B. R. BARTO.

BEARING.

APPLICATION FILED OCT. 13, 1916.

1,246,699.

Patented Nov. 13, 1917.

FIG. 1.

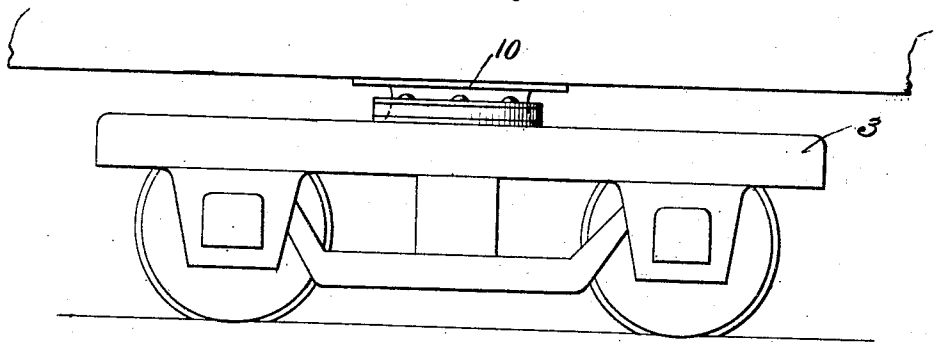


FIG. 2.

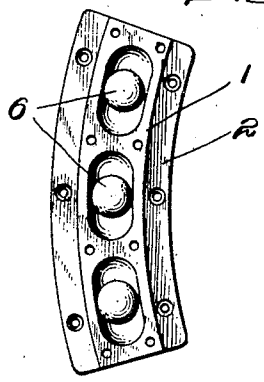


FIG. 3.

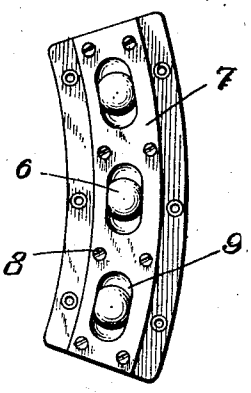


FIG. 4.

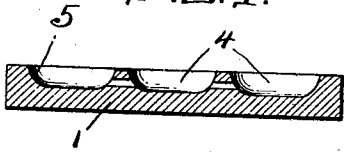


FIG. 5.

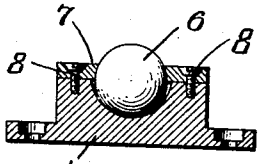


FIG. 6.

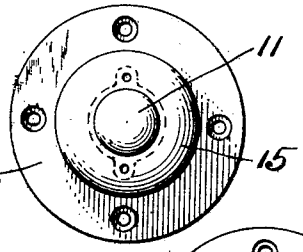


FIG. 7.

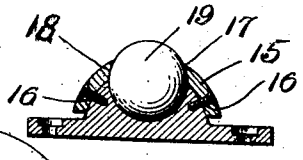
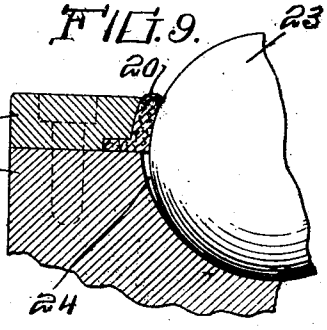


FIG. 9.



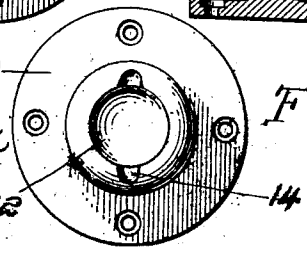


FIG. 8.

Witness
A. E. Newkirk

Inventor
B. R. Barto

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

BENJAMIN R. BARTO, OF WOODLAWN, PENNSYLVANIA.

BEARING.

1,246,699. Specification of Letters Patent. Patented Nov. 13, 1917.

Application filed October 13, 1916. Serial No. 125,509.

To all whom it may concern:

Be it known that I, BENJAMIN R. BARTO, a citizen of the United States, residing at Woodlawn, in the county of Beaver and State of Pennsylvania, have invented new and useful Improvements in Bearings, of which the following is a specification.

This invention relates to a bearing for car trucks by means of which friction may be reduced between the truck and the body of the car when the car is making a turn and has for its primary object to so construct the bearing that the same will be self lubricating.

An object of the invention is the novel manner of constructing the bearing so that the balls may be readily removed while at the same time have free play within the bearing.

An important feature of my invention is the manner of separating the balls from each other so that each ball only sustains a portion of the weight and at no time is the pressure upon one ball transmitted through the bearing to an adjacent ball.

Besides the above my invention is distinguished in the use of a cap so constructed and associated with the ball that the latter will be held against displacement and the exterior surface thereof thoroughly cleansed of accumulations.

With these and other objects in view the invention will be better understood from the following detail description taken in connection with the accompanying drawing:—

Figure 1 is a view illustrating my invention applied to the car truck.

Fig. 2 is a top plan view of the base.

Fig. 3 is a top plan view of the device.

Fig. 4 is a longitudinal sectional view of the base.

Fig. 5 is a cross sectional view of the bearing.

Fig. 6 is a plan view of a modified form of my invention.

Fig. 7 is a sectional view thereof.

Fig. 8 is a plan view of the base of the modification.

Fig. 9 is a sectional view of another modification.

Referring to the drawing and more particularly to Figs. 1 to 5 inclusive the numeral 1, designates a base having flanges 2 by means of which the base may be secured to the car truck 3. The base is formed with series of elongated pockets 4 curved at each end as indicated at 5 so that the balls 6, mounted in the pocket may have the proper play. For the purpose of retaining the balls within the pocket I provide a cap 7 detachably secured to the base by the screws 8. The cap is provided with a plurality of openings 9 through which protrude a portion of the balls so that the same may engage the plate 10 carried by the body of the car when the latter is taking a curve.

At this point I wish to call attention to the fact that although I show the cap provided with elongated openings the same may be constructed with openings of a size to singly engage the exterior surface of the balls so as to remove accumulations from the latter as clearly illustrated in Fig. 5.

In that form of my invention illustrated in Figs. 6, 7 and 8 I have shown a single ball 11 mounted in a semi-spherical pocket 12 in a semi-spherical extension of the base 13 and with which communicate oil recesses 14. In this particular instance the cap 15 is of semi-spherical construction and is detachably connected to the base by screws 6. By this construction it will be seen that the sharpened edges 17 of the opening 18 in the cap will engage the exterior surface of the ball 19 for removing accumulations and because of the outline of the cap said accumulations will pass in a downward direction away from the ball.

In Fig. 9 I have shown a strip of absorbent material 20 clamped between the cap 21 and base 22 and continuously bearing upon the exterior surface of the ball 23 with the result that accumulations are removed from the ball and oil is prevented from rising from the pocket 25 caused by the adhesive action between the exterior surface of the bearing and the oil.

From the foregoing description it will be seen that I provide a bearing that is self oiling and self cleaning and is of substantial construction. A bearing used for the purpose set forth is subject to great wear by the abrasive action of flying particles thrown up from the road bed by the rotating action of the car wheels. My invention is so constructed as to readily take care of this ac-

tion and requires oiling only at long intervals.

Having described my invention what I claim is: —

A bearing consisting of a base formed with pockets, balls arranged in the pockets and a cap detachably secured to the base and adapted to retain the balls in the pockets and cleanse the outer surface of the balls, the outer surface of said cap sloping downwardly away from the balls and a strip of absorbent material arranged between the cap and base and engaging the ball.

In testimony whereof I affix my signature.

BENJAMIN R. BARTO.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."