

Oct. 26, 1926.

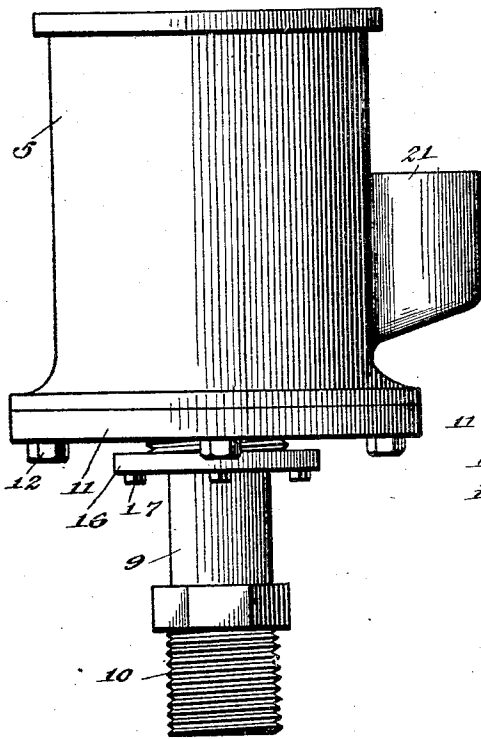
1,604,756

J. PROCHASKA

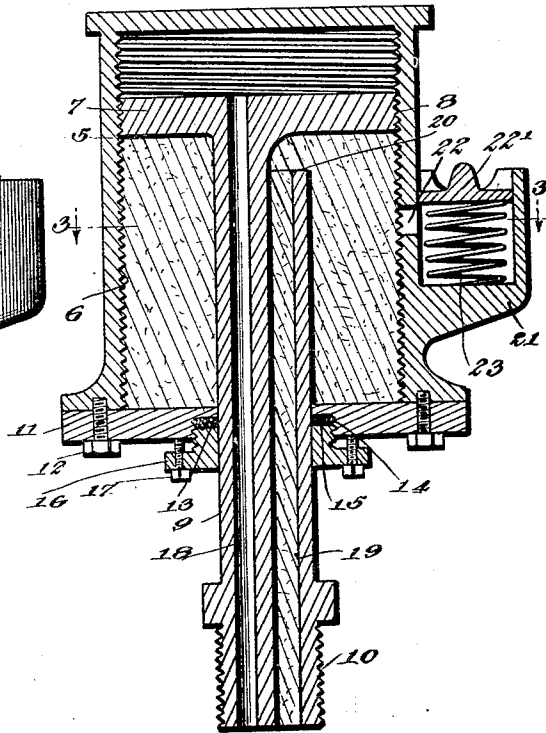
LUBRICATOR

Filed Feb. 24, 1925

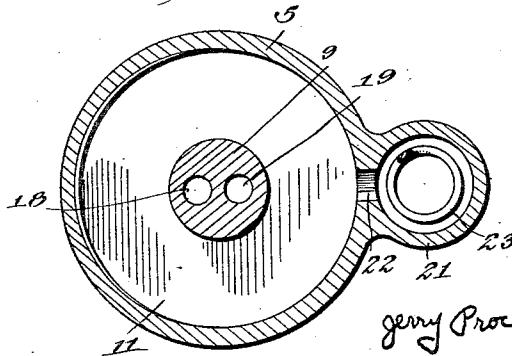
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Jerry Prochaska* Inventor

Patented Oct. 26, 1926.

1,604,756

# UNITED STATES PATENT OFFICE.

JERRY PROCHASKA, OF RENFROW, OKLAHOMA.

## LUBRICATOR.

Application filed February 24, 1925. Serial No. 11,309.

My invention relates to improvements in lubricators and more particularly to a force-feed grease cup.

It is an object of the invention to provide a grease cup having means for forcing the grease from the cup upon rotation of the cup in either direction.

A further object of the invention is to provide a grease cup in which a piston is threadedly mounted having a stem with separate passages leading from the top and underside of the piston, whereby the grease will be discharged through the stem upon rotation of the cup in either direction.

Another object of the invention is to provide a device of the above character which is simple and durable in construction, reliable and efficient in operation and inexpensive to manufacture.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawing, forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Fig. 1, is a side elevation of my improved grease cup,

Fig. 2, is a longitudinal sectional view of the same, and,

Fig. 3, is a cross sectional view on lines 3-3 of Fig. 2.

In the drawing, wherein for the purpose of illustration I have shown a preferred embodiment of my invention, the numeral 5, denotes a circular container or cup closed at its upper end. The inside wall of the cup is provided with screw-threads 6 for the entire length thereof. A piston 7 is mounted within the cup, its peripheral edge having screw-threads 8 to engage the screw-threads 6 of the cup, whereby rotation of the cup will move the piston up and down within the cup. The piston 7 is provided with a stem 9 having screw-threads 10 at its lower end for connecting it with the parts of the machinery to be greased. The bottom of the cup is closed by the disc 11 which is fastened in place by the screws 12. The disc is provided with a central aperture 13 through which the stem 9 extends and is surrounded by an annular screw-threaded recess 14 in which the felt washer 15, or other suitable packing is placed, being held in place by the packing nut 16 which threadedly engages the recess. After adjustment the packing nut may be

locked in place by the set screws 17. The stem 9 has two parallel passages 18 and 19 extending longitudinally thereof, the passage 18 extending through the piston and opening on the upper side thereof, while the passage 19 terminates below the piston, as at 20, opening beneath the piston. Thus, it is seen that communication is established between the cup and stem on both sides of the piston, the purpose of which will be set forth hereinafter.

Cast integral with the side of the cup, about midway its length, is a filling spout 21 and communication between the spout and cup is established by the passage 22 through the side of the cup. The open end of the spout is normally closed by the valve 22' which is held closed by the coil spring 23 mounted beneath the same. The respective ends of the spring 23 are connected with the valve 22' and the bottom of the spout, by solder or other suitable means, the spring having sufficient tension to limit the upward movement of the valve. Pressure on the valve will compress the spring and permit grease to be introduced into the cup through the medium of a grease gun or other suitable filling means.

In use, it will be seen that when the piston is in the position as shown in Fig. 2, the portion of the cup below the piston can be filled with grease and rotation of the cup in an upward direction will cause the piston to force the grease through the passage 19 of the stem to the parts of the machine to be lubricated. When all of the grease within the cup has been discharged, the piston will then be in a position below the passage 22 and the portion of the cup above the piston may then be filled with grease and reverse rotation of the cup will cause the grease to be forced through the passage 18 of the stem. Thus, it is seen that grease will be forcibly discharged from the cup upon rotation of the cup in either direction.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that certain changes in the shape, size and arrangement of the parts may be made without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:—

1. A device of the character described in-

cluding a cup, a reversibly operable piston within said cup having screw-threaded connection therewith, and a stem depending from said piston having longitudinal passages leading from the top and underside of said piston.

5  
10  
2. A device of the character described including a circular cup having its inner wall provided with screw-threads and closed at its upper end, a reversibly operable piston within said cup having its peripheral edge in threaded engagement with the screw-threads

of the cup, a removable plate closing the lower end of said cup having a central aperture, a stem depending from said piston and extending through the aperture of the plate, said stem having longitudinal passages leading from the upper and underside of said piston, whereby grease will be discharged from the cup upon rotation of the same in either direction, and a filling spout having communication with the cup.

In testimony whereof I affix my signature.  
JERRY PROCHASKA.