

J. A. COWLES.  
Car-Axle Lubricator.

No. 109,870.

Patented Dec. 6, 1870.

FIG. 2

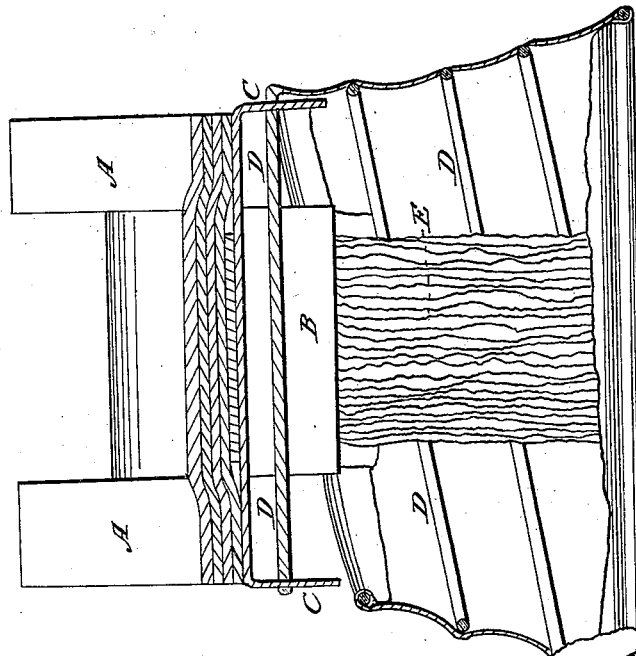
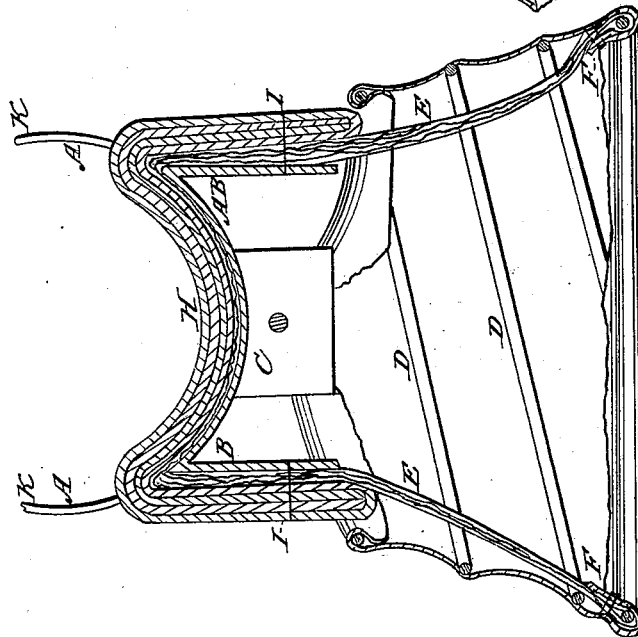


FIG. 1



WITNESSES:

*J. A. Kearie*  
*R. E. Forrester*

INVENTOR:

*James A. Cowles.*

# United States Patent Office.

JAMES A. COWLES, OF CHICAGO, ILLINOIS.

Letters Patent No. 109,870, dated December 6, 1870; antedated November 30, 1870.

## IMPROVEMENT IN JOURNAL-LUBRICATORS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JAMES A. COWLES, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Journal-Lubricators, of which the following is a specification.

### *Nature and Object of the Invention.*

This invention has for its object the construction of a journal-lubricator, which, in its use, will economize the oil, and in the case of railway-journals will dispense with the waste that now is in use.

Figure 1 is a cross-sectional view, and Figure 2 is a longitudinal view.

I take a piece of sheet-iron and form a plate, A. This plate is made with four arms, K K, extending up, two on each side of the journal.

On each side of this plate the part B, between these arms, is turned down in a nearly direct line.

At each end of the plate strips, C C, sufficiently wide for the purpose designed for them, is also turned down.

D D is a coiled-wire spring, upon which is placed the plate A, and is attached to the plate by the upper end of the wire passing through the strips C C of the plate from one to the other.

E E is a piece of loose fibrous material, made of lamp-wicking or similar material, extending from the bottom of the coiled-wire spring up over the plate A. Each end of this wicking is fastened to the bottom of the coiled spring at F F.

H is a matting, made of felt or similar material, placed upon the plate A and connected with the wicking E. This matting H extends over the plate and down beside the pieces B B. At I I this matting H and wicking E are fastened to the pieces B B sufficiently strong to hold the matting and wick in position on the plate A, and without any fastening exposed to the action of the journal on the surface of the plate.

Should it be desired, the coiled-wire spring can be surrounded with a cloth shield, as shown in the drawing.

The operation and use of my invention are as follows:

The waste is removed from the journal-box on a railway-car, and oil is poured into the box. The lubricator is then placed in the box under the journal, with the journal between the arms of the plate extending up on both sides.

The matting H, by the action of the spring D, is pressed against the journal from the under side, and the lower ends of the wicking E are always in the oil in the bottom of the journal-box, as the ends are attached to the bottom of the spring D, which constantly supply the matting on the plate A with oil, and thus at every revolution of the journal it is freshly oiled.

It will be observed that, by the method of fastening the matting to the plate herein described, none of the fastening is exposed to the action of the journal.

### *Claims.*

1. The curved plate A, having the bent-down parts B B, when employed in a journal-lubricator in combination with the matting E E, attached to the parts B B and extending down into the oil, substantially as and for the purpose described.

2. In combination with the curved plate A, constructed with the terminal lugs C C, the coiled spring D, arranged as described, and connected to the plate by the parts C C, substantially as and for the purposes specified.

3. The combination and arrangement of the coiled spring D with the wicking E E, when the latter is attached to the bottom of the curved spring, substantially as shown and described.

JAMES A. COWLES.

Witnesses:

J. H. KEAZIE,  
R. H. FORRESTER.