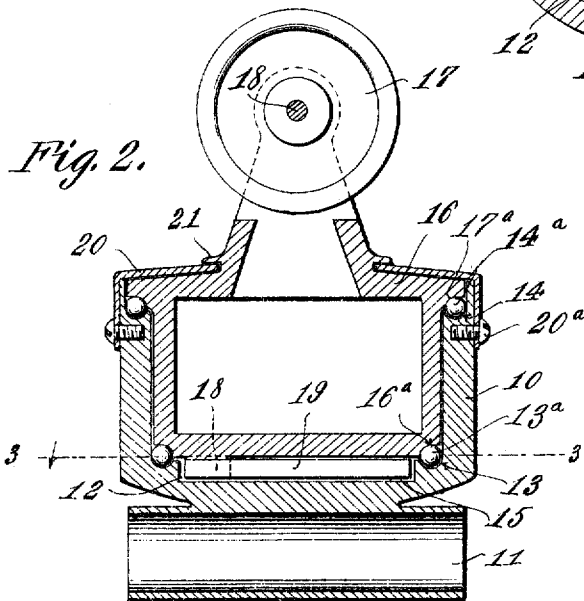
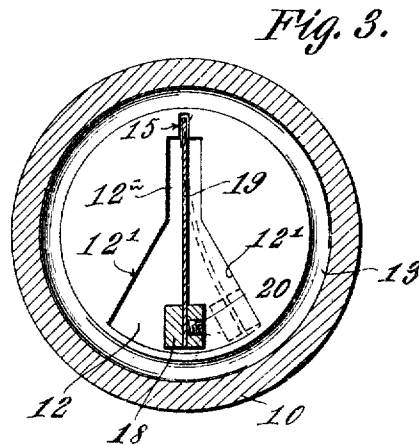
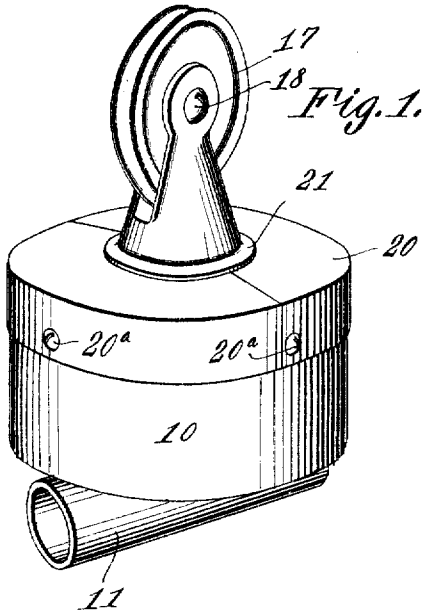


T. R. STAM.
TROLLEY HEAD.
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939,564.

Patented Nov. 9, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

TYSON RUSSELL STAM, OF WEST UNION, IOWA.

TROLLEY-HEAD.

939,564.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, TYSON RUSSELL STAM, a citizen of the United States, residing at West Union, in the county of Fayette and State of Iowa, have invented certain new and useful Improvements in Trolley-Heads, of which the following is a specification.

This invention relates to trolley wheels for electric railway cars and especially to a device of this character in which the trolley wheel will be so mounted with respect to the body portion of the head that it will always right itself or tend to return to a position in a vertical plane parallel to the longitudinal axis of the car.

The invention consists of certain novel features of construction hereinafter fully described and claimed and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a trolley head adapted for attachment to any convenient form of pole; Fig. 2 is a vertical longitudinal section of the same, and Fig. 3 is a horizontal detail substantially on the line 3—3 of Fig. 2.

Throughout the following detail description and on the several figures of the drawings similar parts are referred to by like reference characters.

As indicated in the drawings the base or body portion 10 of the head is provided with a sleeve 11 for attachment to the pole in any convenient manner. The base 10 is cup-shaped and is provided in its bottom with a depression 12 and a plurality of raceways 13 and 14 for the reception of series of anti-friction balls 13^a and 14^a. The bottom of the cup wherein the recess 12 is formed is of peculiar configuration as indicated in Fig. 3. The main portion of the recess 12 is sector-shaped, the edge walls 12' of which terminate at their outer ends near the raceway 13 and the inner ends of said edges are extended parallel to each other forming a neck 12^a at the extreme end of which is provided a notch 15.

The turntable 16, upon which the trolley wheel 17 is journaled on a transverse axis 18, projects into said cup or base member 10 and is provided with raceways 16^a and 17^a complementary to the raceways aforesaid and whereby the turntable is supported upon the balls in both races so that the same may rotate freely within certain limits, as herein-

after described. The body portion of the turntable 16 may otherwise be of any suitable configuration or structure. The turntable is provided on its bottom with a downwardly projecting lug 18 which is adapted to engage either of the aforesaid edges 12' limiting the rotation of the turntable as indicated in dotted lines in Fig. 3. A leaf spring 19 is secured in said lug by detachable means, such for instance as a set screw 20 and the opposite or free end of the spring is located in the notch 15. The normal tendency of the spring, therefore, is to restore the turntable and trolley wheel to the normal midposition indicated in full lines in Fig. 3. It sometimes occurs that the trolley head will be displaced from the wire at the time the car may be making a curve and at which time the trolley wheel is at an angle to the main line of the car. For this reason therefore, it is desirable to have a means for restoring it to normal position.

Any suitable means may be provided for inclosing the aforesaid cup 10 and retaining the turntable in place. As indicated there is provided a two-part cap 20 which is received in an outwardly projecting flange 21 formed preferably integral with the shank of the turntable, whereby the rain will be excluded from the device. The cap 20 may be secured in place in any suitable way as by fastening screws 20^a.

The trolley head described herein may be made of any suitable dimensions or materials and certain details of construction may be varied within the spirit of the invention hereinafter claimed.

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

1. In a trolley head, the combination of a cup having a recess in its bottom, a turntable rotatably mounted within the cup, and having a lug projecting downwardly into said recess to engage opposite walls of the latter, and limit the rotation of the said cup, a spring mounted in the recess and connecting the cup with the lug of the turntable and normally holding said turntable in a predetermined position, said spring being housed between the bottom of the cup and the turntable, and a trolley wheel carried by the turntable.

2. In a trolley head, the combination of a cup having a recess in its bottom, said recess

being sector-shaped and terminating at one end in a notch, a turntable rotatably mounted in said cup and having a lug extending into the recess to limit the rotation thereof, a leaf spring secured in said lug at one end and extending at its other end into said notch whereby the turntable will be maintained in normal position, means inclosing the cup

and retaining the turntable in position, and a trolley wheel carried by the turntable. 10

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

TYSON RUSSELL STAM.

Witnesses:

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