(No Model.)

T. E. HAYES & A. J. READ.

JOURNAL BOX.

No. 408,659. Patented Aug. 6, 1889.

Fig. 1.

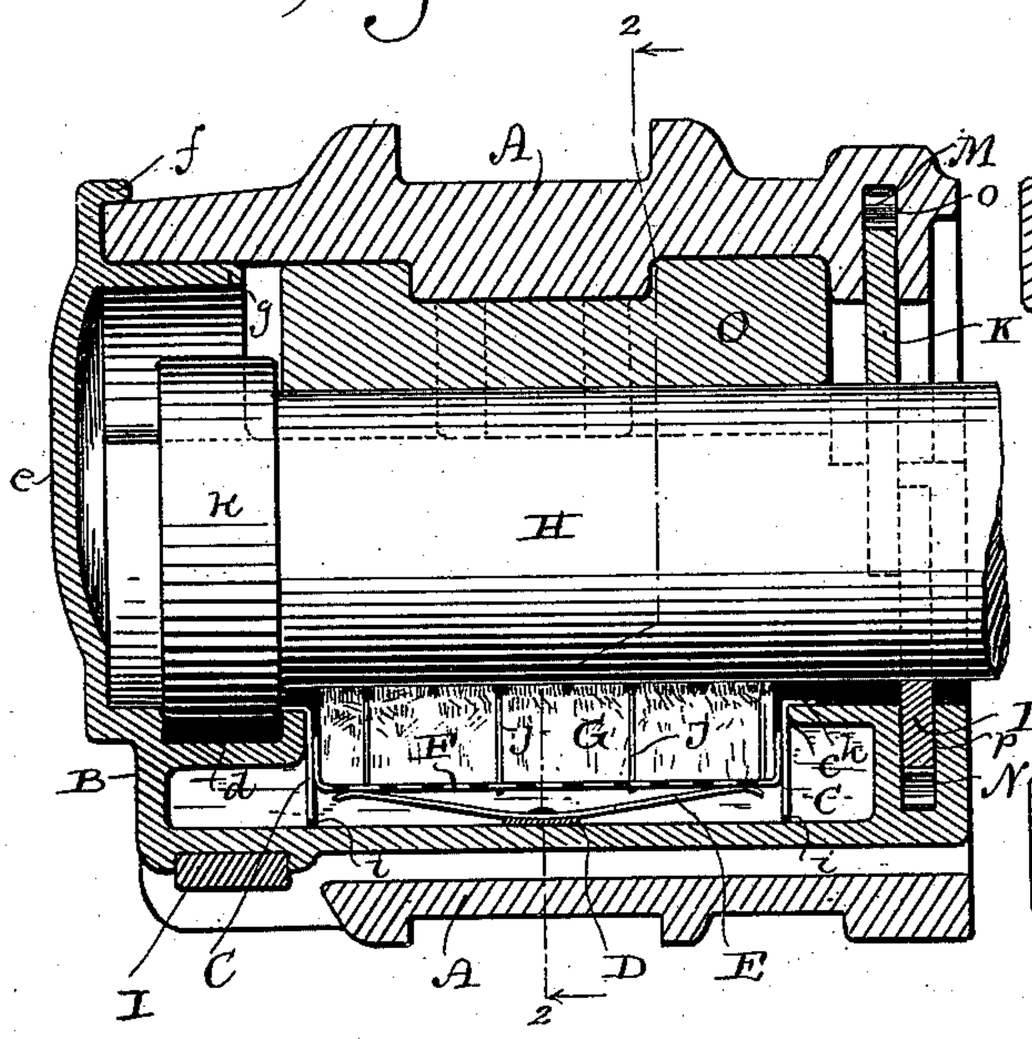


Fig. 2.

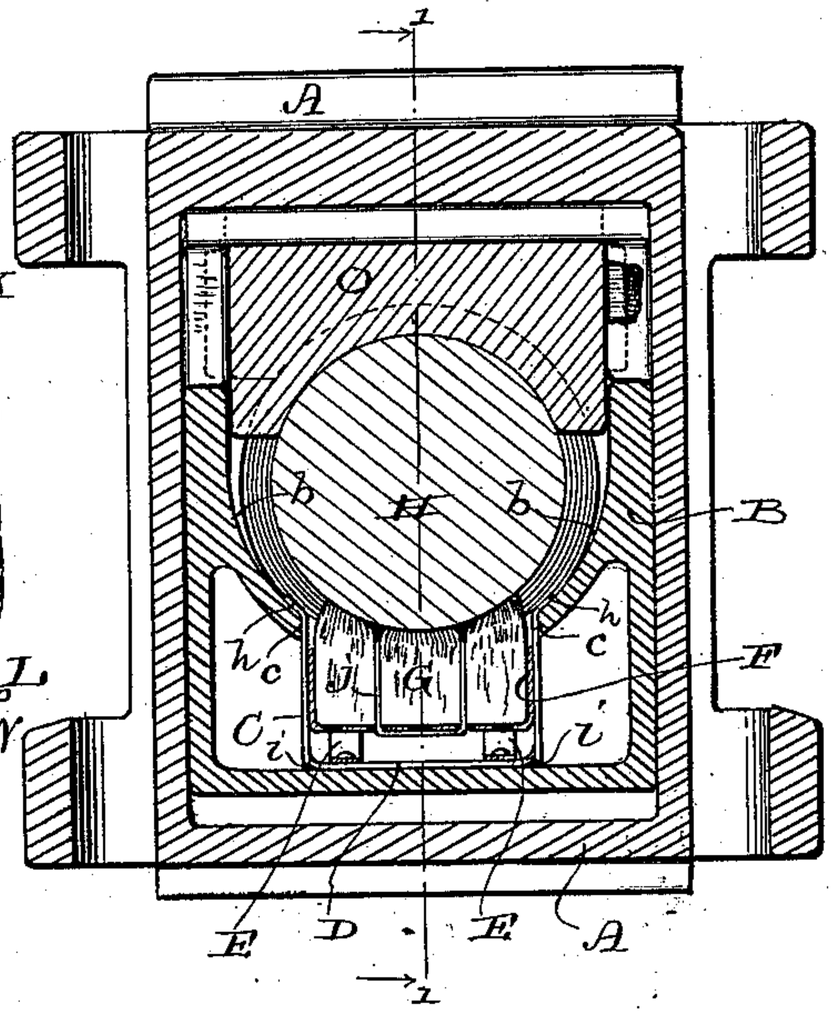


Fig. 4.

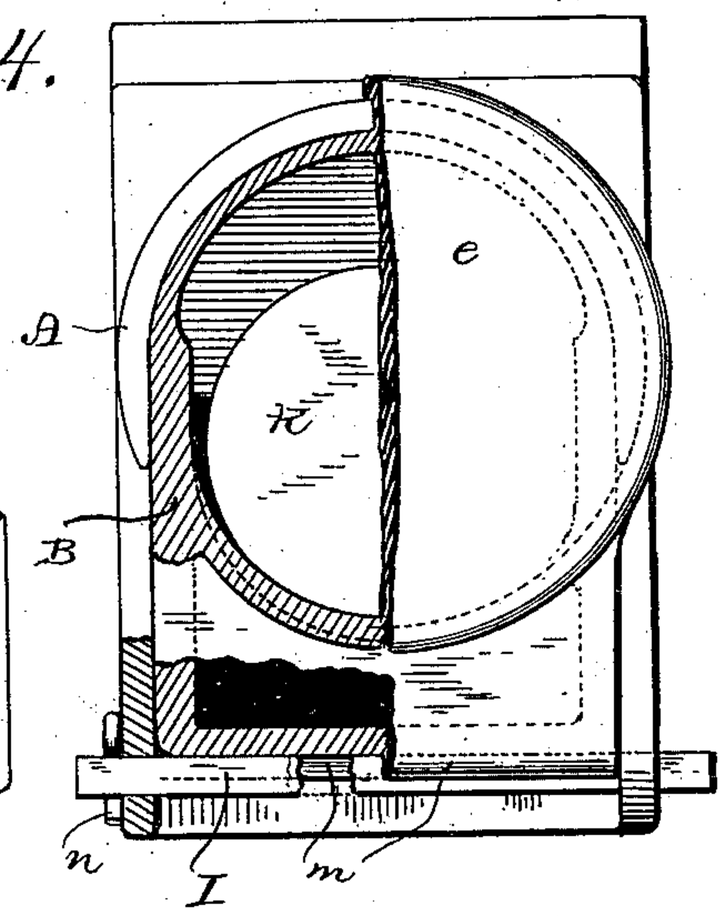
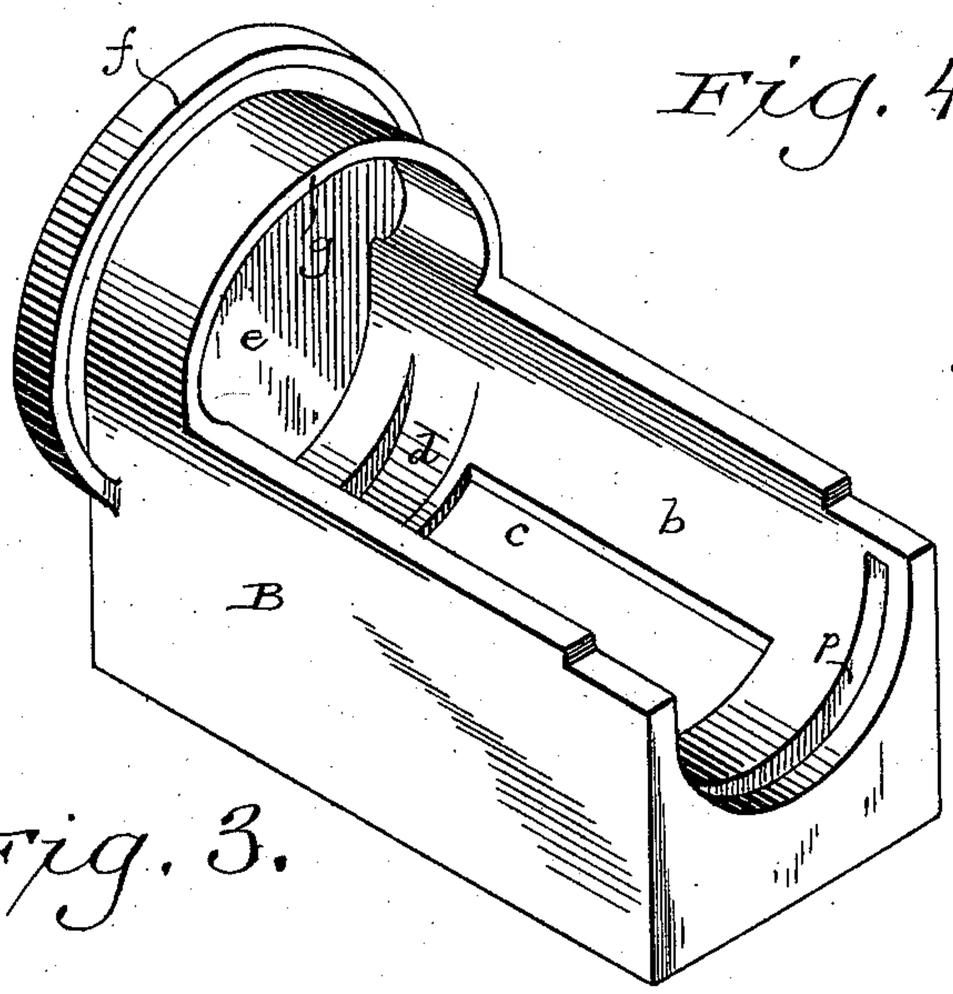


Fig. 3.



Witnesses

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JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 408,659, dated August 6, 1889.

Application filed June 12, 1889. Serial No. 313,958. (No model.)

To all whom it may concern:

Be it known that we, THOMAS E. HAYES and ALBERT J. READ, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Journal-Boxes; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention relates to journal-boxes, being designed as an improvement on the device set forth in our patent, No. 400,210, issued March 26, 1889; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a vertical longitudinal section of our device, the section being taken on line 1 1 of Fig. 2; Fig. 2, a vertical transverse section of the same on line 2 2, Fig. 1; Fig. 3, a perspective view of an oil-reservoir that forms part of our invention; and Fig. 4, a front elevation of said device, partly in section.

Referring by letter to the drawings, A represents a shell that in this instance constitutes an oil-house similar to those ordinarily employed on railway-trucks, with the exception that the doors are omitted. Designed to fit within the shell A is a hollow casting B, having a concave upper face *b*, provided with a rectangular opening *c* and concave recess *d*, the outer end of the casting being for the greater part a circular plate *e*, that extends above said concave face and is provided with a rearwardly-extended flange *f*, while at the same time said casting is provided with an arch *g*, arranged adjacent to the circular plate.

The hollow casting B constitutes an oil-reservoir, and supported by a flange *h*, that rests upon the concave upper face of said casting adjacent to the boundaries of the opening *c*, is a frame C, that depends into the reservoir. In case the frame C is of such vertical length as to rest upon the bottom of the hollow casting or reservoir B, a portion of this frame will be cut away at the lower edge, as shown at *i*, Figs. 1 and 2, in order that the oil in said reservoir may rise within said frame.

At or near the lower edges of the sides of the frame C are secured the ends of a central transverse brace D, that serves as a support for one, two, or more flat springs E, and designed to rest upon the spring or springs is a tray F, having a perforated bottom.

The tray F carries a wick G, preferably secured in place by means of a cord *j* passed through it and perforations in the bottom of said tray, and by means of the spring or springs E the wick is kept in contact with a journal H, that in this instance is one end of an ordinary car-axle terminated in a collar *k*, that rotates in the concave recess *d* in the hollow casting B, as best illustrated in Fig. 1.

When the hollow casting B is in place, the upper outer end of the shell A is engaged between the flange *f* and arch *g* on said casting, while at the same time the sides of said shell are provided with openings for the insertion of a tapered pin I, that engages a corresponding groove *m* in the bottom of said casting to lock the latter in position, the pin being held against withdrawal by means of a key *n*, as shown in Fig. 4.

Like in our former patent, we employ two overlapping non-absorbent plates K L, cut out to fit the journal H, these plates being kept in contact with said journal by means of springs M N, as shown in Fig. 1.

The rear end of the shell A is provided with a recess *o* to receive the plate K and spring M, the casting B being also provided at its rear end with a recess *p*, that receives the plate L and spring N, while at the same time a bearing or brass O for the journal H is fitted to said shell in the usual manner.

By the construction above described it will be seen that the wick G absorbs oil from the reservoir and is kept in contact with the journal H by means of the spring or springs E, while at the same time said wick being equal in its dimensions to the tray F a large lubricating-surface is presented to said journal. Surplus oil from the journal finds its way into the concave recess *d* in the casting B, and consequently the collar *k* on said journal rotates in the oil thus collected, while at the same time such surplus oil that is not retained in said recess finds its way back into the reservoir, and is used over and over for an indefinite length of time.

Should the pin I be withdrawn, the casting B will drop at its lower end, and thus cause

the recess *d* to clear the collar *k* on the journal H, after which the casting can be drawn out at the front end of the shell A to permit refilling of the reservoir, replacing of the wick or such other operations as may be necessary or desirable.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A journal-box comprising a shell provided with a bearing, a hollow casting supported in the shell, a spring-controlled tray having a perforated bottom and arranged to depend into said casting, and a wick carried by the tray, substantially as set forth.

2. A journal-box comprising a shell provided with a bearing, a hollow casting supported in the shell, a frame arranged to depend into said casting, a spring-controlled perforated tray arranged within the frame, and a wick carried by the tray, substantially as set forth.

3. A journal-box comprising a shell provided with a bearing, a hollow casting supported in the shell and having its front of such area as to entirely close the front of said shell, and a spring-controlled wick-carrying tray having a perforated bottom and arranged to depend into said casting, substantially as set forth.

4. A journal-box comprising a shell provided with a bearing, a hollow casting supported in the shell and having its front of such area as to entirely close the front of said shell, a spring-controlled wick-carrying tray having a perforated bottom and arranged to depend into said casting, and spring-controlled non-absorbent plates arranged in the shell and casting to fit around a journal and overlap each other, substantially as set forth.

5. A journal-box comprising a shell provided with a bearing, a hollow casting supported in the shell and having its front of such area as to entirely close the front of said shell, a frame arranged to depend into the casting, and a spring-controlled wick-carrying tray having a perforated bottom and arranged in the frame, substantially as set forth.

6. A journal-box comprising a shell provided with a bearing, a hollow casting supported in the shell and having its front of such area as to entirely close the front of said shell, a frame suspended in the casting and provided with a transverse brace, one or more springs secured to the brace, and a perforated wick-carrying tray supported on the spring or springs, substantially as set forth.

7. A journal-box comprising a shell provided with a bearing, a hollow casting having a concave upper face provided with a central opening and concave recess, a flanged circular plate extended above said concave face, an arch adjacent to the plate and a groove in the bottom of said casting, a pin passed through the sides of the shell to engage the groove in the casting, and a spring-controlled wick-carrying tray having a perforated bottom and arranged to depend into the casting, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

THOMAS E. HAYES.
ALBERT J. READ.

Witnesses:
S. S. STOUT,
WM. KLUG.