(Model.)

T. B. MERRILL.

LUBRICATING CUP.

No. 305,460. Patented Sept. 23, 1884.

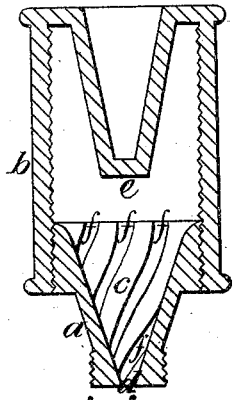

FIG. 1.

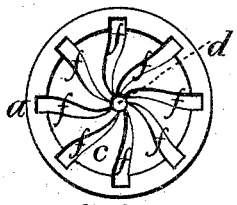

FIG. 2.

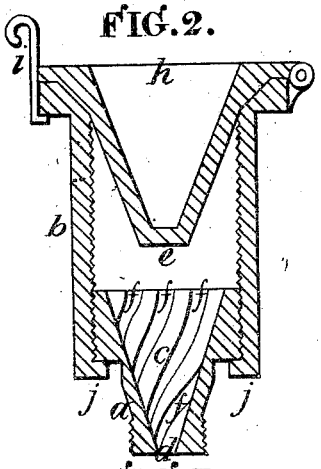

FIG. 3.

WITNESSES:

John P. Kerrigan.

Chas. H. Kimball.

INVENTOR:

Thomas B. Merrill

UNITED STATES PATENT OFFICE.

THOMAS B. MERRILL, OF PORTLAND, MAINE.

LUBRICATING-CUP.

SPECIFICATION forming part of Letters Patent No. 305,460, dated September 23, 1884.

Application filed June 28, 1884. (Model.)

To all whom it may concern:

Be it known that I, THOMAS B. MERRILL, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Lubricating-Cups; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side sectional elevation. Fig. 2 is a plan showing the spiral grooves in the outlet of the lubricator. Fig. 3 is a side sectional elevation showing a hinged cover to the cap.

Same letters show like parts.

My invention relates to lubricators.

My improvement consists of two parts—the body *a* and the cap *b*. The body is distinguished from all other lubricators by having the conical hollow interior *c*, which, as is manifest from the drawings, is of the largest diameter at the top, and slopes or tapers uniformly down to the bottom end, *d*. The advantage I secure by this arrangement is that the grease or lubricating compound is more readily and easily forced and discharged from the hollow of the body.

Lubricating-cups are made in which the hollow has a flat or horizontal bottom inside, with an aperture or outlet in the center thereof. Now, inasmuch as the grease or lubricating compound is forced out of the cup by a vertical pressure on the top of the grease, it is plain that considerable force is needed to make all of the grease, especially the last portions of it, move along the surface of the horizontal bottom of the aperture by pushing or pressing down on it. From this remark the advantage of my conical hollow will be readily perceived. All the lubricating compound in the conical hollow is easily forced down through the cup, as is required for use. To further facilitate this operation, I make the cap *b* of a shape corresponding to the conical hollow of the body. This is illustrated in the drawings. The point *e* has a tendency to enter into the narrowing part of the conical hollow as the cap is screwed down to force out the lubricating compound. The body is, on its outer periphery, provided with a screw-thread fitting with the screw-thread on the inner periphery of the cap *b*. The cap is screwed downwardly in the common way to force out the lubricating compound, as required for use. On the inside of the conical hollow I form spiral grooves or channels *f*. These are also to facilitate the discharge of the grease. Turning the cap to force out the grease tends to impart a rotary motion to the contents. Thus the helical grooves, continuing and more readily allowing of such motion, permit of the outflow of the grease more easily. To fill this lubricating-cup, the cap *b* must be removed in the ordinary way, when the grease can be put either into the body or the cap.

As a modification of this improvement I have invented the hinged cover *h* to the cap *b*, as seen in Fig. 3. The cover is held fastened down into place by the snap or catch *i*. The cover has only to be lifted with this form in order to fill the cup for use. The cap *b* itself, thus not being required to be removed, is furnished with the rim or flange *j* at its bottom. This will limit the extent to which the cap can be screwed upwardly.

I do not claim the combination of the hollow body furnished with a screw-thread on its outer periphery with a screw-cap working as described.

What I do claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The lubricating-cup as described, having the conical or tapering hollow within the body thereof, in combination with a screw-cap, the same furnished with a thread to match the thread cut on the outer periphery of the body, as herein set forth.

2. The conical hollow of the lubricating-cup herein set forth, when furnished with the spiral grooves or channels, as specified.

3. The lubricating-cup as herein specified, having the cap *b*, shaped as illustrated and

set forth, so that it will have the point *e* to enter the hollow of the body as the cap is screwed downwardly to force out the lubricating compound.

4. A lubricating-cup having the hinged cap, as herein set forth and described, the flange *j*, and catch or snap *i*, as herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS B. MERRILL.

Witnesses:
JOHN P. KERRIGAN,
H. M. SYLVESTER.