No. 612,736. Patented Oct. 18, 1898.

E. M. KING & J. KASLINKE.

LUBRICATOR.

(Application filed Nov. 18, 1897.)

(No Model.) 2 Sheets—Sheet 1.

FIG. 1.

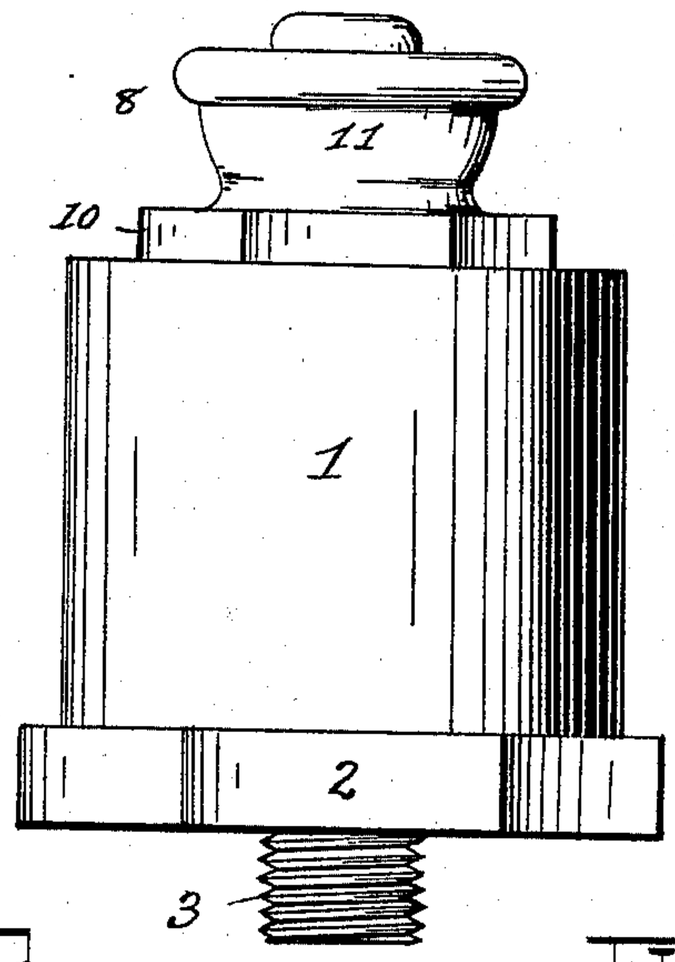

FIG. 2.

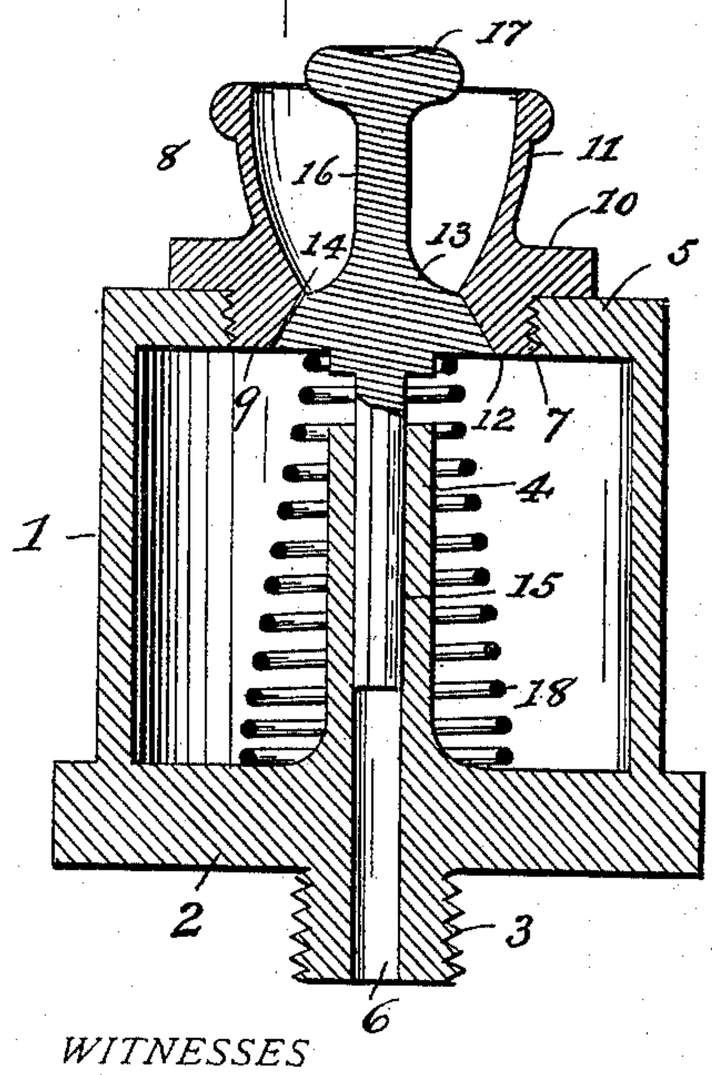

FIG. 3.

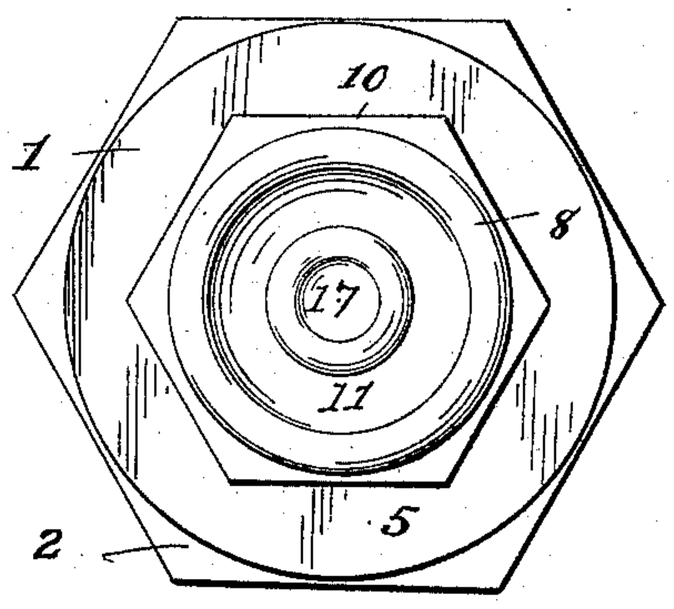

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FIG. 4.

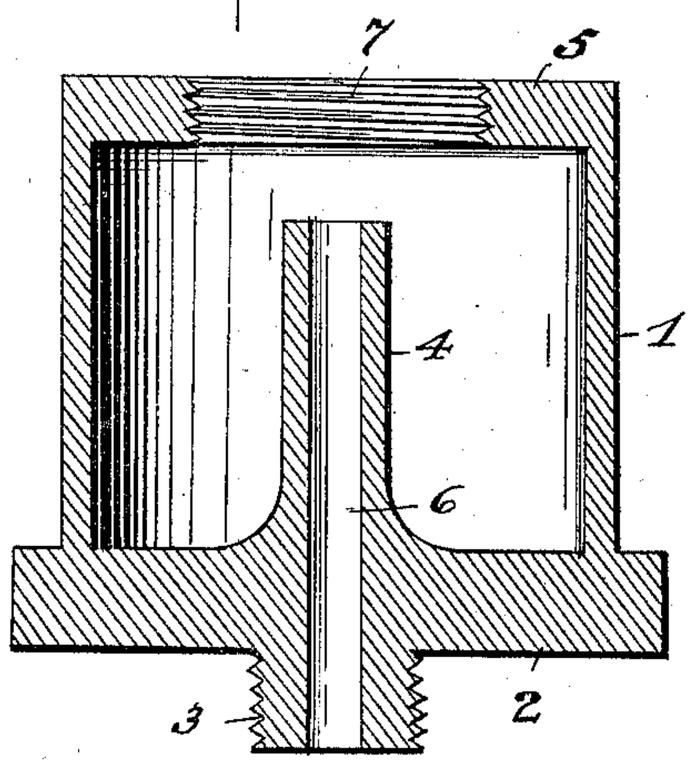


FIG. 5.

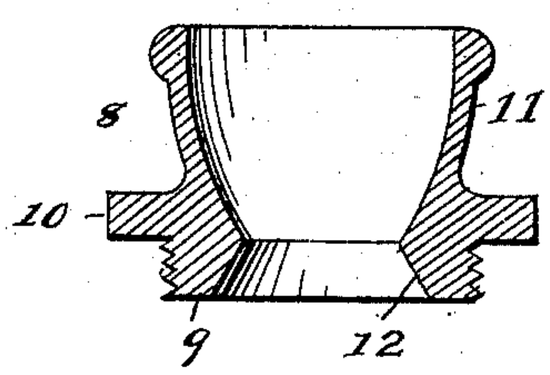


FIG. 6.

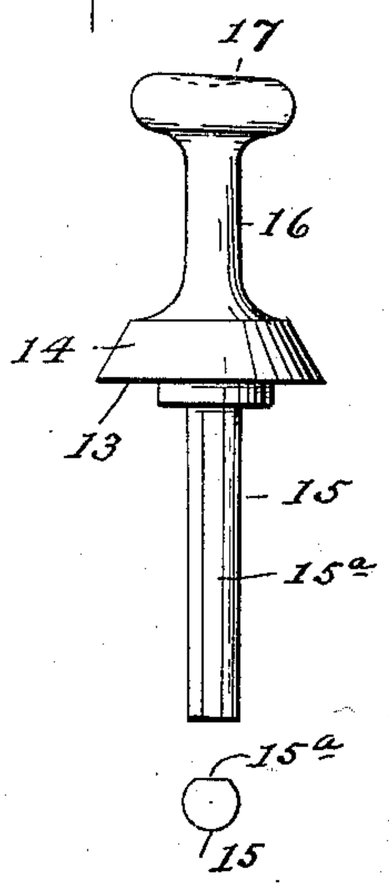
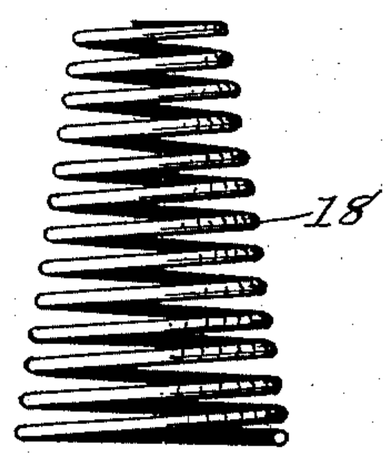


FIG. 7.



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UNITED STATES PATENT OFFICE.

EDWARD M. KING AND JOHN KASLINKE, OF JACKSON, MICHIGAN.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 612,736, dated October 18, 1898.

Application filed November 18, 1897. Serial No. 659,019. (No model.)

To all whom it may concern:

Be it known that we, EDWARD M. KING and JOHN KASLINKE, citizens of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Lubricators; and we do hereby declare the following to be 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 lubricators, and has for its object to provide a lubricator-cup of improved construction and a novel valve-controlled cap therefor by which the cup may be readily and conveniently replenished with oil without the necessity of detaching the cap therefrom.

The detailed objects and advantages of the invention will appear in the course of the subjoined description.

To this end the invention consists in the novel construction and combination of parts hereinafter more fully described, and particularly set forth in the appended claim.

In the drawings hereto annexed and forming part of this specification like reference characters designate corresponding parts throughout the several views.

Figure 1 is a side elevation view of a lubricator embodying our invention. Fig. 2 is a central vertical section; Fig. 3, a top plan view of same. Fig. 4 is a central vertical section of the lubricator-cup; Fig. 5, a similar view of the screw-cap; Fig. 6, a side elevation and a bottom plan view of the plunger-valve, and Fig. 7 an enlarged detail view of the valve-spring.

The lubricator cup or case 1 may be of any approved form suitable for the purpose, and preferably is provided with an enlarged or thickened bottom 2, made rectangular or polygonal in order that a wrench may be applied thereto for conveniently attaching the lubricator to and detaching it from the bearing to be lubricated.

The cup is provided with a threaded nipple 3, pendent from its bottom, and an interior oil-feed tube 4, extending from the upper surface of said bottom and having its upper end terminating a short distance below its top plate 5. The oil-feed passage 6 extends continuously through the said tube, bottom plate of the cup, and the threaded nipple.

The top plate is formed with a threaded opening 7 in line with the feed-tube 4.

8 designates a cap having a screw-threaded base portion 9, adapted to be threaded into said opening, a circumferential polygonal flange 10, which is adapted to rest upon the top plate 5 and prevent leakage of oil through the threaded opening, and a cup-shaped body 11. The base of the cap is formed with an opening in communication with the cup and a beveled valve-seat 12.

A plunger-valve 13 controls the flow of oil from the cup 11 into the case 1. This valve has a beveled face 14 to abut against the valve-seat 12, a stem 15 fitted to slide in the oil-feed tube 4, and a shank 16 projecting into the cap-cup 11 and formed at its upper end with a head or knob 17, whereby it may be depressed and forced off its seat by the fingers.

The valve-stem has a flat face or a groove 15^a, extending longitudinally, which permits a minute quantity of oil to pass through the feed-tube and oil-feed passage 6 to the bearing. The valve is normally held seated by a conical spiral spring 18, encompassing the feed-tube 4 and having its lower end bearing against the bottom of the cup 1 and its upper end bearing against the under side of said valve.

The lubricator is applied to a connecting-rod or other movable part of an engine or machine by means of its threaded nipple 3, which is threaded into an opening therein leading to the bearing. The motion of the machine part causes the oil to slosh up in the cup 1, and the small amount of oil that falls upon the upper end of the tube 4 at each successive movement of said part feeds through the passage 6 to the bearing.

When it becomes necessary to refill or replenish the cup 1 with oil, this may be readily and conveniently accomplished by first pouring the oil from a can or reservoir into the cap-cup 11 and then forcing the plunger-valve off its seat, whereupon the oil will pass down into the lubricator-cup 1, as will be readily understood.

The advantages resulting from our im-

proved construction over the ordinary lubricator having a cap which is detached in filling and again applied after filling are obvious.

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

A lubricator, comprising an oil-containing case having a threaded opening in its top, a threaded nipple on its bottom and an interior oil-feed tube provided with a passage extending through said nipple, a refilling-cup threaded into said opening, said cup being open at the bottom and formed on the under side thereof with a valve-seat, a plunger-valve on the interior of the casing adapted to abut against said seat and provided with a stem movable in the feed-tube and a finger-piece projecting up into the refilling-cup, said stem being formed with a flat feed face or groove, and a spring encompassing the feed-tube and adapted to normally hold the valve upward against its seat, substantially as described.

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

EDWARD M. KING.
JOHN KASLINKE.

Witnesses:
PAUL S. KING,
JOHN WINELAND.