

No. 725,545.

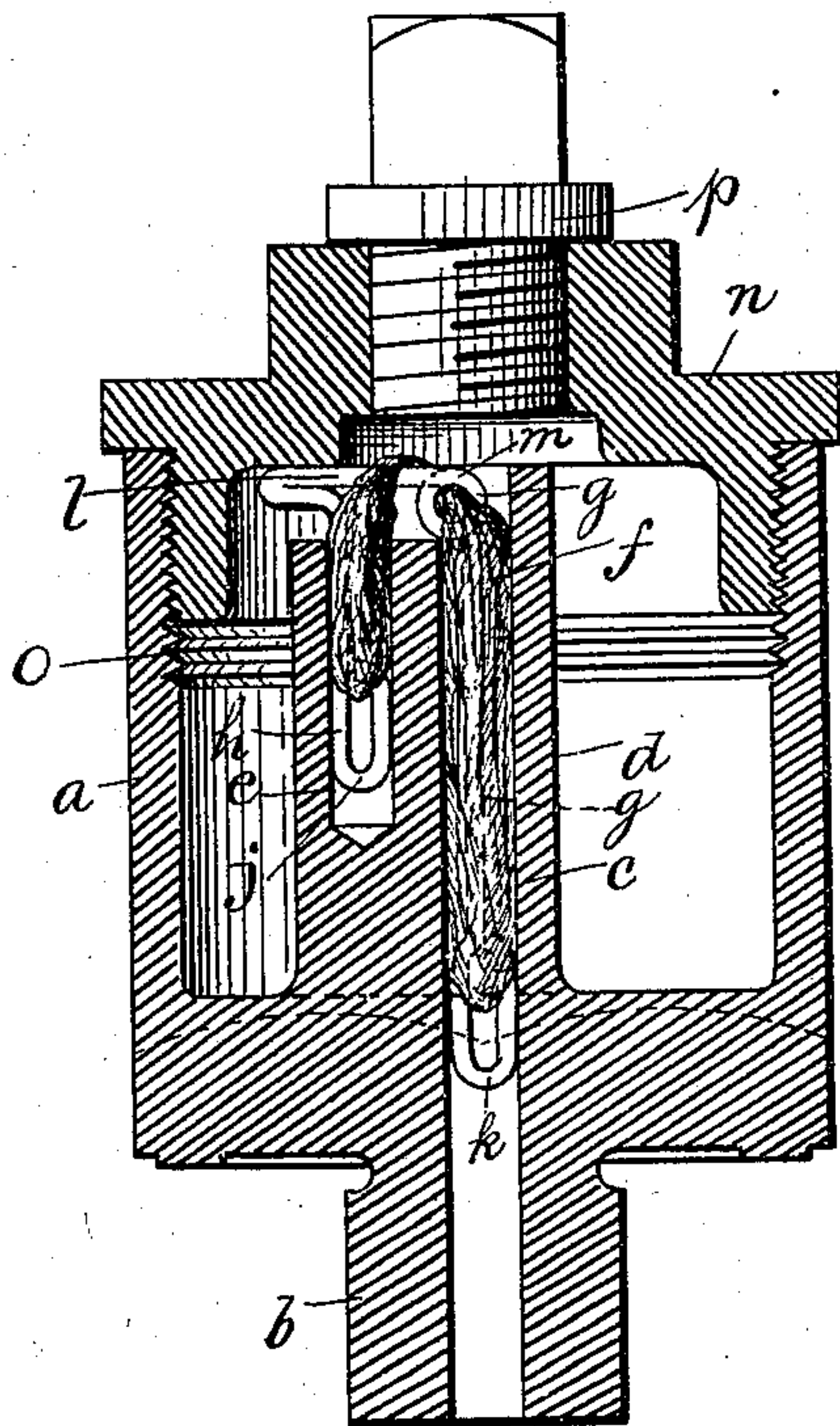
PATENTED APR. 14, 1903.

E. E. DAVIS.  
LUBRICATOR.

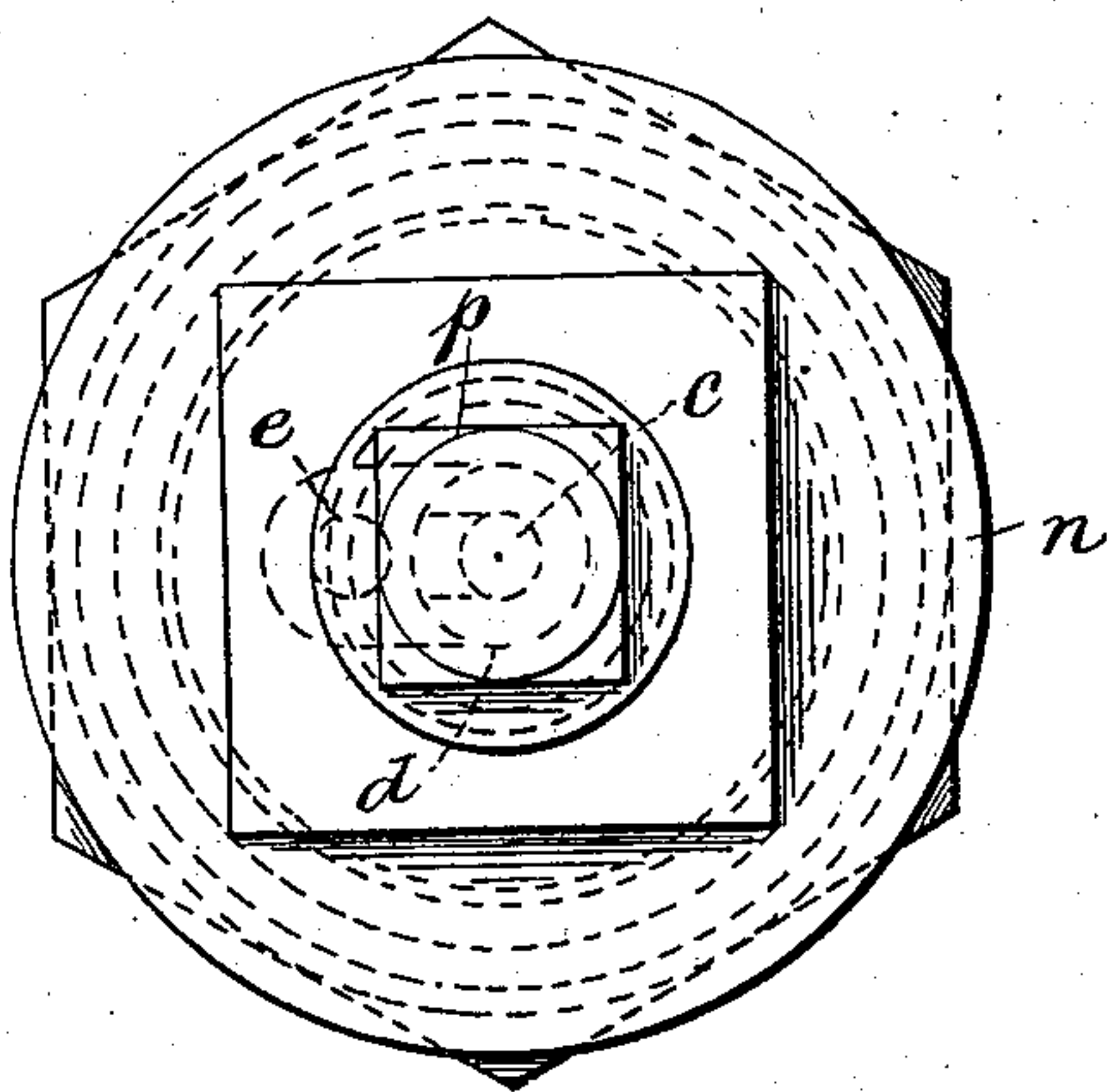
APPLICATION FILED MAY 1, 1902.

NO MODEL.

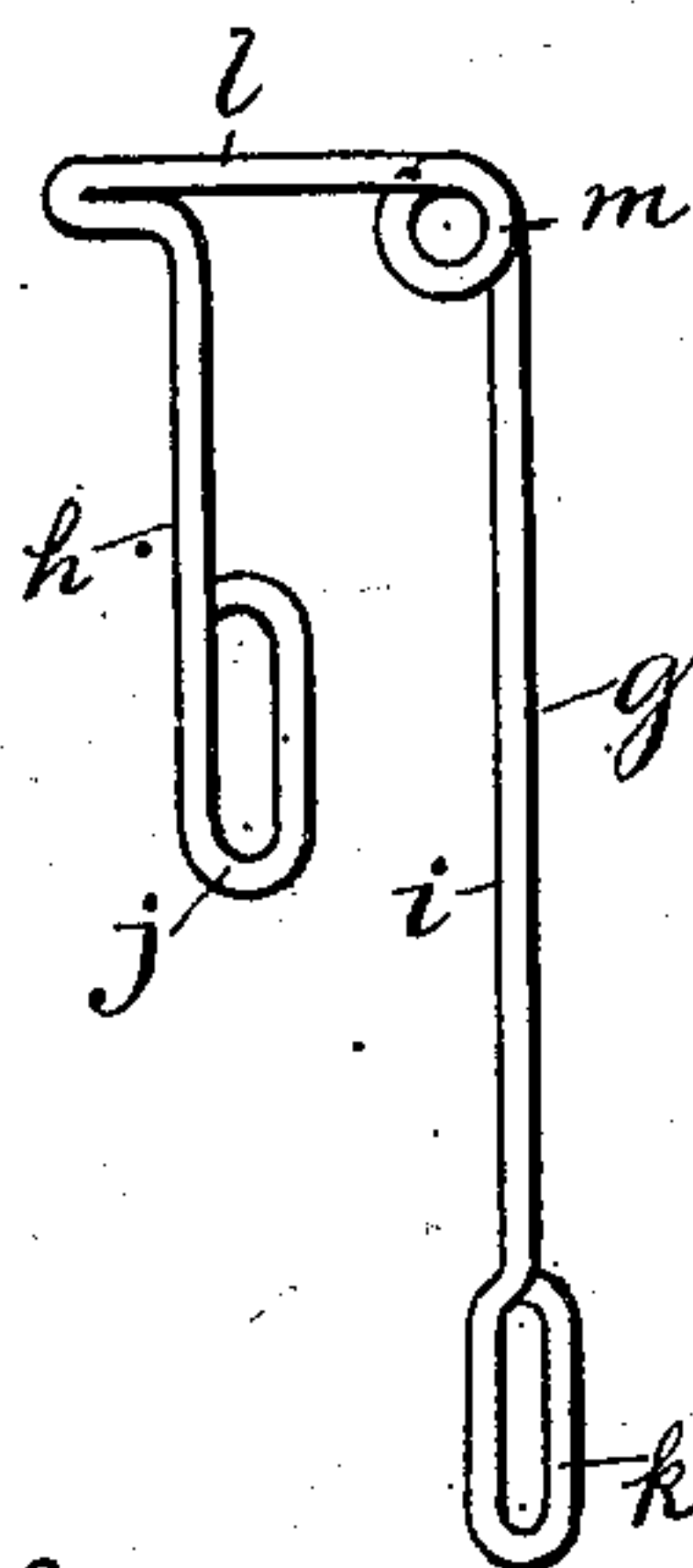
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses

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by

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# UNITED STATES PATENT OFFICE.

EDWARD E. DAVIS, OF NEW YORK, N. Y.

## LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 725,545, dated April 14, 1903.

Application filed May 1, 1902. Serial No. 105,514. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD E. DAVIS, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Lubricators, of which the following is a specification.

My invention relates to lubricators, and has for its object to provide a dash-feed oil-cup adapted to be applied to a shaft or other moving part of machinery and having its feed effected by the motion of such machinery and having an auxiliary capillary feed device acting during the stoppage of the machinery to supply oil to the part to be lubricated in sufficient quantity to serve for the lubrication required in starting up the machinery again.

To these ends my invention consists of the means hereinafter described and claimed.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical sectional view of my improved oil-cup; Fig. 2, a top plan view, and Fig. 3 a detail of wick-supporting wire.

Referring to the drawings, the body *a* of the oil-cup is of the ordinary hollow cylindrical form, provided with the stud *b* for attachment to the part to be lubricated. An oil-passage extends through this stud and up through a feed-tube *c*, rising from the center of the inner base of the cup and formed in the post *d*. This stem is open at the top to admit oil dashed from the body of the cup by the motion of the machinery. The post *d* is thickened toward one side, as shown in the dotted lines in Fig. 2, and is cut away from the top in such side portion. This part is provided with an auxiliary tube *e*, parallel to the feed-tube, open at the upper end and closed at the lower end and forming a well or reservoir adapted to receive and hold a definite reserve quantity of oil. A wick *f* is placed in the reservoir *e* and feed-tube *c* and is adapted to feed the oil from the former to the latter by capillary action. The wick is carried by and held in proper position within the reservoir and feed-tube by a support or holder *g*, consisting, preferably, of a single piece of wire made in the form shown in Fig. 3. The holder comprises a short leg *h* and a

long leg *i*, extending, respectively, into the reservoir and feed-tube, and the ends of the legs being bent to form the respective loops *j* *k*, through which are passed the ends of the wick. The short leg of the wire extends up through the reservoir and is bent at a right angle and then doubled upon itself, so as to extend horizontally and form the straight bearing-arm *l*. At one end of the arm *l*, above the feed-tube, the wire is bent into an eye *m*, which bears upon the cut-away prolonged part of the post. The bearing-arm *l* is on a line with the upper end of the wall of the feed-tube. The wick is adapted to be passed through the loop *j* of the shorter leg up the reservoir and over the bearing-arm and then through the eye *m* and down the feed-tube and through the loop *k*. The wick is thus held by the wire in proper position within the reservoir and tube.

The wire is held in proper position and prevented from being shaken or jarred out of the reservoir by the pressure of a part inserted within the cup, preferably by the cover *n* itself, upon the bearing-arm *l* of the wire. The cover is threaded and screwed within the threaded upper part of the body. A filling-plug *p* screws into the cover *n*.

The operation of the device is as follows: The wick and holder being placed in position, the washer and cover are screwed down, the latter so as to bear upon the wire, and the cup then supplied with oil and the filling-plug *p* screwed into place. When the shaft or other part of machines on which the cup is mounted is put in motion, the oil will be dashed up and into the feed-tube *c* and the reservoir *e* and will be fed down the tube to the part to be lubricated. When the machinery is stopped, the positive dash-feed of the oil from the body of the cup will cease, but a quantity of oil will be retained in the reservoir. This oil will be fed from the reservoir to the feed-tube by the wick, and the quantity so fed will be just sufficient for the amount required for the bearing upon first starting up again.

It is obvious that various changes in the details of the device may be made without departing from the scope of my invention.

Having thus described my invention, what I claim is—



1. A lubricator consisting of a dash-feed cup provided with an open feed-tube, an open reservoir in said cup, and a wick leading from said reservoir to the feed-tube, substantially  
5 as described.

2. A lubricator consisting of a dash-feed oil-cup, having a feed-tube, a separate reservoir in the cup, and a capillary feed device leading from the reservoir to the tube, sub-  
10 stantially as described.

3. A lubricator having an oil-containing cup, an auxiliary oil-reservoir in said cup, a feed-tube, a wick-holder consisting of a frame extending into the reservoir and tube, and a  
15 wick having its ends held by said frame, substantially as described.

4. A lubricator having an oil-containing cup, a feed-tube, a wick, a wick-holder consisting of a frame having a part extending  
20 down into the tube and having the end of the

wick secured thereto, said frame having an arm above the tube and a member bearing against said arm to hold the frame in place, substantially as described.

5. In a lubricator having an oil-containing 25 cup, a feed-tube, an auxiliary reservoir in the cup, a wick, a wick-holder consisting of a frame having legs extending into the reservoir and feed-tube, loops at the ends of the legs to which the wick is attached, a bearing- 30 arm at the upper part of the tube, and an eye through which the wick passes, and means to bear upon said arm, substantially as described.

In testimony whereof I affix my signature 35 in presence of two witnesses.

EDWARD E. DAVIS.

Witnesses:

JACOB B. STOUT,  
WM. N. BAILEY.