(No Model.)

G. B. ESSEX.

LUBRICATOR.

No. 425,936. Patented Apr. 15, 1890.

FIG. 1.

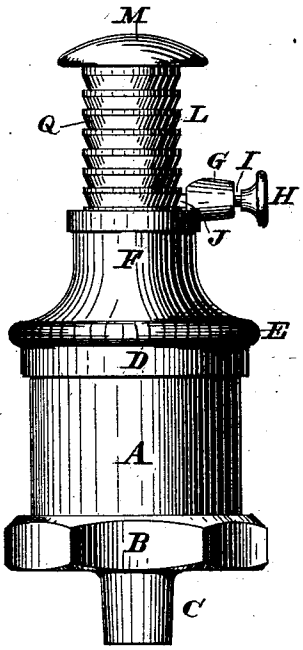
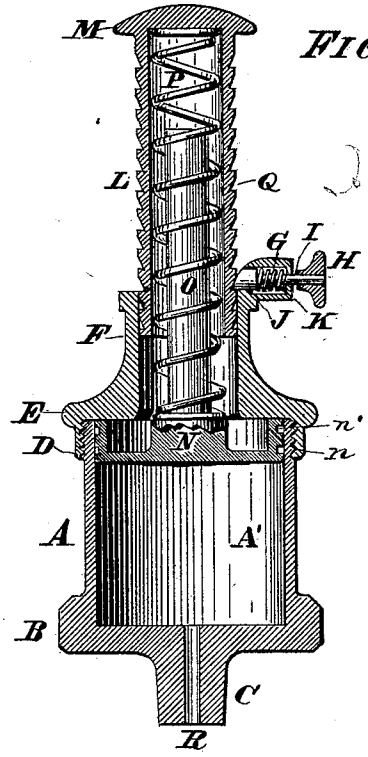


FIG. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE B. ESSEX, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF TO THOMAS J. HART, OF SAME PLACE.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 425,936, dated April 15, 1890.

Application filed December 26, 1889. Serial No. 334,991. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. ESSEX, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Lubricators; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has general reference to improvements in lubricators for tallow, dope, and other greasy compounds and substances of a pasty consistence; and it consists, essentially, in the novel and peculiar combination of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims, whereby increased efficiency of the apparatus and cheapness of manufacture are attained.

In the drawings already mentioned, which serve to illustrate my said invention more fully, Figure 1 is a side elevation of my improved lubricator. Fig. 2 is a longitudinal sectional elevation of the same, like parts being designated by corresponding letters of reference in both figures.

A in the drawings designates the body of my improved lubricator, it having on its lower end a hexagonal wrench-section B for the application of a suitable wrench to screw said body into that part of a machine, journal-bearing, &c., that requires lubrication, and a shank C, the latter being externally screw-threaded, when necessary, to fit said bearing and other parts. The upper end of this body is externally screw-threaded at *n* to receive an internally-screw-threaded cap D, having a "milled" bead E to facilitate the screwing and unscrewing. It terminates in a neck F, the bore of which is adapted to receive a tension-tube L, which by means of a spiral spring P acts upon a piston N, fitted into the cylindrical bore A′ of said body A. The piston N has creases *n*′, acting as a packing in the well-known manner, and it is provided with a piston-rod O, as clearly shown in the drawings.

The neck F of the cap D has a tubular lateral projection G, within which is located a catch consisting of the head J, shank I, and the knob H, and a spiral spring K, which tends to push the head J inwardly toward the tension-tube L and to engage with one or the other of a series of barb-shaped annular creases Q in the exterior of said tube L in a manner to allow the latter being pushed downwardly into the body A, but prevented from being pulled out of the same, except when the head H of the catch has been retracted, and thereby the catch disengaged from said creases Q.

The upper end of the tube L is provided with a knob M for manipulation, as hereinafter described.

In operation the receiver A′ of the body A is filled with grease, dope, or other suitable substance by unscrewing the cap D and removing the piston N by taking hold of its rod O, after which the latter parts are replaced and the tension-tube L pushed downwardly a suitable distance. This has the effect of tensioning the spiral spring P and the latter acting upon the piston N to force the lubricant out of the receiver A′ through the passage R in the shank C. Whenever enough of the lubricant has escaped to slacken the tension, a slight touch upon the knob M will force it farther down and again tension the spiral spring until the receiver A′ is empty and needs refilling.

It will be observed that nearly all forced feed-lubricators for greasy substances having the consistence of paste employ a screw device which either forces the lubricant directly or through the intervention of a spring. This construction necessitates the retraction of the screw whenever the receiver is empty, which is a tedious and troublesome job, especially in works where a large number of these lubricators are used.

In my device the retraction of the tension-tube is accomplished in a moment of time by simply retracting the catch and pulling the tube out of the cap D.

It will be readily understood that the creases around the exterior of the tube L may be spirally arranged, if desired, so that the tensioning of the spring may be accomplished by re-

volving said tube, such a construction accomplishing the desired result in the same manner as the one heretofore set forth.

Having thus fully described my invention, I claim as new and desire to secure to me by Letters Patent of the United States—

As an improved article of manufacture, a lubricator consisting of the body A, having the wrench-section B and shank C, the cap E, provided with the neck F and an internal cylindrical passage, the spring-catch G, the non-rotating tubular tension-rod L, having the series of annular barb-shaped grooves around its periphery, the piston N, having the guide-rod O, and the spiral spring P, interposed in the tubular rod L between the cap M and the top of the piston N and surrounding said rod O, as set forth.

In testimony that I claim the foregoing as my invention I have hereto set my hand in the presence of two subscribing witnesses.

GEORGE B. ESSEX.

Attest:

MICHAEL J. STARK,

THOS. J. HART.