(No Model.)

O. S. HAWYER.

JOURNAL BOX.

No. 458,317. Patented Aug. 25, 1891.

Fig. 1.

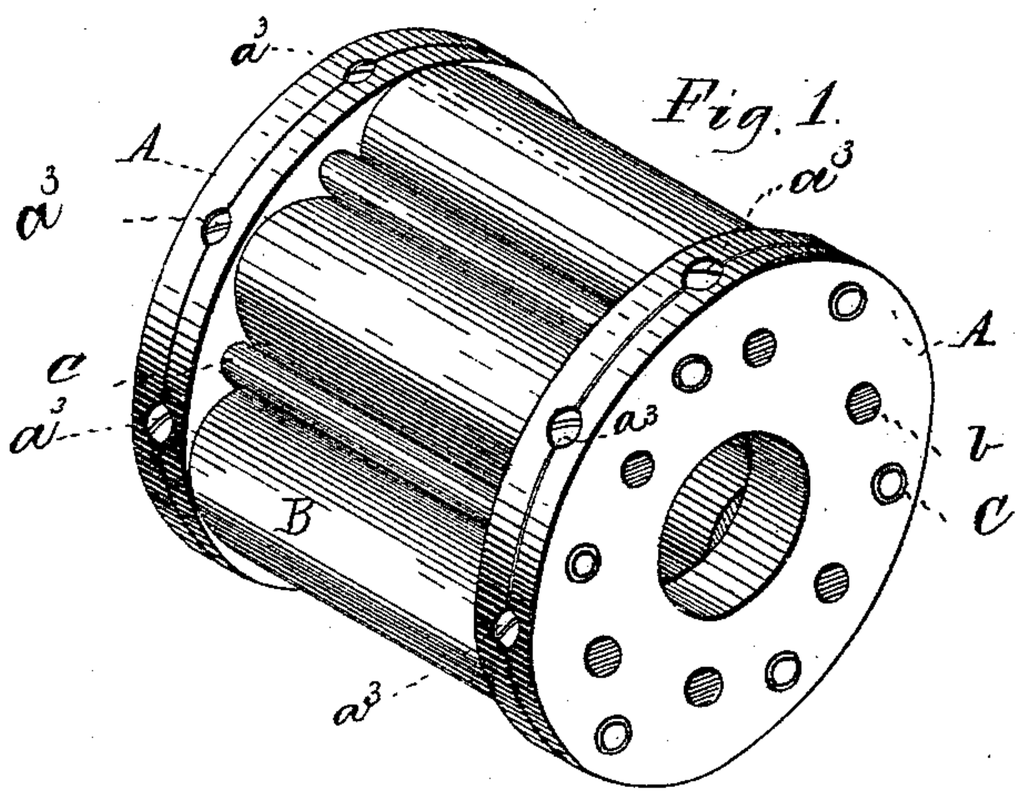


Fig 2.

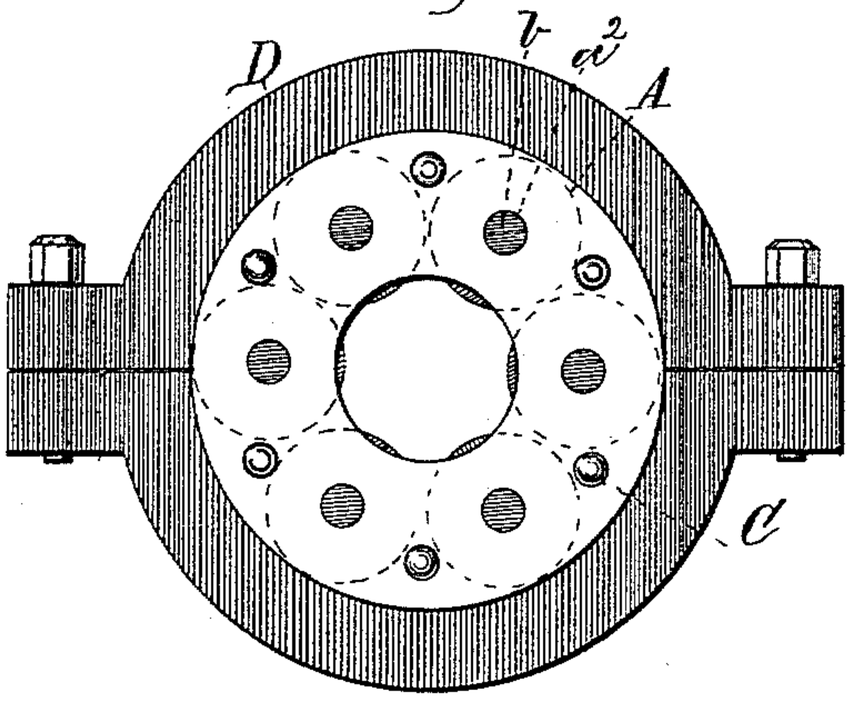
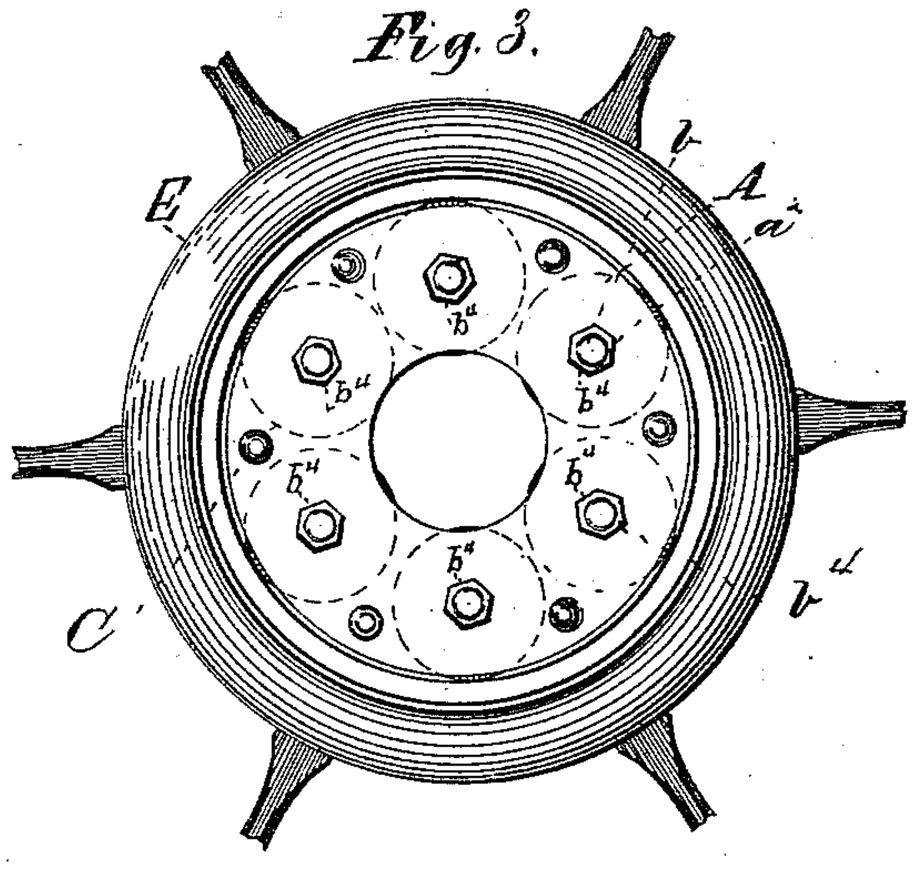


Fig. 3.



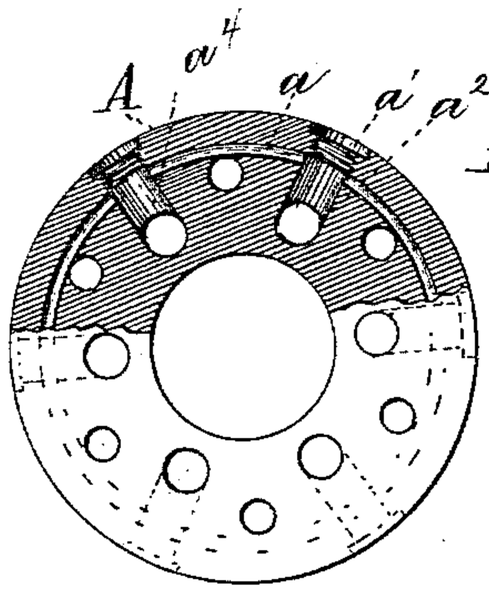


Fig. 6.

Fig. 4.

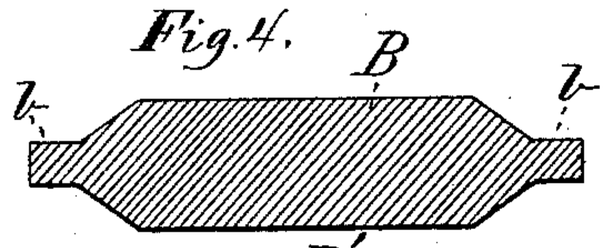
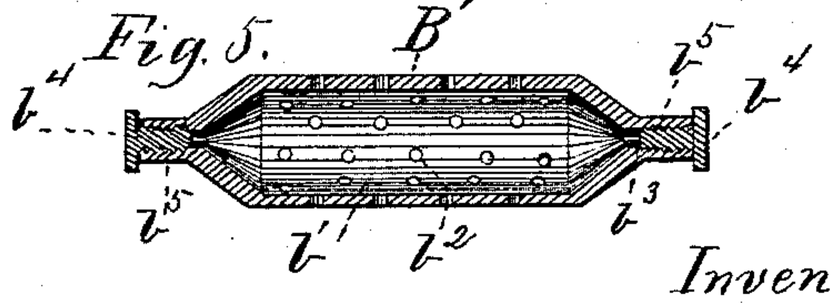


Fig. 5.



Inventor.

Witnesses:
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per

M. F. Chamblin,
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

OSCAR S. HAWYER, OF TRUXTON, NEW YORK.

JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 458,317, dated August 25, 1891.

Application filed November 21, 1890. Serial No. 372,216. (No model.)

To all whom it may concern:

Be it known that I, OSCAR S. HAWYER, a citizen of the United States, residing at Truxton, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Journal-Boxes; and I do hereby 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.

My invention relates to journal-boxes; and the object of my invention is to provide an anti-friction journal-box. I attain said object by a certain construction and arrangement of parts fully described in this specification, and illustrated in the accompanying drawings, in which—

Figure 1 is a detailed view, in perspective, of the journal-box detached from the hub or casing. Figs. 2 and 3 represent the box inclosed in the casing or hub, respectively. Fig. 4 is a longitudinal sectional view of one of the rollers used in the construction of my journal-box. Fig. 5 is a similar view of a modification. Fig. 6 is a plan view of one of the collars broken away.

Referring to the drawings, the letter A designates the collars, each of which is constructed with a circular cavity a near the rim upon the inner side. Each collar is provided with the threaded portions a', which lead to the cavity a, thence to the journal-bearings a^2. Each cavity or chamber a answers the purpose of a repository for the oil which lubricates the journals b. The portion of the perforations a^4 next to the journals b may be filled with a soft packing, through which the oil will slowly ooze, thereby thoroughly lubricating said journals. Said perforations are also provided with the screws a^3, which are easily removed when the cavity a needs to be filled with oil.

B and B′ represent the rollers, which may be constructed as shown in Fig. 4 or Fig. 5, preferably as shown in Fig. 5, with the chamber b', the threaded orifice b^3, communicating with said chamber, and the small perforations b^2, leading from said chamber to the outer surface. The chamber b' may be filled with oil by removing the screw b^4 and inserting the neck of the can into the orifice b^3 in the end of the journal b^5. This provides said rollers with a supply of lubricant, which gradually oozes through the small perforations b^2 and keeps the journal-box thoroughly lubricated. I attach special importance to this feature of my invention and the feature whereby the oil is supplied to the journals b, for the reason that in the event my journal-box is used upon railway-cars said chambers can be filled with lubricant and run thousands of miles without again filling the same.

C indicates the braces that secure and hold the collars A in position. Said braces may be secured by being screwed or riveted through the collars A, or the braces C and the collars A may be molded or constructed in one piece.

D is the casing that incloses the journal-box and the hub E.

What I claim is—

1. In combination with a suitable casing or hub, the collars, each of which has an oil-cavity near the rim of the same and is provided with the perforations a', the braces for holding said collars in their normal positions, and the rollers located in the bearings a^2, substantially as described, and for the purpose set forth.

2. In a journal-box, the combination of the collars, each of which has an oil-cavity a and is provided with the perforations a' and the bearings a^2, and the rollers having journals located in said bearings, substantially as described, and for the purpose set forth.

3. In a journal-box, the collars, each of which has an oil-cavity near the rim, and the perforations communicating with said cavities and the bearings, the braces holding said collars in their normal positions, and the hollow perforated rollers having journals corresponding to said bearings and located in the same, substantially as described.

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

OSCAR S. HAWYER.

Witnesses:

WM. BEATTIE,

F. SCHERMERHORN.