

No. 608,244.

Patented Aug. 2, 1898.

F. D. WINKLEY.
OIL HOLE COVER OR CAP.

(Application filed Sept. 18, 1897.)

(No Model.)

Fig. 1.

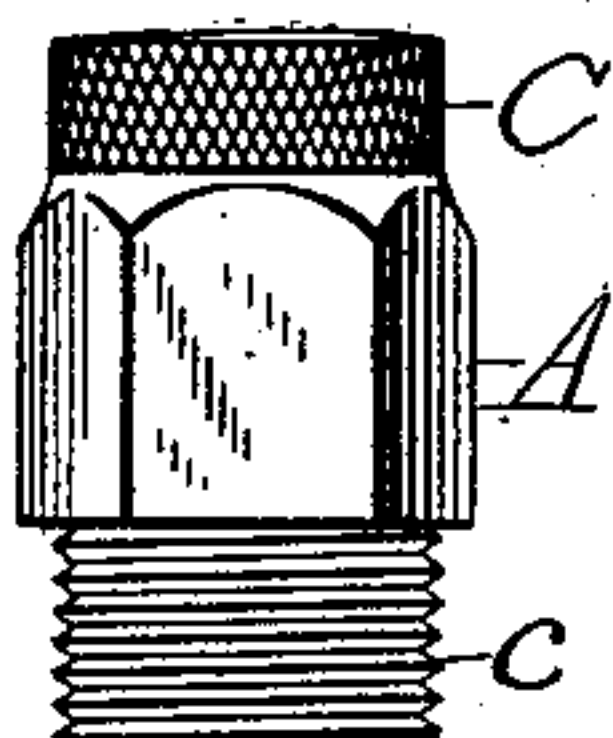


Fig. 2.

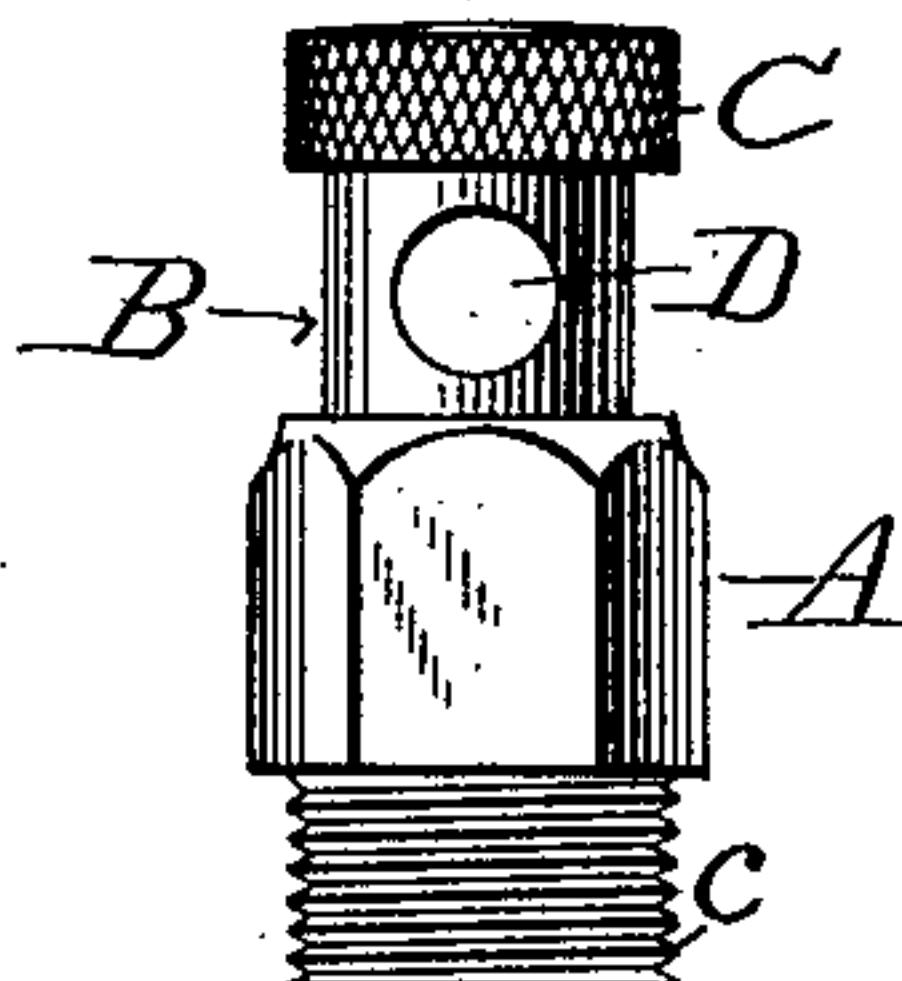


Fig. 3.

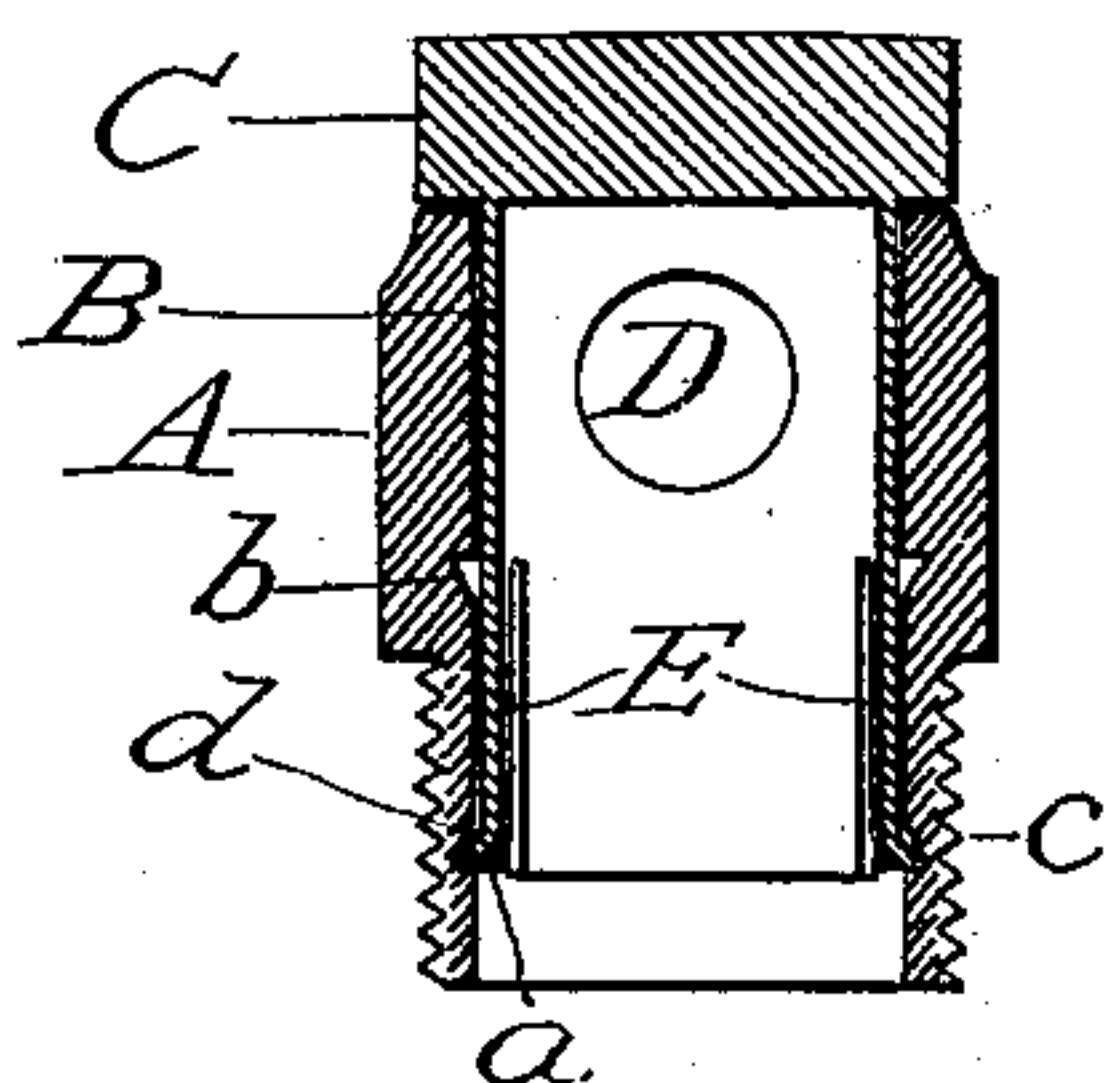


Fig. 4.

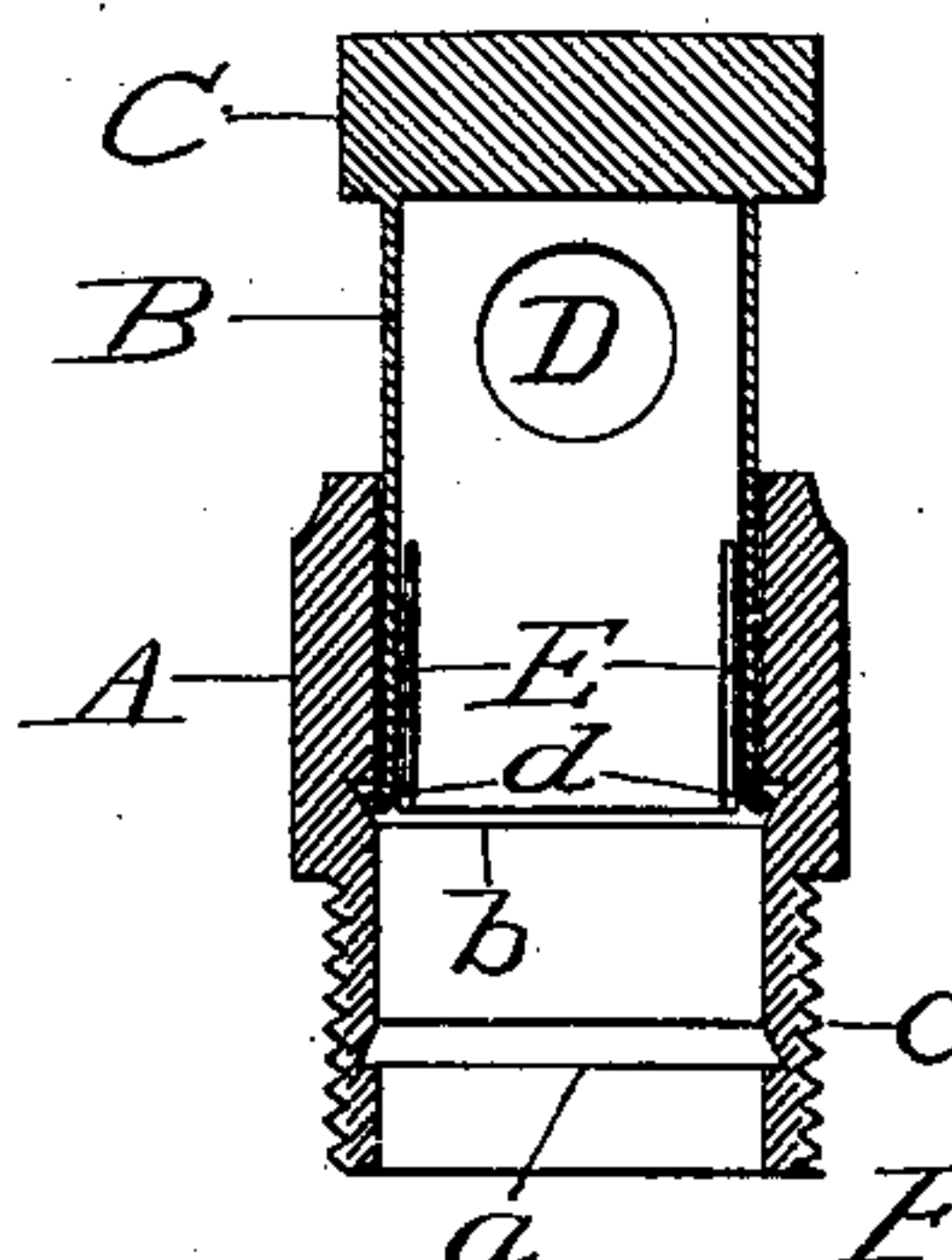


Fig. 6.

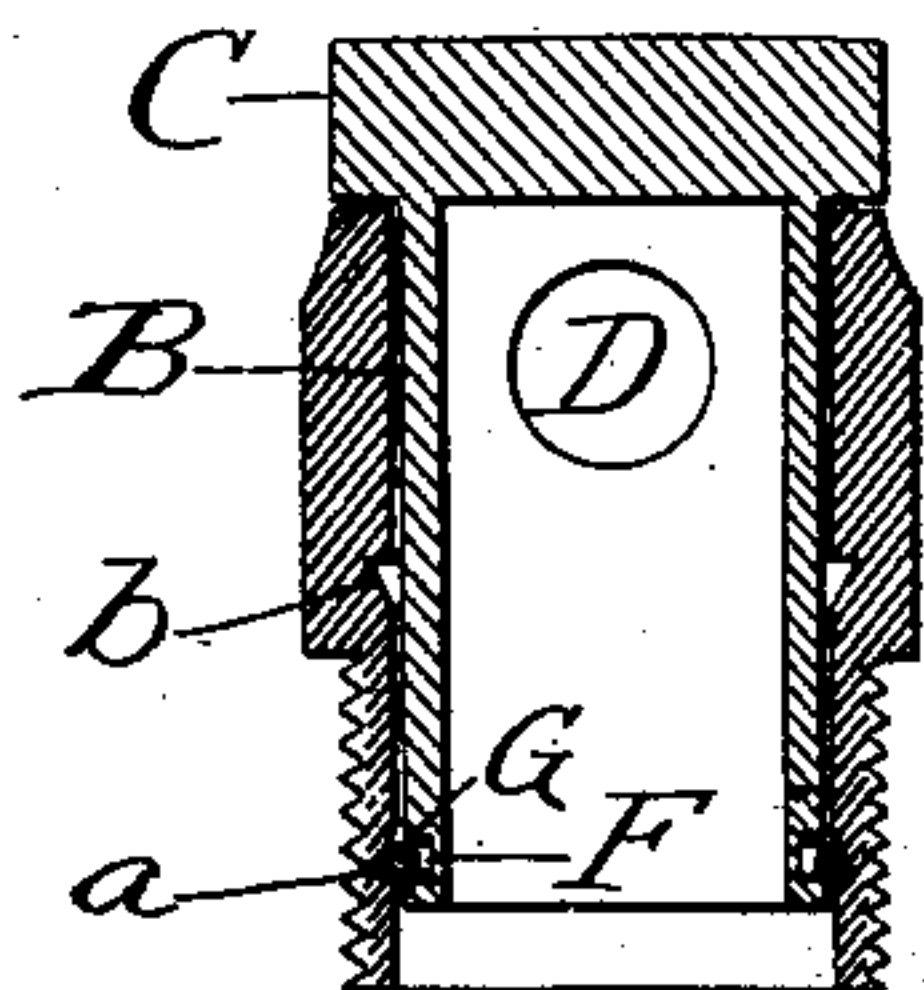


Fig. 5.

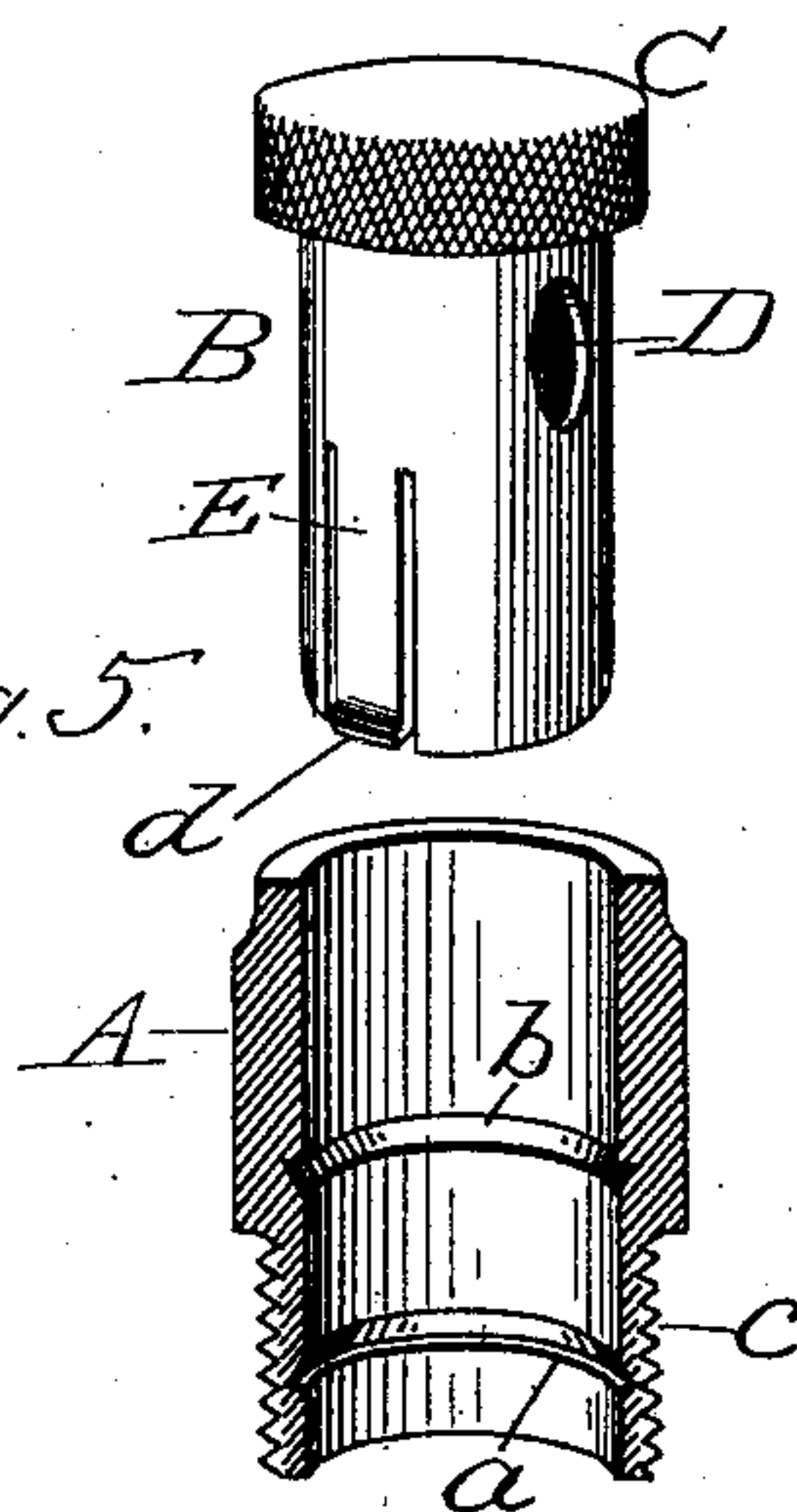


Fig. 7.

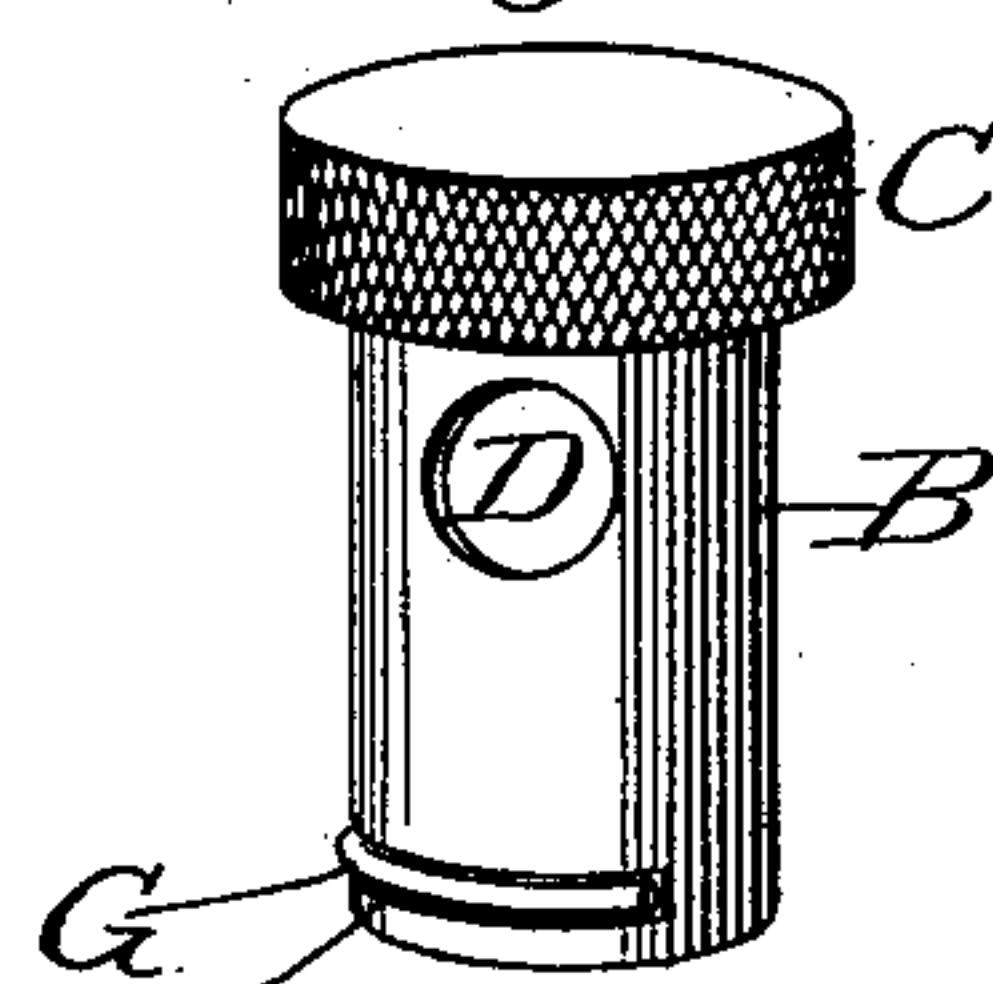
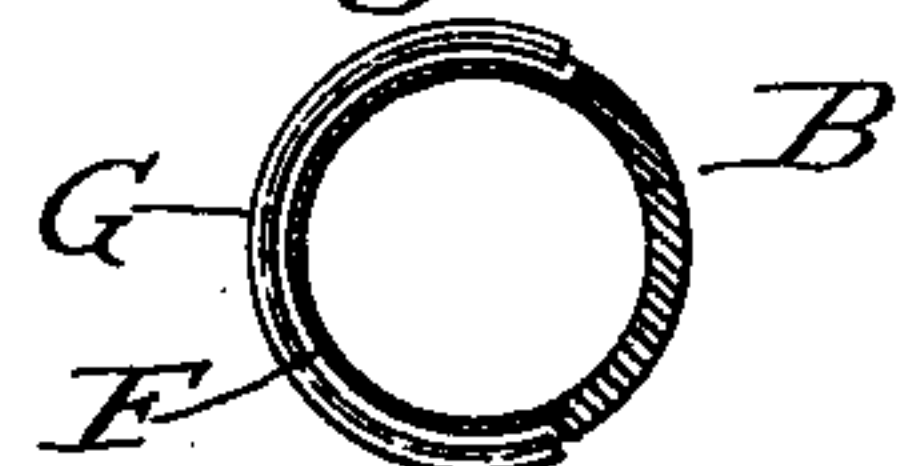


Fig. 8.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK D. WINKLEY, OF MADISON, WISCONSIN.

OIL-HOLE COVER OR CAP.

SPECIFICATION forming part of Letters Patent No. 608,244, dated August 2, 1898.

Application filed September 18, 1897. Serial No. 652,141. (No model.)

To all whom it may concern:

Be it known that I, FRANK D. WINKLEY, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Oil-Hole Covers or Caps, of which the following is a specification.

My present invention relates to improvements in oil-hole covers or caps, the construction and advantages of which will be hereinafter fully set forth, reference being had to the annexed drawings, in which—

Figure 1 is a side elevation of the cover in its closed position; Fig. 2, a similar view, the cap being shown open; Figs. 3 and 4, vertical sectional views of Figs. 1 and 2, respectively; Fig. 5, a sectional perspective view, the parts being shown detached; and Figs. 6, 7, and 8, views illustrating a modified form.

The object of my invention is to provide a simple and efficient oil-hole cover which may be readily applied to an oil-hole when so desired and one which will be dust-proof and easy of manipulation.

Broadly stated, the structure comprises two telescopic members, one designed to be affixed to the machine and the other to be moved in and out thereof, with means for holding said movable member in its elevated or closed position.

The stationary or outer shell or member A is preferably formed with an internal circular bore, as shown, provided with an annular groove *a* near the lower end and with a similar groove *b* above, approximately near the center of the section. The grooves are formed, as shown, with one inclined face and with the other face standing at right angles, or approximately so, to the interior face of the shell. As will be seen upon reference to Figs. 3, 4, and 5, the straight walls of the grooves are near the ends of the shell—that is, the inclined walls extend toward each other. Said outer shell A is provided at its lower end with an external-threaded section, designed to be screwed into the oil-hole, and above said threaded section the shell is polygonal in form, permitting the ready application of a wrench for the more easy insertion or removal of the cap.

The inner member B is of such external

diameter as to freely move in the shell A. It is provided with a head C, preferably milled upon its edge, as shown, and with an opening D in one side near its upper end. Member B is also provided with two or more spring-arms E, formed integral therewith, the lower ends being turned slightly outward, forming lips or projections *d*.

In assembling the parts member B is forced down into member A into the position shown in Fig. 4, when the lips *d* will spring out and enter the upper groove *b*. This is the position of the device when it is desired to oil the machinery. If it be desired to close the cap, member B may be moved down into member A by exerting a slight downward pressure upon head C, lips *d* passing down over the inclined face of groove *b* and being forced inward, the member B descending until the lips enter groove *a* and the head C rests upon the upper end of the outer member A. In this position, as indicated in Figs. 1 and 3, the opening D will be entirely closed and the entrance of dust entirely precluded.

The location of the lower groove *a* with reference to the upper end of member A will of course be such that the lips *d* will fully enter said groove only when head C fits closely down upon said member A. The spring-lips *d* will have a tendency to ride down the upper inclined face of groove *a*, and thus draw the head down to its seat.

It will be noted that the movable member is held in its elevated position when raised by reason of the engagement of the lips *d* with the upper groove and held in its closed position when depressed, so that the operator has free use of both hands while oiling after the cap is opened. It will also be seen that there are no springs to become detached and no screws or bolts to work loose.

Any usual or ordinary pull upon the head in elevating the member B will not withdraw it entirely from the lower member by reason of the spring-lips coming in contact with the abrupt shoulder of groove *b*; but if it be desired to remove said member B it may be withdrawn by exerting a comparatively strong pull.

In the form shown in Figs. 6, 7, and 8 a different spring or lock is employed. The formation of the outer member is the same

as that above described; but instead of forming the spring-catch integral with or out of the inner member said member is provided with a groove *F* near its lower end, which extends about two-thirds of the way around the same, as clearly indicated in Figs. 7 and 8. In said groove is seated a round wire spring *G*, the length of the wire being slightly shorter than the groove and the curve upon which it is formed being slightly greater than that of the groove, so that when the parts are in position, as indicated in Fig. 6, the free ends of the spring will extend into either the groove *a* or *b*. It will thus be seen that the parts are normally locked together, whether the cover be opened or closed, the ends of the spring bearing against the squared face of the grooves *a* and *b*. The spring acting upon the inclined face of groove *a* will always tend to draw the cover *D* down tight.

Having thus described my invention, what I claim is—

1. In an oil-hole cover or cap, the combination of two telescopic members designed to slide one within the other and to contact with each other substantially throughout their length; and means for holding said members either in their closed or extended position and acting to prevent their separation.

2. In an oil-hole cover or cap, the combina-

tion of two telescopic members designed to slide one within the other; two annular grooves formed in the inner face of the outer member; and spring mechanism carried by the inner member coacting with said grooves to hold said inner member in its elevated or closed position and acting to prevent their separation, substantially as described.

3. In an oil-hole cover or cap, the combination of a cylindrical member *A* provided with two annular internal grooves; a second shell or member *B* closed at its upper end and fitting within said member *A*; and spring-arms formed upon member *B* engaging the grooves to hold said member *B* in its elevated or closed position.

4. In an oil-hole cover or cap, the combination of a cylindrical member *A* provided with grooves *a* and *b*; and a shell or member *B* provided with cap *C*, lateral opening *D*, and spring-arm *E* having outwardly-projecting lips *d* designed to enter the grooves, substantially as described.

In witness whereof I hereunto set my hand in the presence of two witnesses.

FRANK D. WINKLEY.

Witnesses:

G. J. CORSCOT,
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