(No Model.)

G. A. STANNARD.

LUBRICATOR.

No. 356,800. Patented Feb. 1, 1887.

Fig. 1.

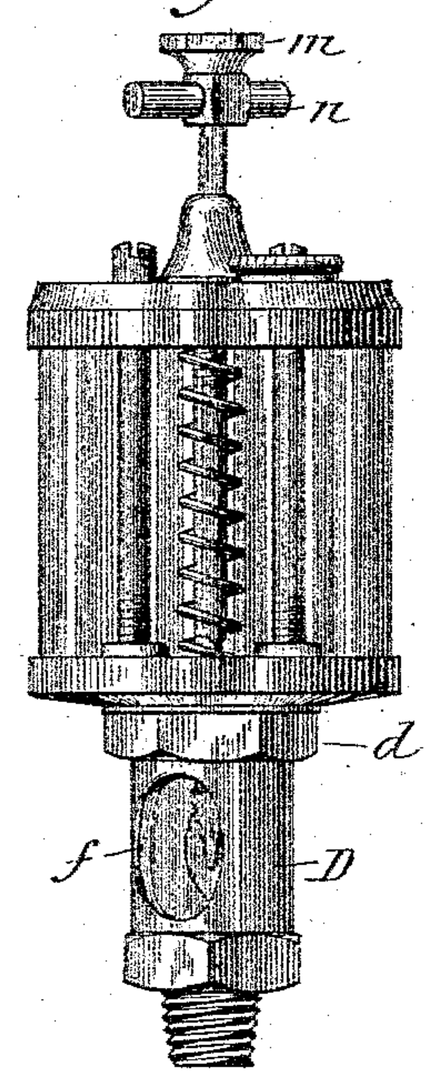


Fig. 2.

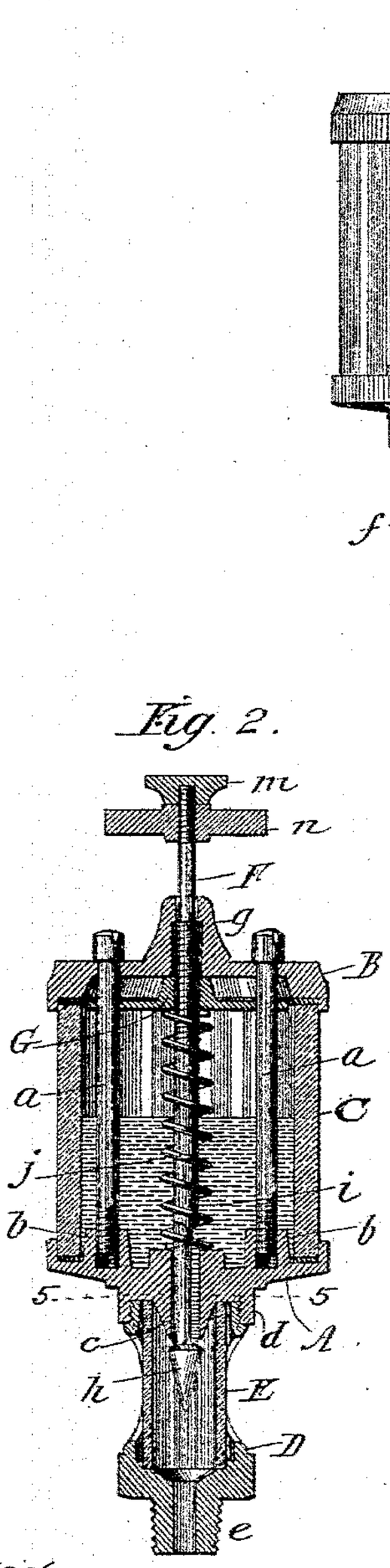


Fig. 3.

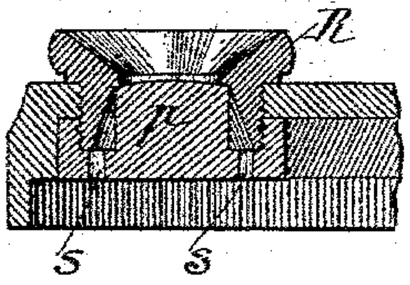


Fig. 4.

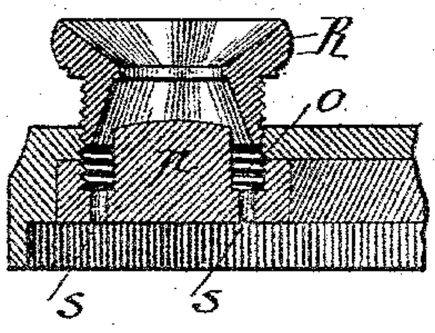
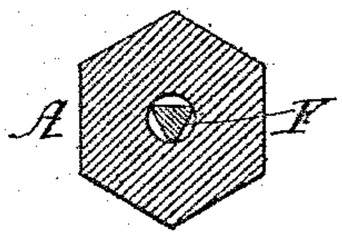


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE A. STANNARD, OF CHICAGO, ILLINOIS.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 356,800, dated February 1, 1887.

Application filed March 12, 1886. Serial No. 195,008. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. STANNARD, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lubricators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to lubricators more particularly intended for the journal-boxes of dynamos and other high-speed machinery; and it has been my main object to provide such a lubricator that can be adjusted for a uniform feed and at the same time may be operated intermittently, like an oil-pump, without disturbing the feed-adjustment.

For that purpose my invention consists of the novel devices and combinations of devices hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 represents an elevation, and Fig. 2 a vertical section, through the center of the lubricator; Figs. 3 and 4, sections of the screw-plug and vent for filling the lubricator, and Fig. 5 a section on line 5 in Fig. 2.

Corresponding letters in the several figures of the drawings designate like parts.

A denotes the base-disk, and B the cap-disk, both having rim-flanges for holding between the glass tube C, these parts being secured together by two screws, *a*, passed through holes in disk B and tapped into bosses *b* of disk A. A central nipple-shaped projection, *c*, formed to the bottom of disk A, is bored for the valve-rod, and around such nipple is a nut-shaped projection, *d*, forming a screw-socket for coupling the neck-extension D, that has a screw-threaded nipple, *e*, to its bottom for connecting it to the cap of a journal-box. The cylindrical shell of this extension D has two diametrically-opposite openings, *f*, and surrounds a glass tube, E, the ends of which are packed and clamped between the bottom of disk A and a bottom shoulder in such extension D. A central nipple-shaped projection, *g*, is also formed to the top of cap-disk B, and is bored for the valve-rod F. This rod F has to its bottom end a conically-pointed head, *h*, which is the valve proper, and shoulders against the end of nipple *c*, that when closed it will form a hermetic joint therewith. From above this valve to point *i*, which is about a quarter of an inch above base A, the rod F is formed triangular to provide oil-channels, and just below disk B the rod F is screw-threaded, and is tapped through a cross-bar, G, the ends of which are bored and passed over the shanks of screws *a*, to be guided thereon. A spiral spring, *j*, surrounds the valve-rod F between the base A and cross-bar G, yieldingly pressing such cross-bar against disk B. The upper part of valve-rod F is passed through disk B, and has secured upon its upper extremity by a knob-shaped nut, *m*, a T-handle, *n*, by which the valve-rod can be rotated, and the opening of the valve *h* can be adjusted to feed a uniform supply of oil to the journal, and in case a journal becomes hot from friction on account of an insufficient supply of the lubricant the attendant by pressing upon knob *m* once or more each stroke of the valve-rod will force as much oil to the journal as is contained in the channels formed by the triangular portion of such valve-rod, and by releasing the pressure after each stroke the spring *j* will lift the valve again to the position it had been adjusted to for a uniform feed. The amount of feed of the lubricant through valve *h* can be inspected through openings *f* and glass tube E.

The opening for filling the lubricator with oil consists of a screw-threaded socket, *o*, in cap-disk B, and of a cylindrical core, *p*, in the center of such socket, thus leaving an annular groove through the bottom of which are drilled four (more or less) holes, *s*, leading into the lubricator. The screw-plug R, fitting the screw-thread in the annular groove, is bored out conical from about the middle toward each end, its middle or smallest diameter portion forming a close joint with the core *p* when screwed down, as shown by Fig. 3. Without entirely removing this plug R, and by unscrewing it only a few turns, the oil poured into the funnel-shaped mouth of plug R will flow into the annular groove and thence through holes *s* into the lubricator. With this device the attendant not only saves the time of unscrewing entirely, and then replacing again the plug that cannot be misplaced, as when disconnected, but

at the same time this plug furnishes a convenient funnel for filling the lubricator.

I am aware that a lubricator has been used wherein a valve or plunger rod has been operated upon by a separate and distinct rod or plunger, and therefore I disclaim such a construction.

What I claim is—

1. In a lubricator consisting of plates A and B and glass casing C, the combination, with such parts, of a plunger-rod, F, extending through plate B and provided upon its upper end with knob *m*, and T-handle *n*, valve *h*, secured upon the lower end of rod F, and spring *j*, wound upon said rod and bar G secured thereupon, as set forth.

2. In a lubricator, the cap B, having screw-threaded annular groove *o*, with holes *s*, in combination with screw-plug R, bored out conically from both ends toward the middle, substantially as and for the purpose set forth.

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

GEORGE A. STANNARD.

Witnesses:

ANTON SCHOENINGER,

ERNST HAMBURGER.