(No Model.)

W. P. MILLER.

LUBRICATOR.

No. 448,785. Patented Mar. 24, 1891.

Fig. 1.

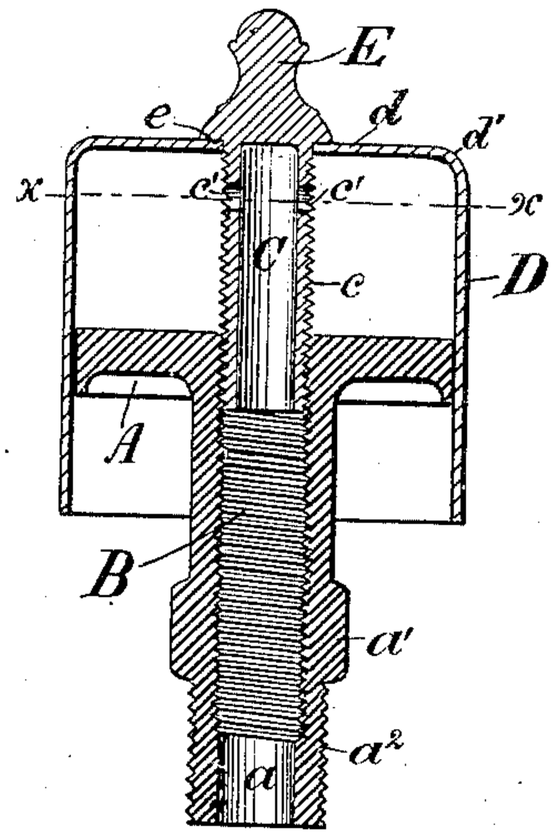


Fig. 2

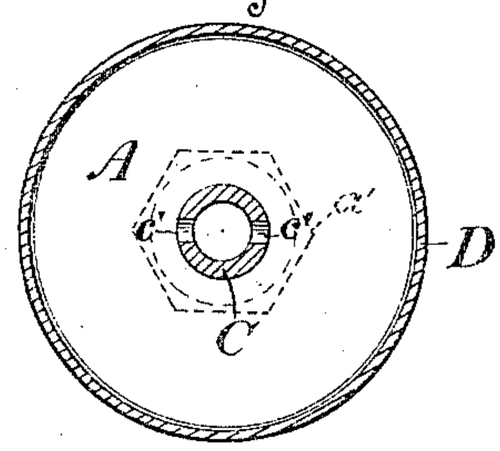
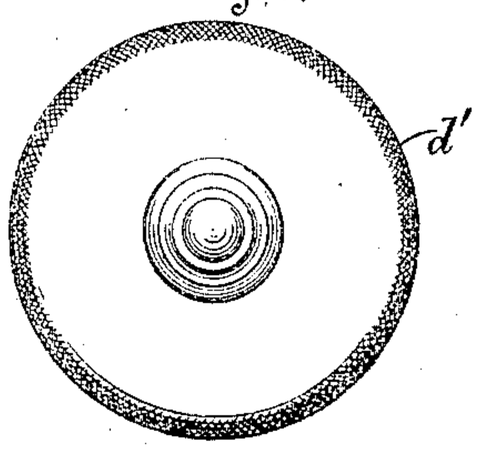


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM P. MILLER, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE WILLIAM P. MILLER COMPANY, OF SAME PLACE.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 448,785, dated March 24, 1891.

Application filed December 6, 1890. Serial No. 373,772. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. MILLER, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Lubricators, of which the following is a specification.

My invention relates to an improvement in lubricators in which provision is made for forcing a lubricant in a viscid or semi-liquid state into contact with the part to be lubricated.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents a view of the lubricator in vertical section. Fig. 2 is a transverse section through the line *x x* of Fig. 1, looking downwardly toward the piston; and Fig. 3 is a top plan view.

My present invention contemplates a piston provided with a hollow stem, through which the lubricant is forced onto the part to be lubricated, the said piston being fixed, and the cup or shell containing the supply of lubricant and within which the piston operates being made movable relatively to the piston.

A represents the piston, here shown as cylindrical and provided with a hollow or tubular stem *a*. The stem *a* is conveniently provided with a squared portion *a'* for the engagement therewith of a wrench for the purpose of screwing the stem into the bearing or other suitable support, in position to discharge the lubricant onto the journal or part to be lubricated. For the purpose of its attachment the said stem is provided with an externally-threaded portion a^2 at its end. The said stem is also provided with an interior screw-thread B, extending from the face of the piston toward the end of the stem, for the purpose of adjusting therein the vertically-movable tubular stem C of the cup or shell D. The cup or shell D is preferably formed of brass or other suitable metal capable of being spun or pressed into shape, and is adapted to receive within it, with an easy-sliding fit, the piston A.

The tubular stem C projects from the central portion of the top *d* of the cup D within the cup toward its open end, and is provided with an exterior screw-thread *c*, adapted to register with the interior screw-thread B in the piston-stem. The tubular stem is conveniently provided, as herein shown, with a head E, provided with shoulders *e* at the point where the threaded portion of the stem begins, which shoulders are intended to overlap the adjacent edges of the top *d* of the cup or shell, and thereby form a convenient joint for soldering the stem firmly to the shell.

Near the upper end of the stem C, within the cup or shell D, the said stem is provided with openings *c'* therethrough, which establish communication between the interior of the shell D and the interior of the stem C.

In operation the cup D, having been removed from the piston A, may be charged with the lubricant, and then by replacing it over the piston A and engaging the threaded stem C with the interior threaded stem B the piston A may be forced toward the top *d* of the shell, to as little or great an extent as may be desired, by simply rotating the cup or shell, and the lubricant will be thereby forced through the openings *c'* in the stem C and along down the stems C and B into contact with the part or parts to be lubricated thereby.

To furnish a convenient hold for the fingers in rotating the shell D to force the lubricant I have knurled or milled the outer edge of the top *d*, as shown at *d'*, Fig. 3.

The lubricator as thus constructed is well adapted to general use, both in connection with fixed and movable parts.

What I claim is—

A lubricator comprising a piston having a tubular stem screw-threaded interiorly, and a cup or shell adapted to receive the piston therein with a close sliding fit and provided with a tubular stem screw-threaded to register with the interior thread in the piston-stem, the stem connected with the cup or shell being provided with openings through its walls, through which communication is established between its interior and the interior of the cup or shell, substantially as set forth.

WILLIAM P. MILLER.

Witnesses:

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