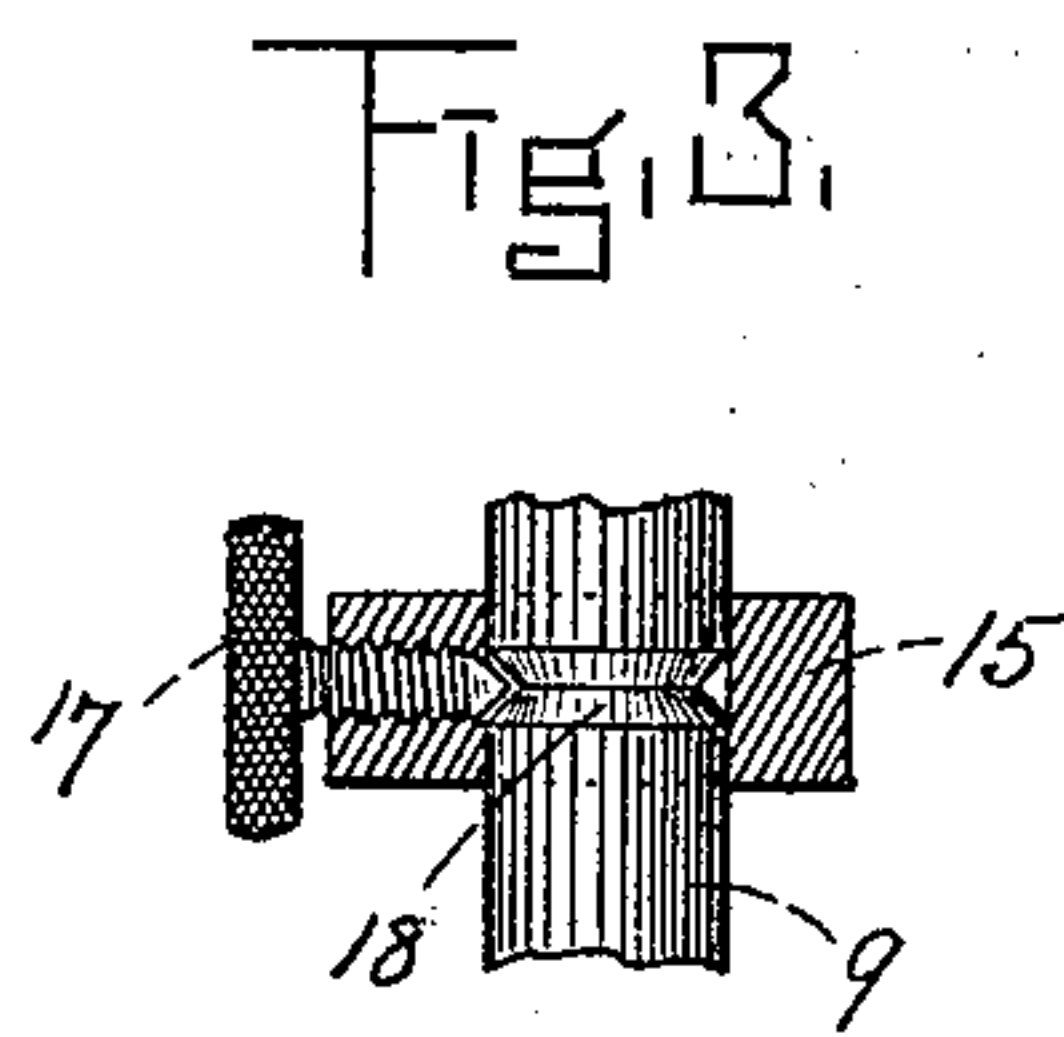
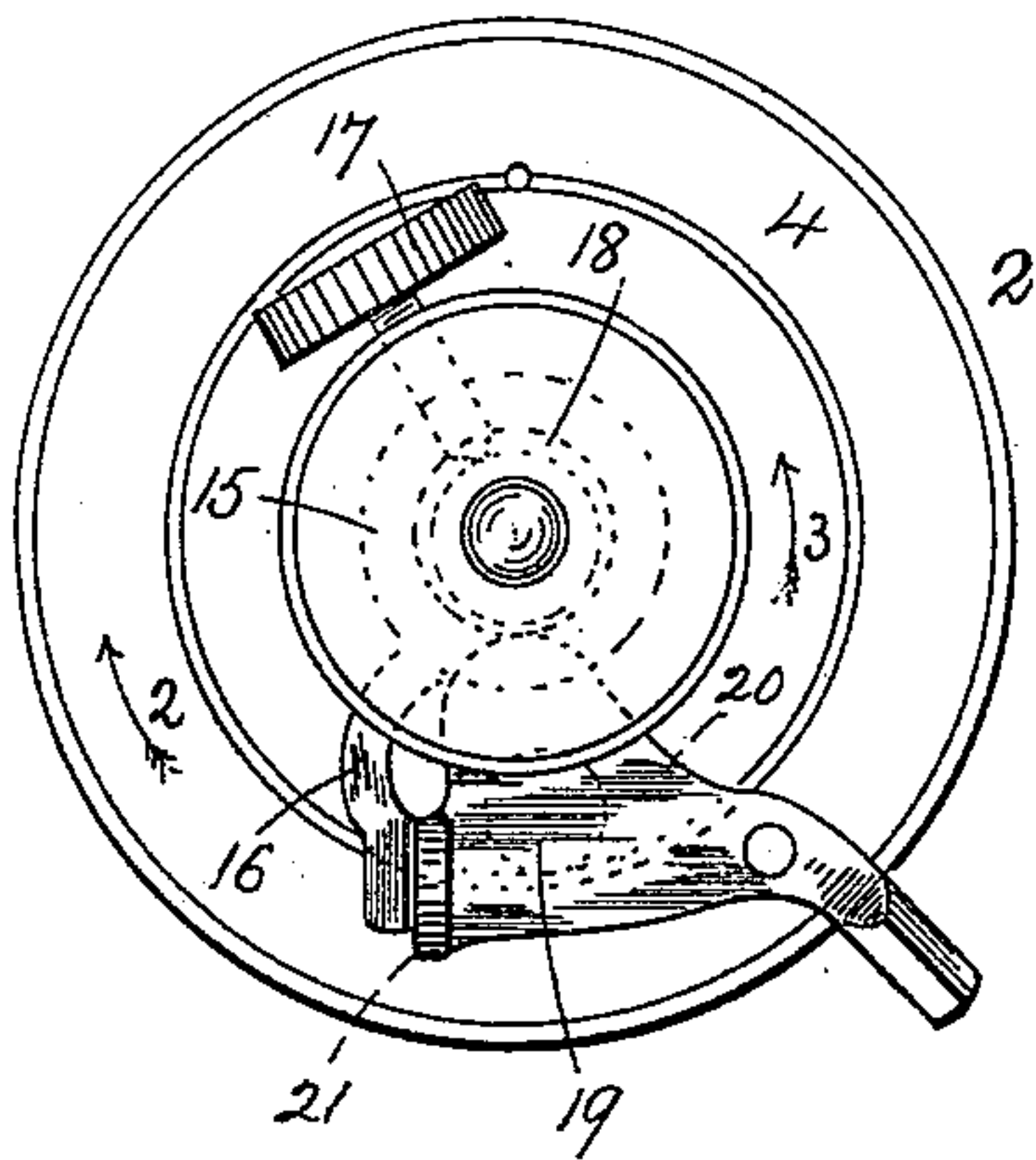
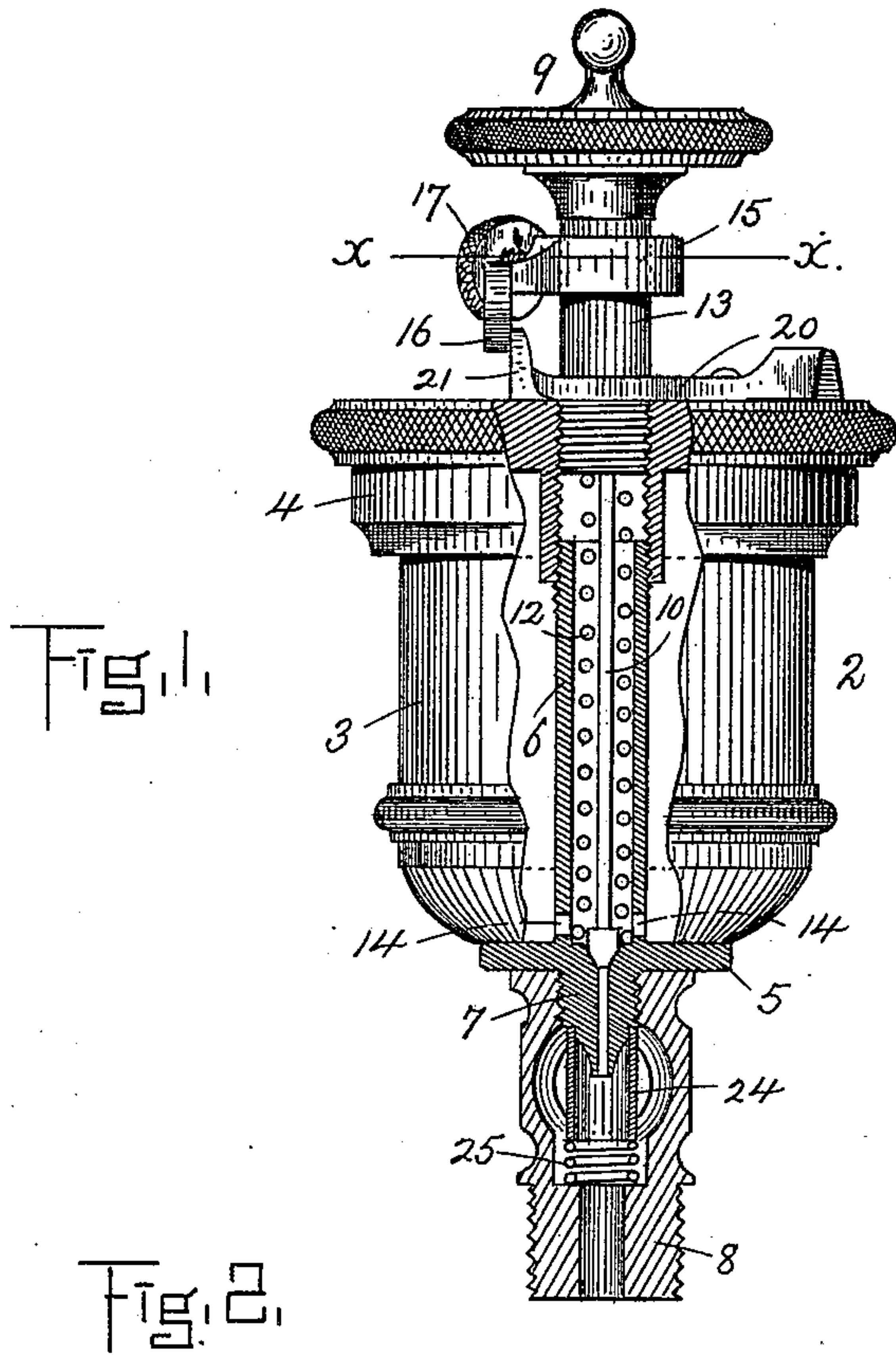


(No Model.)

W. H. WILKINSON.  
OIL CUP.

No. 441,731.

Patented Dec. 2, 1890.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

WILLIAM H. WILKINSON, OF BOSTON, MASSACHUSETTS.

## OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 441,731, dated December 2, 1890.

Application filed July 22, 1890. Serial No. 359,549. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. WILKINSON, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, 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, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to oil-cups, particularly that class provided with a changeable feed yoke or collar and a fixed stop, so that the oil-supply each time the valve is changed in position—say to close it—can be restored to produce the same flow, or one which has been predetermined upon.

The drawings herewith presented represent, in Figure 1, a vertical sectional elevation of an oil-cup embodying my invention. Fig. 2 is a plan. Fig. 3 is a detail view, partly in section, of the yoke and its set-screw which regulate the flow of oil.

This invention may be considered as an improvement upon oil-cups described under Serial No. 352,834, filed by myself May, 1890.

The novel features will be hereinafter fully explained.

In said drawings, 2 represents an oil-cup as an entirety, in which a cylindrical glass vessel 3 is closed at the top by a metallic cap 4; and at the bottom by a base 5. The latter is united with the cap by a central tube 6, which terminates at its lower end in a screw-threaded nipple 7. This nipple engages with a short apertured hollow post 8 to create a sight-feed and to hold the oil-cup in position upon the part to be supplied with lubricant. The cap is centrally bored and interiorly screw-threaded to receive the valve-stem 9, composed of the interior attenuated part 10, to which the valve is attached, and the exterior enlarged part 13, which engages in the cap. This portion 13 is surmounted by a knob, by which the valve-stem is rotated to open or close the valve, which is seated upon the base 5 below the delivery oil-orifices 14 in the central connecting-tube 6. A spring 12 within the latter

bears forcibly beneath the enlarged part of the valve-stem and prevents the latter from accidentally turning or shifting. This spring is of tempered steel and so retains its life for a long period. Thus it will be seen that the oil-supply is determined by the position of the knob, effected by rotation of the valve-stem. Consequently I have mounted about said valve-stem a yoke or collar 15, provided with a projecting arm 16. This yoke is adjustably secured by means of a set-screw 17. The latter is conical at the end and co-operates with an annular groove 18, V-shaped in cross-section. (See Fig. 3.) Hence the screw can be turned back sufficiently to allow the yoke to revolve in position, while the end of said screw, still projecting within the groove, holds the yoke in place and prevents it from slipping down.

In Fig. 2 I have shown the filling-aperture in broken lines at 19 with a pivotal cover 20. This latter is somewhat changed in shape from the usual form, being enlarged and furnished with an upraised abutment or stop 21, which is to contact with the end of the arm 16 on the yoke. This cover is extended likewise centrally to rest against the valve-stem and limit the movement of said cover in this direction. By means of this stop 21 any feed predetermined by the position of the yoke on the valve-stem can be instantly obtained, even if the valve be turned to stop the oil-supply at any time. Any desired feed is created by first loosening the yoke on the valve-stem, which is to be raised or lowered vertically until said feed is obtained. The yoke is then moved until its arm contacts with the stop on the cover 20. So long as the position of these parts remains unchanged a fixed feed is always obtained when the arm and stop are in contact. The valve can be closed at any time by turning the valve-stem in direction of arrow 2.

Frequently it is necessary to flush a bearing with oil. In such instances the advantages of my invention become apparent, since I make the stop 21 on the cover removable by causing the latter to swing outwardly. In other words, the stop is to be removed from the path of the arm on the yoke. By so doing it is not necessary to alter the yoke, but



simply rotate the valve-stem two or three times in direction of arrow 3, and thus open the valve wide. When sufficient oil has flowed, the valve-stem is returned to its first position, 5 the cover is swung back, and the predetermined and normal flow of lubricant continues. Thus it is evident that the valve can be shut or opened wide at any moment, while the predetermined feed remains unchanged. 10 This is an important feature.

In connection with the sight-feed I have introduced certain changes. In some oil-cups of this class the small glass tube shown at 24 is made air-tight at its ends where they 15 rest upon the metal of the oil-cup, and at times when a sudden flow of oil occurs, as in flushing, the air confined therein retards the flow of oil. To obviate this objection I have made the glass tube shorter and confined 20 therebeneath a coil-spring 25. The latter serves as a duct for the oil, holds the tube firmly in place, and, should a sudden flow of oil occur, permits the air to escape quickly.

What I claim is—

25 1. In combination with the oil-receptacle,

the valve, its valve-stem in screw engagement with said receptacle, the annular groove in said valve-stem, the feed-yoke and its arm revoluble thereabout, its holding-screw, and a swinging stop secured to the oil-receptacle 30 and to co-operate with the feed-yoke, substantially as set forth and described.

2. The combination, with an oil-cup, the vertically-moving valve-stem, and the valve, of the apertured post, the glass tube therein, and 35 the coiled spring beneath the end of said tube and serving in part as an oil-duct, substantially as stated.

3. An oil-receptacle, a valve-stem in screw engagement therewith, the feed-yoke and its 40 arm adjustable about said stem, an annular groove therein, a holding-screw, and a movable stop secured to the oil-receptacle, substantially as set forth.

In testimony whereof I affix my signature in 45 presence of two witnesses.

WM. H. WILKINSON.

Witnesses:

H. E. LODGE,

FRANCIS C. STANWOOD.