

(No Model.)

A. W. WRIGHT.  
JOURNAL LUBRICATOR.

No. 541,197.

Patented June 18, 1895.

Fig. 1.

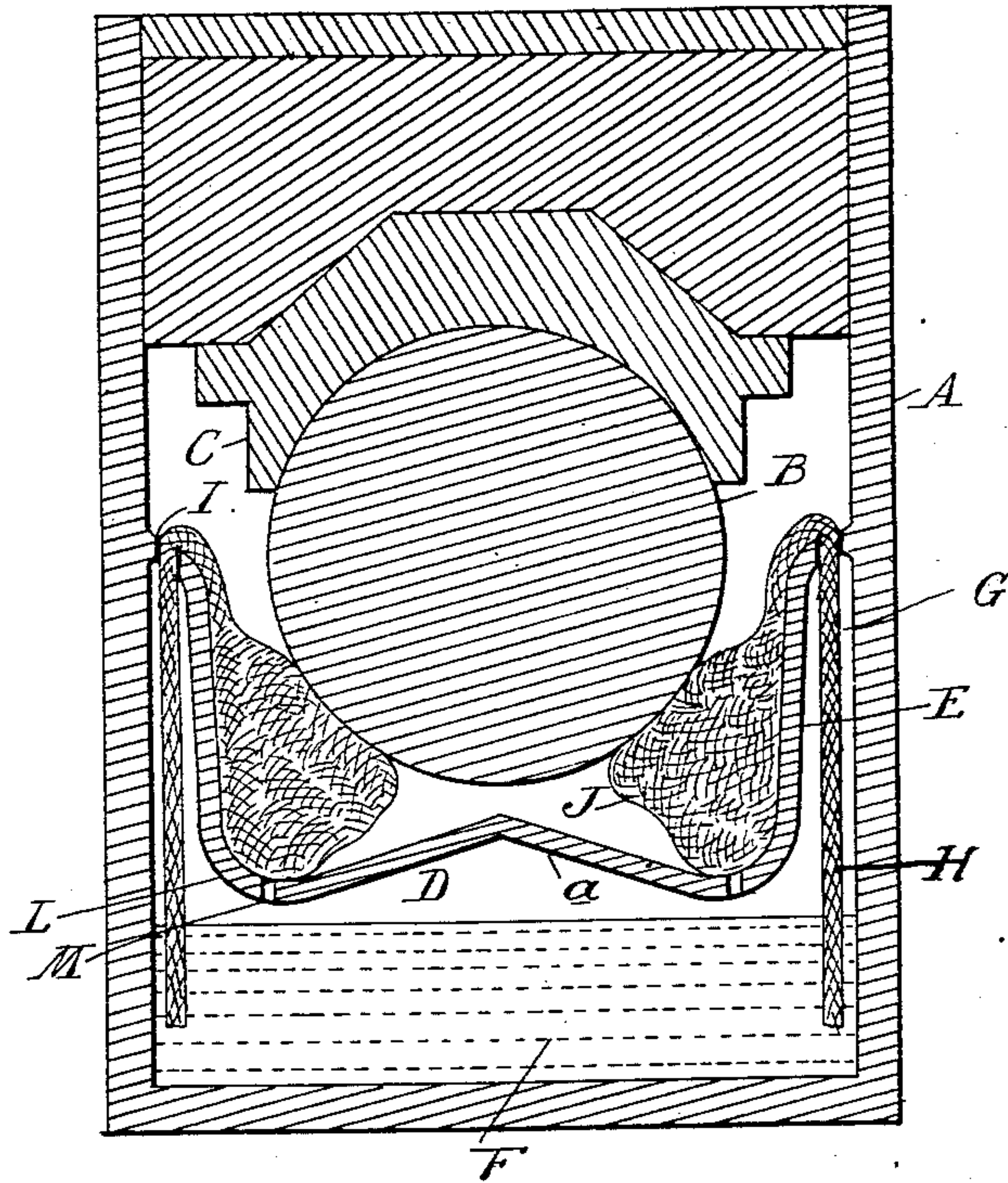


Fig. 2.

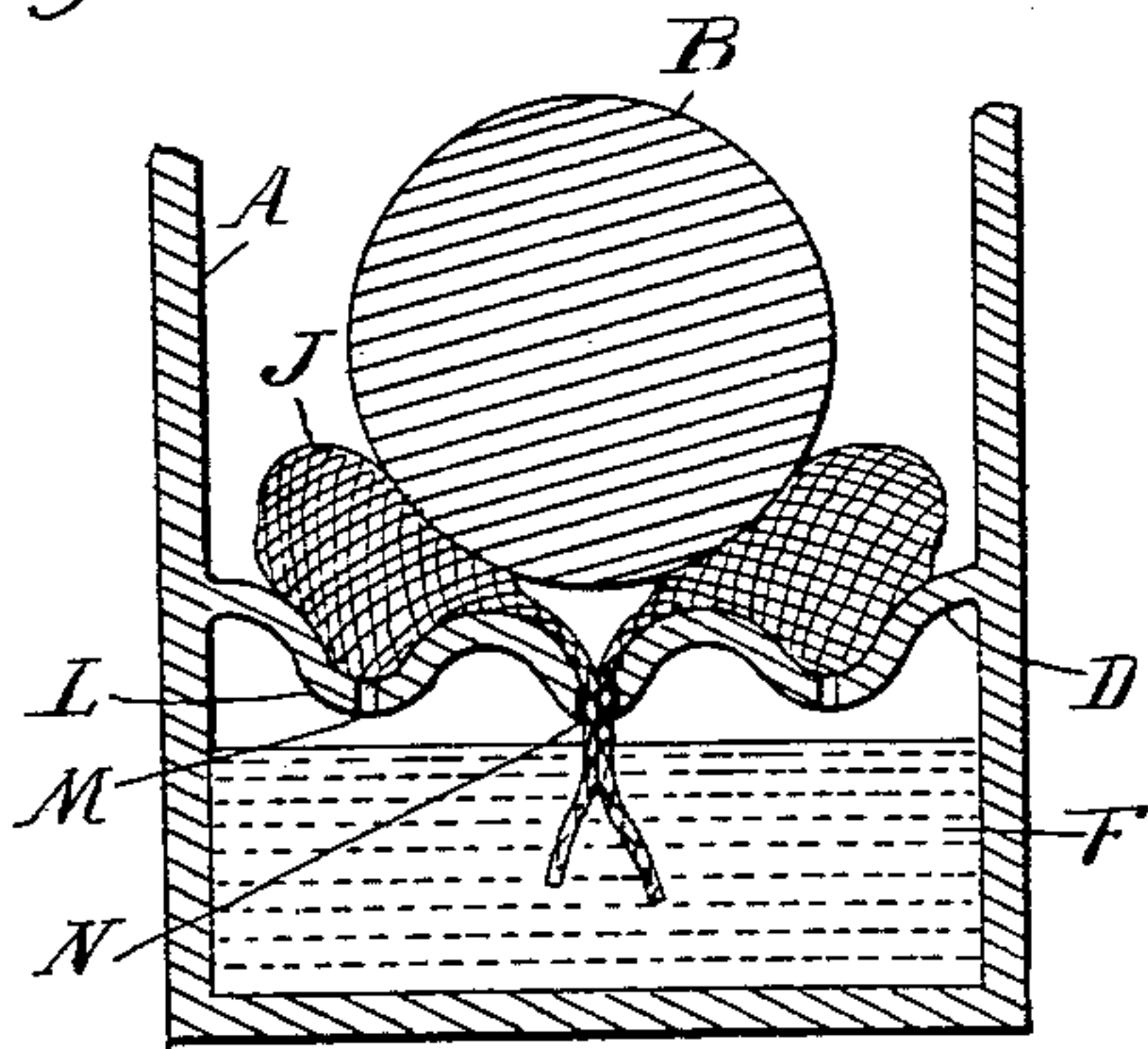
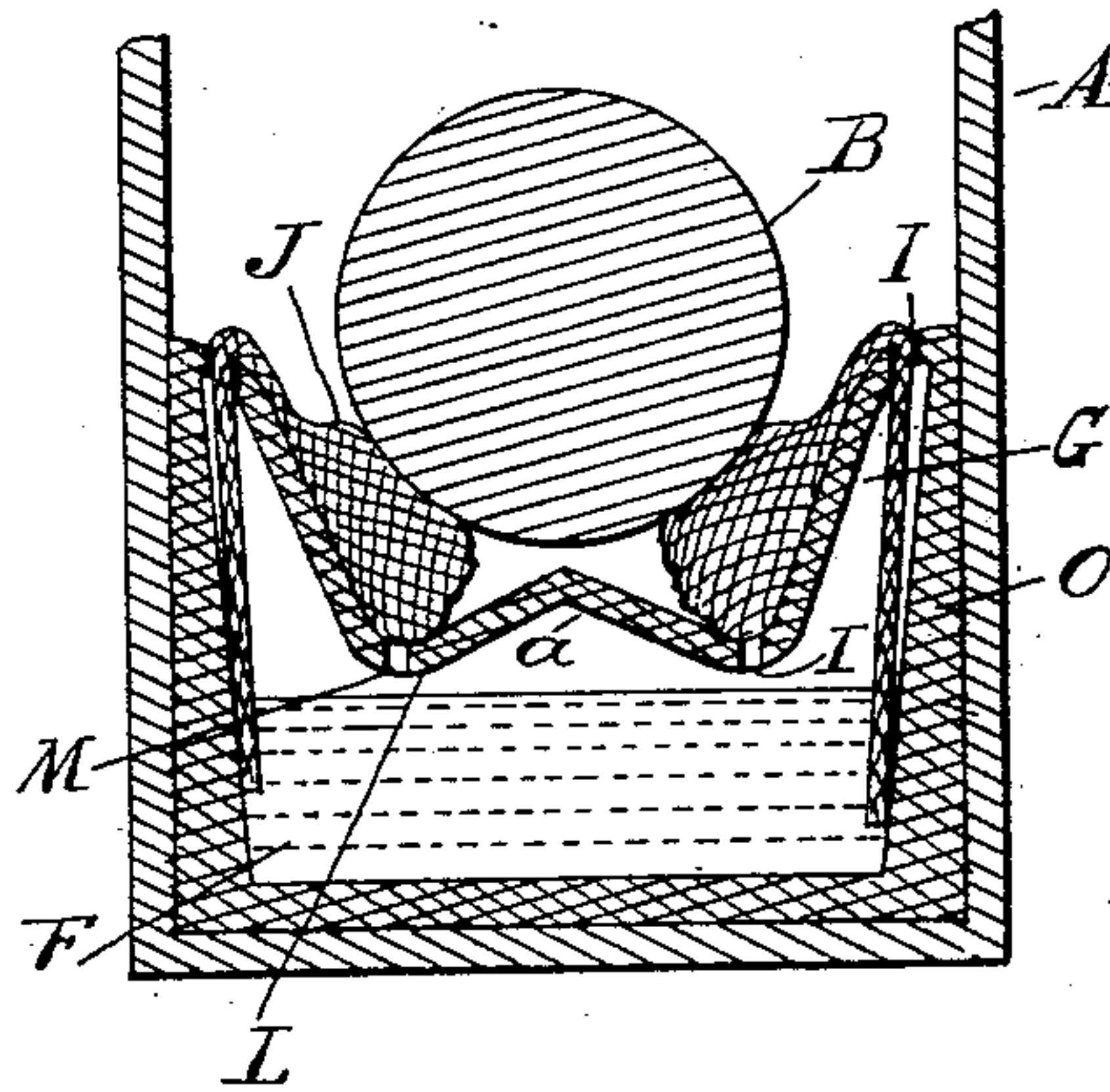


Fig. 3.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ARTHUR W. WRIGHT, OF DETROIT, MICHIGAN.

## JOURNAL-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 541,197, dated June 18, 1895.

Application filed July 10, 1894. Serial No. 517,059. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR W. WRIGHT, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Journal-Lubricators, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention consists in the peculiar construction of a journal box especially designed for railway cars, but which may be used for other journals.

15 The invention particularly consists in the peculiar construction of the box and a fibrous feeding wick or body for feeding the oil to the journal by capillary action, and devices for causing the oil to return to the oil receptacle (formed as a separate inclosure or chamber) as it drips from the wicking, and further in the peculiar construction, arrangement and combination of the various parts, all as more fully hereinafter described.

25 Figure 1 is a cross-section through a car axle box of my improved construction. Figs. 2 and 3 are similar sections through modified forms.

30 A is the car axle box. B is the journal, and C the bearing, these parts being of known and usual construction except as hereinafter described.

Across the box below the journal and cast integral with the box I form a diaphragm or partition D having a bottom comprising the 35 oppositely inclined sections  $\alpha$  from the edges of which are the vertical sections E, extending parallel with the sides of the box beside the lower portion of the journal. This divides the box to form the oil receptacle F in the 40 bottom of the box and the vertical wick chambers G. Extending through the wick chambers is the wicking H which extends from the oil receptacle through wick chambers G, through apertures I at the top of the wick 45 chambers and connects on the upper face of the diaphragm into a fibrous pad J, extending the whole length of the journal or part of the same if desirable and bearing against the inner face of the wall E. Beneath this pad is 50 formed a trough L in which rests the lower end of the pad J, this trough being formed at the meeting of the bottom and side sections of the diaphragm, and is provided with drain-

age apertures M leading into the oil receptacle F. The parts being thus constructed the device may be filled by pouring the oil into the 55 trough L from which it will run through the apertures M into the receptacle F. It will then be lifted by capillary action through the wicks H and fed into the pad J, the outer face 60 of which bears against the face of the journal, thereby perfectly and evenly lubricating the same.

The oil which will accumulate in the trough L by the pressure of the journal on the pads 65 will drip off the pads and will be drained back into the oil receptacle through the apertures M and thus the device at all times will be kept in good condition and with the oil protected from cinders, sand and dust beneath 70 the diaphragm.

Instead of arranging the wicks and pad as shown in Fig. 1, I may arrange the wicks through a central aperture N leading to the 75 troughs L at the side in which the oiling pads J are located.

In Fig. 3 I have shown a construction similar to Fig. 1 except that I have made an interior box O with the diaphragm D integral therewith, the arrangement of the parts being 80 the same. This is the construction which I prefer to apply to axle boxes now in use and to that end I construct this box of rubber or other suitable material so that it may be collapsed and inserted into the usual oil box. 85

It will be observed that the bottom of the diaphragm inclines from a central point downward to the bottom of the trough so that all oil dripping will be fed into the oil receptacle.

What I claim as my invention is— 90

In a journal box lubricator, the combination with the box and the axle, of a diaphragm spanning the box and supported from the sides thereof, the outer portions of the diaphragm being extended downwardly at an 95 incline toward the center of the box, and the diaphragm perforated and formed into receiving pockets on opposite sides of the center of the axle, substantially as described.

In testimony whereof I affix my signature 100 in presence of two witnesses.

ARTHUR W. WRIGHT.

Witnesses:

M. B. O'DOHERTY,  
L. J. WHITEMORE.