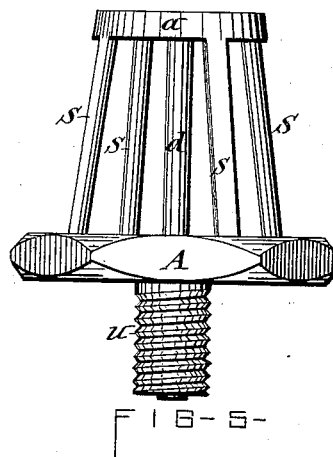
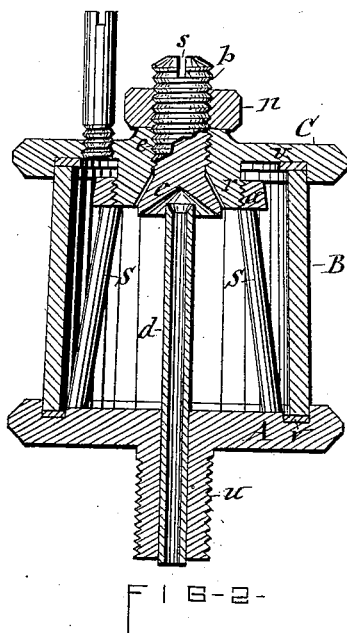
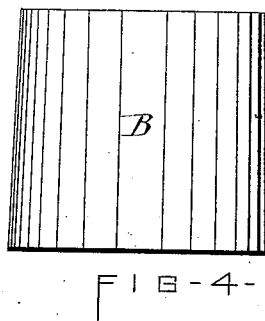
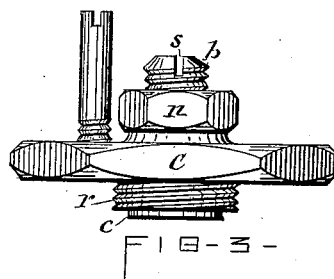
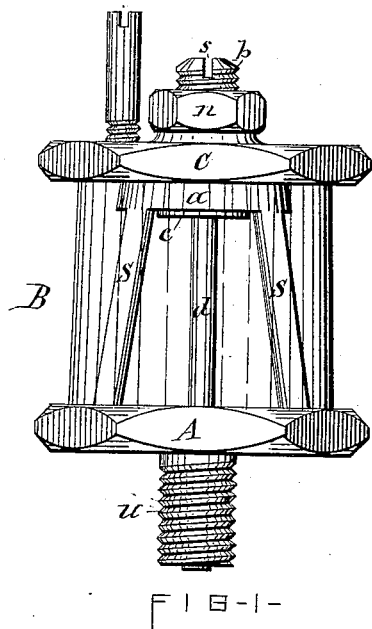


(No Model.)

W. R. MICHENER.  
AUTOMATIC LUBRICATING CUP.

No. 266,178.

Patented Oct. 17, 1882.



WITNESSES—  
Wm. L. Raymond  
C. A. Duell

INVENTOR—  
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per Budd, Lassett & Co.  
his Attys.

# UNITED STATES PATENT OFFICE.

WILLIAM R. MICHENER, OF OSWEGO, NEW YORK.

## AUTOMATIC LUBRICATING-CUP.

SPECIFICATION forming part of Letters Patent No. 266,178, dated October 17, 1882.

Application filed April 1, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM R. MICHENER, of Oswego, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Automatic Lubricating-Cups, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to an improved lubricating device designed more particularly for automatically supplying the lubricant to cranks, eccentrics, and other similar or quick-acting parts of machinery; and it consists in a novel construction and combination of its constituent parts, as hereinafter fully described, and specifically set forth in the claims.

The invention is fully illustrated in the annexed drawings, where Figure 1 is an exterior side view of my improved lubricator. Fig. 2 is a vertical transverse section of the same, and Figs. 3, 4, and 5 show the details of the invention detached from each other.

Similar letters of reference indicate corresponding parts.

A B C represent respectively the base, body, and top or cap of the lubricant cup or receptacle, which may consist of any desired material and be formed either in one or more pieces, the most essential feature of the invention consisting in the devices for automatically feeding the lubricant from said cup to the parts to be lubricated, as hereinafter explained. In order, however, to facilitate and cheapen the construction of the aforesaid lubricant-cup, and to obtain a view of the contents thereof, I form the base A, body B, and cap C of three separate parts, the base A consisting of a metallic plate, from the bottom of which projects a tubular externally-screw-threaded stud, *u*, which is inserted in a correspondingly-threaded hole in the part of the machinery to be lubricated.

In the tubular stud *u* is inserted the lubricating duct or tube *d*, which projects from the top of the plate A upward. From the top of said plate also rises a skeleton standard, S, which is rigidly attached thereto or integral therewith, said standard having at its upper end a horizontal ring, *a*, the orifice of which is screw-threaded.

The cap C is provided in the center of its under side with a downward-projecting screw-

threaded lug, *r*, by means of which it is screwed onto the aforesaid ring *a* of the standard S.

Between the base A and cap C is clamped the shell or body B, gaskets or packing-rings *v* being inserted between the ends of the body B and base A and cap C to render the cup or receptacle perfectly tight.

The center of the cap C is provided with a screw-threaded orifice, *e*, in which works a screw-threaded stem, *b*, said stem having on its lower end a disk, *c*, which is concave on its under side, and arranged directly over the upper end of the lubricating-tube *d*, said disk being considerably larger than the diameter of the tube, so as to project over the top edges thereof and form around the exterior of the same a concentric outwardly and downwardly sloped cap, which tends to collect and throw over the center or mouth of the tube *d* a portion of the lubricant thrown up from the bottom of the oil receptacle or cup by the motion of the crank or pitman to which the lubricating device is attached. The upper end of the stem *b* is provided with a transverse slot, *s*, for the application of a screw-driver for turning said stem, and thus causing the same to work up or down in the cap C. This brings the disk *c* a greater or less distance from the top of the tube *d*, and thereby regulates the size of the opening by which the tube *d* communicates with the interior of the oil cup or receptacle. A jamb-nut, *n*, applied to the upper end of the stem *b*, serves to retain the same in its desired position.

In order to obviate the danger of clogging the ingress to the tube *d*, I make the mouth or upper end thereof flaring on the inside and bevel it to an edge, as illustrated in Fig. 2 of the drawings. This prevents gumming matter or such foreign substances as may accidentally enter the oil-cup from lodging on the end of the tube *d*.

The body B, I prefer to form of a frustum-shaped glass shell, the inclined or convergent sides of which tend to throw the lubricant toward the center of the upper portion of the lubricant-cup by the thrust received during the movement of the part of the machine to which the lubricating device is applied. The transparency of the glass shell B affords a view of the interior of the lubricant-cup.

The described lubricating device is designed

to be applied to cranks, pitmen, eccentrics, and other parts of machinery having a rotary or quick reciprocating motion, the lubricant being fed to the lubricating-tube *d* by the agitation and upward thrust of the lubricant, the ingress of the lubricant to the said tube being regulated by the screw-threaded stem *e* of the tube *d* working in the cap C, as before described.

10 Having described my invention, what I claim is—

1. The combination, with the lubricant-cup and its tube *d*, of the disk *e*, arranged over the mouth of said tube, and formed on its under side with an outward and downward projection over the exterior of the tube, substantially as described and shown, for the purpose set forth.

2. In combination with the lubricant-cup, the tube *d*, having a sharp-edged flaring mouth, and the disk *e*, arranged adjustably over the mouth of said tube, and having a concave bottom projecting over the exterior of the same, substantially as shown and described, for the purpose specified.

3. The combination of the base A, provided

with the tubular externally-screw-threaded stud *u*, the tube *d*, having its lower extremity inserted in said stud, the skeleton standard S, rigidly attached to or integral with the base A, and provided at its top with the screw-threaded ring *a*, the cap C, provided on its under side with a screw-threaded projection, *r*, engaging the ring *a*, the disk *e*, pendent from the center of the cap, and the shell B, clamped by and between the base A and cap C, as shown and described.

4. The frustum-shaped body or shell B, in combination with the base A, provided with the vertical tube *d*, and the cap C, provided with the disk *e*, arranged over the upper end of the tube *d*, substantially as shown and set forth.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 22d day of March, 1882.

WILLIAM R. MICHENER. [L. S.]

Witnesses:

C. H. DUELL,

WM. C. RAYMOND.