

W. J. BREWER.

BEARING.

APPLICATION FILED MAR. 10, 1910.

981,055.

Patented Jan. 10, 1911.

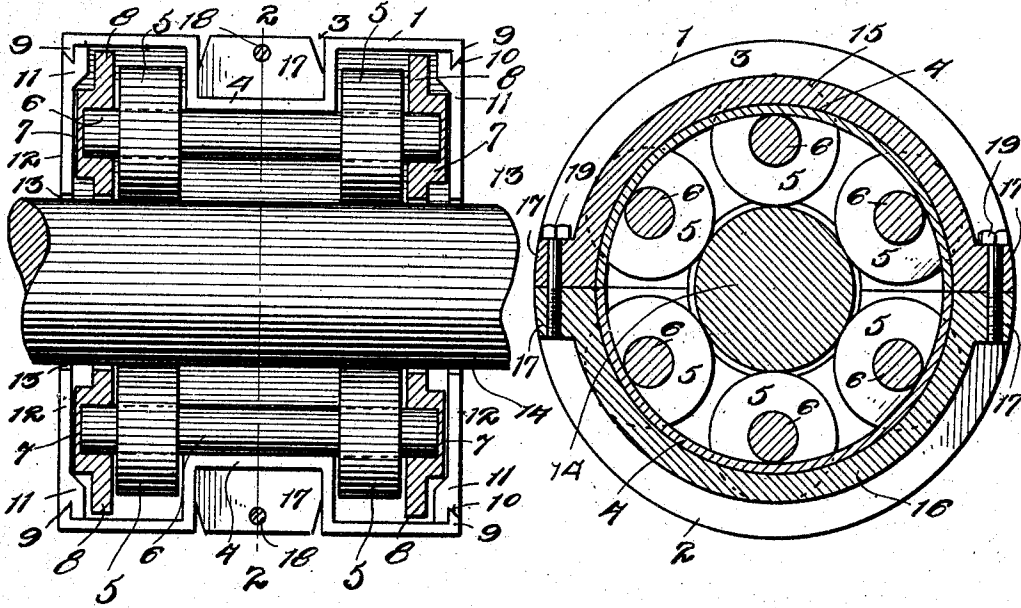
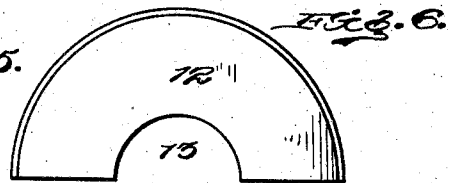
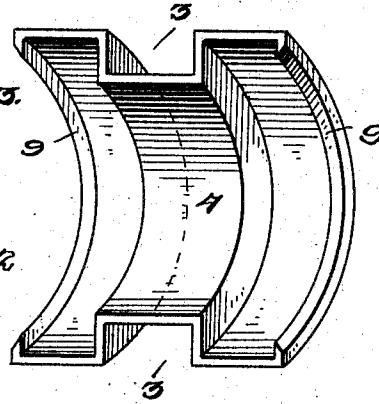
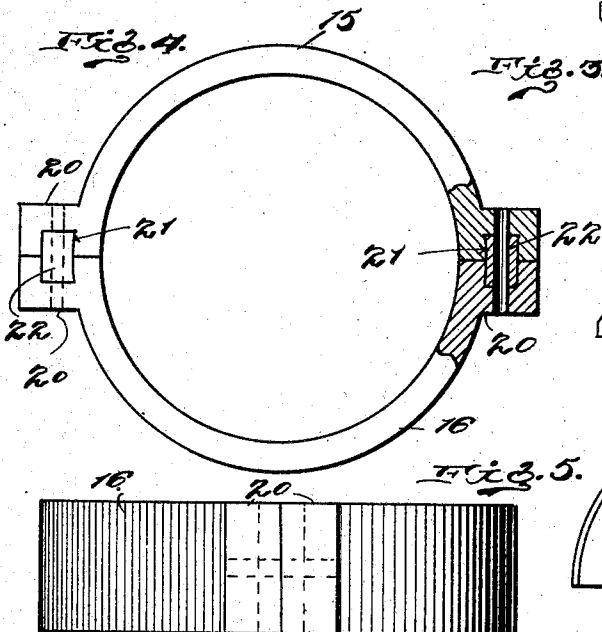


Fig. 1.

Fig. 2.



Inventor

William J. Brewer.

Witnesses

J. W. Wells
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UNITED STATES PATENT OFFICE.

WILLIAM J. BREWER, OF TROY, NEW YORK.

BEARING.

981,055.

Specification of Letters Patent.

Patented Jan. 10, 1911.

Application filed March 10, 1910. Serial No. 548,386.

To all whom it may concern:

Be it known that I, WILLIAM J. BREWER, a subject of the King of England, residing at Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Bearings, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to shaft bearings of the type set forth in my allowed application Serial No. 505,539, filed July 2, 1909, and the principal object of the same is to cheapen the cost of production of the bearing and to simplify the bearing casing shown in said application so that the bearing may be more readily applied to a box, sleeve or the like of a shaft.

In carrying out the objects of the invention generally stated above, it will be understood, of course, that the essential features thereof are necessarily susceptible of changes in details and structural arrangements, certain simple and practical embodiments of which are shown in the accompanying drawings, wherein—

Figure 1 is a view in transverse section of the improved bearing. Fig. 2 is a longitudinal sectional view taken on the line 2—2, Fig. 1. Fig. 3 is a detail perspective view of one section of the improved casing. Fig. 4 is a view in side elevation, partly in section, of a modified retainer ring for holding the sections of the casing assembled. Fig. 5 is a view in front elevation thereof. Fig. 6 is a detail view in elevation of one of the cover plates for the sides of the casing sections.

Referring to said drawings by numerals, 1—2 designate the two sections of the bearing casing, said sections being duplicates and forming a cylindrical casing when assembled. The sections are formed of suitable metal pressed or stamped or cast to provide a central circumferential groove 3 and a corresponding internal ledge 4, in a manner similar to that set forth in my application mentioned in the foregoing. The ledge 4 provides two channels in the casing for the rollers 5 which are mounted on the axles 6, the axles being journaled in the bosses 7 of the spacer rings 8. Said bosses project outwardly from their rings and provide means for preventing the axles working loose in the casing. Said bosses are preferably integral with the rings and may be

formed by a single operation of a suitable stamping machine, or may be cast.

The sections 1—2 are open at their ends and are each provided with inwardly-projecting flanges 9 at their edges. The free edges of said flanges are preferably beveled and are adapted for engagement with the peripheral groove 10 that is formed in the thickened periphery 11 of the sectional end cover plates 12. Said plates 12 are complementally recessed at their meeting edges, as indicated at 13 to form an opening for the shaft 14 to which the improved bearing is applied.

Sections 1—2 are detachably held in assembled position by means of a ring that is formed of two sections 15—16. Said ring sections conform to the contour of the grooves 3 of the casing sections 1—2 and are fitted in said grooves. The ring sections have their ends provided with outstanding laterally-projecting lugs 17 through which bolt openings 18 are formed for the reception of the locking bolts 19 which detachably fasten the end lugs of the ring sections together. Said bolts are threaded, and the openings formed through the lugs of one ring section are also threaded to permit the pressure of the ring sections to be regulated by adjusting said bolts.

As is suggested in Figs. 4 and 5, the lugs 20 of the ring sections 15—16 are slightly spaced from the ends of their sections, which arrangement provides a pocket 21 between the adjacent lugs when the ring sections are in their casing sections retaining position. A wear block 22 is seated in each pocket, the fastening bolts obviously passing through said blocks.

It will be clear from the foregoing that the improved bearing may be readily taken apart, or bodily moved on shaft 14 when necessary or desirable, and also that the employment of the cover plates for the ends of the casing provides an absolutely dust-proof bearing and one from which the lubricating material cannot escape.

What I claim as my invention is:—

1. A bearing comprising complementary casing sections, sectional detachable means surrounding said sections for holding the same assembled, anti-friction means inclosed by said sections, and means for sealing the ends of said sections.

2. A bearing comprising complementary casing sections, a sectional retaining ring

adapted to surround said sections to hold the same in cylindrical form, anti-friction means inclosed by said sections, and means for sealing the ends of said sections.

5 3. A bearing comprising a pair of semi-cylindrical sections, means for detachably retaining said sections in cylindrical form, bearing means inclosed by said sections, and
10 sectional cover plates for sealing the ends of said sections.

4. A bearing comprising a pair of casing sections, means for assembling said sections, sectional cover plates having an interlocking engagement with the ends of said sections,
15 and anti-friction means inclosed by said sections.

5. A bearing comprising a pair of complementary casing sections each provided with a circumferential groove, a sectional retainer
20 ring engaging the grooves of said sections, means for fastening the ends of the said sectional ring together, and anti-friction means inclosed by said casing sections.

6. A bearing comprising a pair of casing
25 sections, each provided with a circumferential groove, a retainer ring section for each groove, said ring sections provided with end lugs, means for detachably fastening the lugs of the ring sections together, and anti-fric-
30 tion means inclosed by said casing sections.

7. A bearing comprising a pair of complementary open-end casing sections, said sections having their end portions provided with an inwardly-projecting flange, a sectional
35 closure plate for the end of each section pro-

vided with a peripheral groove for the reception of said flanges, means for assembling said sections in cylindrical form, and anti-friction means inclosed by said sections.

8. A bearing comprising a sectional casing, 40 spacer rings within said casing and disposed at opposite portions thereof, said rings provided with journal bosses, axles having their ends mounted in said bosses, and anti-friction rollers carried by said axles. 45

9. A bearing comprising a pair of casing sections each provided with a circumferential groove, a retainer ring section for each groove, said ring sections provided with end lugs, said lugs being complementally recessed, a block adapted to be fitted between the recessed lugs of said ring sections, and means for fastening the recessed lugs of one ring section to the lugs of the other ring section. 55

10. A bearing comprising a pair of casing sections, a retainer ring for holding said sections assembled, said ring being in two sections, and having a recessed lug at the ends thereof, bolts for detachably fastening 60 the lugs of the ring sections, and wear blocks closing the pockets formed by the recesses of said lugs.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

WILLIAM J. BREWER.

Witnesses:

Mrs. JOSEPH PODMORE,
BESSIE M. TOLHURST.