R. S. WOODWARD, JR.
CAR JOURNAL ROLLER BEARING.
APPLICATION FILED JUNE 27, 1912.

1,223,335. Patented Apr. 17, 1917.

FIG. 1.

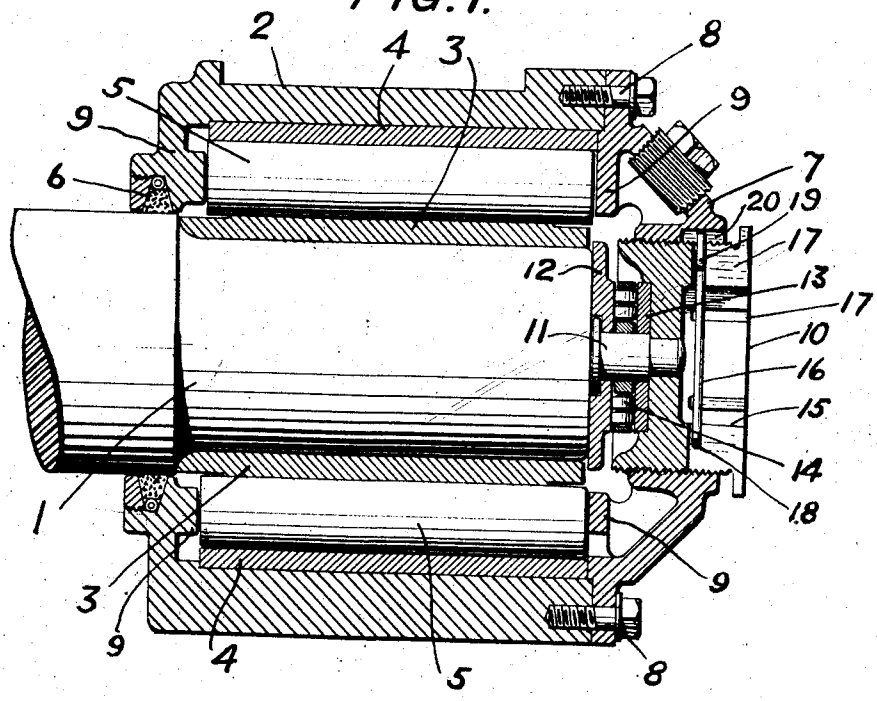


FIG. 2.

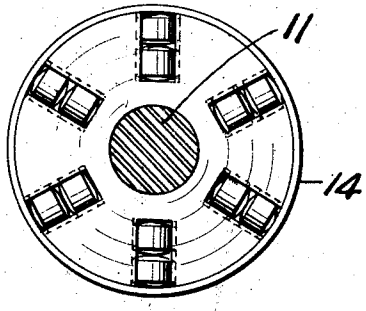
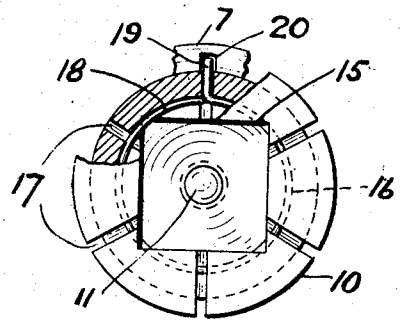


FIG. 3.



WITNESSES:
Robt. R. Kitchel.
Frank C. French.

INVENTOR
Robert S. Woodward Jr.
BY
Augustus B. Stoughton
ATTORNEY.

UNITED STATES PATENT OFFICE.

ROBERT S. WOODWARD, JR., OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE STANDARD ROLLER BEARING COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

CAR-JOURNAL ROLLER-BEARING.

1,223,335. Specification of Letters Patent. Patented Apr. 17, 1917.

Application filed June 27, 1912. Serial No. 706,171.

To all whom it may concern:

Be it known that I, ROBERT S. WOODWARD, Jr., a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Car-Journal Roller-Bearings, of which the following is a specification.

The principal object of the present invention is to provide a car journal roller bearing which shall be efficient, durable and capable of satisfactory operation under conditions of use in street and other railway service. Another object of the present invention is to provide for convenient inspection, assembly and taking apart and repair of the bearing.

The invention will be claimed at the end hereof, but will be first described in connection with the embodiment selected from other embodiments of it for purposes of illustration in the accompanying drawings, in which—

Figure 1, is a side view principally in section of a roller bearing embodying features of the invention.

Fig. 2, is a face view of the end thrust drawn to a somewhat enlarged scale, and

Fig. 3, is an end view partly in section of the cap.

In the drawings 1 is the axle or journal and 2, is the housing or box. These may conform to the requirements of standard Master Car Builders' trucks. 3, is a sleeve fitted to the axle or journal and 4 is a sleeve fitted to the housing or box. These sleeves may be properly hardened and between them is arranged an annular series of rollers 5 adapted to take the radial thrust. 6, is a dust guard arranged at the rear of the box. 7, is a cover applied to the end of the box and shown as removable by means of the screws 8, so as to permit of the insertion of the sleeve 4 and rollers 5. 9, are flanges which complete the roller race. 10, is a cap detachably arranged to close an opening in the cover 7; as shown the opening and the cap are threaded. The cap is provided with a headed post 11 upon which are mounted hard washers or plates 12 and 13 with the end thrust ring 14 interposed between them so that the two plates 12 and 13 with the interposed member 14 constitute an end thrust for the bearing which is removable and transportable with the cap 10 and which is adjusted by the adjustment of the cap 10. The cap 10 is shown as provided with a cavity 15 adapted for the application of a key or wrench, with a groove 16 communicating with the cavity and with radial notches 17. 18, is a coiled wire having a projecting end 19. When the cap is screwed to its proper position the coil of the wire, being in the groove 16, projects the end 19 into a notch 20 in the cover, thus holding the cap against accidental displacement. The various notches 17 can be made to receive the projecting end 19 of the wire 18 so that the end 19 may be made to project from any of the notches 17 as may be required by the annular position of the cap 10.

What I claim is:

In a roller bearing the combination of an axle, a housing open at its end, an end cover for the housing having an opening therein opposite the end of the axle, a cap having screw-and-thread connection with the opening in the end cover, spring actuated locking means carried by the cap for locking the cap against turning movement in either direction and in respect to the housing, a post secured to the cap and extending toward the end of the axle, and an anti-friction end-thrust bearing carried by the post, substantially as described.

In testimony whereof I have hereunto signed my name.

ROBERT S. WOODWARD, JR.

Witnesses:

FRANK E. FRENCH,

CLIFFORD K. CASSEL.