

P. N. MOORE.
 ROLLER SIDE BEARING.
 APPLICATION FILED JUNE 27, 1910.

988,586.

Patented Apr. 4, 1911.

Fig. 4.

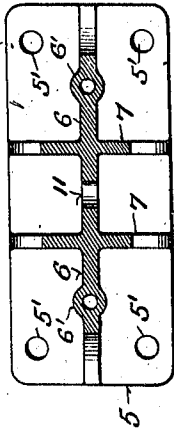


Fig. 3.

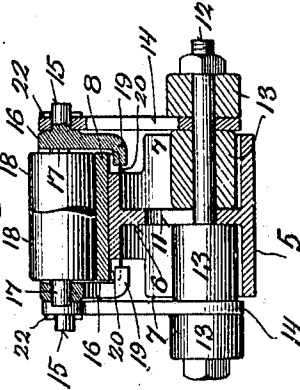


Fig. 1.

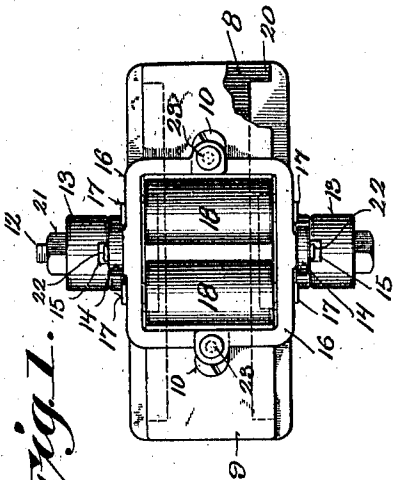
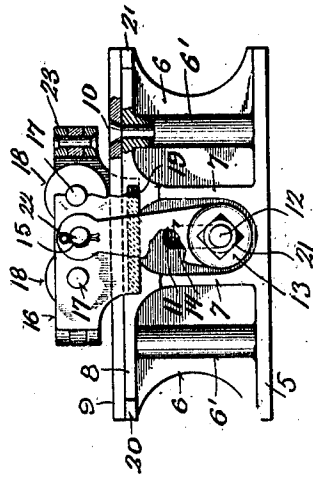


Fig. 2.



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UNITED STATES PATENT OFFICE.

PETER N. MOORE, OF MILWAUKEE, WISCONSIN.

ROLLER SIDE BEARING.

988,586.

Specification of Letters Patent.

Patented Apr. 4, 1911.

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To all whom it may concern:

Be it known that I, PETER N. MOORE, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Roller Side Bearings; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in what is herein particularly set forth with reference to the accompanying drawings and pointed out in the claims of this specification, its object being to provide simple, economical and efficient roller side bearings applicable to railway-car trucks in opposition to car-bodies thereon, provision being had for travel of the rollers of each bearing, under pressure, on a supporting surface in either of two directions from their normal position to which they have automatic return when the pressure is removed.

Figure 1 of the drawings represents a plan view of a roller side bearing in accordance with my invention partly broken away; Fig. 2, a side elevation of the same partly broken away and in section; Fig. 3, an end elevation of the bearing partly broken away and in section, and Fig. 4, a horizontal section of the bearing-stand.

Referring by numeral to the drawings 5 indicates the horizontal base, 6 the longitudinal center web, 7 each of a pair of transverse webs and 8 the horizontal top of a single casting constituting the stand of my improved roller bearing, the base of this stand being provided with apertures 5' for bolts by which to rigidly secure the same upon a railway-car truck. The top of the stand has a wear-plate facing 9 bolted thereto, the bolts 10 being in engagement with enlargements 6' of the web 6 of said stand.

Midway between the transverse webs 7, the longitudinal web 6 of the stand is provided with a vertical slot 11 engaged by a bolt-rod 12 upon which preferably cylindrical weights 13 are supported, and the bolt-rod also engages the lower ends of hangers 14 pivotally supported on outer central side lugs 15 of members 16 of a preferably separable carriage-frame in which journals 17 of anti-friction rollers 18 have their bearings, said frame-members being provided with lower horizontal flanges 19 that extend inward to engage and play in side recesses in the top of said stand under the wear-plate 9. By

side recessing the top of the stand, stop-lugs 20 are provided at the ends of the same, and these lugs limit travel, in opposite directions, of the frame in which the rollers are carried in contact with the wear-plate. The flanges 19 of the frame serve as stops opposite the wear-plate 9 to limit upward play of the frame or roller-carriage aforesaid and thus shocks detrimental to the bolt 12 are avoided.

The hangers 14 are preferably fashioned to have a preponderance of weight at their lower ends and thus supplement the weights 13 on the bolt 12 upon which a nut 21 is run to secure the same in its engagement with said hangers and weights. The hangers are held in connection with the lateral lugs 15 of the roller-carriage by split-keys 22 engaging said lugs.

The members 16 of the carriage-frame are preferably fashioned at their ends to have tongue-and-groove connection one with the other, the joints being secured by bolts or rivets 23, and it is also preferable to fashion the ends of said frame-members so that each member has a tongue extremity and a groove extremity matching similar extremities of the other members. The carriage being separable, the assemblage of the rollers therein is facilitated.

In practice, when the carriage travels in either direction from normal position, under pressure upon the bearing-rollers 18, and the resulting sway of the hangers 14 causes a lift of the weights 13, because of the engagement of the bolt 12 with the vertical slot 11 in the web 6 of the stand. Pressure being removed from the rollers, there is descent of the weights to thereby restore the roller-carriage and parts in connection therewith to normal position.

The construction and arrangement of parts shown and described constitutes a practical form of my invention, but the roller side bearing herein disclosed may be varied in matters of detail without departure from the scope of the following claims.

I claim:

1. A roller side bearing comprising a vertically slotted stand, a carriage-frame, and rollers therein mounted on the stand, hangers suspended in connection with said frame, and a weighted hanger-supported rod that extends through the slot in said stand.

2. A roller side bearing comprising a vertically slotted stand, a carriage-frame, and

rollers therein mounted on the stand, hangers suspended in connection with said frame, a hanger-supported rod that extends through the slot in said stand, and a series of weights 5 confined on the rod.

3. A roller side bearing comprising a vertically slotted stand, a carriage-frame having outer central side lugs, stand-opposing rollers, mounted in said frame, hangers pivotally suspended on said lugs, and a weighted 10 hanger-supported rod that extends through the slot in the stand.

4. A roller side bearing comprising a vertically slotted stand, a separable carriage-frame, stand-opposing rollers mounted in the frame, hangers suspended in connection with said frame, and a weighted hanger-supported rod that extends through the slot in said stand. 15

5. A roller side bearing comprising a vertically slotted stand, a separable carriage-frame, stand opposing rollers having journals engaging the sides of the frame, hangers suspended in connection with said frame, 20 and a weighted hanger-supported rod that extends through the slot in said stand.

6. A roller side bearing comprising a vertically slotted stand, a separable carriage-frame having outer central side lugs, stand-opposing rollers having journals engaging the sides of the frame, hangers pivotally suspended on said lugs, and a weighted hanger-supported rod that extends through the slot in said stand. 30

7. A roller side bearing comprising a vertically slotted stand having a top thereof provided with side recesses, a carriage-frame having inner side flanges that engage and play in said recesses, stand-opposing rollers 35 mounted in the frame, hangers suspended in connection with said frame, and a weighted hanger-supported rod that extends through the slot in said stand.

8. A roller side bearing comprising a vertically slotted stand having the top thereof provided with side recesses and a wear-plate facing, a carriage-frame having inner side flanges that engage and play in said re- 45

cesses under said facing, stand-opposing rollers mounted in the frame, hangers suspended in connection with said frame, and a weighted hanger-supported rod that extends through the slot in said stand. 50

9. A roller side bearing comprising a stand in the form of a casting consisting of a base, a longitudinal center web vertically slotted midway of its length, suitably arranged transverse webs and a top having side recesses therein, a carriage frame having inner side flanges that engage and play 55 in said recesses, stand-opposing rollers mounted in the frame, hangers suspended in connection with said frame, and a weighted hanger-supported rod that extends through the slot in said stand. 60

10. A roller side bearing comprising a stand in the form of a casting consisting of a base, a longitudinal center web vertically slotted midway of its length, suitably arranged transverse webs and a top having side recesses therein, a carriage frame having inner side flanges that engage and play in said recesses, a wear-plate facing on the stand-top, a carriage frame having inner side flanges that engage and play in said 65 recesses under said facing, stand-opposing rollers mounted in the frame, hangers suspended in connection with said frame, and a weighted hanger-supported rod that extends through the slot in said stand. 70

11. A roller side bearing comprising a vertically slotted stand, a carriage frame in sections having tongue-and-groove union, means for securing the joints, stand-opposing rollers mounted in the frame, hangers 75 suspended in connection with said frame, and a weighted hanger-supported rod that extends through the slot in said stand. 80

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee in the county of Milwaukee and State of Wisconsin in the presence of two witnesses. 85

PETER N. MOORE.

Witnesses:

JAMES GEARY,
CLEO. DERFAN.