

(No Model)

F. M. ANDREWS.  
LUBRICATOR.

No. 585,417.

Patented June 29, 1897.

*Fig. 1.*

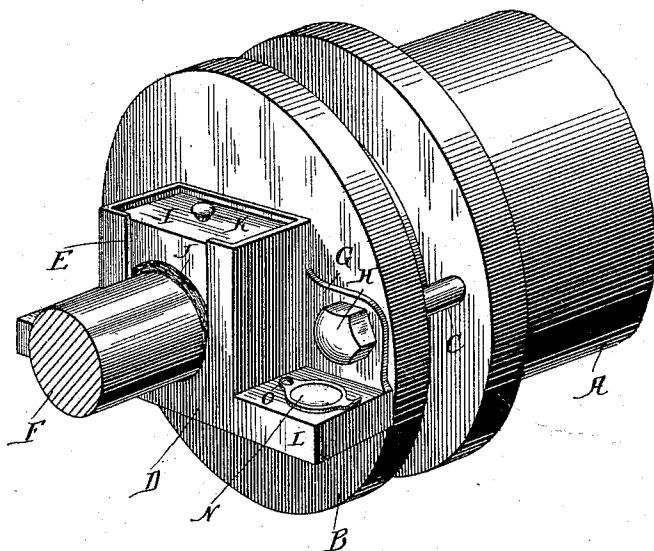


*Fig. 2.*

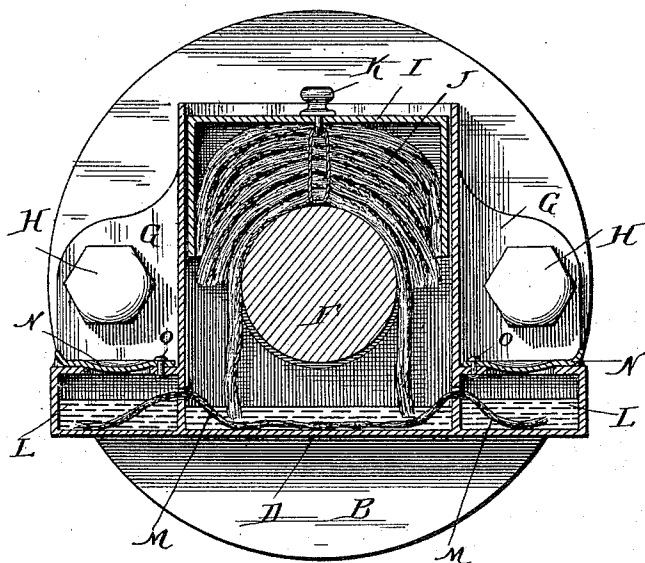
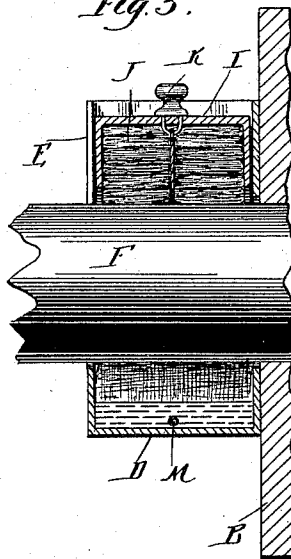


*Fig. 3.*



Witnesses:  
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# UNITED STATES PATENT OFFICE.

FRANCIS M. ANDREWS, OF MANCHESTER, MASSACHUSETTS.

## LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 585,417, dated June 29, 1897.

Application filed July 15, 1896. Serial No. 599,321. (No model.)

*To all whom it may concern.*

Be it known that I, FRANCIS M. ANDREWS, a citizen of the United States, residing at Manchester, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Piston-Rod Lubricators, of which the following is a specification.

My invention relates to a new and useful improvement in oilers for piston-rods and the like, and has for its object to provide a device of this description which may be readily attached to the stud-bolt of the ordinary stuffing-box, and when so attached will supply the proper amount of lubricant to the piston-rod during its outward and inward movements, which in turn will lubricate the stuffing-box gland.

With these ends in view my invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective of a stuffing-box having my improvement applied thereto and showing a portion of the piston-rod extending therethrough; Fig. 2, a section of my improvement, taken parallel with the face thereof; and Fig. 3, a central cross-section.

Referring to the drawings in detail, A represents a stuffing-box of any ordinary construction, and B the flange, which is formed with the gland and which is secured to the stuffing-box flange by the bolt C.

My improvement consists of a casing D of box shape, having U-shaped slots E formed in its front and rear sides to receive the piston-rod F, and this casing is provided with projecting ears G, having suitable holes formed therethrough for the passage of the bolts C, by means of which the device is attached to the gland, the nuts H serving to hold the ears in position, as will be readily understood. A cap I is arranged to slide within the casing and has semicircular notches formed therein so as to partly surround the piston-rod, and within this cap is secured a quantity of fibrous

material or wick J, one or more of which extend downward to the bottom of the casing, as clearly shown in Fig. 2. This wick may be held in place by a cord or wire passed there-  
through and attached to the lower end of the knob K, which latter serves as a handle for removing or replacing the cap, and when the cap is in place the wicks therein bear upon the piston-rod, and, as is well understood, the heat generated by the movements of said rod will facilitate the drawing of oil or other lubricant which has previously been placed in the bottom of the casing after the manner of the ordinary lamp-wick. This oil will be taken up as needed by the piston-rod and conveyed to the gland, thus keeping said gland thoroughly lubricated.

While it is obvious that the lubricant may be placed directly in the bottom of the casing and be drawn therefrom, as before described, under some circumstances this is not so advantageous as to supply the oil to reservoirs L, which are formed upon either side of the casing, and permit the oil to be fed there-  
through to the bottom of the casing by feeding-wicks M. This arrangement prevents the waste of the oil which would otherwise take place and only supply a limited amount to the wicks J, and this is especially advantageous in connection with high-speed engines.

N are caps pivoted at O, which serve to close suitable openings in the tops of the reservoirs, by means of which the oil is placed within said reservoir.

By the use of my improvement little or no attention is required to keep the piston or other rods of the engine properly lubricated, the only requirement being that the reservoir be filled before becoming exhausted, thus obviating much annoyance and inconvenience from the constant attendance which is now required to accomplish this result.

I have here shown my improvement having ears projecting from the sides thereof, and it is obvious that when the device is to be attached to a stuffing-box, the bolts C located at the top and bottom, that provision must be made for this location of the bolt, which I accomplish by forming a single ear, which projects from the bottom of the casing, and in practice I have found that it is not necessary to secure the casing at the top.

Having thus fully described my invention, what I claim as new and useful is—

1. In a device of the character described, a casing forming a central reservoir, said casing having U-shaped slots formed in its front and rear sides to receive a piston-rod, reservoirs formed on either side of said casing, wicks leading to the central reservoir, a cap adapted to slide in the central reservoir, a wick attached to said cap, as and for the purpose described.

2. In a piston-rod lubricator, a casing forming a central reservoir, said casing having U-shaped slots formed in its front and rear sides to receive a piston-rod, reservoirs formed on either side of said central reservoir, wicks leading to the central reservoir, a wick leading from the bottom of the central reservoir up over the piston-rod, means for securing said casing to the stuffing-box, as and for the purpose described.

3. The herein-described combination of the casing D having a central reservoir, ears G by which said casing may be attached to a stuffing-box, the cap I, wicks J and M, reservoirs L and caps N pivoted to said reser-

voirs for closing the openings through which oil may be introduced to the reservoir, substantially as and for the purposes set forth.

4. In a device of the character described, a casing forming a central reservoir, said casing having U-shaped slots formed in its front and rear sides to receive a piston-rod, ears formed with said casing, reservoirs formed on either side of said central reservoir, a cap adapted to slide in the central reservoir, said cap having a cut-out portion adapted to surround the piston-rod, a knob formed on said cap, a wick secured within the cap, said wick being adapted to extend down to the bottom of the reservoir, caps pivoted to the side reservoirs to close suitable openings formed therein, a wick leading from the side reservoirs to the central reservoir, as and for the purpose described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

FRANCIS M. ANDREWS.

Witnesses:

S. S. WILLIAMSON,  
S. M. ANDREWS.