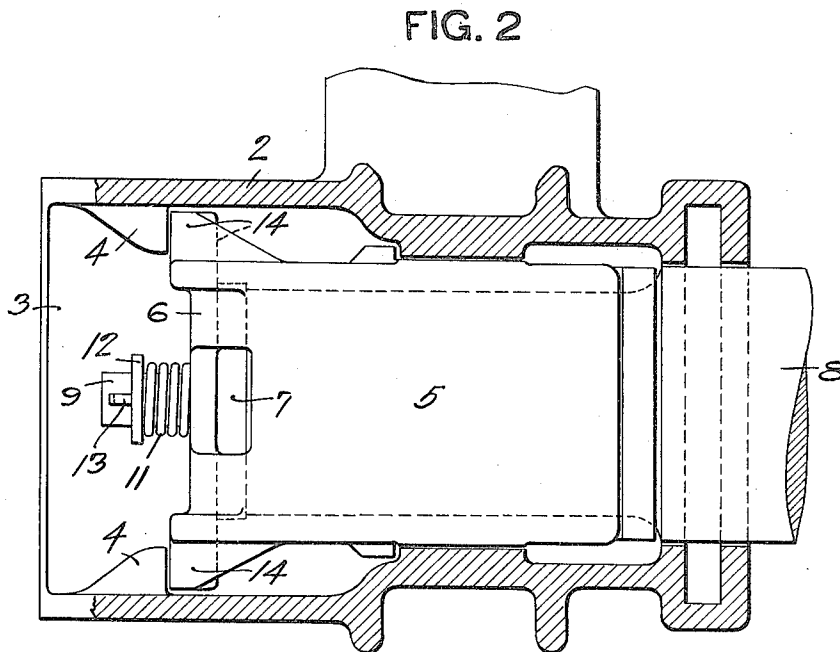
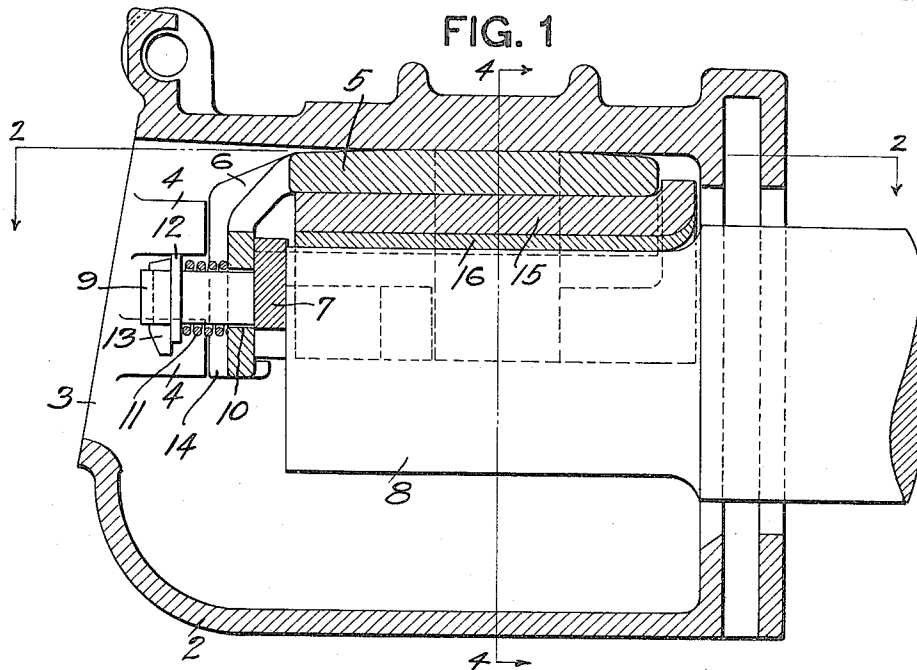


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JOURNAL BOX BEARING.
APPLICATION FILED APR. 25, 1913.

1,127,963.

Patented Feb. 9, 1915.

2 SHEETS-SHEET 1.



WITNESSES.

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INVENTOR.

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FIG. 3

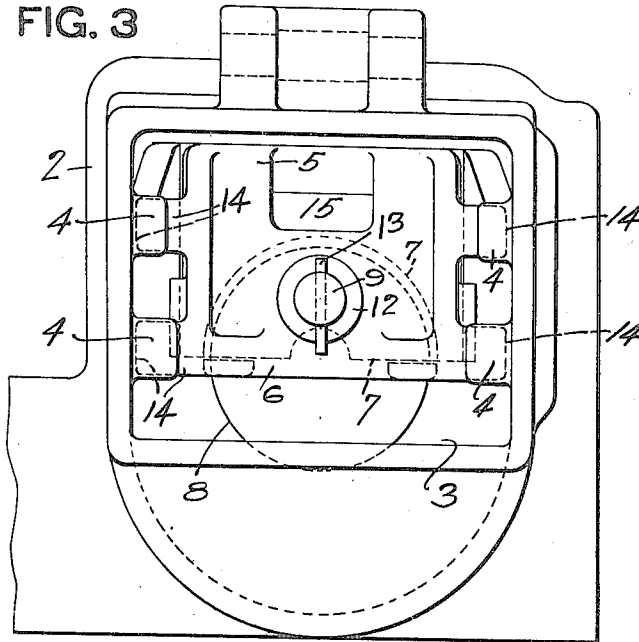
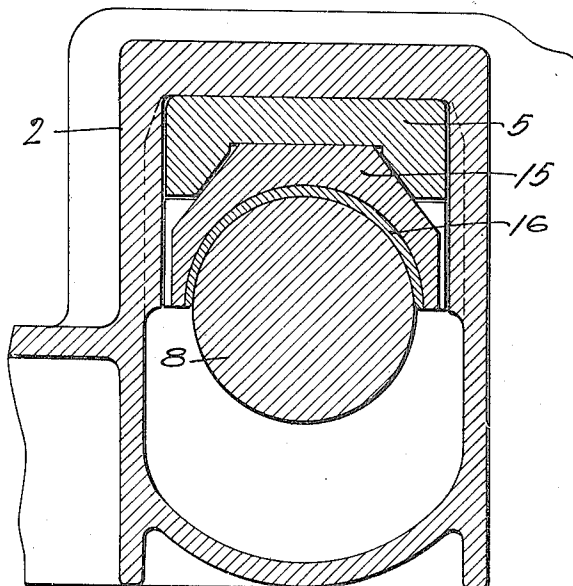


FIG. 4



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UNITED STATES PATENT OFFICE.

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JOURNAL-BOX BEARING.

1,127,963.

Specification of Letters Patent.

Patented Feb. 9, 1915.

Application filed April 25, 1913. Serial No. 763,545.

To all whom it may concern:

Be it known that I, ANDREW CHRISTIANSON, a citizen of the United States, and resident of Butler, in the county of Butler and State of Pennsylvania, have invented a new and useful Improvement in Journal-Box Bearings; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to journal-box bearings.

In trucks for railway cars provision must be made for controlling the end thrust of the axles in the journal-boxes, and heretofore it has been customary to provide against the outward thrust by having a lug cast or formed on the inside face of the top of the journal-box with which the wedge is adapted to engage and so prevent undue outward movement of the axle. This construction however has proved inefficient in that the lug being located at the top of the journal-box could not be made deep enough to take up the thrust in line with the axial line of the axle, and being at the top become worn off on its lower edge by the continual battering which it received by the outward and upward thrust of the axle, so that in time it became ineffective to properly restrain this outward movement of the axle. Unless this outward movement of the axle is restrained, it causes swaying of the car and bad riding results.

The object of my invention is to provide for the controlling of the end movement of the axle farther down near the axial line of the line of the axle, so as to give a more even thrust and prevent the wearing away of the restraining lugs, and providing a construction in which the swaying of the car is prevented and the discomfort attendant therewith avoided.

To these ends my invention comprises the employment of a lug or lugs on the side of the journal box and lugs on an overhanging portion of the wedge adapted to engage the lugs on the journal-box, said lugs being so arranged that when the journal-box is jacked up the lugs on the overhanging portion of the wedge are thrown out of register with the lugs on the journal-box, so that the wedge may be readily removed.

In the accompanying drawing Figure 1 is a longitudinal section of a journal box and the journal bearing showing my invention;

Fig. 2 is a horizontal sectional view; Fig. 3 is a front view, and Fig. 4 is a cross section on the line 4—4 Fig. 1.

In the drawing, the numeral 2 designates a suitable journal-box provided with the front opening 3 to be closed by the ordinary lid (not shown). Formed on the inner side wall of the journal-box 2 are the lugs 4, said lugs being located at a suitable distance apart. The wedge 5 has the overhanging end portion 6 which is adapted to support the check-plate 7 interposed between said overhanging portion 6 and the end of the axle 8. The check-plate 7 has the stud 9 formed integral therewith which projects through the opening 10 in the overhanging portion 6, and a spring 11 surrounds said stud and is interposed between the outer face of the overhanging portion 6 and the washer 12 which is held in place by the key 13 passing through the stud 9. The journal-brass 15 is interposed between the wedge 5 and the axle with an intervening layer of Babbitt or like metal 16. This bearing-brass extends down so as to inclose half or approximately half of the axle as indicated in Fig. 4, and said brass in this way controls the lateral movement of the axle being interposed between said axle and the side of the journal-box.

Extending out from the side of the overhanging portion 6 are the lugs 14 which are adapted to register with the lugs 4 when the parts are assembled in the positions indicated in Fig. 1. These lugs 14 engaging the lugs 4 control the longitudinal movement of the axle outwardly and, as said lugs are located below the top of the box and the lower lug is in substantially the axial line of the axle, it is apparent that the outward thrust of the axle is more uniformly resisted, and said lugs offer a positive and practically continuous abutment.

When it is desired to remove the wedge 5 the journal-box is jacked up in the ordinary manner and the lugs 4 are brought up into a position above the lugs 14 and out of line with said lugs 4, and the wedge can be removed without any difficulty.

By my invention I provide for the more uniform resistance of the outward thrust of the axle, while at the same time any upward movement of the axle does not have any effect to reduce the efficiency of my device as is the case where the lug is formed on the

top of the box and which becomes worn by this upward movement of the axle and the striking of the wedge on said lug which tends to wear off the lug, and in time its efficiency to retard the outward movement of the axle is destroyed.

What I claim is:

The combination of a journal-box having lugs spaced apart one above the other on the inner side walls, a wedge having an overhanging portion, a check-plate supported thereby, a journal-brass, and lugs on said

overhanging portion adapted to register with the spaced lugs on said journal-box, whereby when said journal-box is raised, said lugs are thrown out of register to permit the withdrawal of said wedge.

In testimony whereof, I the said ANDREW CHRISTIANSON have hereunto set my hand.

ANDREW CHRISTIANSON.

Witnesses:

ROBERT C. TOTTEN,
JOHN F. WILL.

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