(No Model.)

H. P. HUMPHREY.

JOURNAL BOX FOR SHAFTING.

No. 499,429. Patented June 13, 1893.

Fig. 1.

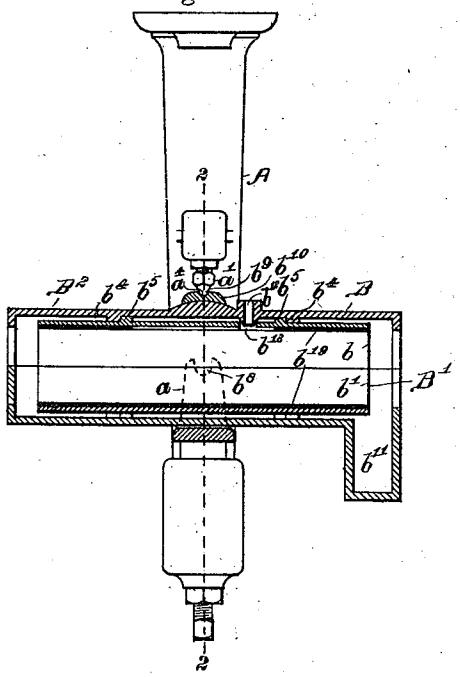


Fig. 2.

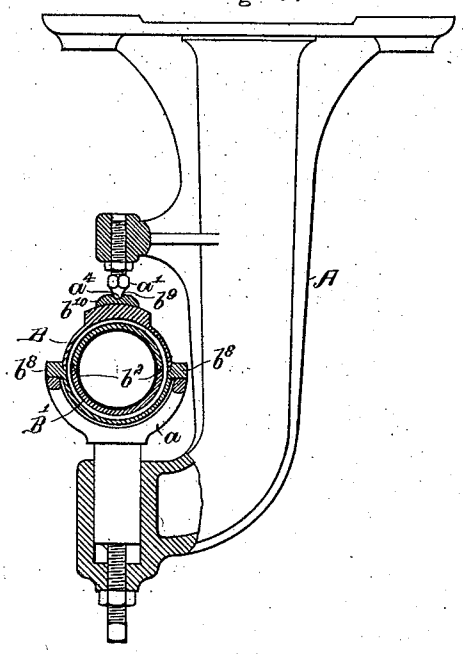


Fig. 4.

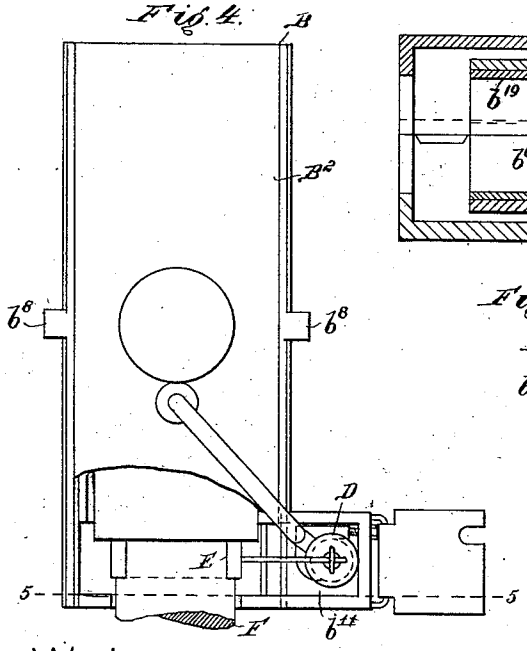


Fig. 3.

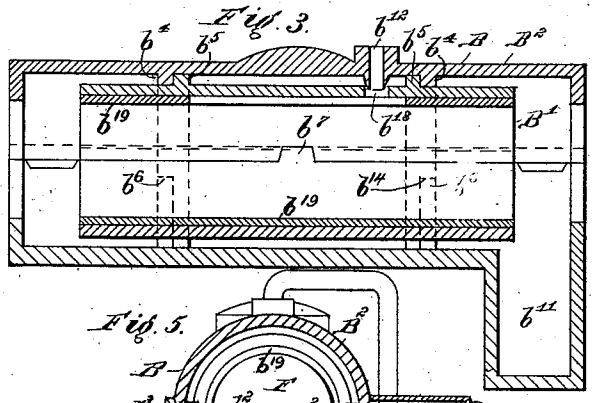
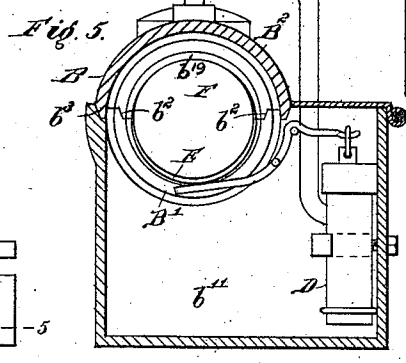


Fig. 5.



Witnesses—
Kirkley Hyde.
Francis M Reid

Inventor—
Henry P. Humphrey
By Albert M. Moore,
His Attorney.

UNITED STATES PATENT OFFICE.

HENRY P. HUMPHREY, OF NASHUA, NEW HAMPSHIRE, ASSIGNOR TO THE LOWELL OILER COMPANY, OF SAME PLACE.

JOURNAL-BOX FOR SHAFTING.

SPECIFICATION forming part of Letters Patent No. 499,429, dated June 13, 1893.

Original application filed March 14, 1890, Serial No. 347,760. Divided and this application filed November 28, 1890. Renewed December 20, 1892. Serial No. 455,841. (No model.)

To all whom it may concern:

Be it known that I, HENRY P. HUMPHREY, a citizen of the United States, residing at Nashua, in the county of Hillsborough and State of New Hampshire, have invented a certain new and useful Improvement in Journal-Boxes for Shafting, of which the following is a specification.

My invention relates to journal-boxes for shafting and consists in the devices and combinations hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of a shaft-hanger and a central vertical longitudinal section of my improved journal-box supported therein; Fig. 2, a side elevation of said hanger, and a vertical central transverse section on the line 2 2 in Fig. 1, of said journal-box, the lower part of said hanger and the part of said hanger above said journal-box being also in section in the same plane; Fig. 3, an enlarged vertical longitudinal section of said journal-box in the plane of section shown in Fig. 1; Fig. 4, a plan of said journal-box and of a mechanical oiler arranged therein and of a piece of shafting, the upper half of the outer shell of the journal-box being broken away at one end, to show the internal construction of said box; Fig. 5, a vertical section on the line 5 5 in Fig. 4.

The hanger A is of any usual construction and forms no part of my invention, but is represented as a hanger adapted to be secured to an overhead beam or ceiling by bolts, in the usual manner. The improved journal-box herein described may, however, be supported in any hanger or floor-bracket, adapted to hold a cylindrical journal-box in a horizontal position.

The journal-box B consists of an inner shell or journal-box, proper, B′, formed in halves b b' and lined with Babbitt metal or other well known anti-friction alloy or material b^{19}, said halves being bolted together or lapping past each other, as shown at b^2, in Figs. 2 and 5, to prevent a lateral movement of one half upon the other. The outer shell B^2 of the journal-box is formed substantially the same as the journal-box proper B′, in parts or halves, one of which laps past the other, as shown at b^3 in Fig. 5. The outer shell B^2 is provided with internal annular ribs b^4 and the journal-box B′ is provided with external annular ribs b^5, arranged at such a distance apart as to fit between the ribs b^4 and prevent a longitudinal movement of said journal-box proper, in said outer shell. The ribs b^5 on the box B′ are provided with lateral extensions b^6, as shown in dotted lines in Fig. 3, to enter and fit notches b^{14} in the ribs b^4 and thereby prevent a rotation of said box within said shell. The upper half of the shell is provided with a notch to receive a projection b^7 on the lower half of the shell and to prevent longitudinal motion of said upper half upon said lower half. The lower half of the shell B^2, midway between its ends, is provided with ears b^8 which rest upon the arms of the fork a in the usual manner, the shell being prevented from rising off from said fork by a set-screw a' which turns in the hanger A in the usual manner and is prevented from being accidentally turned by a check-nut turning on said screw, the head of said screw being provided with a central point or projection a^4 which enters a depression b^9 in a cap b^{10}, formed to fit on the top of the upper half of the shell surrounding said journal-box and extending beyond the ends of the same and the lower half of the shell B^2 is represented as provided with a reservoir b^{11}, cast or formed in one piece therewith and extending downwardly and laterally therefrom to receive a pump D, as shown in Figs. 4 and 5, which pump is operated by a cam E, supported on the shaft F and discharges oil from said reservoir into oil-holes b^{12} b^{13}, in the journal-box B′ and shell b^2, as fully described in another application, Serial No. 347,760, filed March 14, 1890, of which application this is a division.

The lubricating-devices shown in the drawing and their arrangement are not claimed herein, being claimed in said application above-named.

I claim as my invention—

1. The combination of the journal-box, provided with external projections, and the shell, surrounding said journal-box and extending beyond the ends of the same and provided with internal projections, to keep separate

said shell and box and to leave an oil space between them, as and for the purpose specified.

2. The combination of the journal-box, provided with ribs, and the shell, provided with ribs, the ribs on one of said parts fitting between the ribs on the other of said parts, to prevent longitudinal motion of said box within said shell, as and for the purpose specified.

3. The combination of the journal-box, provided with ribs, and the shell, provided with ribs, and a rib on one of said parts having a lateral extension to enter a notch in a rib on the other of said parts, to prevent a rotation of said box within said shell, as and for the purpose specified.

In witness whereof I have signed this specification, in the presence of two attesting witnesses, this 28th day of October, A. D. 1890.

HENRY P. HUMPHREY.

Witnesses:
ALBERT M. MOORE,
MYRTIE C. BEALS.