No. 676,561. Patented June 18, 1901.

J. M. KING.

OIL CUP.

(Application filed Mar. 28, 1901.)

(No Model.)

Fig. 1.

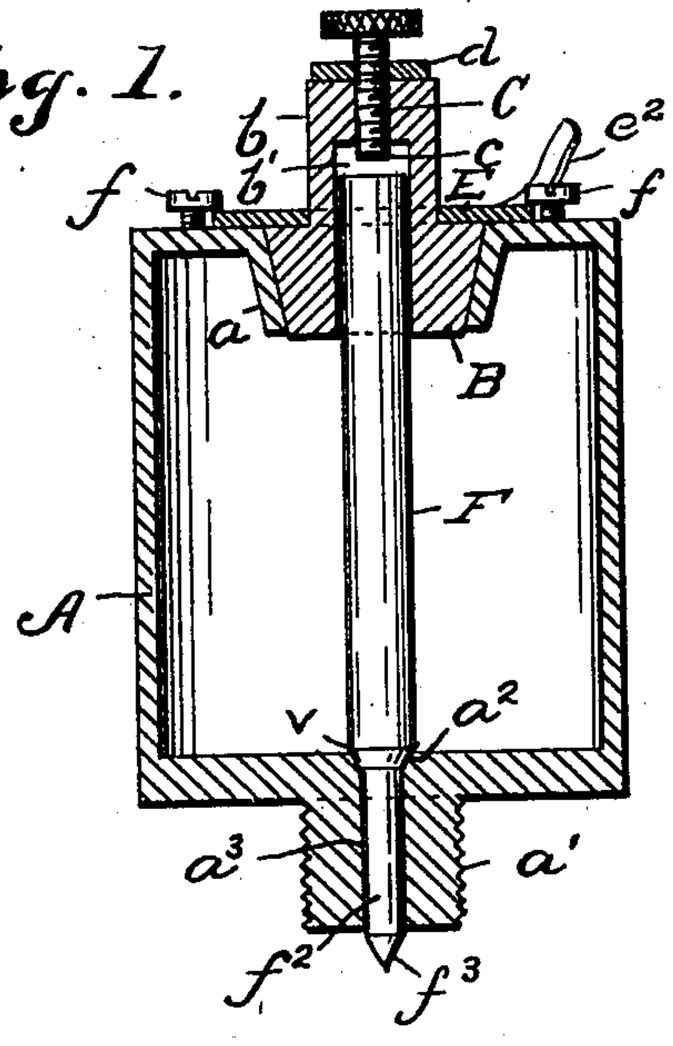


Fig. 3.

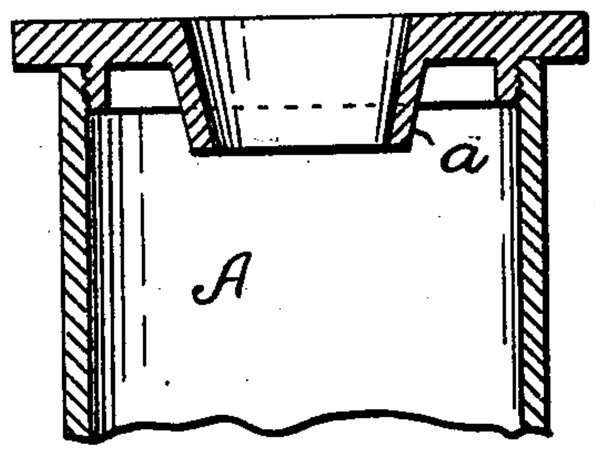


Fig. 4.

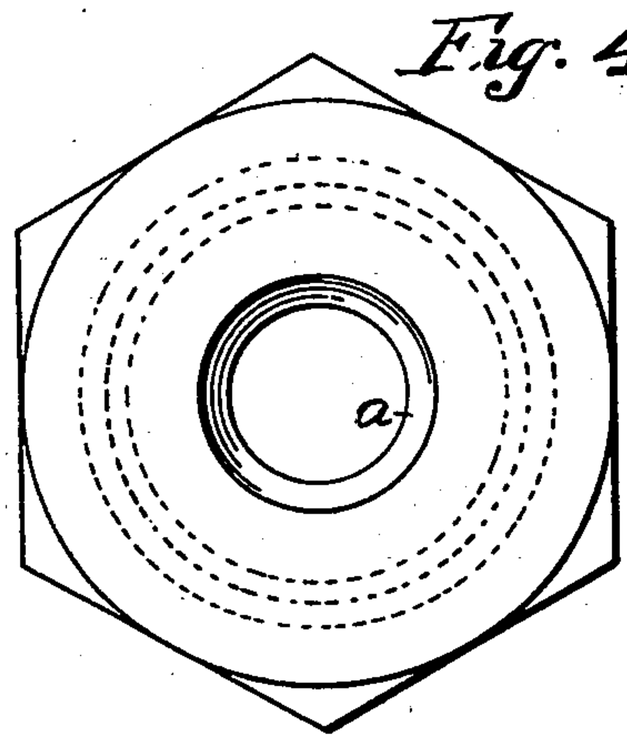


Fig. 2.

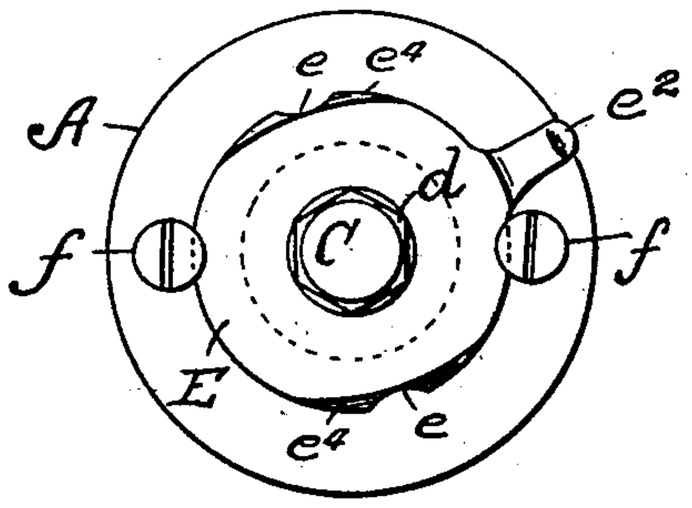
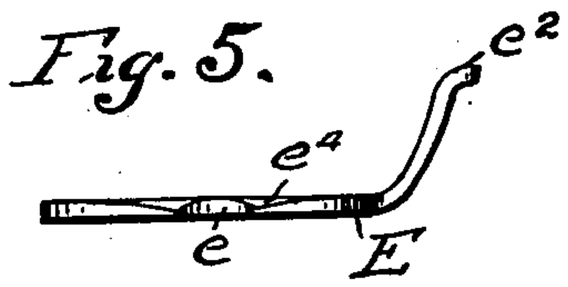


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN M. KING, OF READING, PENNSYLVANIA.

OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 676,561, dated June 18, 1901.

Application filed March 28, 1901. Serial No. 53,196. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. KING, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Oil-Cups; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in oil-cups.

The object of the invention is to provide a cup that will permit a constant flow of fluid through a passage kept free at all times by reason of the construction and one that will permit with ease the opening and closing of the cup without endangering its hold on the part to which it has been secured.

My present construction embodies a solid or one-piece body with means for readily opening the same for filling or to secure access to the valve-stem.

The construction is fully set forth in the accompanying drawings and clearly described in the following specification.

Figure 1 is a vertical sectional view of my improved oil-cup. Fig. 2 is a plan view thereof. Fig. 3 shows a screw-cap applied to my improved cup. Fig. 4 is a plan view of Fig. 3. Fig. 5 is a detail of the spring-cover.

The cup A is preferably formed in one piece and has a cone-shaped central inlet a at its top, extending some distance into the cup. The lower end is formed with the usual screw a' and with a central opening a^3 therethrough, while a valve-seat a^2 is formed at the top of said opening in the base of the cup.

A plug B, having tapered body adapted to fit the opening a, forms a closure for the cup. This plug is formed with a head b and has a hollow space b' extending nearly its full length. Through its top a set-screw C passes, provided with a jam-nut d, and its end c depends some distance into the space b'.

A spring-cover E fits loosely over the head b of the plug and while approximately circular is formed with two diametrically opposite semicircular depressions e, adapted to register with two screws f, set into the cup on either side of the opening a. This cover is slightly tapered on its upper face for a short distance on either side of the depressions e to permit them to more easily enter under the heads of the screws f, and it also has a thumb-piece or extension e^2 to facilitate its movement.

The valve-spindle F extends through the full length of the cup into the hollow space b' of the plug and has a valve v formed near its lower end, adapted to seat against the point a^2 of the cup-base, and its lower extension f^2, while somewhat smaller in diameter than the body, passes entirely through the screw a' and has a tapered end f^3 depending below it. In other words, the spindle passes entirely through the cup and extends above its top and below its lower surfaces. The valve-spindle is regulated in its movement by means of the set-screw C, which when properly regulated is secured in that position by means of the nut d, thus insuring it against becoming loose and changing the regular flow of oil.

The plug B fits snugly in the opening a, and the spring-cover, which fits loosely over the head b, is so placed that the depressions e therein register with the screws f and permit it to drop to the surface of the cup, and by turning it by means of the thumb-piece e^2 it will tighten thereunder by reason of the tapered surfaces e^4 wedging under said screw-heads, thus securely holding the plug in position in the cup.

The valve-spindle F, having its lower end f^2 extending entirely through the screw at the bottom of the cup, will prevent clogging of the oil in the passage thereof by reason of the constant movement therein of the spindle, and should it become clogged by reason of having remained stationary for any length of time the spring-cover can be easily turned, the plug lifted out, and the end of the spindle F which extends above the upper surface of the cup can be taken hold of and moved up and down to open the passage. The tapered lower end f^3 of the spindle F will cause the oil to drop from that point and will prevent the tendency of the oil from working its way out around the lower surface of the screw a'.

In Figs. 3 and 4 I have shown that my invention can be applied to a screw-cap—as, for instance, where the body of the cap is

formed integral with the part to be lubricated. In such case it will be necessary to have a separate cover, and I have shown that the cover may embody the features of my invention.

Having thus fully described my invention, what I claim is—

1. In an oil-cup, the one-piece body with central opening in its top, a recessed plug adapted to fit said opening, screws set in said cup on either side of said opening, a spring-cover adapted to fit loosely over said plug and having notches adapted to register with said screws and having a central opening, a set-screw in the top of said plug with a jam-nut thereon, and a removable valve-spindle seated in the base of said cup and having its upper end extending above the upper surface of the cup and into the recessed plug, while its lower end passes through the base of said cup and depends below its surface, substantially as set forth.

2. The combination of a one-piece oil-cup having screw-heads inserted in the top thereof and having a central tapered opening, with a recessed plug adapted to fit said opening and a spring-cover having a central opening adapted to hold said plug in position by engagement with screws set in the cup opposite each other, a set-screw passing through the top of said plug, and a valve-spindle having a lower tapered end and passing entirely through the cup and into the hollow plug, all substantially as set forth.

3. A one-piece oil-cup having screw-heads *f* inserted in the top thereof and having a central tapered opening in its top, a recessed plug carrying a valve-spindle regulator adapted to fit said opening, a tapered valve-spindle F and a spring-cover, having tapered surfaces, adapted to engage the screw-heads *f* and to securely hold said plug in position all substantially as and for the purpose set forth.

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

JOHN M. KING.

Witnesses:
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