return to the position shown in Fig. 1 under all normal conditions, and the main wire or conductor will always be retained in proper place and cannot be accidentally disconnected from the trolley-wheel.

My invention is not limited to the exact form, construction, and arrangement of the various parts as herein described, as it is evident that changes therein and modifications thereof may be made without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with the trolley-arm of

a trolley-car, of a trolley-yoke secured to the end thereof, the sides of which are downwardly curved, a trolley-wheel mounted in said yoke, the shaft of which extends beyond the sides thereof, and a supplemental yoke mounted on said shaft, the end of which is connected with the ends of the sides of the trolley-yoke, and the sides of which are directed upwardly, and provided at the upper ends thereof, with heads or wheels by which the space between said sides is closed, substantially as shown and described.

2. The combination with the trolley-arm of a trolley-car, of a trolley-yoke secured to the end thereof, the sides of which are downwardly curved a trolley-wheel mounted in said yoke, the shaft of which extends beyond the sides thereof, and a supplemental yoke mounted on said shaft, the end of which is connected with the ends of the sides of the trolley-yoke, and the sides of which are directed upwardly and provided at the upper ends thereof with heads or wheels by which the space between said sides is closed, said supplemental yoke being composed of spring metal, substantially as shown and described.

3. The combination with the trolley-arm of a trolley-car, of a trolley-yoke secured to the end thereof, the sides of which are downwardly curved and are provided with projecting stops, a trolley-wheel mounted in said yoke, the shaft of which extends beyond the sides thereof, and a supplemental yoke mounted on said shaft, the end of which is connected with the ends of the sides of the trolley-yoke, and the sides of which are directed upwardly, and provided at the upper ends thereof, with heads or wheels by which the space between said sides is closed, said supplemental yoke being composed of spring metal, and the sides thereof, which are pivotally supported abut against said projecting stops formed on the trolley-yoke, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 14th day of April, 1896.

CHRISTIAN F. L. ORTH.

Witnesses:

CHARLES S. ROGERS,

C. GERST.