(No Model.)

W. H. ADAMS.

JOURNAL BOX.

No. 303,784. Patented Aug. 19, 1884.

Fig. 1.

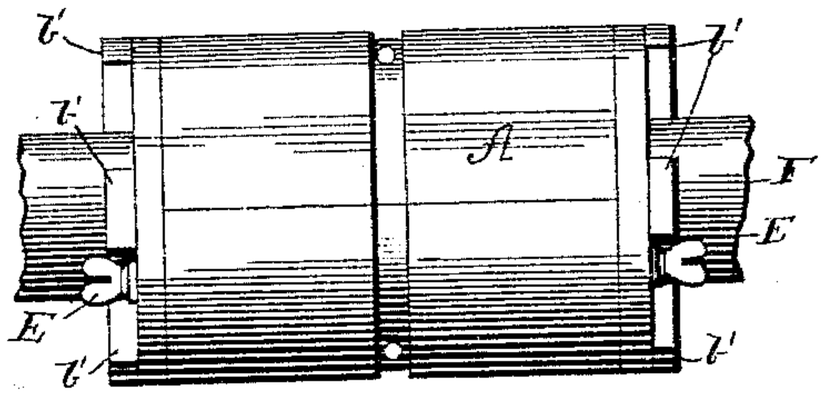


Fig 2

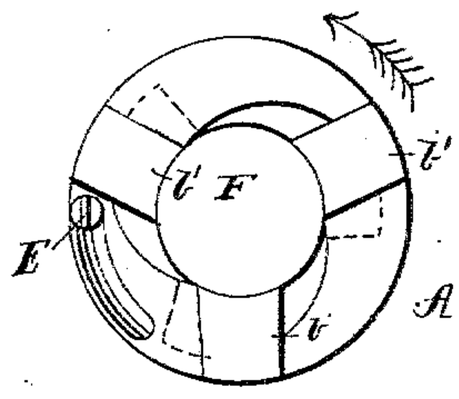


Fig 3

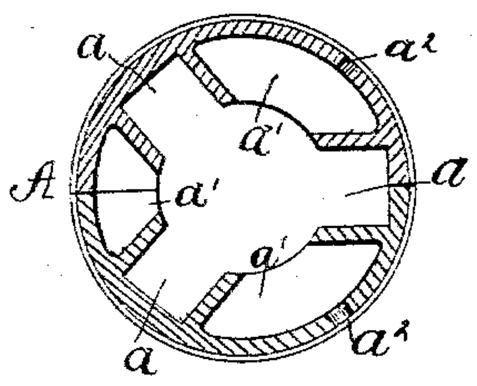


Fig 4

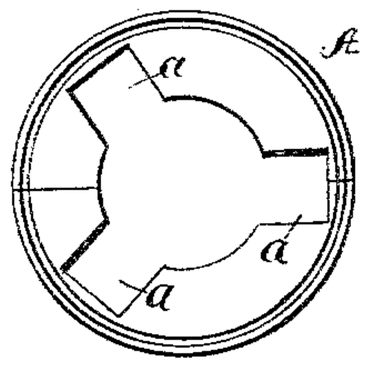


Fig 5

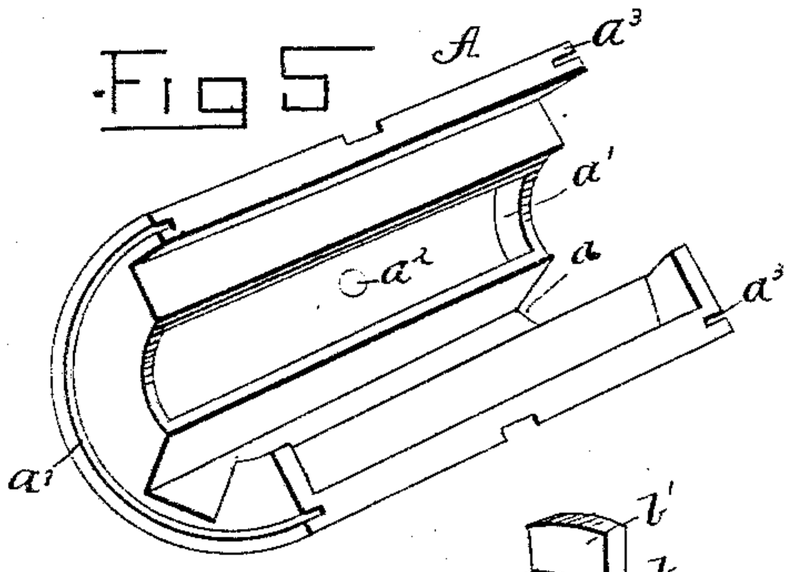


Fig 7

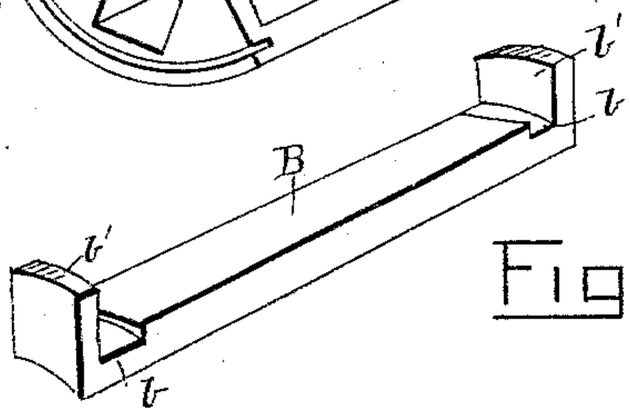


Fig 6

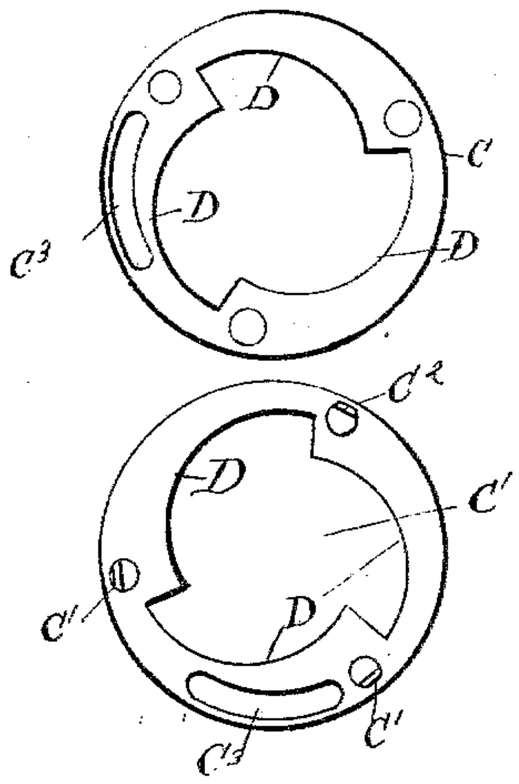
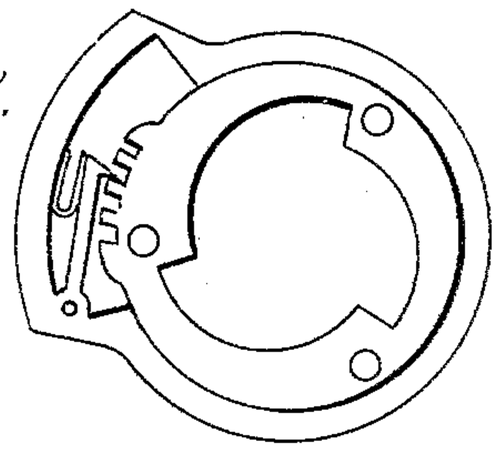


Fig. 8.



WITNESSES

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Attys

UNITED STATES PATENT OFFICE.

WILLIAM H. ADAMS, OF COLUMBUS, OHIO.

JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 303,784, dated August 19, 1884.

Application filed June 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. ADAMS, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Journal-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to journals and bearings, and has for its object an improved box which will be self-oiling, and which will be capable of adjustment to fit shafts or bearings of different diameters, as will be explained more fully hereinafter.

In the drawings, Figure 1 is a side view of my improved box on a shaft. Fig. 2 is an end view of same. Fig. 3 is a transverse section of the box. Fig. 4 is an end view of the box with the bearing-bars removed. Fig. 5 is a perspective view of a section of the boxing. Fig. 6 shows a front and rear side view of the cam-ring. Fig. 7 is a detail perspective view of one of the bearing-blocks. Fig. 8 shows a modification, all of which will be described.

The boxing A is preferably made in two longitudinal sections, as will be understood from Figs. 3 and 5, and has on its inner sides radial grooves *a*, in which are guided the bearing-blocks presently described. The space between these guide-grooves is by preference formed to serve as a receptacle, *a'*, for waste, which is saturated with oil, and as the receptacle opens inward the oiled packing or waste is held against the shaft in the operation of the device, so that the proper and constant lubrication thereof is accomplished. Openings a^2 are formed through the boxing into these receptacles, through which the packing may be oiled without removing the pulley or wheel from the shaft. The bearing-blocks B are fitted in the grooves *a* of the box and extend at *b* beyond the opposite ends of same, and are preferably turned upward at their outer ends, *b'*, as shown most clearly in Fig. 5. Rings C are secured against the opposite ends of the boxing, and are rotatable independently of said box for the purpose presently described. An opening, C', is made through this ring, and has its walls or edges formed with a series of eccentric segments or cams D, curved on equal arcs. These cams are equal in number to the bearing-blocks B, and bear against the part *b* of such blocks. I prefer to form the ends of the boxing with grooves a^3, and the cam-rings C with lugs C^2, fitted to extend therein, so as to steady the connection; but this may be dispensed with when desired, though it is a convenient means of holding the box together when made in longitudinal sections, as shown. A curved slot, C^3, is formed through the ring near its rim, and a screw, E, turns, through this slot and into a tapped opening in the box. When tightened, the head of this screw bears on opposite sides of the slot C^3 and holds the ring at any point to which it may be adjusted when the screw is loosened.

When the parts are in the position shown in Fig. 1, and it is desired to adjust it to fit a smaller shaft than the one, F, shown, the ring C is rotated in the direction indicated by arrow until the desired diameter of bearing is had.

It is manifest that the device for securing the cam-ring at any point of adjustment may be varied without departing from the broad principles of my invention. In Fig. 8 the cam-ring is shown with several peripheral notches, and the boxing is extended over the said notches and provided with a detent actuated by a spring into engagement with said notches, so as to hold the ring at any desired point of rotation. I prefer, however, to use the screw and slot, as before described.

My invention is applicable to pulleys, wheels, and all classes of devices in which a hub or box revolves on a shaft or spindle.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the box having central opening and grooves extended radially therefrom, the bearing-blocks held and movable in said grooves, and the cam-rings engaging the ends of the blocks and rotatable independently of the box, substantially as set forth.

2. The combination of the boxing having guide-grooves *a* and intermediate packing-re-

ceptacles, a', and oiling-apertures a^2, the bearing-blocks held and movable radially in grooves a, and the cam-rings engaging the ends of the blocks and rotatable, substantially as set forth.

3. The combination of the box, the bearing-blocks, the cam-ring provided with a slot and a screw turning through said slot into a tapped opening in the box, with its head bearing on opposite sides of the slot, substantially as set forth.

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

WILLIAM H. ADAMS.

Witnesses:
J. V. LEE,
W. B. PAGE.