J. RICHARDS.
Lubricator.

No. 201,289. Patented March 12, 1878.

Fig. 1.

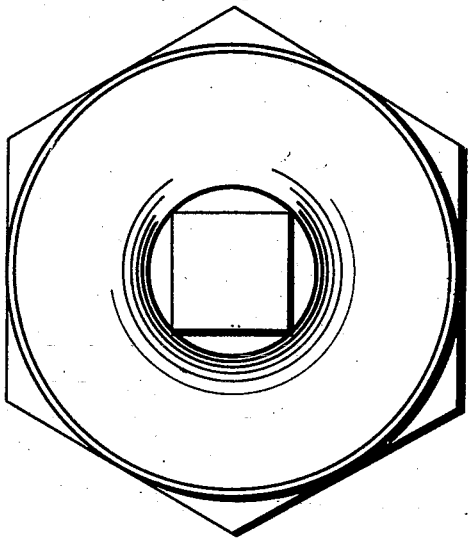
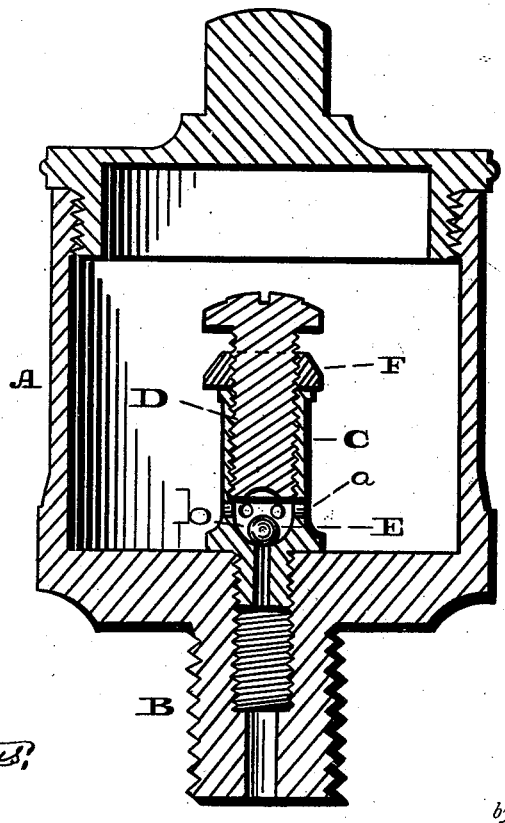


Fig. 2.



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JACKSON RICHARDS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. **201,289**, dated March 12, 1878; application filed January 25, 1878.

To all whom it may concern:

Be it known that I, JACKSON RICHARDS, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Oil-Feeders, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a top or plan view of the feeder embodying my invention. Fig. 2 is a central vertical section thereof.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists of an oil-feeder applicable to a movable member of machinery, and having a valve which is lifted or opened by centrifugal action due to the throw of the portion of the engine, crank, or other movable member of the machinery to which the valve is connected.

A set-screw is provided for adjusting the lift of the valve to regulate the feed while running, and a jam-nut for holding the screw in adjustable positions.

The seat of the valve is at the base of a chamber fitted within the cup, and said chamber has openings at or near its bottom for the admission of oil to said chamber, and consequently to the outlet, whereby but a small quantity of oil or lubricant is required to be placed in the cup, and the feed will be accomplished to the last particles thereof.

Referring to the drawings, A represents an oil-cup, provided with a stem, B, for purposes of attachment of the cup.

Within the cup is a chamber, C, which is screwed or otherwise fastened to the bottom of the cup, and it communicates with the opening of the stem B; and openings *a* are formed in said chamber, at the bottom thereof, for the admission of the oil or lubricant from the cup into the chamber.

D represents a set-screw or screw-plug, which is fitted to the interior of the chamber C, and the space *b* below the screw constitutes a chamber, in which plays a loose ball-valve, E, which seat is at the base of the chamber C, and said valve covers and uncovers the passage of the chamber C, which communicates with the opening of the stem B.

On the set-screw D is fitted a jam-nut, F, which tightens against the top of the chamber C, for holding said screw in its adjusted or set positions.

The operation is as follows: When the cup is properly attached in position and the machinery moves, the throw of the latter causes the valve E to move alternately from and to its seat, or rise and fall. As the valve is lifted, the opening in the base of the chamber C is uncovered, and oil flows therethrough into the opening of the stem B, and thus drops from the cup to the journal, wrist-pin, or other part to be lubricated. By raising or lowering the screw D, the space *b* is increased or decreased. Consequently, the extent of play of the ball-valve E is correspondingly affected, whereby, as the intervals between the lifts and falls of the ball are increased or decreased, the oil is cut off with less or greater rapidity, and thus the feed is regulated.

It is not essential that the valve E be of globular form, as a loose valve of any other shape will operate equally as well as the ball-valve shown.

By the construction of the internal chamber D, only a small quantity of lubricant is required to be placed in the cup, and the last particles thereof will be passed out.

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

1. The loose valve E, in combination with the internal chamber C, with openings *a* near its bottom and a valve-seat at its base, substantially as and for the purpose set forth.

2. The loose valve E, in combination with the threaded chamber C, having openings *a* at or near its bottom and a valve-seat in its base, and with the set-screw D and the nut F, said parts being inclosed within the cup A, substantially as and for the purpose set forth.

JACKSON RICHARDS.

Witnesses:

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