(No Model.)

A. D. ABBENZELLER & H. S. FAUNCE.

JOURNAL AND JOURNAL BOX FOR RAILWAY TRUCKS.

No. 567,673. Patented Sept. 15, 1896.

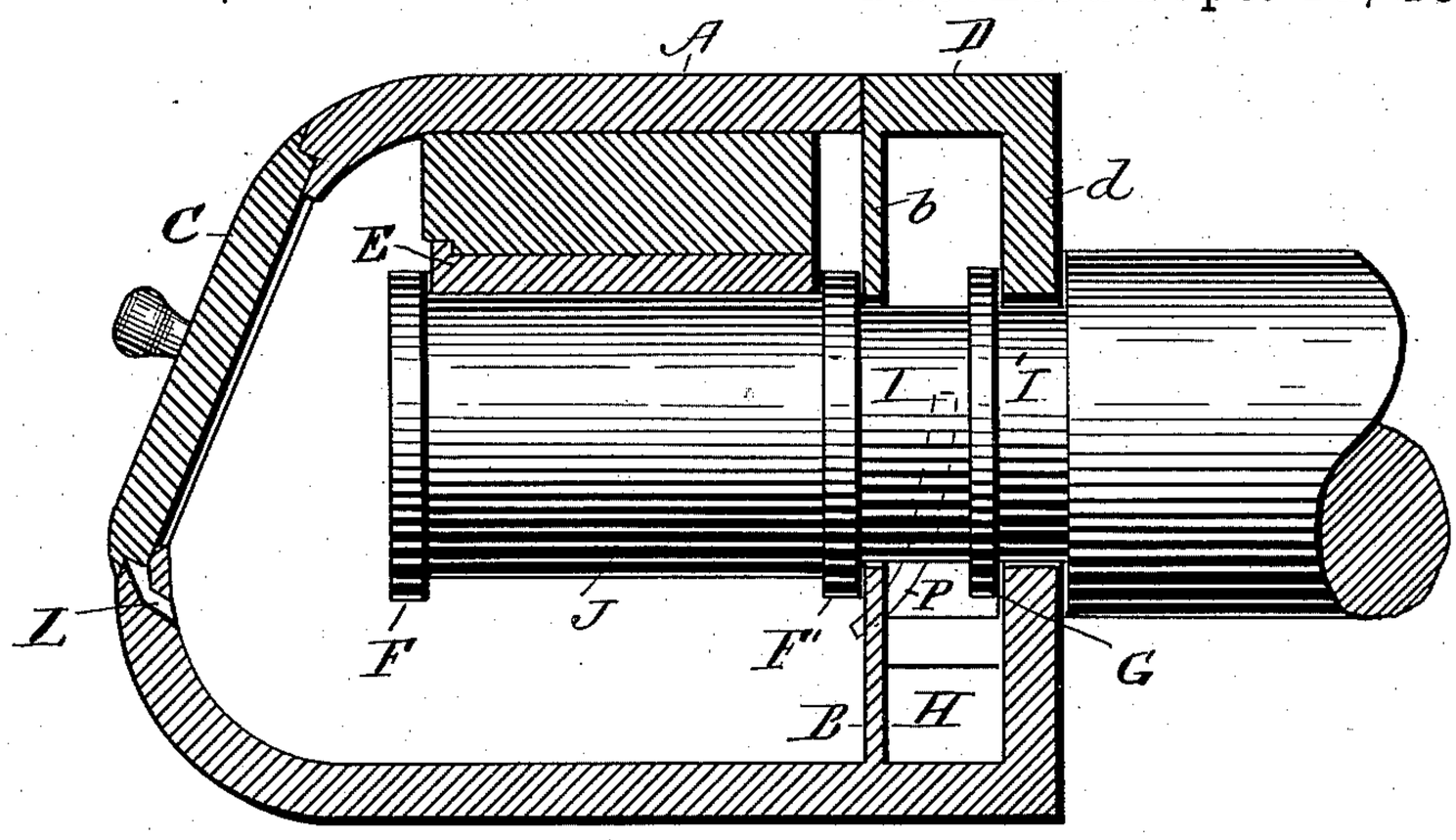

Fig. 1.

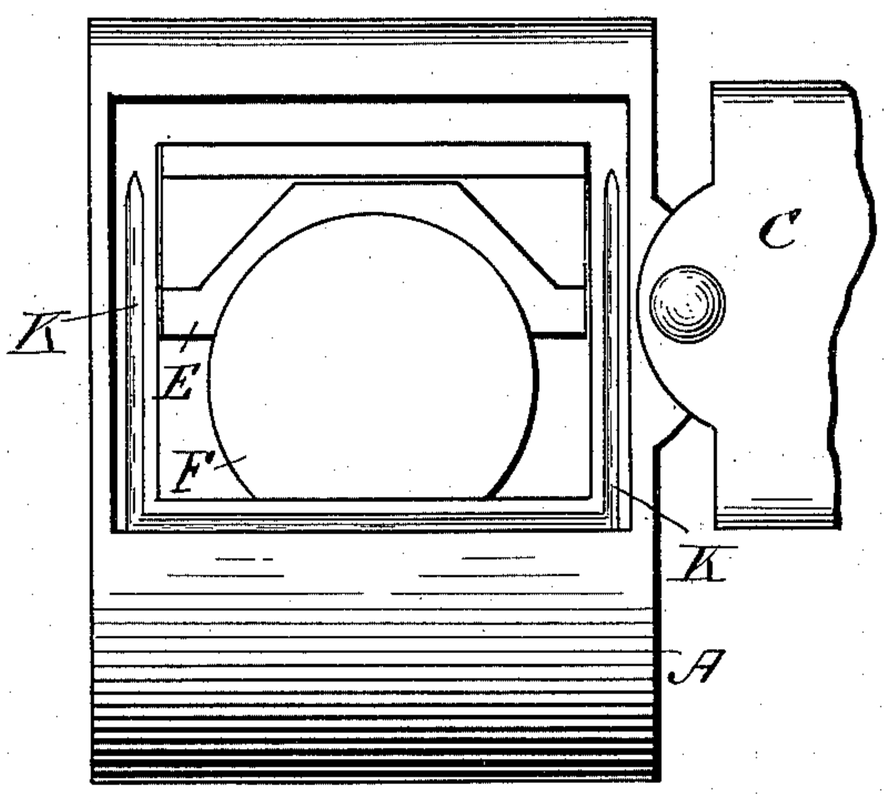

Fig. 2.

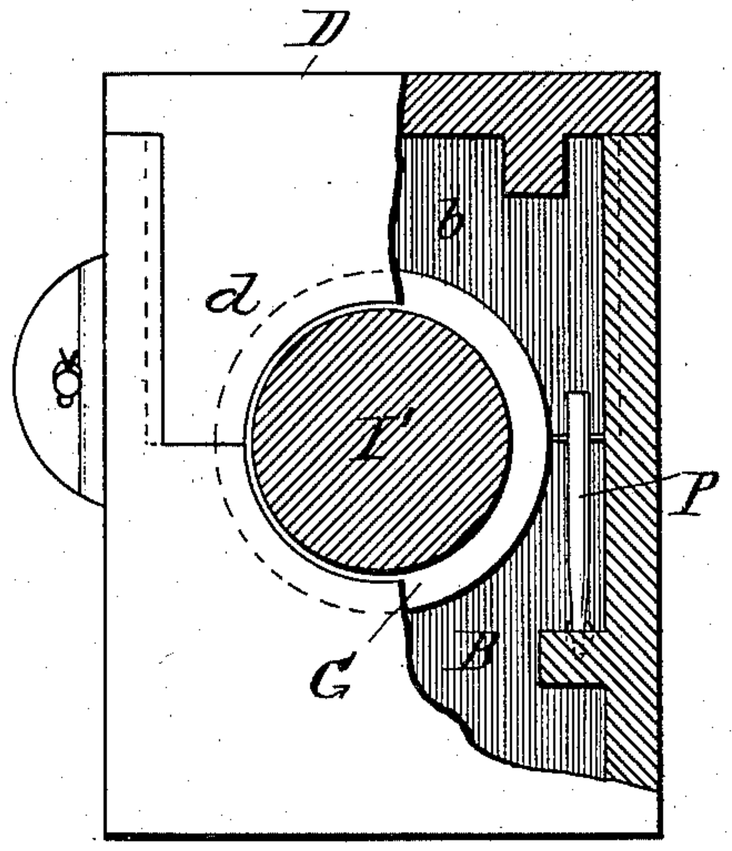

Fig. 3.

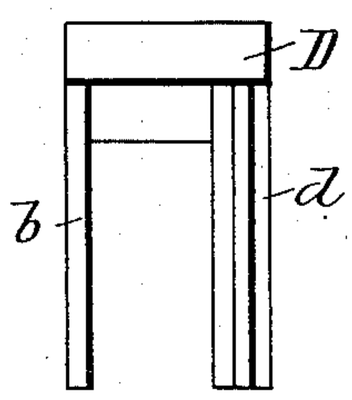

Fig. 4.

WITNESSES

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ALFRED D. ABBENZELLER AND HIRAM S. FAUNCE, OF RANDOLPH, MASSACHUSETTS.

JOURNAL AND JOURNAL-BOX FOR RAILWAY-TRUCKS.

SPECIFICATION forming part of Letters Patent No. 567,673, dated September 15, 1896.

Application filed January 9, 1896. Serial No. 575,032. (No model.)

To all whom it may concern:

Be it known that we, ALFRED D. ABBENZELLER and HIRAM S. FAUNCE, of Randolph, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Journals and Journal-Boxes for Railway-Trucks, of which the following is a specification.

The invention consists in the peculiarities of construction, which will be readily understood from the drawings and the description hereinafter contained, whereby a very great saving of oil is effected and dust is almost entirely prevented from entering the journal-box.

In the drawings hereto annexed, Figure 1 illustrates a central vertical longitudinal section of the journal-box with the journal in place therein; Fig. 2, a front end elevation of the box with the cover removed; Fig. 3, a rear end elevation of the box with a portion of the rear wall broken away and the journal in a section in a plane coincident with the said rear wall; Fig. 4, a side elevation of a cover for the upper portion of the rear chamber of the journal-box removed therefrom.

Referring to the drawings, A is the casing or box, having a partition B near the rear wall, by which a supplemental chamber or reservoir is formed.

C is a cover for the opening in the front of the journal-box.

D is a removable cover, the vertical legs *b* and *d* of which constitute, respectively, the upper portion of the partition B and of the rear wall of the box A, the lower end of these legs being cut away in semicircular form to fit closely over the journal, as shown in Fig. 3.

E is the brass or other suitable metal bearing for the journal J, which is provided with fixed collars or annular projections F F′ upon the portion within the main chamber of the box A and with another fixed collar or annular projection G upon the portion within the rear or supplemental chamber H. The portion I of the journal, between the collars F′ and G, and the portion I′, beyond the collar G, are made smaller than the portion J, for the reasons hereinafter stated. In the side and lower ledges around the opening in the front of the box A, and against which the cover C bears when in place, a groove or channel K is formed, and from the groove in the lower portion an outlet L is made into the main chamber. This groove is intended to catch any oil which may run down the said ledges from the cover and return it into the journal-box. The cover D is made removable, so that the journal may be inserted into the box readily. It will be seen that when the main chamber is filled with oil until it comes in contact with the portion J of the journal the oil will not touch the portion I, neither will it be sufficiently high to flow over the partition B into the chamber H; and, further, the collar F′ being of greater diameter than either the portion J or I, whatever oil is upon it will be carried to its periphery and thrown off by centrifugal force when the journal is in motion. Whatever oil does find its way through the partition and along the portion I will be caught up by the collar G and thrown off into the chamber H, and no more oil will be able to find its way to the part I′ of the journal than is sufficient for lubrication and to arrest any dust which may work into that joint. We also provide an opening through the partition B, which is stopped by a plug P, and in the event of the chamber H becoming so much filled with oil as to extend above this hole the plug can be removed and the portion of the oil above the hole will run back into the main chamber when the oil has been partially exhausted therefrom.

We claim—

1. A journal-box divided into a front chamber, which contains the main oil-reservoir and a rear chamber, which contains a waste-oil reservoir, combined with a journal whose bearing-surface within the main chamber is of greater diameter than the portion within the waste-chamber, a collar upon the journal of greater diameter than its bearing-surface, and located within the main chamber beside the dividing-partition, and another collar upon the journal within the waste-chamber, located beside the rear outer wall of the journal-box for the purpose described.

2. A journal-box provided with a waste-oil reservoir in its rear part, combined with a journal which is reduced in diameter in

the portion within the waste-reservoir chamber, and is provided with a collar thereon immediately within the outer wall of said chamber, and a cover for the chamber the two legs of which include the upper portion of the inner and outer walls thereof for the purpose described.

3. In combination with a vehicle journal-box, a journal having its bearing end of greater diameter than the adjacent inner portion, an annular projection at the inner limit of its bearing-surface, and an annular projection upon the smaller portion of the journal near the rear wall of the journal-box substantially as described.

4. In combination with a journal-box provided with a main and a waste-oil chamber, the rear walls of each of which fit closely about the journal, a journal having a fixed annular projection at the inner limit of its bearing-surface in the main chamber and a fixed annular projection near the rear wall of the waste-oil chamber; the portion of said rear walls above the journal being adapted to be removed for the purpose specified.

5. A journal-box, provided with grooves or oil-channels in the ledge around the front opening thereof, and an outlet from the channel in the lower ledge into the main chamber, whereby oil thrown upon the cover of said opening, when closed, will be returned to said chamber as described.

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