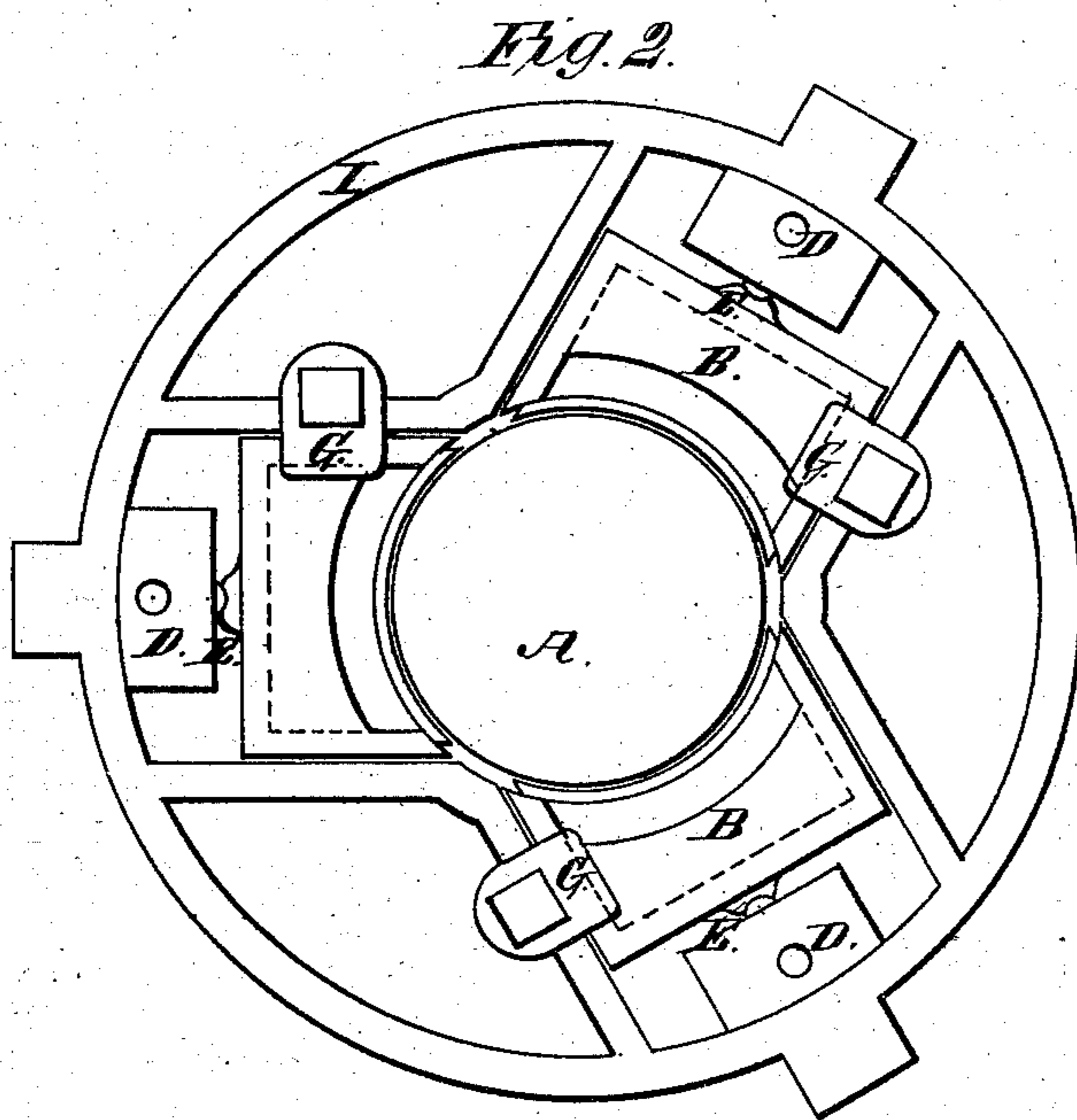
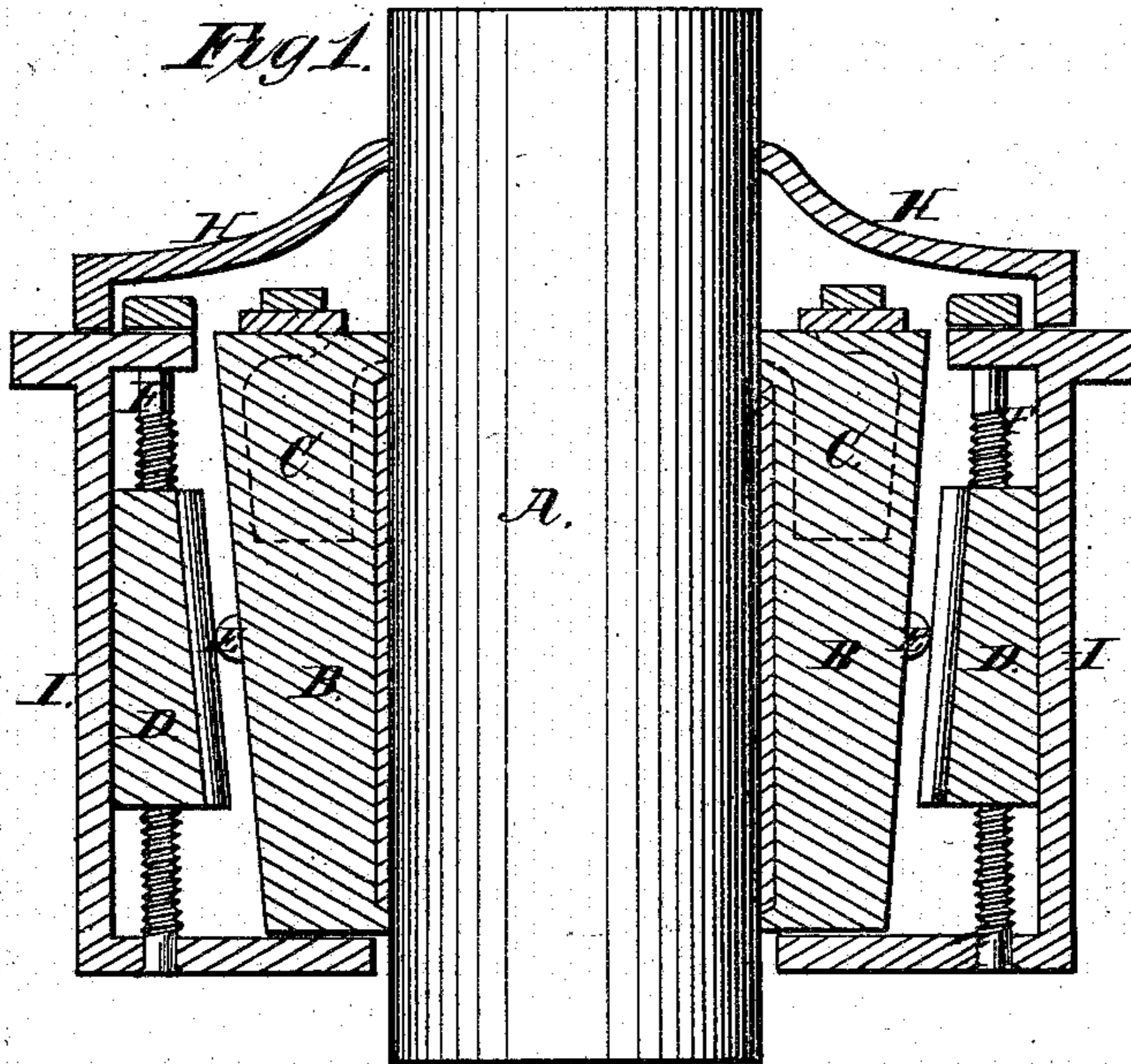


B. E. ORTON.

Bearings for Upright Shaftings.

No. 154,957.

Patented Sept. 15, 1874.



Attest:
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Inventor:
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UNITED STATES PATENT OFFICE.

BRAINARD E. ORTON, OF STERLING, ILLINOIS.

IMPROVEMENT IN BEARINGS FOR UPRIGHT SHAFTINGS.

Specification forming part of Letters Patent No. **154,957**, dated September 15, 1874; application filed July 14, 1874.

To all whom it may concern:

Be it known that I, BRAINARD E. ORTON, of Sterling, in the county of Whitesides and State of Illinois, have invented certain Improvements in Bearings for Upright Shafting, of which the following is a specification:

My invention relates to providing a bearing for upright shafting, that will accommodate itself to the positions of the shaft, whether the latter be out of true or not; and, second, that such bearing shall be self-oiling and secure from dirt.

Figure 1 is a vertical transverse section of my invention. Fig. 2 is a plan view of the same.

I is a cylindrical iron frame containing the parts, such frame being entirely closed when the lid H is thereon, with the exception of three holes in the bottom for bolting down. A is the shaft, passing through the bearing. B is a vertical follower, laterally concave on its inner surface to fit the shaft A. The line of the back surface of the follower B diverges from the line of its face from the bottom of the follower to its top, giving the follower a half-wedge shape. On the center of the back surface of the follower B is cast a small protuberance, E, and in the center of such protuberance is a groove parallel with the follower. The follower B is cast hollow at the space marked C, such cavity C being an oil-chamber. The concave face of the follower B is fitted with babbitt-metal or other anti-friction compositions.

The oil is led out of the chamber C to the shaft A, by a piece of wick or cotton, in such quantity as may be required.

There are three of these followers to each bearing, and they, combined, nearly, but not quite, encircle the shaft. They rest upon the bottom of the frame I, and are kept down, respectively, by the button G. D is a vertical key, having its outer surface perpendicular, and its inner surface parallel with the outer

surface of the follower B. The key D is placed directly behind the follower B, and on the inner face of the key D is cast a longitudinal rib, which fits into the groove in the protuberance E on the outer surface of the follower B. F is a set-screw bolt, having a bearing in the top and bottom of the frame I. The screw-bolt F extends downward entirely through the key D, and works in corresponding threads cut in the key D. The screw-bolt F is turned by means of a small wrench applied to the head of the bolt, and can be turned to either raise or lower the key D; and, by thus raising or lowering the key D, by reason of the contact of the rib on the inner surface of D with the protuberance E on the outer surface of the follower B, the latter is either forced inward or allowed to recede, as may be requisite, while such contact of the key and follower being but at the one point, the follower B is at liberty to align and adjust itself with the shaft A at all times. H is a tight lid, fitting closely around the shaft A, and resting upon the outer edge of the frame I.

The advantages which I claim for my invention are, first, that the bearing may be adjusted to the shaft in any position of the latter, even approximating the perpendicular; and, second, the bearing may be secluded from dirt, and may remain untouched and self-oiling for a month at a time.

The flange cast upon the lower side of the lid H catches upon the head of the screw-bolt F, and prevents the lid from revolving with the shaft.

I claim as my invention—

1. The follower B, provided with the oil-chamber C and the protuberance E, substantially as and for the purpose described.

2. The follower B, key D, and screw-bolt F, in combination, as and for the purpose set forth.

BRAINARD E. ORTON.

Witnesses:

GEO. H. DRAKE,
H. C. WARD.