

(No Model.)

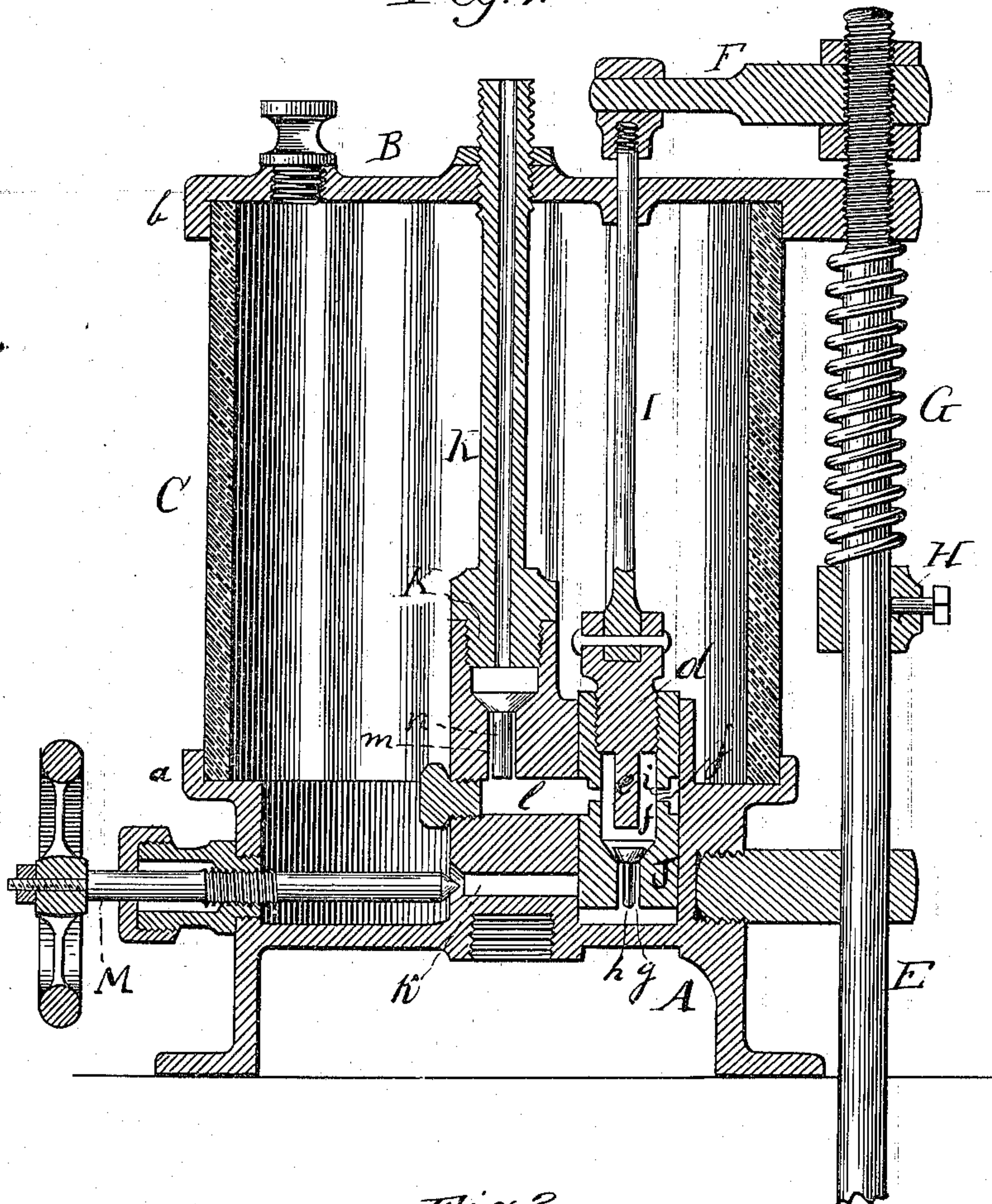
O. H. JEWELL.

LUBRICATOR.

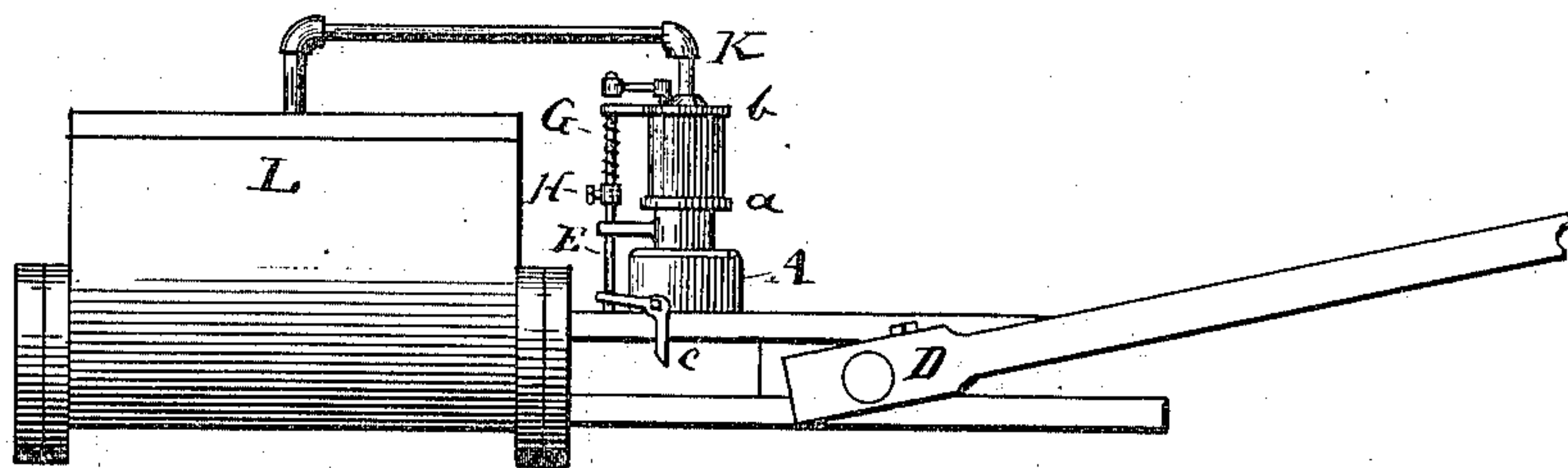
No. 328,313.

Patented Oct. 13, 1885.

*Fig. 1.*



*Fig. 2.*



Witnesses.

Will R. Quahndra  
W. J. Clagett

Inventor

Omar H. Jewell

By, Wm H. Lotz

Atty.



# UNITED STATES PATENT OFFICE.

OMAR H. JEWELL, OF CHICAGO, ILLINOIS, ASSIGNOR TO JAMES B. CLOW,  
OF SAME PLACE.

## LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 328,313, dated October 13, 1885.

Application filed December 26, 1883. Renewed May 8, 1885. Serial No. 164,836. (No model.)

*To all whom it may concern:*

Be it known that I, OMAR H. JEWELL, 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.

My invention relates to lubricators, and has for its object the construction of a simple and effective oil-cup.

To that end it consists of the novel devices and combination of devices, as will be described and claimed.

Reference will be made to the accompanying drawings, in which Figure 1 is a vertical sectional view of the cup, and Fig. 2 an elevation showing the cup in position for use.

Like letters refer to like parts in each view.

A represents the base of the cup provided with means for attaching it in a suitable position, and upon its upper edge with an upwardly-projecting flange, *a*.

B represents the top of the oil-cup, which is provided with downwardly-projecting flange *b*, between which and flange *a* the glass tube C is situated, said tube forming the wall of the cup.

Pivoted to one side of base A is a bell-crank lever, *c*, so situated that one of its arms will be operated upon by the cross-bar D when said bar is reciprocated, while its other arm occupies a position directly beneath a rod, E, which, after passing through suitable bearings secured to or forming part of the cup, is secured at its upper end to a yoke, F.

Passed around rod E is a spring, G, which is situated between the upper bearing of said rod and an adjustable collar, H, mounted thereon, the adjustability of which renders it possible to vary the tension to be applied to rod E to make the return-stroke, as will be described.

To the opposite end of yoke F is secured the plunger-rod I, which passes through an opening in the top plate, B, and is detachably secured at its lower end to a screw-threaded block, *d*. Below the screw-thread of block *d* is a downwardly-projecting pin, *e*, the use of which will be explained.

J represents the plunger-head, which is hollowed out to form a chamber, *f*, as shown, said chamber extending from a point near the bottom of said head to the top thereof, and communicating at its lower end with a port, *g*, also made in said head and which is closed by an upwardly-opening valve, *h*. At or about its center plunger-head J is provided on its outer face with a circumferential groove, *i*, communication between said groove and chamber *f* being established through openings *j* provided for that purpose. The raised portion which forms the seat for plunger J, and which is cored out to accommodate it, is provided with passages *k l*, the one *k* communicating with the interior of the cup, while the one *l* is closed at its end by a plug, as shown. Passage *l* communicates with a passage, *m*, which is closed by a valve, *n*, and which in turn communicates with a pipe, K, which is passed through the top plate of the cup, and by suitable couplings is carried to the steam-chest L, as in Fig. 2. The passages *k l* open into the space formed for plunger J.

A screw-stem, M, is passed through the side of the base-plate A, and occupies a position directly opposite the opening of passage *k*, whereby the flow of the oil is regulated.

By providing the block *d* with the downwardly-projecting pin *e*, the opening of the valve *h* can be regulated.

The operation is as follows: The cup is filled with oil and the regulating-screw M is adjusted to admit to passage *k* the desired amount of oil. The cross-head then contacting with the arm of bell-crank lever *c*, forces up the rod E and with it the plunger I J. As the plunger is thus raised, a vacuum is created below it and oil is drawn in through passage *k*. The cross-head then being withdrawn, the spring G carries rod E and the plunger back, and the valve *h* is opened and allows of the passage of oil into the interior of the plunger. When the plunger has thus been carried back, the openings *j* are opposite the passage *l* and the oil is allowed to escape thereto. In this manner oil is forced past valve *n* and through pipe K to the steam-chest, where it is distributed to the parts to be lubricated.

What I claim is—

1. In the lubricator described, the combina-



tion, with a spring-depressed rod and means for operating it, of a hollow plunger connected to said rod, a valve situated within the plunger, and ports or openings formed in said plunger and communicating through other ports with the parts to be lubricated, as described.

2. In the lubricator described, the hollow plunger J, provided with groove *i*, openings *j*, and valve *h*, in combination with spring-depressed rod E, and means for operating it, as described.

3. In the lubricator described, the hollow plunger J, provided with groove *i*, openings *j*, and valve *h*, and communicating with ports *l* *m* for guiding the lubricant, in combination with spring-depressed rod E, and means for operating it, as described.

4. In the lubricator described, the cross-

head D and bell-crank lever *c*, in combination with spring-depressed rod E, and hollow plunger J, the parts constructed, arranged, and operating as described and shown.

5. In the lubricator described, the cross-head D and bell-crank lever *c*, in combination with spring-depressed rod E, and hollow plunger J, said plunger provided with valve *h*, openings *j*, and groove *i*, and communicating with ports *l m* to guide the lubricant, as described.

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

OMAR H. JEWELL.

Witnesses:

M. J. CLAGETT,  
LOUIS NOLTING.