R. C. AGNER.

LUBRICATOR.

APPLICATION FILED MAR. 3, 1909.

940,572. Patented Nov. 16, 1909.

Fig. 1.

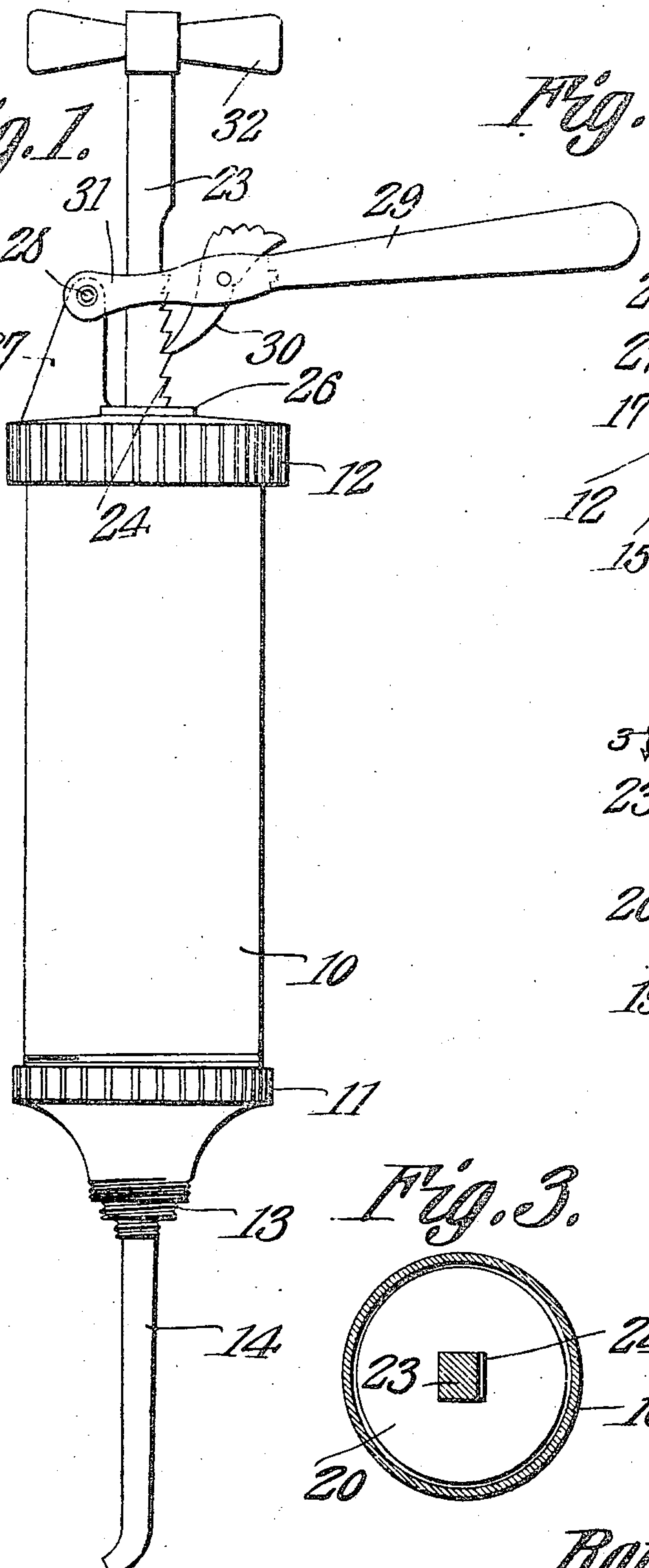

Fig. 2.

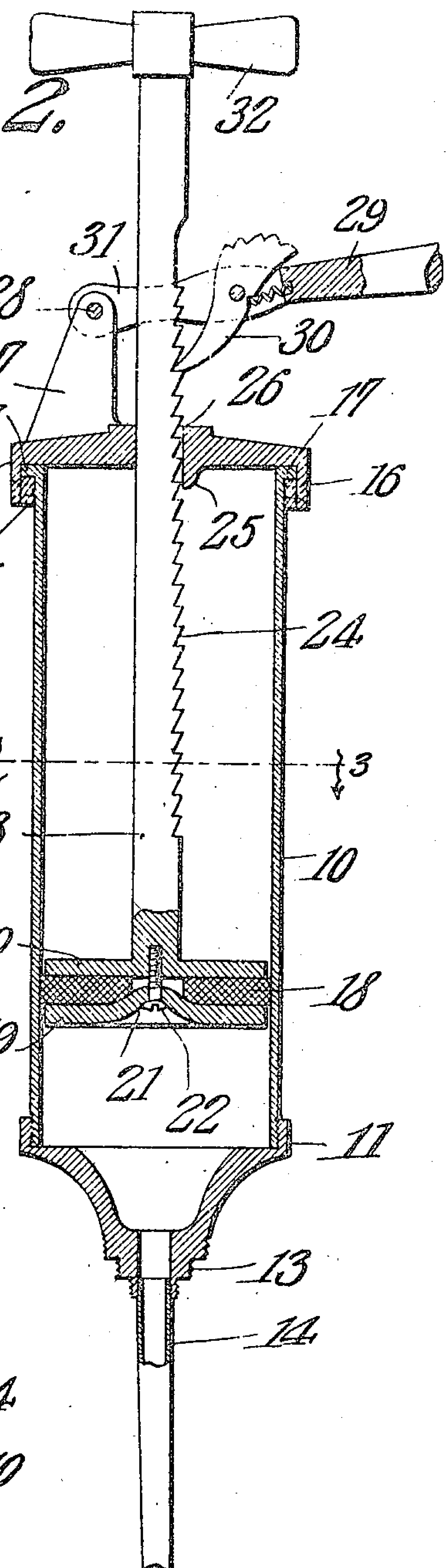

Fig. 3.

Witnesses

[illegible]

[illegible]

Inventor

Raymond C. Agner.

By C.A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

RAYMOND C. AGNER, OF BURLINGTON, WISCONSIN.

LUBRICATOR.

940,572. Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed March 8, 1909. Serial No. 482,080.

To all whom it may concern:

Be it known that I, RAYMOND C. AGNER, a citizen of the United States, residing at Burlington, in the county of Racine and State of Wisconsin, have invented a new and useful Lubricator, of which the following is a specification.

This invention relates to that type of lubricators characterized by a hand operated pump, and the object of the present invention is to provide in a lubricator of this kind an improved form of plunger, as well as improved and novel means for operating the same.

With the foregoing objects in view the invention consists in a novel construction and arrangement of parts to be hereinafter described and claimed, reference being had to the drawing hereto annexed in which:

Figure 1 is an elevation of the pump. Fig. 2 is a central vertical section thereof, partly broken away. Fig. 3 is a transverse section on the line 3—3 of Fig. 2.

Referring more particularly to the drawings, 10 denotes the barrel of the pump, the same being in the shape of a cylinder which is closed at its ends by caps 11 and 12, respectively. The cap 11 is screwed or otherwise removably secured to the discharge end of the barrel, and is cup-shaped, and provided with a nipple 13 having interior screw-threads for the attachment of a nozzle 14 by which the lubricant is directed to the parts to be lubricated. The nipple is also threaded exteriorly to screw into the lubricant opening of a bearing, and said threaded portion is stepped so that the nipple is given different diameters which enables it to be screwed into different sized openings. By making the cap dished as described, the lubricant will flow more readily, and freely through the nozzle. The cap has a milled edge to facilitate its being turned on or off the pump barrel.

The cap 12 is swiveled to the opposite end of the pump barrel, by being fastened to a ring 15 encircling the barrel, and loose thereon so that it is free to turn. The cap has a marginal flange which extends over the outer periphery of the ring, and screws 16 or other suitable fastening means passing through this flange and into the ring fasten said parts together. The end of the pump barrel has an outwardly directed flange 17 against which the ring abuts, and which prevents said ring from slipping off the barrel.

The plunger working in the pump barrel comprises the leather washer 18 held between disks 19 and 20, respectively. The disk 19 has a central dished portion 21 whereby a depression is had in the working face of the plunger. By thus forming a depression in the working face of the plunger, a better pressure on the lubricant is had, and the same is discharged from the barrel with greater force. The disks 19 and 20 are fastened together by a screw 22 passing centrally therethrough, and the washer 18 is clamped between said disks. The washer has a central opening to receive the raised portion of the disk 19 on the inner face thereof formed by the depression heretofore described. The disk 20 is provided with a stem 23, which is formed integral therewith. The said stem is polygonal in cross section, and has ratchet teeth 24 in one of its edges. The stem extends through an opening in the cap 12, the shape of said opening corresponding to the cross sectional shape of the stem, and as the same is angular, it will be seen that the stem is prevented from rotating in said opening. On the inner surface of the cap 12, adjacent the opening through which the stem 23 passes, and on that side opposite the ratchet teeth, is a lug 25. On the outer surface of the cap 12, and surrounding the aforesaid opening, is a raised portion 26. The object of this lug and the raised portion is to prevent lateral play of the plunger stem, whereby the ratchet teeth are prevented from catching on the edges of the opening in the cap.

From the cap 12 rises a standard 27 to which is pivoted at 28 a lever 29 carrying a pawl 30 which is engageable with the ratchet teeth 24 of the plunger stem 23. The pivoted end of the lever is forked as indicated at 31 to receive the standard 27 and also the plunger stem. The pawl is pivotally mounted between the branches of the forked end of the lever. One end of the pawl is weighted, whereby it is normally swung in a direction to engage the ratchet teeth. A spring may also be employed for this purpose. The outer end of the plunger stem is provided with a handle 32.

By the hereindescribed pawl and ratchet mechanism the plunger is advanced in an

obvious manner to force the lubricant to the parts to be lubricated. By swiveling the cap 12 on the pump barrel, the operating mechanism can be swung around after the pump barrel has been screwed into the bearing opening of the part to be lubricated, and it can therefore be operated with greater ease in close places.

What is claimed is:

1. A lubricator pump comprising a barrel having a projecting flange at one end, a ring loosely encircling the barrel below the flange, a cap fitting over the flanged end of the barrel, and having a marginal flange engageable with the ring, fastening means passing through said marginal flange and the ring, a plunger working in the barrel, a stem on the plunger having ratchet teeth, the aforesaid cap having an opening through which the stem extends, and said opening and stem being shaped to prevent rotation of the stem with respect to the cap, a lever pivotally mounted on the cap, and a pawl carried by the lever and engageable with the ratchet teeth of the stem.

2. A lubricator pump comprising a barrel having a projecting flange at one end, a ring loosely encircling the barrel below the flange, a cap fitting over the flanged end of the barrel, and having a marginal flange engageable with the ring, and fastened thereto, a plunger working in the barrel, a stem on the plunger, and aforesaid cap having an opening through which the plunger stem passes, and means for operating the plunger stem.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

RAYMOND C. AGNER.

Witnesses:
JAMES N. THOMAS,
DALUBY BALEFTER.