

July 5, 1932.

C. N. WILCOX

1,865,990

OIL CAN

Filed June 16, 1930

Fig - 1-

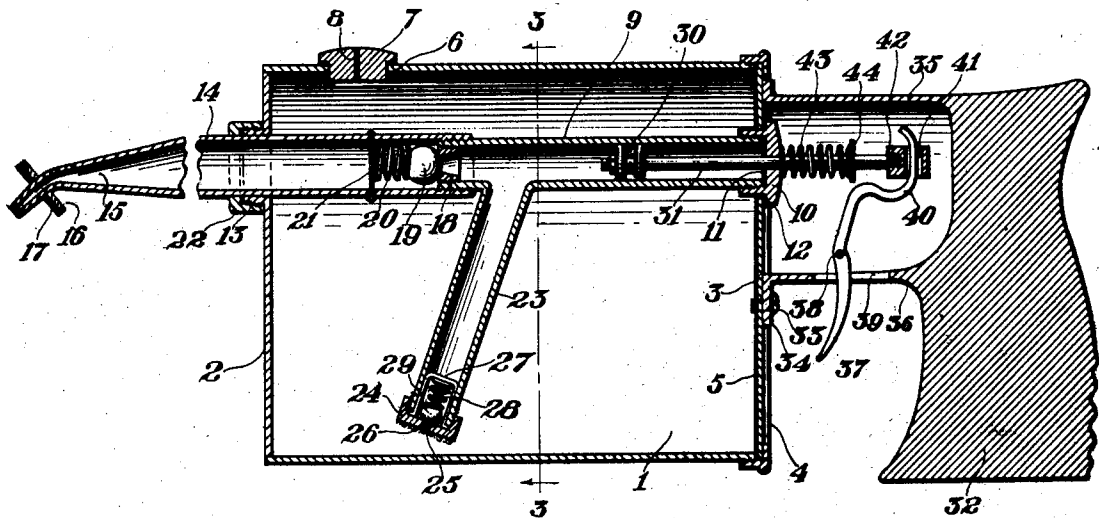


Fig - 2-

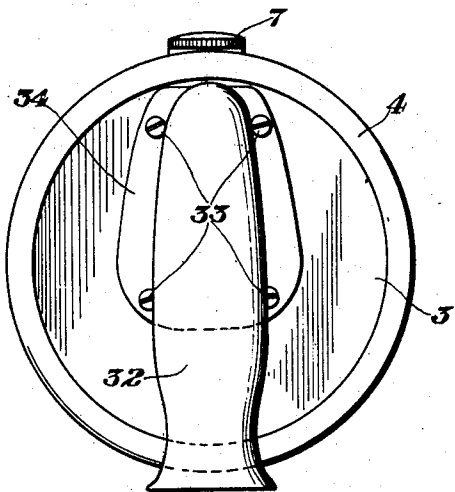


Fig - 3-

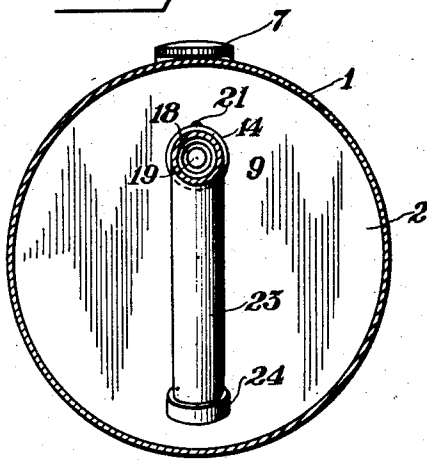
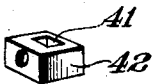


Fig - 4-



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OIL CAN

Application filed June 16, 1930. Serial No. 461,600.

This invention relates to dispensing receptacles and more particularly to an oil can used for applying lubricating oil to bearings, shafts and other moving parts of machinery.

One object of the invention is to provide an oil can having a container or receptacle of relatively large capacity and improved means for discharging oil from the receptacle into a bearing or onto a shaft.

Another object of the invention is to so form the discharge means that when the oil can is in use quantities of oil may be withdrawn from the container by the discharge apparatus and ejected when the spout of the discharge apparatus is applied to a bearing.

Another object of the invention is to provide the oil can with an improved handle by means of which it may be very easily held and also to provide improved actuating means for the discharge apparatus so located that a trigger forming part of the same may be easily engaged with one finger of the hand grasping the handle.

Another object of the invention is to so form the oil can that elements constituting the same may be very easily taken apart when cleaning or repairs are necessary and then reassembled.

The invention is illustrated in the accompanying drawing, wherein

Figure 1 is a longitudinal sectional view through the improved oil can,

Fig. 2 is a rear elevation thereof,

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1, and

Fig. 4 is a perspective view of a trigger-engaging eye at the rear end of a piston rod forming part of the ejecting apparatus.

The receptacle 1 of this improved oil can is preferably cylindrical in shape and at its forward end is provided with a head 2 permanently attached to walls of the receptacle. The rear end of the receptacle is closed by a removable head 3 consisting of a disk which

fits against the walls where it is secured by a ring or collar 4 threaded upon the walls, as shown in Figure 1. A gasket 5 may be disposed between the head 3 and end edges of the walls in order to prevent danger of leakage. A filling opening 6 is formed in the walls and this opening is normally closed by a plug 7 having a vent 8 formed therein so that air may enter the receptacle as oil is discharged therefrom.

The barrel or cylinder 9 of the discharge apparatus extends longitudinally in the receptacle with its rear end in threaded engagement with a cap 10 engaged through an opening formed in the rear end 3 and gaskets 11 and 12 may be employed in order to prevent leakage at the rear end of this cylinder. A neck 13 extends forwardly from the front head 2 and through this neck is disposed a spout 14, the inner end of which is in threaded engagement with the forward end of the cylinder. It should be noted that the outer or forward end portion 15 of the spout is tapered and adjacent its forward end carries a collar 16 against which is secured a washer 17 of felt or other suitable material so that when the tip of the spout is engaged in a bearing and oil forced through the spout into the bearing the oil will be confined in the bearing by the felt washer. A valve seat 18 is provided at the forward end of the barrel for engagement by a valve ball 19 in the rear end portion of the spout and this valve ball is yieldably held in a closed position against its seat by a spring 20, the forward end of which bears against a pin 21 extending through the spout. Therefore, the rear or inner end of the spout carries an outwardly opening check valve serving to permit oil to be freely discharged through the spout but preventing suction inwardly through the spout. Since the spout is in threaded engagement with the forward end of the cylinder, it may be easily detached therefrom when cleaning or repairs

are necessary. A gland 22 engaged about the neck 13 serves to form a tight joint about the spout and prevent oil from leaking out of the receptacle.

5 Adjacent its forward end the cylinder or barrel 9 carries a tube 23 which extends downwardly in the receptacle and at its lower end carries a cap 24. This cap is threaded into place and is formed with a port 25 through
10 which oil may pass from the receptacle into the tube. A screen 26 is applied to the cap in order to prevent sediment which may collect in the receptacle from entering the tube. Before the cap 24 is applied a yoke 27 is
15 thrust into the tube to serve as an abutment for the upper end of a spring 28 by means of which a valve ball 29 is held in position to close the inner end of the port 25. Therefore, the tube will be provided with an inwardly or upwardly opening check valve
20 serving to prevent oil from passing outwardly through the tube after being sucked into the same.

When this oil can is in use, the oil is to be
25 drawn through the tube 23 into the barrel or cylinder 9 and then forced outwardly past the check valve 19 and through the spout 14. In order to do so, there has been provided a piston 30 similar in construction to the
30 piston of a tire pump and having a piston stem or rod 31 which projects outwardly through and opening formed centrally in the cap 10. A handle 32 which resembles the grip of a piston is removably secured against
35 the head 3 by screws 33 passed through a flange 34 surrounding the shank 35 of the handle and this shank is hollowed to form a chamber 36 into which the outer end portion of the piston rod 31 extends. A trigger
40 37 which is pivotally mounted, as shown at 38, has its lower portion projecting outwardly through a slot 39 in the lower portion of the shank and the upper portion of the trigger is bent to form a hook 40 engaged through
45 an eye 41 formed in a block or head 42 threaded into engagement with the rear end of the piston rod. It will be readily seen that when the handle is grasped in one hand and a finger engaged with the trigger the trigger may be
50 moved to force the piston forwardly and cause oil to be forced past the check valve 19 and outwardly through the spout. When pressure upon the trigger is relieved, the spring 43 disposed about the piston rod between the cap 10 and a pin 44 passed through
55 the piston rod moves the piston rearwardly. This causes a suction to be created in the barrel and tube 23 and a fresh supply of oil will be sucked inwardly through the depending
60 tube into the barrel or cylinder. It will thus be seen that the oil can may be easily held by means of its handle and by actuating the trigger oil caused to be ejected through the spout and as the piston moves rearwardly a fresh
65 supply of oil sucked into the barrel. When

repairs are necessary or it is desired to clean the oil can, the gland 22 is loosened after which the spout is unscrewed from the forward end of the barrel so that it may be drawn outwardly through the neck 13 and the ring 4 may then be unscrewed and the head 3 and barrel together with the tube 23 withdrawn as a unit from the receptacle. Necessary cleaning or repairs can then be performed and the oil can reassembled.

Having thus described the invention, I claim:

1. An oil dispenser comprising a receptacle having front and rear heads, a barrel extending longitudinally in said receptacle from the rear head, a spout removably carried by said barrel and projecting through the front head, an outwardly opening valve controlling flow of oil through the barrel and spout, an inlet tube depending from said barrel within the receptacle and having a valve controlled inlet, a handle carried by the rear head and formed with a pocket having a slot in its lower portion, a piston for drawing oil into the barrel through said tube and forcing the oil out of the barrel through said spout having a stem extending through the rear head into the pocket of said handle, and a trigger carried by the handle and having its upper end engaging with the stem of said piston and its lower portion projecting outwardly through said slot.

2. An oil dispenser comprising a receptacle having front and rear heads, a barrel extending longitudinally in said receptacle from the rear head and having a valve seat at its front end, a spout removably connected with the front end of said barrel and projecting through the front head, a valve in the inner end portion of said spout opening outwardly and yieldably held in a normally closed position against the seat at the front end of said barrel, an inlet tube extending downwardly from said barrel rearwardly from its front end and having an inwardly opening valve at its lower end normally closed, a handle carried by the rear head, a piston in said barrel having a stem projecting through the rear head, a trigger carried by said handle and engaged with said piston, and resilient means yieldably resisting inward movement of the piston.

3. An oil dispenser comprising a receptacle having front and rear heads, a barrel removably connected with the rear head and extending longitudinally in said receptacle from the rear head, a spout removably connected with said barrel and projecting through the front head, an outwardly opening check valve controlling flow of oil through the barrel and spout located in the rear portion of the spout and accessible when spout is detached from the barrel, an inlet tube extending downwardly from said barrel within the receptacle, an inwardly opening check

valve for said tube, a releasable gland carried by the front head and forming a tight joint about said spout, a cap for the rear end of said barrel engaged through the rear head, means releasably securing the rear head to said receptacle, a handle removably secured to the rear head, a piston for drawing oil into the barrel through said tube and forcing the oil out of the barrel through said spout having a stem extending from the rear end of the barrel, and an actuating element for the piston rod carried by the handle.

4. An oil dispenser comprising a receptacle having front and rear heads, a barrel extending longitudinally in said receptacle from the rear head, a spout carried by said barrel and projecting through the front head, an outwardly opening check valve controlling flow of oil through the barrel and spout, an inlet tube extending downwardly from said barrel within the receptacle, an inwardly opening check valve for said tube, a releasable gland carried by the front head and forming a tight joint about said spout, a cap for the rear end of said barrel engaged through the rear head, means releasably securing the rear head to said receptacle, a handle removably carried by the rear head and formed with a pocket, a piston in said barrel having a stem extending through the cap of the barrel into the pocket of said handle, a spring about the piston rod bearing against said cap and yieldably resisting inward movement of the piston rod, an eye at the rear end of said piston rod, and a trigger pivotally mounted in said pocket with its upper end engaged through the eye and its lower portion projecting downwardly out of the pocket.

5. An oil dispenser comprising a receptacle having front and rear heads, a barrel extending longitudinally in said receptacle from the rear head, a spout carried by said barrel and projecting through the front head, an outwardly opening check valve controlling flow of oil through the barrel and spout, an inlet tube extending downwardly from said barrel within the receptacle, an inwardly opening check valve for said tube, a handle carried by the rear head and formed with a pocket in its forward portion and a slot opening through the lower portion of the pocket, a piston in said barrel having a piston rod extending into said pocket, and a trigger pivotally mounted in said pocket with its upper end engaged with said piston rod and its lower portion projecting outwardly through the slot.

6. An oil dispenser comprising a receptacle having front and rear heads, a barrel extending longitudinally in said receptacle, a spout carried by said barrel and projecting through the front head, an outwardly opening check valve controlling the flow of oil through the barrel and spout, an inlet tube extending downwardly from said barrel within the re-

ceptacle, an inwardly opening check valve for said tube, a handle carried by the rear head and formed with a pocket, the front end of which is closed by said rear head, a piston for drawing oil into the barrel through said tube and forcing the oil out of the barrel through said spout and provided with a stem, and an actuating element mounted in the pocket of the handle for engagement with the stem of the piston.

In testimony whereof I affix my signature.
CHARLIE N. WILCOX. [L. S.]

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