(No Model.)

# D. M. PERINE.

## LUBRICATOR.

No. 406,665. Patented July 9, 1889.

Fig. 1.

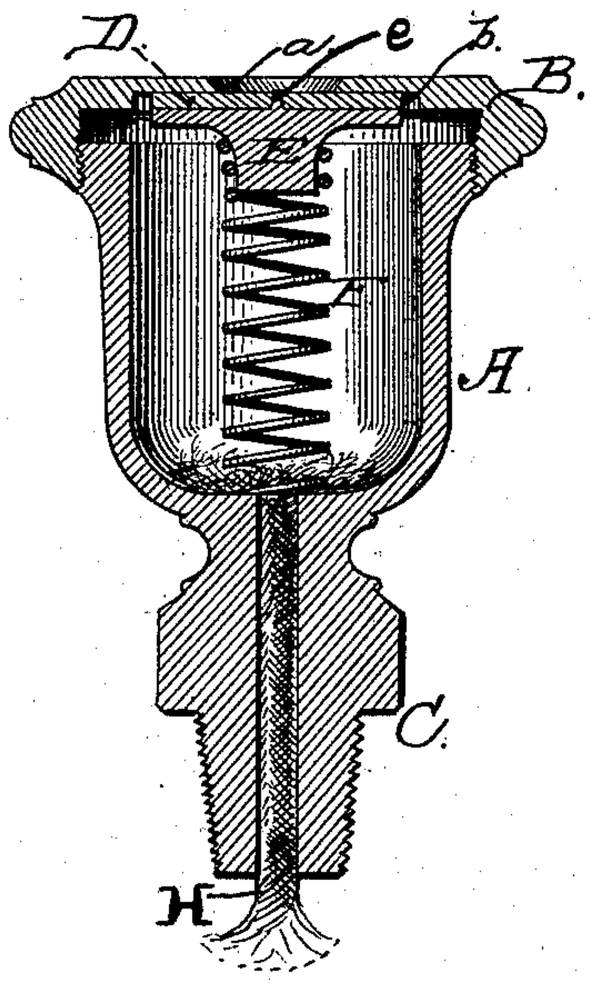
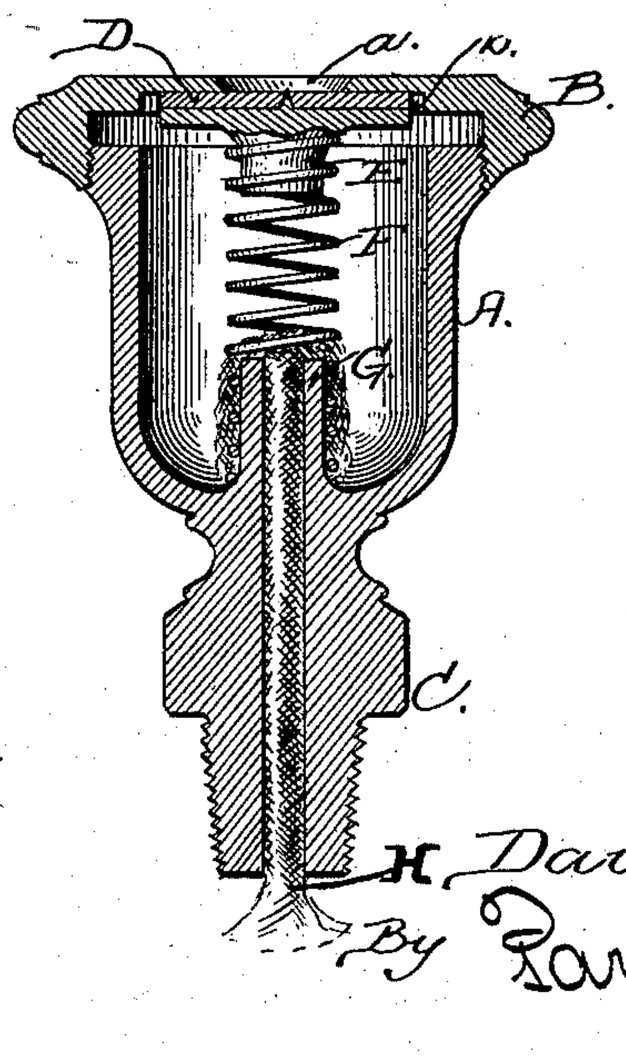



Fig. 2.




Witnesses
Harry S. Rohrer.
Tom R. Stuart.

Inventor
David M. Perine,
By Parker & Sweet, Jr.
Attorney

# UNITED STATES PATENT OFFICE.

DAVID M. PERINE, OF BALTIMORE, MARYLAND.

## LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 406,665, dated July 9, 1889.

Application filed April 14, 1888. Serial No. 270,670. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID M. PERINE, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Lubricators; and I 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.

My invention relates to improvements in lubricating-cups, the object being to provide a simple, cheap, and effective cup which can be readily filled without removing the cover or cap, the interior of the cup itself being proof against the entrance of dust or foreign substances.

To these ends my improvements consist, essentially, of the details of construction and arrangement of parts, as will be hereinafter fully described, and specifically designated in the claim.

In the accompanying drawings, Figure 1 represents a vertical longitudinal section of my improved lubricating-cup, and Fig. 2 a similar view showing a modification thereof.

Similar letters of reference indicate like parts in both figures of the drawings.

In carrying out my improvements I preferably employ the ordinary lubricating-cup, which is composed of a suitable receptacle A, provided with a screw cap or cover B and with a screw-threaded tubular stem or shank C, as shown. The cover or cap B, I provide with a central opening or aperture *a*, terminating at its lower end upon the interior of the said cap with a suitable valve-seat or shallow cavity *b* to receive a correspondingly-sized valve D, preferably made of a rubber or leather disk. This disk or valve is suitably secured upon the upper surface of a head B, the lower end of which fits within the upper end of a spiral spring F, the lower end of which in turn rests upon the bottom of the lubricating-cup, as shown. The head E is provided with a central upstanding spur *e*, which fits in a corresponding central perforation in the elastic disk D and holds the latter in place on the head. When said disk becomes worn or compact, it may be readily replaced, as a new disk is readily affixed to the head by simply pressing it down on the spur *e*.

Through the oil-passage in the stem or shank C of the lubricating-cup I draw a suitable length of wick H, spreading the upper part thereof out upon the bottom of the cup beneath the spiral spring, while the lower end of the wick extends a suitable distance below the said stem or shank.

The construction of the lubricating-cup being as above described, it will be readily observed that the cup can be filled with oil at any time without removing the cap or cover by simply pressing the valve D downward with the spout of the filling-can, thereby allowing the oil to flow in until the cup is full, and the withdrawal of the spout of the filling-can causes the valve D, through the action of the spiral spring, to automatically close the oil-supply opening *a* in the cap to prevent the entrance of dust or other foreign substance into the lubricating-cup.

In some instances it may be deemed desirable that the oil be supplied slowly from the lubricating-cup, in which case I provide a central tube G in the bottom of the cup, said tube communicating with the oil-passage in the stem or shank, as shown in Fig. 2, the latter arrangement effecting an economy in the consumption of oil, as but a limited quantity of the same can be carried by the capillaries of the wick over the central tube G.

I am aware that lubricating-cups have been provided heretofore with valves to close the aperture through which the oil is introduced, and therefore I do not desire to claim this; but it has been found that the continual pressure of the valve and the frequent insertion of the tube of the can soon wear the packing-disk, and render it so hard and compact as to be comparatively useless, and therefore I have provided simple means whereby said disk may be readily replaced. Further, it is the practice to provide a slightly conical or tapered valve to fit in a correspondingly-shaped seat or opening; but in the improved cup a simple hole or aperture *a*, of any suitable size and shape, is formed in the cap, and the valve closes up against the inner side of the latter, thereby closing said aperture and preventing the escape of the contents and excluding dust. The packing forms a perfectly air-tight joint.

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

The herein-described lubricating-cup, having a chamber A, exteriorly screw-threaded at its upper edge and provided with a tubular stem C, the cap B, fitting over the open top of the chamber A, provided with a female screw to engage the threaded upper edge of said chamber, and also provided with a central aperture *a*, the spiral spring F, resting at its lower end on the floor of the chamber A, the valve-head E, fitted to the upper end of the said spring and provided with a flat upper surface and a central upstanding spur *e*, and the elastic packing-disk D, arranged on the flat upper surface of the valve-head and engaged at its center by the spur *e*, whereby said disk is normally pressed by the spring against the inner surface of the cap to cover the aperture therein, and may be removed from the head by disengaging it from the spur, substantially as and for the purpose specified.

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

DAVID M. PERINE.

Witnesses:

PARKER H. SWEET, Jr.,

JAMES H. GRIDLEY.