

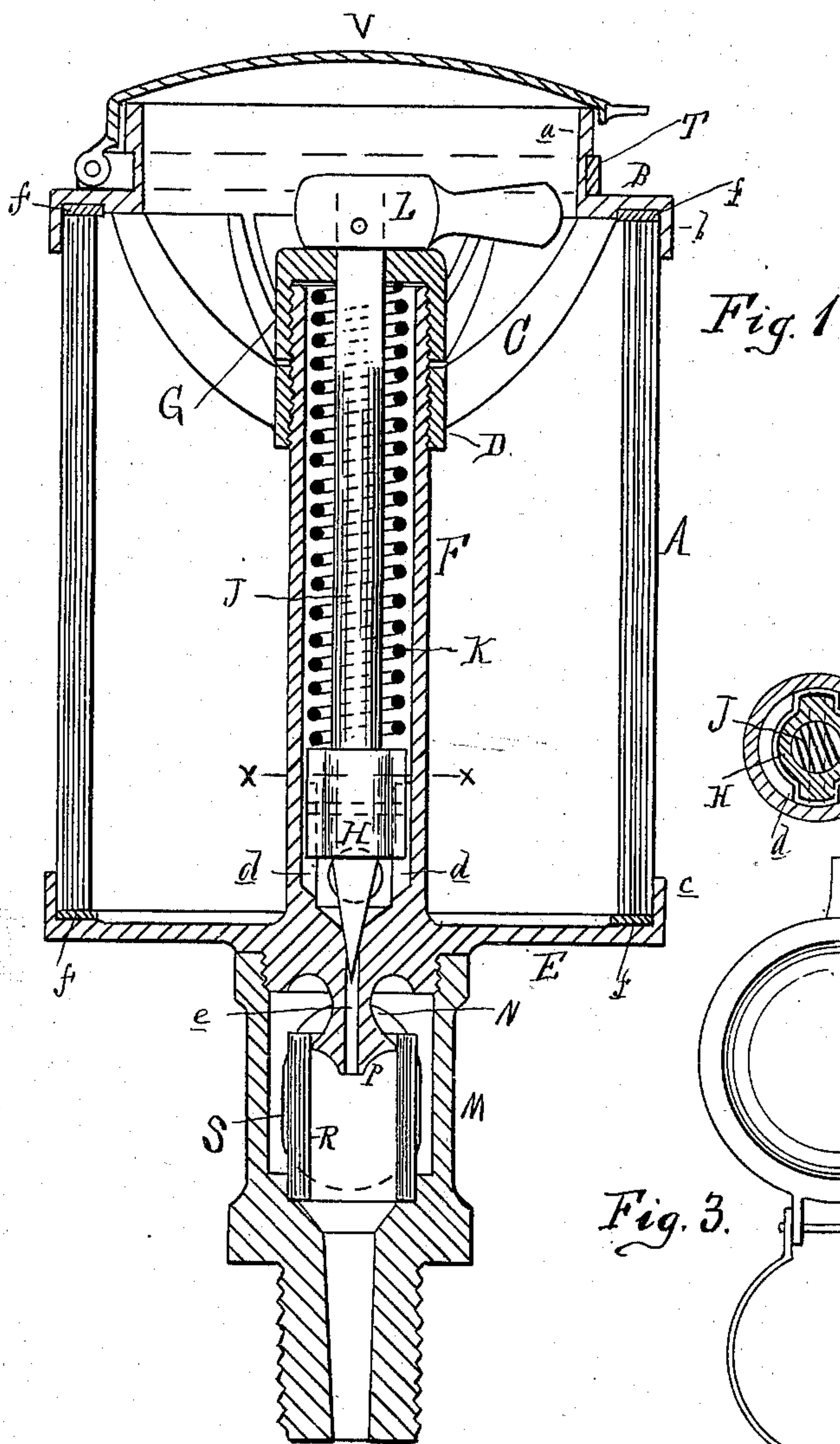
No. 609,III.

W. L. MORRIS.
OIL CUP.

Patented Aug. 16, 1898.

(Application filed Apr. 7, 1897.)

(No Model.)



Attest:
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UNITED STATES PATENT OFFICE.

WILLIAM L. MORRIS, OF CLEVELAND, OHIO.

OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 609,111, dated August 16, 1898.

Application filed April 7, 1897. Serial No. 631,107. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. MORRIS, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Oil-Cups, of which the following, with the accompanying drawings, is a specification.

This invention relates to certain new and useful improvements in oil-cups.

The invention has for its objects the construction of a cup wherein the feed mechanism is entirely inclosed within the feed-opening, to provide increased facilities for filling, to simplify the feed mechanism, and to provide means whereby the sight-feed may be readily removed for the purpose of cleansing and so that the feed may be flushed when desired.

To these ends the invention consists in the novel features and in the combinations of the various parts, all as more fully hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, which form a part of this specification, Figure 1 is a central vertical section of my improved cup. Fig. 2 is a cross-section upon the line *xx* of Fig. 1. Fig. 3 is a plan showing construction of cover with its attached ring.

This device is of the general form in which a glass cylinder-body is secured between two metallic heads.

A represents a glass cylinder.

B is the upper metallic head, provided with the upwardly-projecting flange *a*, which forms the feed-opening, and with the downwardly-projecting peripheral flange *b*. Pending from this head B there is a spider C, the center of which terminates in an interiorly-threaded hub D, said head, spider, and hub being cast integrally with each other.

E represents the lower metallic head, and it is provided with the peripheral flange *c* and with the axial hollow post F, the upper end of which is exteriorly threaded to engage with the hub D of the spider C and the cap-adjusting nut G. Near the lower end of this post F its bore is reduced, and in this reduced portion there are formed the vertical ways or guides *d*, diametrically opposite each other, said guides being adapted to receive the winged collar H, secured upon the valve stem

or spindle J by means of a proper pin, as shown. The bore of the post F communicates with a valve-seat and passage *e*.

Suitable packing *f* is placed between the ends of the cylinder A and the heads B E, and as the head *a* is turned, causing the hub D to travel down the post F, said cylinder is securely clamped in place between the heads.

K is a coil-spring surrounding the valve-stem J, with its lower end resting upon the collar H, its upper end finding resistance against the regulating-nut G. The upper end of the valve-stem slidingly passes through the nut G, but is non-rotatable therein, and receives a bifurcated cam-lever L upon its projecting end.

The head E is adapted to engage with a plug M, which latter screws into the part to be lubricated.

Projecting from the head E is a supplemental stem N, through which the valve-port or passage *e* is continued. This stem N is provided with an annular head P, which readily enters the sight-glass R, the lower end of which rests upon a proper shoulder formed in the plug to receive it. In diametrically opposite sides of this plug M there is formed an elongated opening S, through which the sight-glass may be readily introduced or removed without the necessity of disconnecting the plug.

T represents a band having arms *h*, by means of which it is pivotally connected to ears *i* of the cover or cap-plate V. This band is designed to be clasped around the flange *a* of the head, which may have a channel formed therein to receive it, as shown in the drawings. By employing these means for securing the cover upon the cup it will be readily seen that the cover, with its band, may be turned upon the flange *a*, so that the cover may be opened at the most convenient point.

The parts being constructed and arranged substantially as shown, the operation is as follows: The cover is raised and oil is introduced by pouring directly into the upper head, the construction of which admits of a can or pitcher being used instead of a spout-filler, as in the ordinary constructions.

By turning the lever L over into a reversed position from that shown the valve-stem, with its valve, is raised, thus allowing oil to find

exit through the valve-port drop by drop to the part to be lubricated.

To change the feed, the valve-stem is drawn up until its winged collar H will free the guides *d*, when the valve-stem may be turned, and with it the regulating-nut G, so as to increase or diminish the valve-opening when the valve is raised to its feed position.

If it is desired to clean the sight-glass R, it is pushed upwardly until its lower end can be readily passed out of either of the sight-openings in the plug M, or it may be pushed or tilted to one side for the purpose of flushing.

It will be observed that the feed mechanism is all inclosed within the feed-opening and below the top plane of the cup, that each section of the bore of the central post F is greater in diameter than the portion immediately below, and that by simply removing the regulating-nut G the entire feed mechanism may be lifted out without disturbing or disconnecting other portions of the cup.

The operation of devices of this character is so well understood it is not deemed necessary to enlarge thereupon in this connection.

What I claim as my invention is—

1. The combination, with an oil-cup, a vertically movable and adjustable valve-stem, a valve, a plug provided with elongated openings diametrically opposite each other, and a glass sight-tube adapted to be inserted and removed through the elongated openings in said plug, substantially as and for the purpose set forth.

2. In an oil-cup, a plug provided with elongated openings in the side wall thereof, a sight-glass tube adapted to be inserted and removed through said openings, and a supplemental-valve-port stem provided with an annular head receivable within said sight-glass tube, substantially as set forth.

3. In an oil-cup, the head B, provided with the flange *a*, in combination with the band T, embracing said flange and carrying its hinged cover V, whereby the filler-opening and feed

mechanism are inclosed and protected, substantially as set forth.

4. In an oil-cup, a cam-lever L, a valve-stem J, a collar H, a spring K, an adjustable nut G, which engages non-rotatably with said valve-stem, a hollow post F, provided with stationary guides *d*, to prevent said stem being rotated until collar H is disengaged therefrom, the bore of each portion of said hollow post being larger than the portion immediately below, thereby enabling the feed mechanism to be lifted out of said post, in the manner and for the purpose, substantially as set forth.

5. In an oil-cup, a feed mechanism consisting of a valve-stem with valve at lower end, a spring engaging with said stem for closing the valve against its seat, vertical guides on stem and stationary corresponding guides on cup that necessitate raising the valve-stem to disengage same, a cam at upper end of valve-stem and an adjustable cam-support through which the stem slidingly but non-rotatably engages, substantially as and for the purpose specified.

6. In an oil-cup, the combination of the heads B, E, the intervening cylinder A, said head B being provided with the depending spider C, having a hub D, and an upwardly-projecting flange or rim *a*, forming a filler-opening, a vertically-adjustable valve-stem and valve, a spring for closing said valve, a cam-lever or valve-operator located within the filler-opening and below the upper edge of said flange *a*, and a cover for inclosing both filler-opening and feed mechanism, substantially as and for the purpose described.

In testimony whereof I affix my signature, in presence of two witnesses, this 3d day of April, 1897.

WILLIAM L. MORRIS.

Witnesses:

H. S. SPRAGUE,
I. W. MCKEE.