

(No Model.)

A. B. FAUNCE & M. S. CABELL.  
LUBRICATOR.

No. 469,236.

Patented Feb. 23, 1892.

Fig. 1.

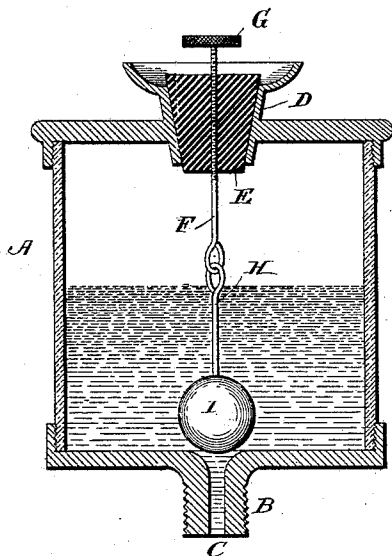


Fig. 2.

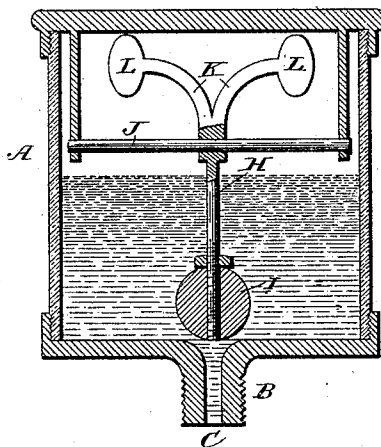


Fig. 3.

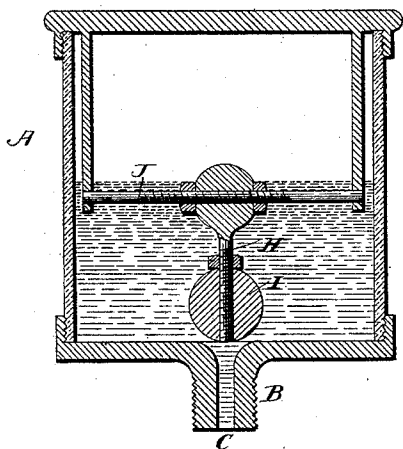
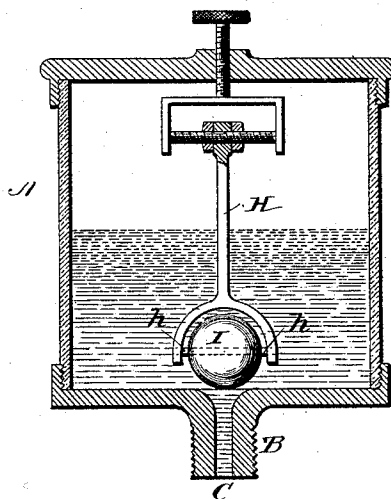


Fig. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

ALBERT B. FAUNCE AND MILTON S. CABELL, OF QUINCY, ILLINOIS.

## LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 469,236, dated February 23, 1892.

Application filed April 4, 1891. Serial No. 387,589. (No model.)

*To all whom it may concern:*

Be it known that we, ALBERT B. FAUNCE and MILTON S. CABELL, citizens of the United States, residing at Quincy, Adams county, Illinois, have invented certain new and useful Improvements in Lubricators; and we do hereby declare that the following is 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.

Our invention relates to improvements in lubricators for feeding lubricating material, such as heavy grease or greasy compounds, to the crank-pins of engines or other machinery wherein the lubricator-cup is subjected to more or less motion.

The invention consists in the combination, with a suitable cup or receptacle for the lubricant, of a suspended ball of anti-friction metal or alloy of metals.

It also consists in the combination, with a lubricator-cup, of a cork or stopper fitting an opening in the top of said cup, and a ball suspended from the stopper, adapted to swing and vibrate within the cup.

It also consists in certain other combinations hereinafter described and claimed.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical section of our lubricator-cup, the cork or stopper, the swivel-joint, and the metallic ball suspended therefrom. Figs. 2, 3, and 4 represent modifications of the invention.

A is the cup proper, which is preferably made of glass for the purpose of permitting an insight to the interior to obtain a knowledge of its contents, or it may be made of metal with a glass slide or window therein for the same purpose. The cup is also preferably made in two parts, as shown, the lower part of which may be made of cast-iron or brass, and has a threaded extension B around the discharge C for screwing into the part of the machine to be lubricated. The upper part has a cone or funnel shaped opening at D, in which the cork or stopper E, preferably of rubber, rests. Through the center of this stopper passes the screw-threaded rod F, provided with a thumb-piece G at its top, so that it may be conveniently raised or lowered. At the lower end of this rod F is connected by

a swivel-joint a secondary rod H, to which the metallic ball or ring I is attached. This rod H may be in the form of an elastic flat or spiral spring.

The motion of the machine causes a swinging motion of the ball I across the interior of the lubricator, which mixes and grinds the lubricant and thoroughly commingles the detritus from the ball caused by its impact upon the sides of the cup with the grease, and thereby adds to its lubricating effect. When the machine is not in motion, the ball I assumes a position directly over the exit-opening C, so as to obstruct the flow of the lubricating material to the bearings. In other lubricators of this class the loose ball settles in the discharge-opening itself and difficulty has been experienced in getting the same dislodged. To overcome this objection, we suspend the ball, as shown and described, so that it comes to rest slightly above the angles of the opening, the exact position being regulated by means of the screw connection with the stopper on the rod F. The grease used being heavy will not pass through the small opening thus left. When the grease in the lubricator has become exhausted or the ball I become worn away, which may easily be seen through the transparent sides of the cup, both or either may be renewed by simply withdrawing the cork or stopper E and there-through replenishing the same.

In Fig. 2 we show a modification of our invention. J is a bar passing across the cup about midway of its length, and to this is pivoted the rod H, to which the ball I is attached. This rod H has two or more projecting or flaring arms K K, on the ends of which are wings or balls L L. The motion of the machine causes the balls L L and I to vibrate on their axes, the balls L L forcing the grease to the bottom.

Fig. 3 shows a second modification, in which the ball I is suspended on the cross-bar J and is adapted to swing thereon and make a complete revolution. The rod H screws into the ball I and the adjustment of the latter is made thereby. Two nuts of the bar J prevent lateral movement of the rod H.

Fig. 4 shows a third form. In this the rod H is provided with a forked end or yoke, through which a small shaft h passes, on which

the ball I is axially mounted and adapted to rotate. On the reciprocation of the rod H by the motion of the machine the ball I, bearing against the cup at different points, owing to  
5 the rotation thereof, equalizes the wear of the same over its entire surface. The ball I may be vertically split and the two parts mounted as above stated. Additional wear of the ball is thus caused by the friction of the parts on  
10 each other and the mixing of the grease is also facilitated.

Having now described our invention, what we claim is—

1. The combination of a reservoir or grease-  
15 cup having opening or passage for the discharge of the lubricant, a swiveled or jointed hanger suspended from the upper part of the cup, and a ball attached to said hanger normally adjusted in proximity to and above the  
20 discharge-opening, but at all times out of con-

tact with any part of the bottom of the cup, whereby the ball is free to swing from side to side of the cup, substantially as described.

2. In a lubricator, the combination of a body part, a base provided with an annular thread- 25 ed extension forming an outlet-opening, a stopper fitting an opening in the top, a threaded rod passing therethrough having a thumb-piece at its top, a secondary rod connected by swivel-joint at the lower end thereof, and a 30 metallic ball attached to said secondary rod, substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in the presence of two witnesses.

ALBERT B. FAUNCE.  
MILTON S. CABELL.

Witnesses:

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