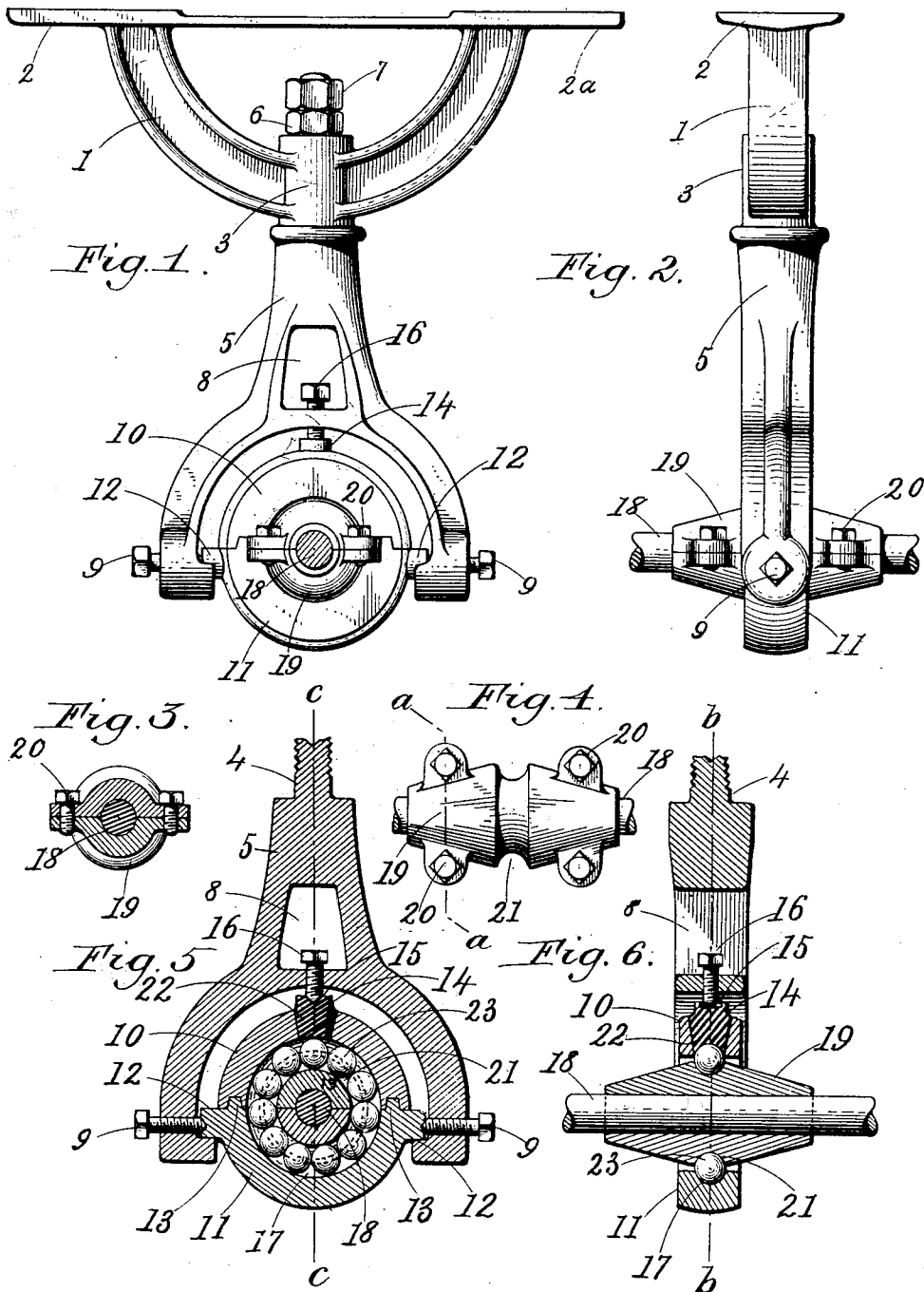


(No Model.)

B. LOBEE.
HANGER FOR SHAFING.

No. 560,297.

Patented May 19, 1896.



Witnesses,
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UNITED STATES PATENT OFFICE.

BART LOBEE, OF BUFFALO, NEW YORK, ASSIGNOR TO HIMSELF AND
GEORGE DUCHSCHERER, OF SAME PLACE.

HANGER FOR SHAFTING.

SPECIFICATION forming part of Letters Patent No. 560,297, dated May 19, 1896.

Application filed February 11, 1896. Serial No. 578,914. (No model.)

To all whom it may concern:

Be it known that I, BART LOBEE, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Hangers for Shafting, of which the following is a specification.

My invention relates to certain improvements whereby the hanger is made easily adjustable in any required direction; and it also relates to certain details of construction, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 represents a front elevation of the hanger complete, showing also a vertical cross-section through the shafting. Fig. 2 represents a side elevation of the same, a portion of the shafting being shown in position therein. Fig. 3 is a vertical cross-section cutting through the shaft and its bearing-collar on or about line *a a*, Fig. 4. Fig. 4 is a top view of the shaft-bearing collar that is rigidly secured to the shaft and rotates with it. Fig. 5 represents a vertical longitudinal section on or about line *b b*, Fig. 6. Fig. 6 is a vertical transverse section through the hanger on or about line *c c*, Fig. 5.

Referring to the drawings in detail, 1 represents the stationary supporting hanger-frame. It is preferably made of cast-iron and is rigidly secured to the ceiling by bolts, which pass through the parts 2 and 2^a in the usual and well-known way. In the lower part of the hanger-frame 1 is a hollow portion 3. It is bored out perfectly true, so as to fit the shank 4, (shown in Figs. 5 and 6,) which is a part of and extends up from the forked frame-piece 5. This shank 4 extends up through the portion 3 and is fitted so as to turn easily therein. It is secured by two nuts 6 and 7, which screw onto the screw-threaded portion of the shank 4, the nut 7 being a jam-nut. This construction allows the forked frame-piece 5 to be adjusted up or down by loosening the jam-nut and then adjusting it to the desired point, after which the jam-nut is tightened again. Through the forked portion 5 is an opening 8, and at each end of the forked portions is a pivotal set-screw 9. A bearing-ring, formed in two parts 10 and 11, is pivot-

ally secured to the forked portion 5. The lower portion 11 is provided with two bearing-lugs 12, into which the points of the set-screws 9 extend for holding it in position, so it can swing thereon. On each upper side of the portion 11 is an upward-extending lug 13, (see Fig. 5,) which projects up into corresponding openings in the top portion 10 of the bearing-ring, so as to keep the two parts exactly in position when together. The top portion 10 of the bearing-ring is provided with an upwardly-extending lug 14, (forming a portion of a removable plug, as will appear farther on,) having a transverse slot or recess 15, (see Figs. 5 and 6,) into which the end of the holding set-screw 16 extends and secures the portion 10 rigidly in place to the lower portion 11 of the bearing-ring when adjusted.

The inner side of the bearing-ring 10 and 11 is provided with an annular substantially semicircular or half-ball-bearing raceway 17. (See Figs. 5 and 6.)

On the shaft 18 is a ball-bearing collar 19, rigidly secured to the shaft by screw-bolts 20, (see Figs. 3 and 4,) having a surrounding ball-bearing semicircular raceway 21. (See Figs. 4, 5, and 6.)

At the top of the portion 10 is a removable plug 22, (shown in Figs. 5 and 6,) having the lug 14 and its slotted portion 15 at the top.

The object of the removable plug is to provide an opening through which the balls 23, that fill, or substantially fill, the annular space formed by the raceways 17 and 21, may be conveniently inserted and the plug then replaced, thereby forming a ball-bearing in which the collar 19, carrying the shaft 18, may rotate easily.

This device forms a convenient means for setting up shafting, as it can be very easily adjusted, and it will not require to be supplied with lubricating material as often as an ordinary bearing, because the lower raceway 17 will hold oil enough to last for a long time. It also avoids the use of cups to catch oil that may drip down, it being necessary with this device to put in only enough to nearly fill the lower part of the raceway 17, so that it will not run over the sides. The raceway will hold sufficient oil to last a long time and thereby avoid the dripping of the

same, the oil being used over and over again by this means.

If desired, the bearing-ring, instead of being formed in the two parts 10 and 11, may be made in one integral piece, and the removable plug 22 will provide the required means for allowing the balls to be conveniently put into the ball-raceway, as hereinbefore described.

10 I claim as my invention—

1. In a hanger for shafting, the combination of a stationary depending supporting portion, with a downward-extending forked portion pivoted thereto in a vertical bearing so as to turn therein, means for securing and adjusting it vertically in said bearing, a supporting-ring consisting of two halves secured together and provided with an annular groove forming one part of a ball-raceway on its inner side, pivotal supports extending inward from the lower ends of the forked portions upon which the supporting-ring is mounted, a collar rigidly secured to the shaft and provided with a surrounding groove forming the

other part of a ball-raceway, and a series of balls located within the two raceways substantially as described. 25

2. In a hanger for shafting, the combination of a stationary depending supporting portion, with a downward-extending forked portion having a pivotal connection therewith, a supporting-ring pivoted within the forked portion and provided with an annular groove on its inner side forming one part of a ball-raceway, a collar secured to the shaft and having a surrounding groove forming the other part of a ball-raceway, a series of balls mounted in said raceway, and a removable plug at the top of the supporting-ring adapted to fit the opening through which the balls are inserted in the bearing and means for securing the plug in place, substantially as described. 30 35 40

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Witnesses:

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