May 5, 1931. J. D. DINES 1,804,251

BEARING

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Fig. 1.

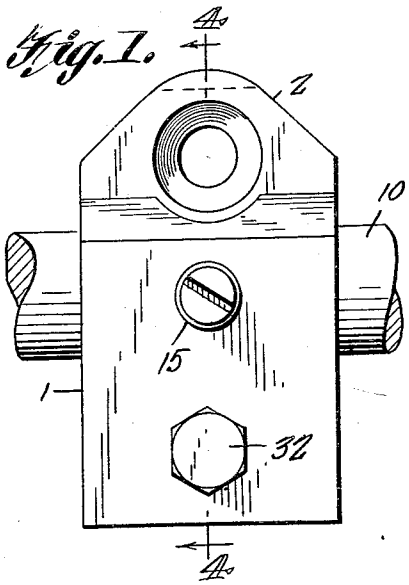


Fig. 2.

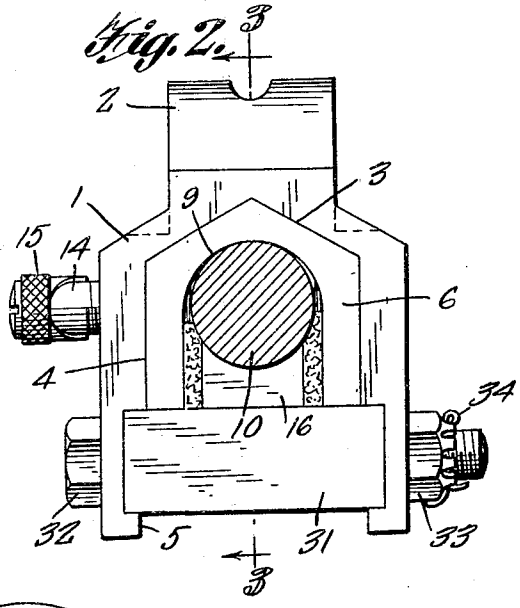


Fig. 3.

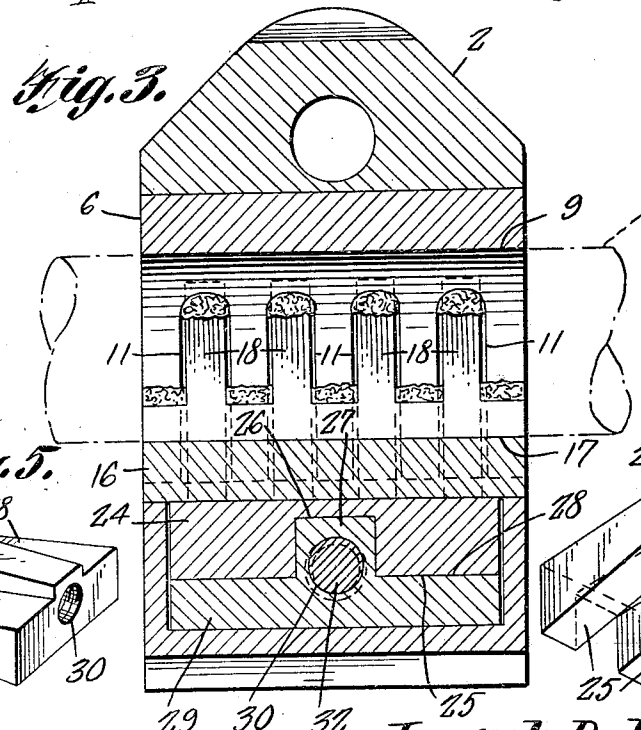


Fig. 5.

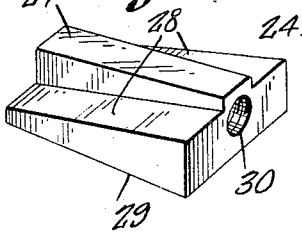
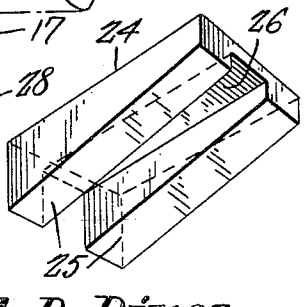


Fig. 6.



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BEARING

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Fig. 4.

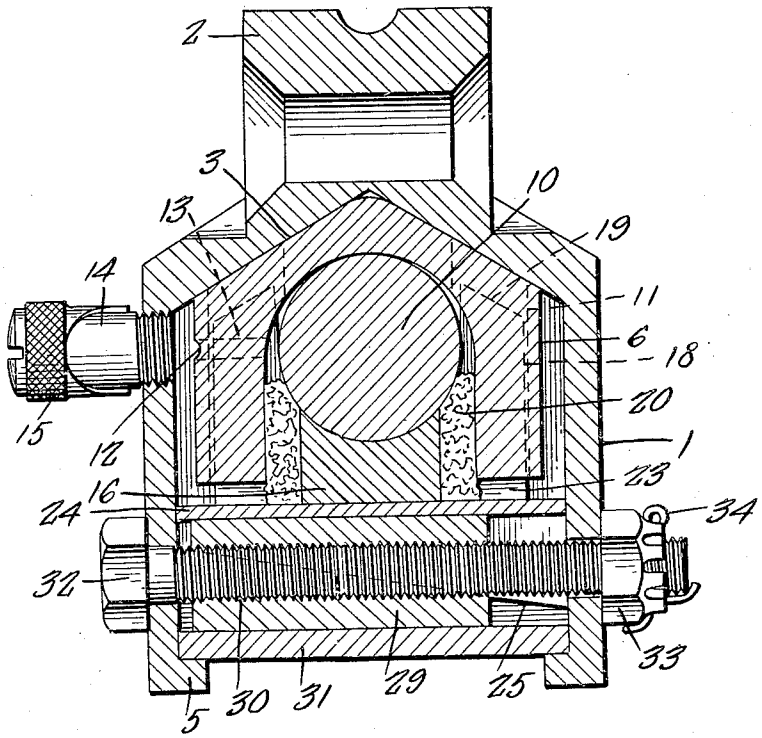


Fig. 7.

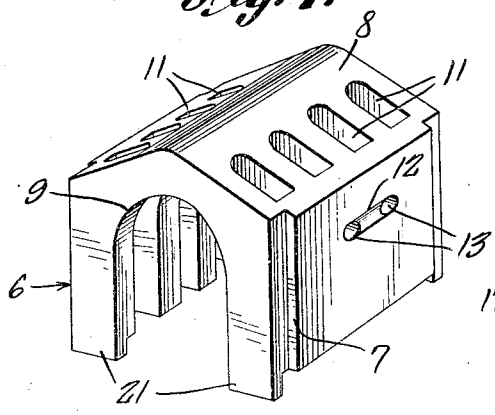
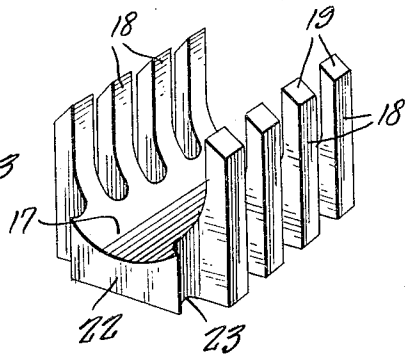


Fig. 8.



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Patented May 5, 1931 1,804,251

UNITED STATES PATENT OFFICE

JOSEPH D. DINES, OF TEMPE, ARIZONA

BEARING

Application filed March 24, 1930. Serial No. 438,559.

My present invention has reference to a journal bearing, and my primary object is the provision of a bearing that shall comprise an upper and a lower bearing brass having interengaging means therebetween for holding the same against longitudinal movement, a wick or cotton waste with means for feeding a lubricant thereto for delivering the same onto the journal, and means for adjusting the lower brass with respect to the upper brass and likewise with respect to the journal to compensate for any wear between the bearing members and said adjusting means being operable from the exterior of the bearing.

For a full and comprehensive understanding of the invention reference is to be had to the accompanying drawings which form part of this application.

In the drawings:

Figure 1 is a side elevation of a bearing in accordance with this invention.

Figure 2 is an end view thereof.

Figure 3 is an enlarged sectional view on the line 3—3 of Figure 2.

Figure 4 is a sectional view approximately on the line 4—4 of Figure 1.

Figure 5 is a perspective view of the slidable wedge.

Figure 6 is a similar view of the tapered supporting block for the lower bearing member.

Figure 7 is a similar view of the upper or fixed bearing member.

Figure 8 is a similar view of the lower movable bearing member.

The box or casing 1 of the improvement has its top formed with a lug extension 2 provided with a transverse aperture for the reception of means for securing the box upon a suitable support. The box has a transverse opening therethrough, and the upper wall provided by this opening is tapered from the sides to the center thereof, as indicated by the numeral 3. The ends of the box 1, from the angle top 2 are formed with inwardly projecting lugs or flanges 4 which terminate a suitable distance from the ends of the sides of the box and the lower corners of the box have their sides formed with inwardly directed lugs or flanges 5.

There is seated in the upper portion of the box 1 and held from longitudinal movement by contact with the lugs or flanges 4 the upper and fixed bearing brass or block 6. The brass 6 has its vertical corners reduced to form shoulders 7 that contact with the inner walls of the lugs or flanges 4 and the top of the box is peaked or is inclined outwardly from the sides thereof to its center, as indicated by the numeral 8, and the peaked top contacts with the angle top walls 7 of the box 1.

The outer bearing block 6 is provided with a transverse opening whose upper wall is rounded, as at 9, and this rounded wall is struck at a greater curvature than the journal 10 which contacts with the said wall. The block 6 is provided with a series of equidistantly spaced vertically disposed openings 11 which communicate with the sides thereof and also pass through the oppositely beveled or inclined surfaces at the top 8 of the brass or block 6 and preferably the inner walls provided by these openings are round. The upper bearing brass 6 is, on one of its sides, provided with a transverse groove 12 whose ends are provided with ports 13 that communicate with two of the inner openings 11, and directly opposite the groove 12 the box 1 has screwed through an opening therein a nipple 14 that affords a passage for a lubricant, and the lubricant opening in the nipple is normally closed by a spring influenced sleeve valve 15 of the usual construction. The lower bearing member of the brass or block is indicated by the numeral 16 and is of a less width than the upper block 6. The block 16 has a longitudinally extending opening therethrough whose lower wall is rounded, as at 17, and this lower wall is struck at the same curvature as the cross sectionally round bearing 10 and the said bearing rests on the said wall 17. The sides of the lower bearing member 16 are formed with equidistantly spaced fingers 18, the same being provided by notching or grooving the block from the outer sides thereof and the upper ends of these fingers are cut at downward

angles, as at 19. The fingers are designed to be received through the openings in the block 6 and as disclosed by Figures 2, 3 and 4 of the drawings there is preferably arranged in the space between the fingers 18 and the inner sides of the upper bearing 16 a cotton wick or cotton waste 20 that absorbs the lubricant delivered through the nipple 14 and delivers the same to the bearing blocks and brasses and to the journal 10.

By reference to the drawings it will be noted that the corners of the upper bearing 6 are projected a suitable distance beyond the lower edges of the sides thereof and these projections are indicated by the numerals 21. Also by reference to the drawings it will be seen that the openings 11 enter the inner walls of the sides of the block. The lower ends of the bearing member 16 are formed with extensions 22 whose ends are preferably grooved, as at 23, to receive the inner edges of the extensions 21 and the block 24 therein and as far as the description has progressed it will be apparent that the bearing members 6 and 16 are held in proper alinement with each other and against longitudinal movement through the box 1 and that a lubricant is fed between the bearing members and such lubricant is imparted to the journal 10.

The lower bearing block 16 rests on a plate or block 24 whose lower or outer face is tapered, as at 25, and which bearing block is provided with a centrally arranged longitudinal groove 26 that communicates with its inclined or tapered face 25. The groove 26 is designed to receive therein a rib 27 that is centrally formed upon the upper inclined or tapered face 28 of a wedge block 29. The wedge block is of a less length than the bearing block 24 and the said wedge block is centrally provided with a longitudinally round opening 30 which is threaded. Both the blocks 24 and 29 are received in a U-shaped or channeled plate 31 of a size to be snugly received in the cut-away portion in the sides of the box 1 between the flanges 4 and 5, the said channeled member 31 resting upon the lower flanges 5.

Passing transversely through the sides of the box 1 there is the threaded shank of a headed bolt 32. This shank is screwed through the threaded opening 30 in the slidable wedge block 29. The end of the shank which passes through one side of the box 1 has screwed thereon a castellated nut 33 and there is passed through the castellations of the nut and through an opening in the said bolt 32 a cotter pin 34 which holds the bolt from longitudinal movement. It will be apparent that by turning the bolt the wedge member 28 will be caused to travel longitudinally in the channel member and by virtue of such movement the same will raise or permit the lowering of the tapered bearing supporting block 24 and whereby the lower bearing member 16 may be vertically adjusted with respect to the bearing 10 and likewise to the upper and fixed bearing member 6.

Having described the invention, I claim:

1. A bearing for journals comprising a fixed bearing member having a longitudinal opening entering from its lower end, its top struck at a curvature to afford a rest for a journal and the said curved top being at a greater curvature than the cross sectional contour of the bearing, an outer bearing having a longitudinal opening therethrough whose inner wall is round and arranged at the same curvature as the cross sectional contour of the bearing, said outer bearing having its sides provided with equidistantly spaced fingers and the fixed bearing having openings therethrough for the reception of the fingers, said bearings having a cotton waste therebetween, means for feeding lubricant to the waste and means for adjusting the outer bearing with respect to the journal and with respect to the fixed bearing.

2. A bearing for journals including a box having a longitudinal opening therethrough whose top is inclined outwardly from the sides to the center, and whose ends are formed with inwardly directed flanges, a bearing received between the flanges and having a top portion which is peaked to contact with the top of the box, said bearing having a longitudinal opening therethrough whose upper wall is struck at a greater curvature than that of a bearing which contacts with said wall, a lower bearing having a longitudinal opening therethrough whose lower wall is struck at a curvature to that of the bearing, said lower bearing having its sides provided with spaced fingers and the upper bearings having spaced openings therethrough for the reception of the fingers, said upper bearing having its outer face grooved longitudinally and provided with ports at the ends of the grooves which communicate with the inner openings, said box having a normally closed nipple disclosed opposite the groove and providing a lubricant passage, and means in the box affording a rest for the lower bearing and susceptible to movement for adjusting the lower bearing with respect to the upper bearing.

3. A bearing for journals including a box having a longitudinal opening therethrough whose top is inclined outwardly from the sides to the center, and whose ends are formed with inwardly directed flanges, a bearing received between the flanges and having a top portion which is peaked to contact with the top of the box, said bearing having a longitudinal opening therethrough whose upper wall is struck at a greater curvature than that of a bearing which contacts with said wall, a lower bearing having a longitudinal opening therethrough whose lower wall is

struck at a curvature to that of the bearing, said lower bearing having its sides provided with spaced fingers and the upper bearings having spaced openings therethrough for the reception of the fingers, said upper bearing having its outer face grooved longitudinally and provided with ports at the ends of the grooves which communicate with the inner openings, said box having a normally closed nipple disposed opposite the groove and providing a lubricant passage, a block having an outer beveled tapered face arranged in the box and affording a support for the lower bearing, said block having a longtudinal groove passing through the tapered face thereof, a wedge block having a tapered face to contact with that of the supporting block and having a longitudinal rib to be received in a groove of the supporting block and said wedge block having a threaded opening therethrough, a channeled member in the box receiving the blocks therein, a headed bolt passing transversely through the box and threaded through the opening in the wedge block and a castellated nut secured on the outer end of the bolt.

In testimony whereof I affix my signature.

JOSEPH D. DINES.