

(No Model.)

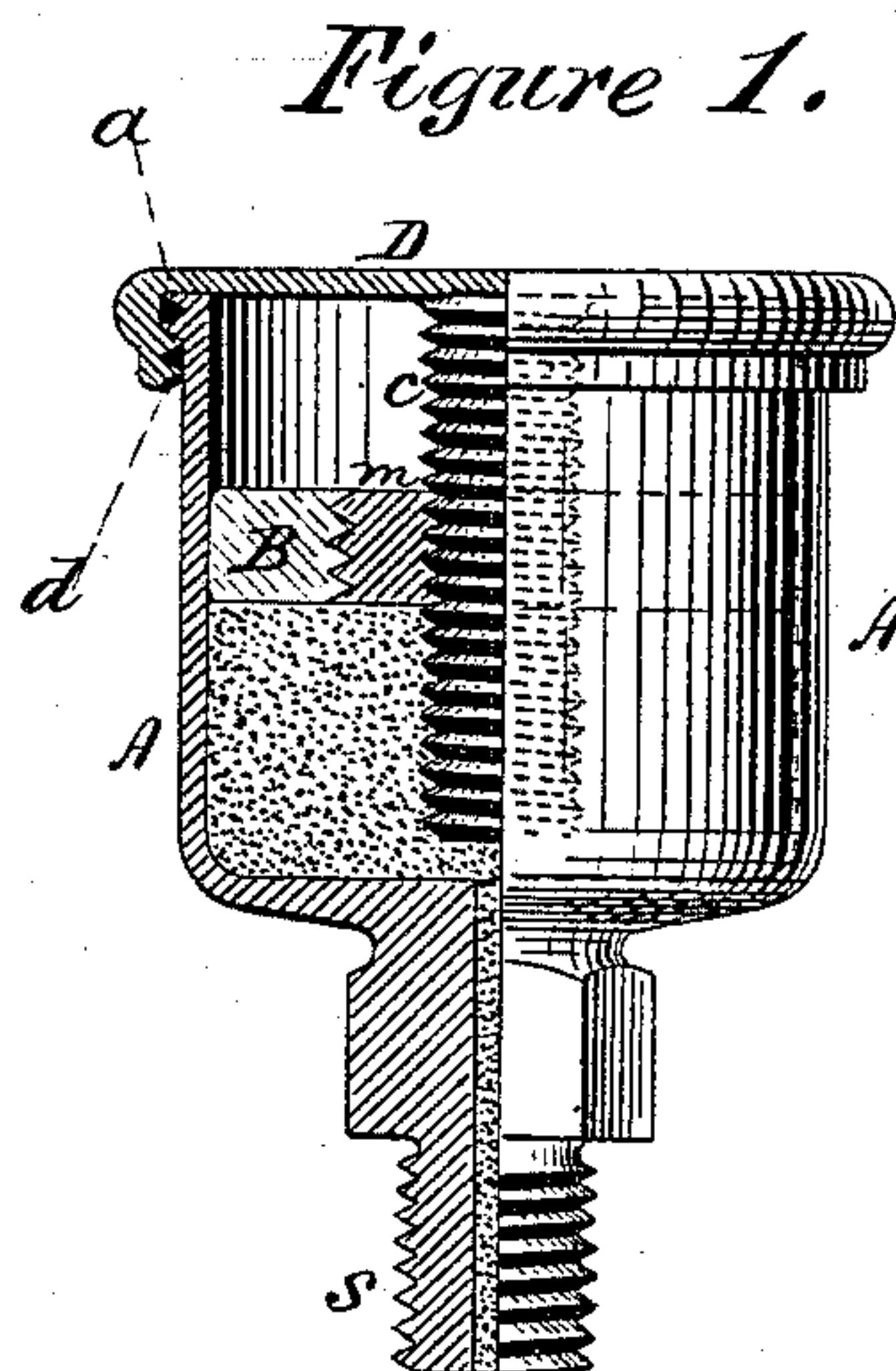
2 Sheets—Sheet 1.

H. REISERT.

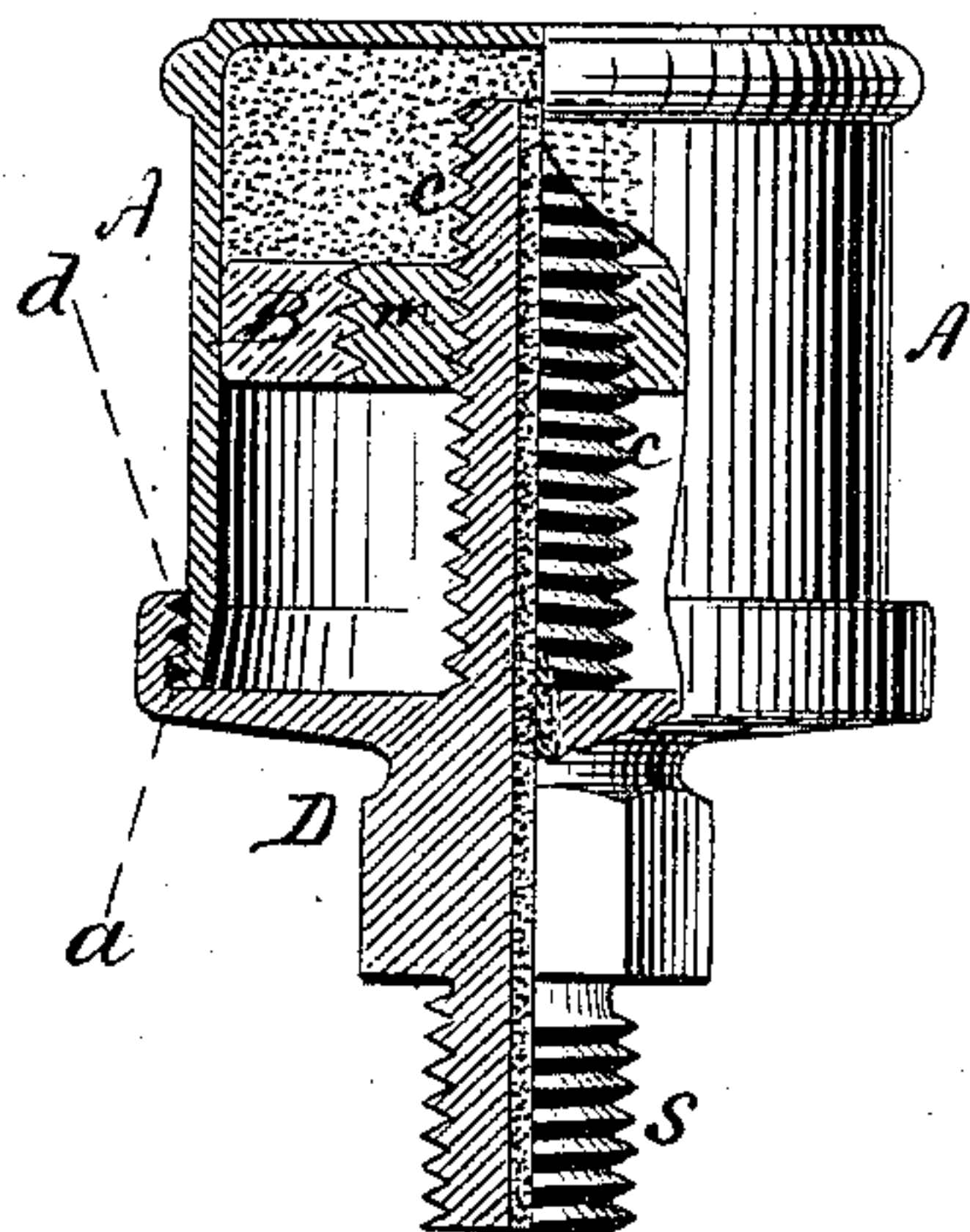
APPARATUS FOR LUBRICATING BEARINGS.

No. 287,963.

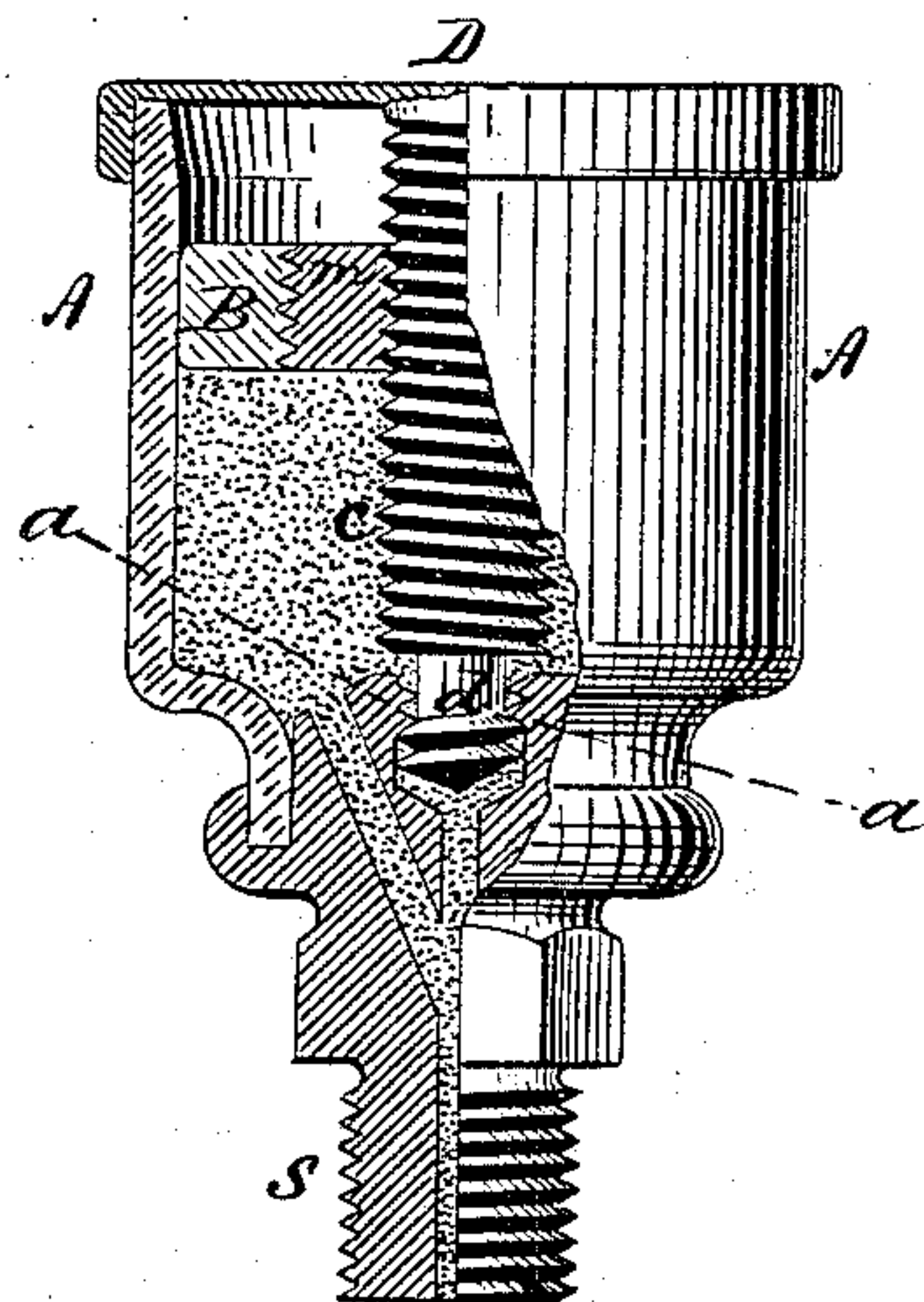
Patented Nov. 6, 1883.



*Figure 2.*



*Figure 3.*



Witnesses:  
A. E. Harmann.  
C. P. Humphrey.

Inventor:  
Hans Reisert  
By his Attorneys  
Foster & Freeman

(No Model.)

2 Sheets—Sheet 2.

H. REISERT.

APPARATUS FOR LUBRICATING BEARINGS.

No. 287,963.

Patented Nov. 6, 1883.

Figure 4.

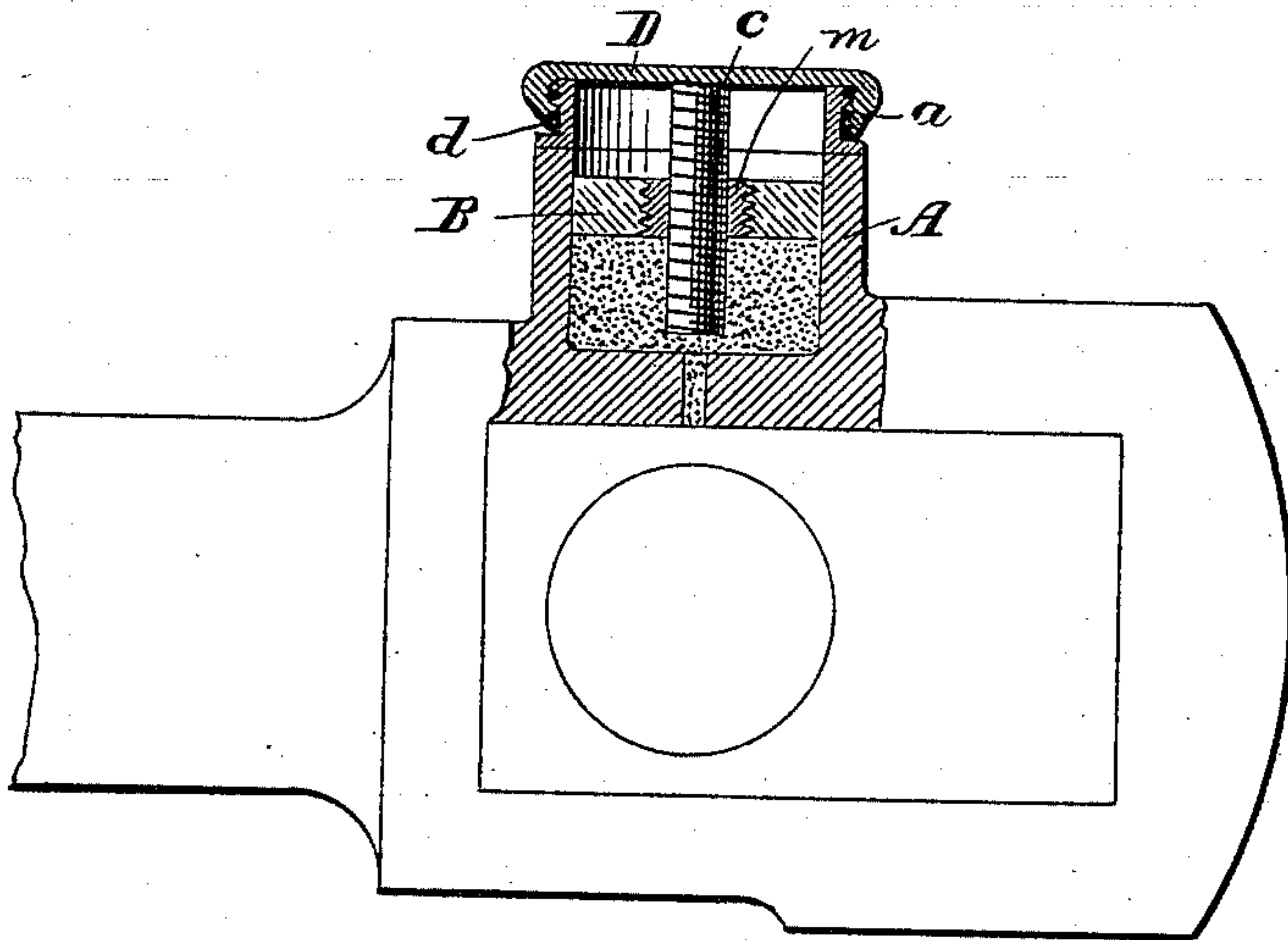
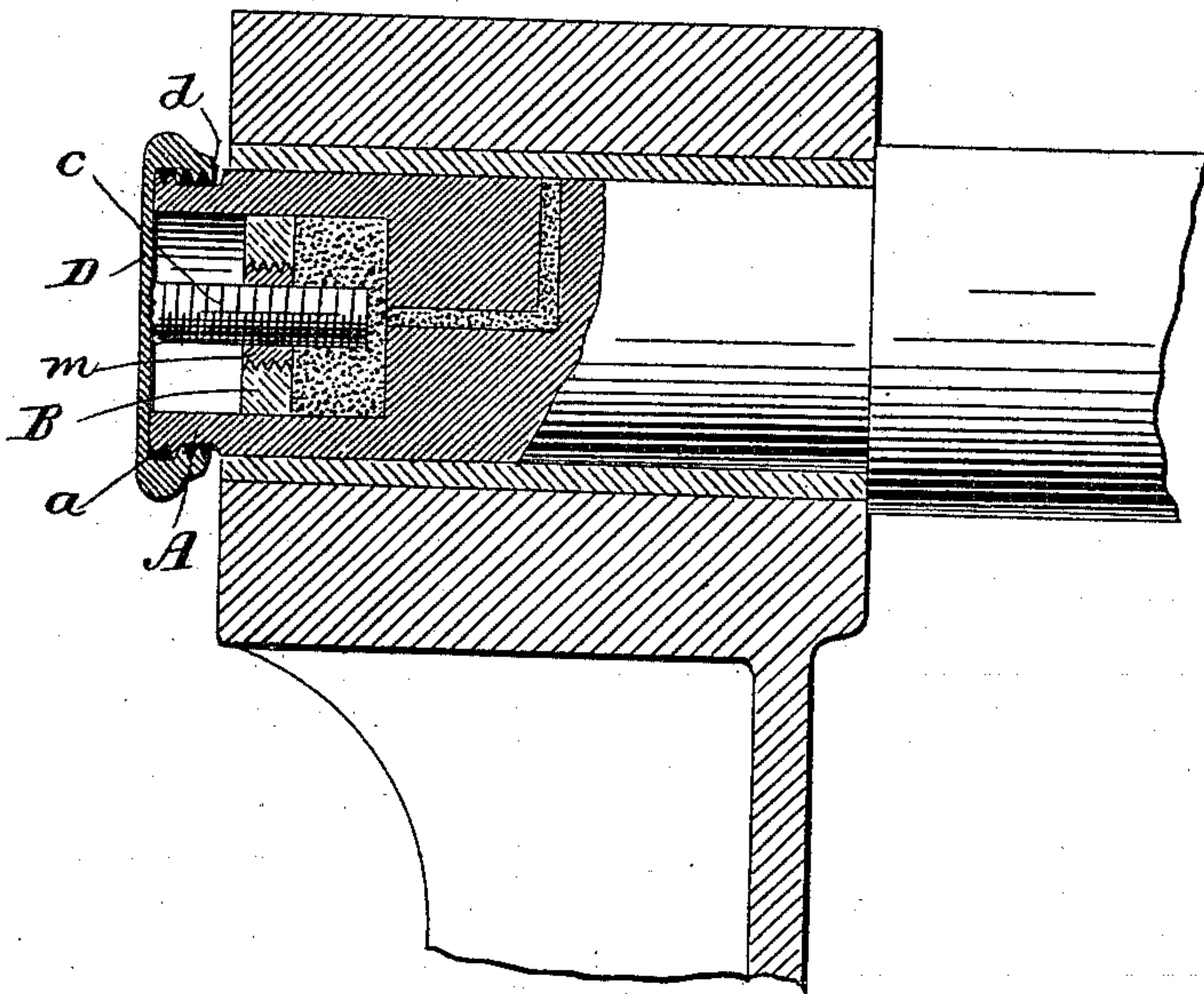


Figure 5.



Witnesses:

A. G. Hansmann.

C. B. Humphrey.

Inventor:

Hans Reisert

By his attorney,

Foster & Freeman



# UNITED STATES PATENT OFFICE.

HANS REISERT, OF COLOGNE-ON-THE-RHINE, GERMANY.

## APPARATUS FOR LUBRICATING BEARINGS.

SPECIFICATION forming part of Letters Patent No. 287,963, dated November 6, 1883.

Application filed September 11, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, HANS REISERT, a citizen of the Empire of Germany, residing at Cologne-on-the-Rhine, have invented certain new and useful Improvements in Apparatus for Lubricating Bearings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an improvement in lubricators, in which the lubricant, preferably semi-solid or solid, is forced at intervals by hand in contact with the bearing which it is to lubricate.

My invention will be readily understood from the accompanying drawings, in which Figures 1, 2, and 3 represent sections of modified forms of my invention; and Figs. 4 and 5, views of the apparatus shown in Fig. 1 as applied directly above and at the end of a revolving shaft.

My apparatus consists, generally, of an oil-cup, A, which constitutes one portion of the case as shown in Fig. 1, adapted to be screwed by a connection, S, to the bearing or connection through which the lubricant is to be forced.

Within the cylindrical cup A is the piston B, which is preferably made of soft material—such as cork, rubber, &c.—and is built upon and surrounds a threaded metallic bushing, *m*. This piston fits with sufficient friction to prevent its ready revolution within the cylindrical oil-cup.

The oil-cup A is provided at its upper extremity with a short screw-thread, *a*, having but two threads cut upon it. The cover D, which constitutes another portion of the case, has a lip formed in a peculiar manner, adapted to engage with the screw-thread *a*. This lip is provided with a screw-thread, *d*, at its lower extremity, of the same number of turns or threads as is the screw-thread *a*; but this screw-thread does not extend to the under surface of the cup, but is cut away, leaving a plain cylinder beneath the cover D, so that the cover D may be first screwed upon the screw-thread *a*, and the screw-thread *d* will then pass clear of the screw-thread *a*, and the cover D can be indefinitely and freely turned, while at the same time the threads prevent its withdrawal, except it be unscrewed, as will be hereinafter explained.

To the center of the cover D is attached

the screw *c*, engaging with the bushing *m*. This screw-thread is cut in a reverse direction from the screw-thread *d*, so that after the cover D has been screwed on in the position shown in Fig. 1 the continued revolution of the cover to the right will force downward the piston upon the material within the cup.

The operation will be readily understood. The cup having been properly filled, and the piston B being at the upper part of the screw-thread *c*, the cover D is turned, so as to screw down upon the cup A, and the continued revolution of the cover D will force down the piston or follower B, which is prevented from revolving by friction against the cup A. When it is desired to remove the piston to refill, it is only necessary to remove the cover in the reverse direction, when the piston will be, in the first place, drawn up against the cover, and until which time the threads *d* and *a* will not engage, and then the threads *d* and *a* will engage, and the cover and piston may be removed together. The advantage of this arrangement is that it is unnecessary to screw up the piston by hand.

In Fig. 3 the cup is made of glass, and the locking contrivance holding the cover D upon the cup is shown at the bottom of the cup, the end of the screw *c* having a short reverse screw-thread cut upon it, locking into the short screw-thread cut in the base, the action being the same as that in Fig. 1.

In Fig. 2 the cup is inverted, and is screwed upon the base D by the short screw-thread *a* and *d*, and the lubricant is forced downward through the center of the screw *c*. These constructions are, however, substantially the same as that shown in Fig. 1.

In Figs. 4 and 5 the screw-connection S is not shown, but the lubricator-cup is attached directly to the bearing.

In Fig. 5 the cup is bored within the end of the journal, and a channel is cut delivering the lubricant laterally upon the bearing-surface. The construction is otherwise as shown in Fig. 1.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a lubricator in which a piston is used to force the lubricant through a delivery-channel, a screw rigidly connected to an exterior



portion of the case of the lubricator and passing through the piston, thereby enabling the piston to be forced downward on the revolution of the moving part of the case of the lubricator, substantially as described.

2. In a lubricator in which the lubricant is forced by pressure to a delivery-channel, the combination of a piston forced downward by the revolution of the screw with an independent portion of the exterior of the lubricator, serving to force the piston against the lubricant by the action of the screw, and itself locked to the permanent part of the contrivance by a screw-thread cut in the reverse direction from the screw-thread of the screws, substantially as described.

3. The combination of the cylinder A with the cap D, provided with screw *c*, and with thread *d*, adapted to engage with and pass beyond the thread *a* upon the cup A, substantially as described.

4. The combination of the cup A, with the piston B, with the fixed screw-thread *c*, thereby enabling the piston to be fed by the revolution of the cup, substantially as described.

5. The new lubricator for the journals herein described, which consists in a cup or cavity cut in the end of the journal, and itself provided with a piston adapted to be forced against the lubricant therein contained, to deliver said lubricant against the wearing-surface, substantially as described.

In testimony whereof I have affixed my signature, in presence of two witnesses, this 24th day of July, 1883.

HANS REISERT.

Witnesses:

CARL ROCHELS,  
TH. PEITMAN.