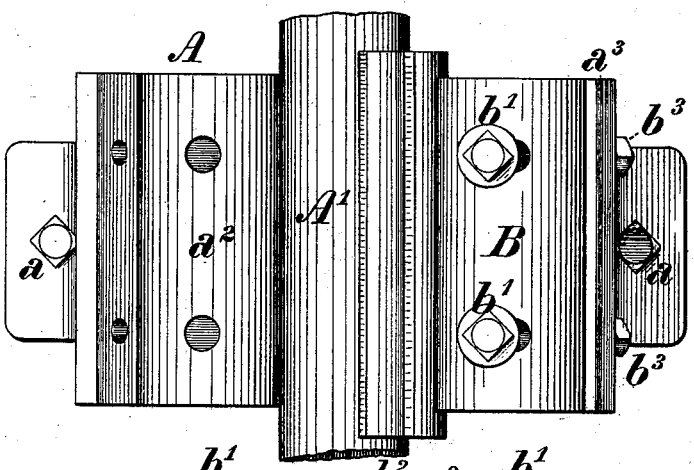
(No Model.)

F. H. SWEET.

JOURNAL BOX.

No. 261,274. Patented July 18, 1882.

FIG. 1.



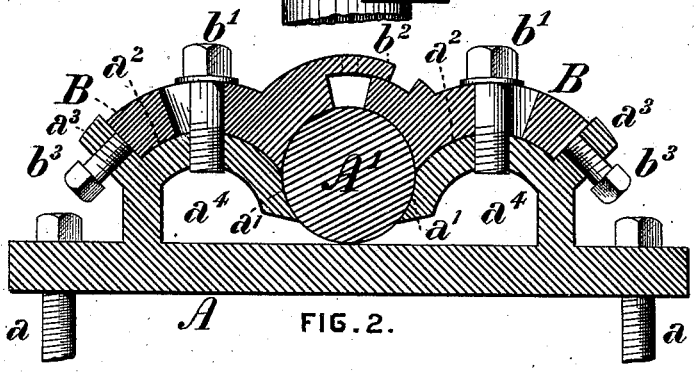


FIG. 2.

WITNESSES:
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UNITED STATES PATENT OFFICE.

FREDERICK H. SWEET, OF WILLIAMSPORT, PENNSYLVANIA, ASSIGNOR TO ROWLEY & HERMANCE, OF SAME PLACE.

JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 261,274, dated July 18, 1882.

Application filed June 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK H. SWEET, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Journal-Boxes, of which improvements the following is a specification.

My invention relates to journal-boxes of the class having a cap composed of two sections which are independently adjustable toward and from the center of the shaft; and its object is to afford improved facilities for the adjustment of the cap-sections, to provide a convenient reservoir for lubricating material, and to reduce as far as may be the height of the complete box.

To these ends my improvements consist in certain novel devices and combinations, embracing a fixed box having a central journal-recess and a segmental guide on each side thereof, two adjustable cap-sections fitting on the guides and adapted to bear at their adjacent ends against the journal, adjusting-screws bearing against the outer ends of the cap-sections, a lip or dust-guard formed upon one of the sections and fitting over the other, and an internal oil-reservoir covered by the guides and journal, all as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a plan or top view of a journal-box embodying my invention with one of the cap-sections removed, and Fig. 2 a transverse section through the same.

To carry out my invention I provide a box or bearing, A, which is secured in desired position upon the frame of a machine by bolts a, and has a central recess, a', fitted to receive and support the journal A′ of a shaft. A segmental guide or support, a^2, is formed upon the top of the box A, on each side of the central recess, and a cap-section, B, the lower face of which corresponds in curvature with the guide, is fitted upon each of said guides, and adjustably secured thereto by a cap-bolt, b', passing through a slotted hole in the cap-section. The adjacent ends of the cap-sections are adapted to bear against the periphery of the journal, above the axis thereof, and in the instance shown are recessed segmentally to a corresponding radius. A lip or dust-guard, b^2, formed upon the inner end of one of the cap-sections fits neatly over the outside of the other section, and thereby prevents the access of dust and other foreign matters. The cap-sections are moved to the journal A′, as from time to time required to compensate for wear, by adjusting screws b^3, which engage female threads in lugs a^3 formed on the box A at the outer ends of the guides a^2, and bear against the adjacent ends of the cap-sections.

To insure a constant supply of lubricant to the journal, an oil-reservoir, a^4, is formed in the box, and is closed at top by the guides a^2, and by the journal A′, which protrudes into it through a longitudinal slot in the central bearing-recess.

Oil may be introduced to the reservoir through one of the openings in which the cap-bolts fit, or a special oil-hole may be provided.

It will be seen that my improvements enable a material reduction in the height of the journal-box to be effected as compared with sectional cap-boxes having inclined bearing-surfaces, as heretofore employed, and thus adapt the box to use in positions where the latter construction would be impracticable. A ready and convenient adjustment of the cap-sections is also afforded and efficient lubrication assured by the provision of the oil-reservoir.

I claim as my invention and desire to secure by Letters Patent—

1. The combination, substantially as set forth, of a fixed box or bearing having a central recess for the reception of a shaft-journal and a segmental guide formed upon its top on each side of said recess, and two adjustable cap-sections, each fitting upon one of the guides and adapted to bear at its inner end against the journal.

2. The combination, substantially as set forth, of a fixed box having a curved guide on each side of a central shaft-recess, two cap-sections fitting on said guides, and adjusting-

screws bearing against the ends of the cap-sections.

3. The combination, substantially as set forth, of a box having curved guides on its top, two cap-sections fitting on said guides, and a lip or dust-guard.

4. A journal-bearing having an internal oil-reservoir, covered at top by curved guides extending from a central shaft-recess to the sides of the box, substantially as set forth.

FREDERICK H. SWEET.

Witnesses:
THOS. H. HARTMAN,
J. S. TAYLOR.