

(No Model.)

O. H. JEWELL.
LUBRICATOR.

No. 270,805.

Patented Jan. 16, 1883.

Fig. 1.

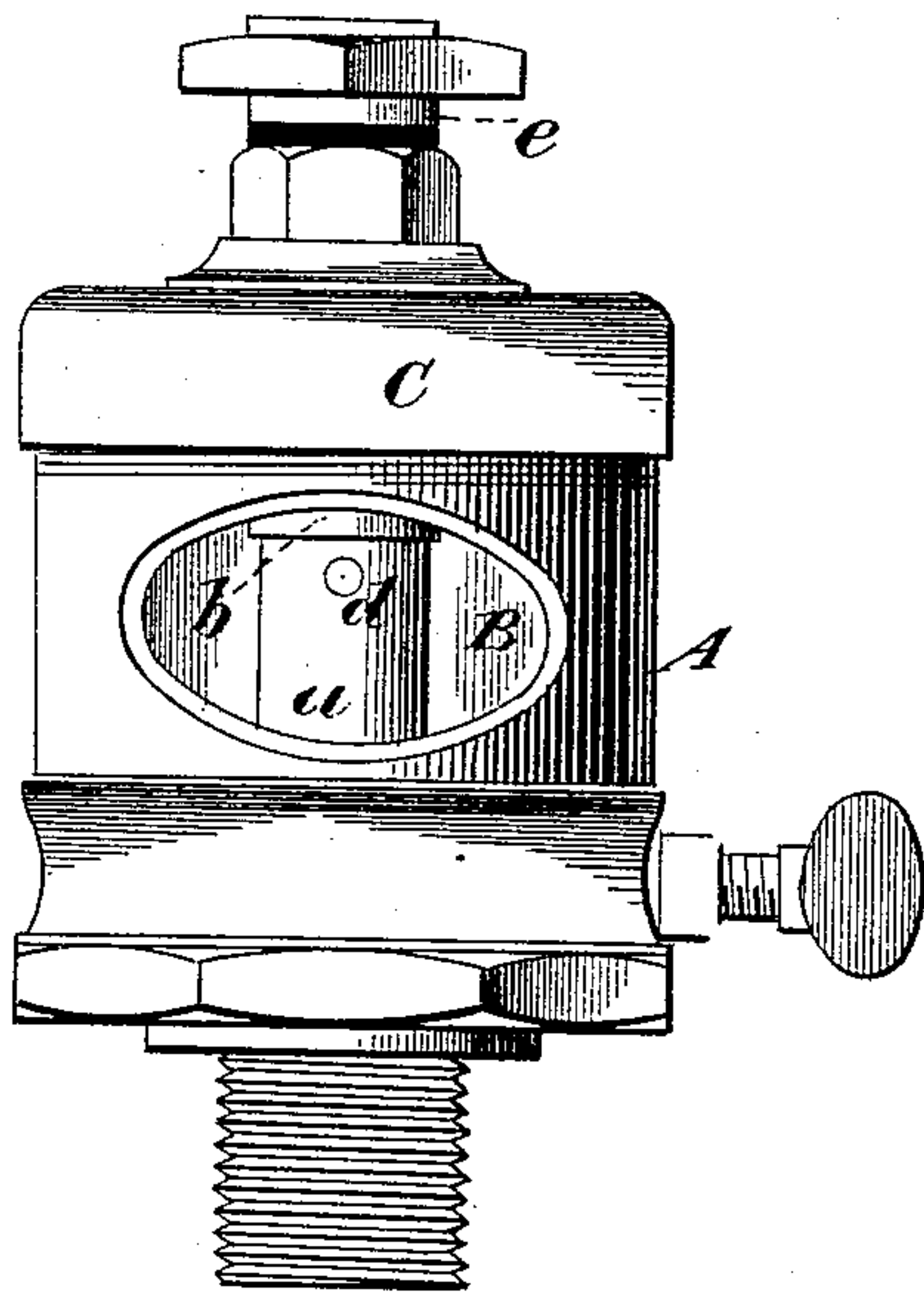


Fig. 2.

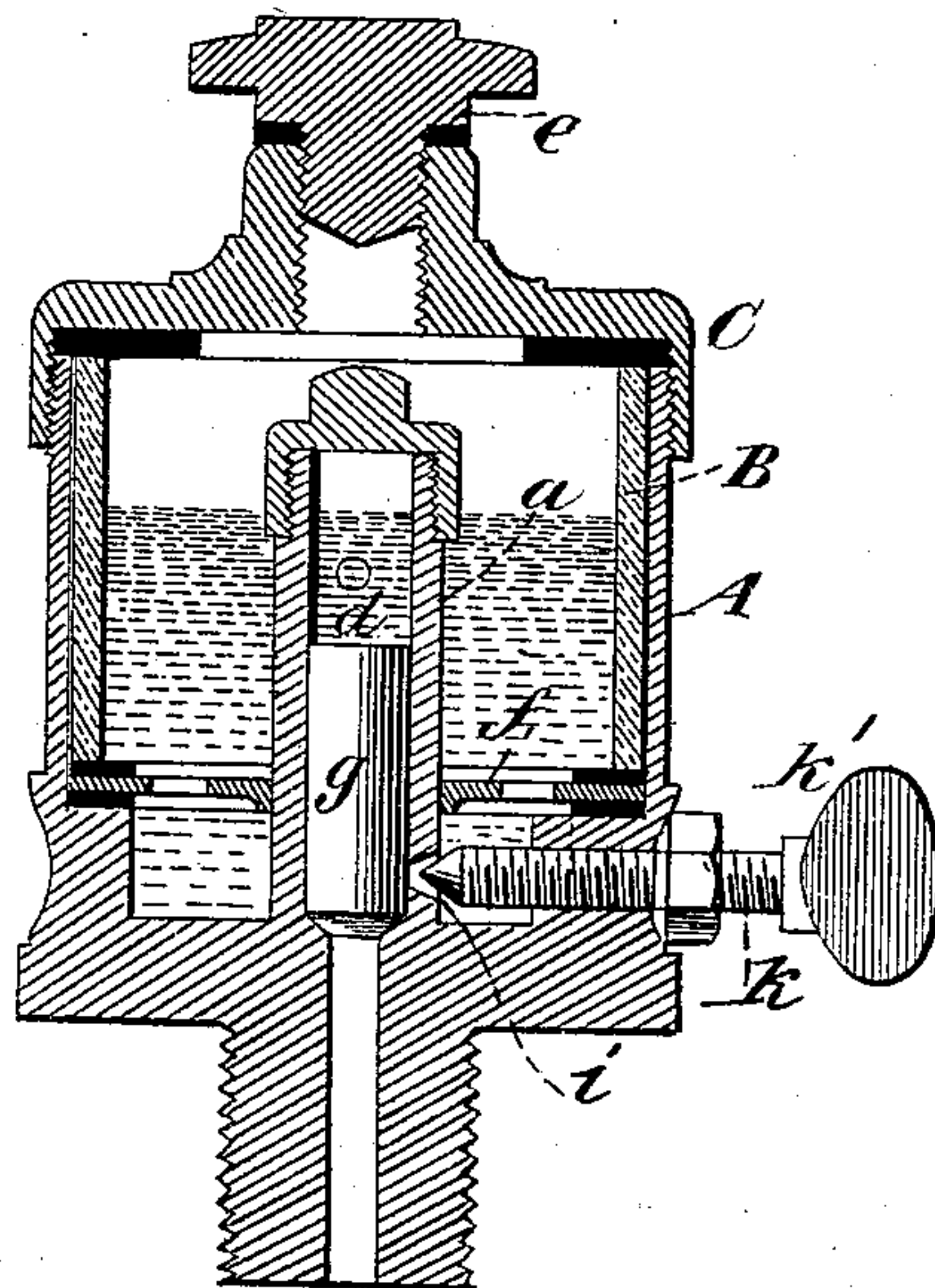
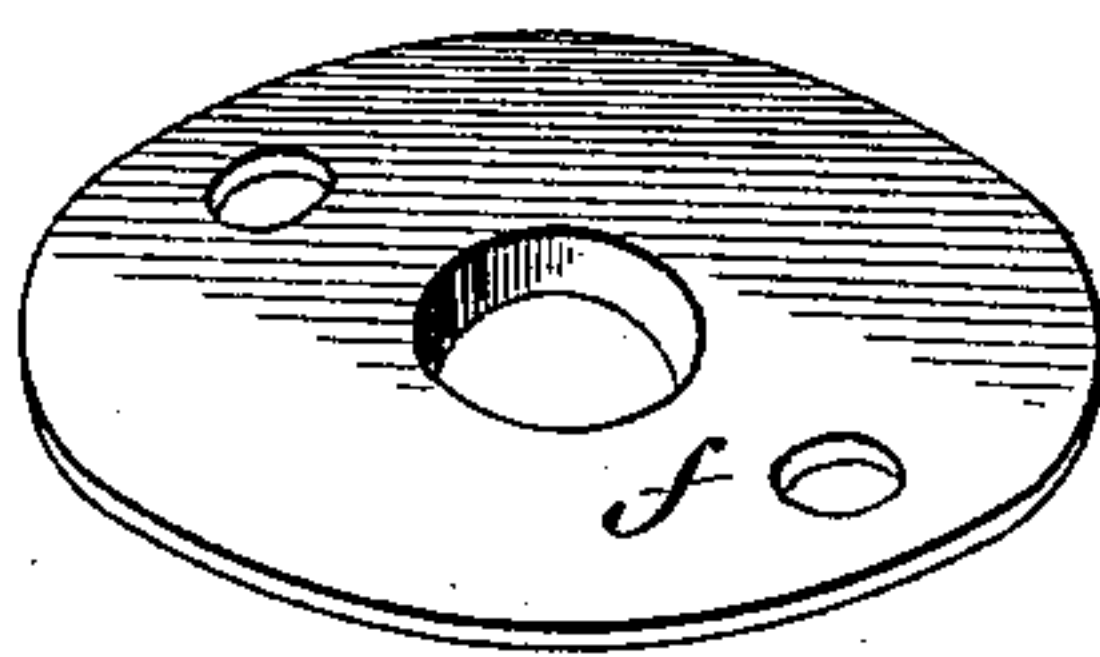


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

OMAR H. JEWELL, OF CHICAGO, ILLINOIS.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 270,805, dated January 16, 1883.

Application filed December 7, 1882. (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.

This invention relates to that description of lubricator or oil-cup which is applicable for use upon a cylinder, steam-chest, or other stationary part of a machine subjected to steam-pressure, or to a journal, or to a moving part, as a connecting-rod, &c.

In the accompanying drawings, Figure 1 is an elevation of the lubricating-cup. Fig. 2 is a vertical section of the same. Fig. 3 is a perspective view of a detail thereof.

Similar letters of reference indicate similar parts in the respective figures.

A is the outer metallic casing, having a screw-shank, with a channel therein leading to the part to be lubricated. B is the glass cylinder. Openings are cut in the casing, so that the interior of the cup may be seen. A vertical tube, *a*, extends from the base of the casing, and has at its upper end an exterior thread, upon which a cap, *b*, screws. The upper end of the tube *a* is provided with apertures *d*. The screw-cap of the casing is shown by C. A screw-plug, *e*, fits in the top of the cap. A tin plate or partition, *f*, is placed underneath the glass cylinder D, and divides the cup into two chambers—an upper large one and a lower small one. The plate *f* is perforated, a hole being at each side of the tube *a*. The plate is shown in Fig. 3 detached from the cup. Within the tube *a* is fitted a loose cylindrical gravitating valve, *g*, which slides freely up and down within the tube by the pulsations of steam, if the cup is attached to a steam-port of a machine or engine, or if to a moving part—as a connecting-rod—by the motion of the part being more rapid than that to which the valve itself is subject, due to gravity. Near the bottom of the tube *a*, and below the plate *f*, is a small conical hole, *i*, serving as a seat for the conical end of a screw-stem, *k*, which extends to the outside of the cup, and is provided with a lock-nut, *k'*.

The oil may be fed through the openings *d* in the top of the tube *a* alone, or through said

openings in connection with the lower hole, *i*. The flow of the oil is regulated by the position of the loose valve *g* with respect to the holes in the tube *a*. Thus oil received into the upper part of the tube finds its way around the loose valve *g*, and when the valve is raised from its seat will pass from the cup. When it is desired to discharge a greater amount of oil, this may be done by unseating the screw-valve *k*, the oil (on the valve *g* being elevated above the aperture *i*) flowing in regulated quantities to the part to be lubricated. The perforated plate *f* serves the purpose of a strainer to guard the opening *i*, and also to prevent the oil within the cup from surging or dashing therein by the movement of any part of the machine to which the cup may be attached.

I claim as my invention—

1. The combination, in a cylinder oil-cup, of a central perforated tube the interior of which is in communication with the outlet of the cup, and a cylindrical gravitating valve constructed to play within said tube and admit oil to and shut it off from the tube-outlet, substantially as set forth.

2. The combination, in a cylinder oil-cup, of a central perforated tube, a cylindrical gravitating valve adapted to play therein, and a regulating-screw extending beyond the exterior of the cup, substantially as set forth.

3. The combination, in a cylinder oil-cup having a central perforated tube, of a cylindrical gravitating valve within said tube, and a screw-cap closing the upper end of said tube, substantially as set forth.

4. The combination, in a cylinder oil-cup, of a central tube having a perforation at its base, a screw-valve controlling said opening, and a cylindrical gravitating valve within said tube, substantially as set forth.

5. The combination, in a cylinder oil-cup, of a central perforated tube, a screw-valve controlling the opening in said tube, a perforated plate above said opening, and a cylindrical gravitating valve adapted to play within the tube, substantially as set forth.

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

OMAR H. JEWELL.

Witnesses:

P. R. MARLING,
JOHN CARLSON.