Dec. 29, 1925. 1,567,291

A. NOVAK, JR

OIL CAN

Filed Feb. 5, 1925

Fig. 1.

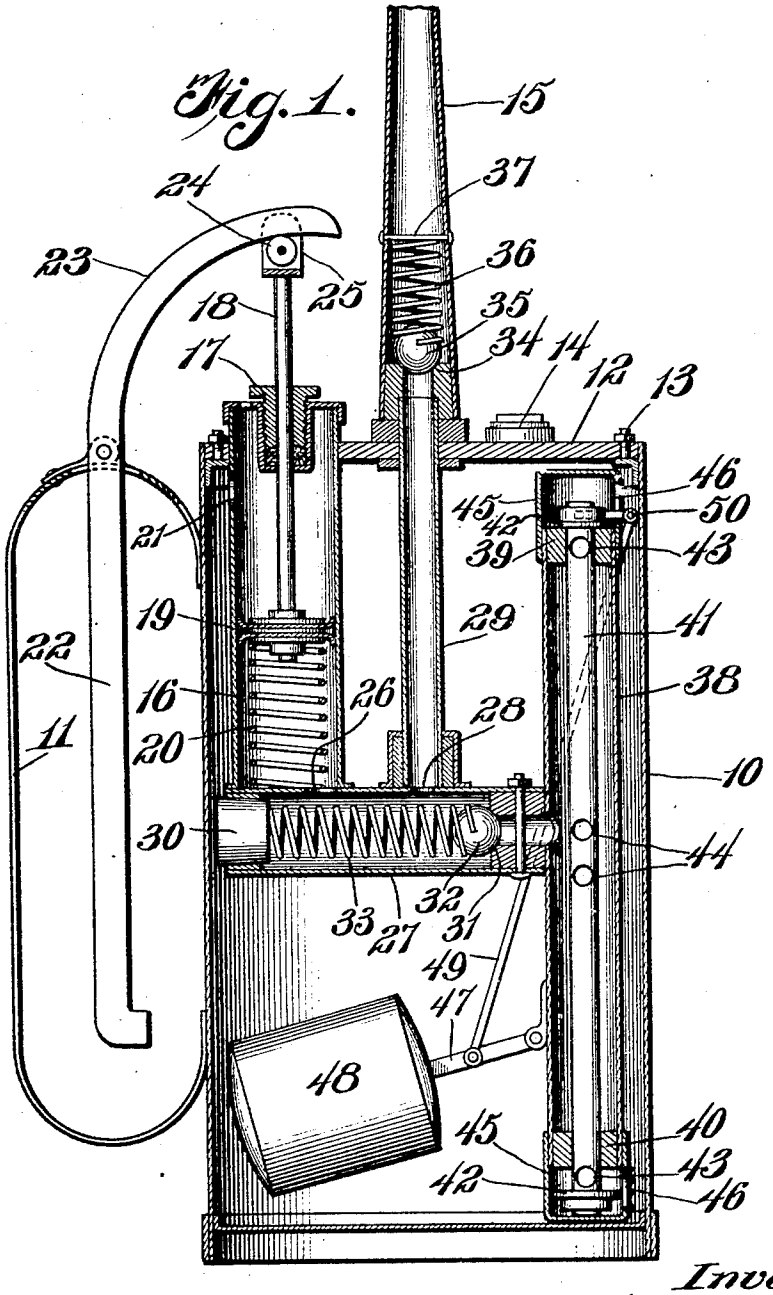
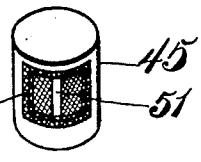


Fig. 2.



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Patented Dec. 29, 1925. 1,567,291

UNITED STATES PATENT OFFICE.

ANTON NOVAK, JR., OF MILFORD, NEBRASKA.

OIL CAN.

Application filed February 5, 1925. Serial No. 7,066.

To all whom it may concern:

Be it known that I, ANTON NOVAK, Jr., a citizen of the United States, residing at Milford, in the county of Seward and State of Nebraska, have invented certain new and useful Improvements in Oil Cans, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to oil cans.

An important object of the invention is to provide a positive feeding oil can which will operate regardless of the position in which the can is placed.

A still further object of the invention is to provide a device of this character in which the parts are supported from an end wall of the can so that the assembly of the device is rendered a simple matter and so that this end wall and the interior mechanism may be bodily removed for cleaning or repair.

These and other objects I attain by the construction shown in the accompanying drawings, wherein for the purpose of illustration is shown a preferred embodiment of my invention, and wherein:—

Figure 1 is a vertical sectional view through an oil can constructed in accordance with my invention; and

Figure 2 is a perspective view of the upper cap removed.

Referring now more particularly to the drawings, the numeral 10 generally indicates the body of the can and 11 the handle thereof. The can embodies a top wall 12 which is removable being held in position by removable securing elements 13. This cover is provided with a removable filling cap 14 and with an outlet spout 15, the construction of which will be hereinafter more fully explained.

Secured to and extending through the top 12 is a pump barrel 16 having at its upper outer end a packing gland 17 through which is directed the plunger rod 18 of the pump. This plunger rod is provided at its inner end with the usual piston 19, the movement of which toward the inner end of the barrel is opposed by a coil spring 20. Between the upper limit of travel of the piston and the point where the barrel 16 passes through the upper wall of the can, an opening 21 is formed in the side wall of the barrel. Pivoted to the handle 11 of the can is a lever 22, the upper end of which is bent, as at 23, to form a cam arm extending over and engaging a roller 24 carried by the upper end of the plunger 18 between spaced guiding arms 25. By operating the lever 22, the plunger may be depressed and will be returned to its raised position by the spring 20.

Secured to the lower end of the pump barrel and communicating with the pump barrel through an opening 26 formed in its wall is a tube 27 which extends transversely of the oil can and beneath the spout 15. Adjacent its opposite end the tube 27 communicates through an opening 28 through a vertically extending conduit 29, the upper end of which connects with the nozzle 15. That end of the tube attached to the pump barrel has a removable plug 30 and the opposite end thereof is formed interiorly with a check ball seat 31 against which engages a spring pressed check ball 32, the opposite end of the spring 33 of which engages the plug 30. The lower end of the nozzle is formed with a check ball seat 34, the ball 35 of which is held seated by a spring 36 extending between the ball and a small pin 37 extending transversely of the nozzle tube 15. It will be seen that as the pump plunger moves upwardly, fluid will be drawn into the tube 27, pass the check ball 32 and that as the plunger moves downwardly, this fluid will be forced outwardly through the conduit 29, pass the check ball 35 and so through the nozzle 15.

It is necessary, however, that some means be provided to insure that the tube 27 is at all times in communication with the fluid in the can and for this purpose I provide a vertically extending tube 38 secured intermediate its ends to the free end of the tube 27 and having adjacent opposite ends thereof check seats 39 and 40. Directed through the bores of check seats 39 and 40 is a tube 41, the ends of which are sealed and provided with leather check valves 42. Adjacent each end, the tube 41 is provided with inlets 43 and at its center provided with outlets 44. The ends of the outer tube 38 are in the form of caps 45 which are removable and each of which has a screened opening 46 formed therein to permit fluid to enter the tube outwardly of the check seats 39 and 40. Pivoted to the vertical tube 38 is an arm 47, the free end of which has secured thereto a weight 48. To opposite sides of the arm 47 are pivoted the lower ends of links 49, the opposite ends of which are secured to the upper end of the inner or control tube, as at 50.

It will be seen that this weight will shift as the can is shifted shifting the tube 41 and bringing the upper check into engagement with the seat 39 when the can is vertically arranged or in normal position and the check in engagement with the lower seat 40 when the can is inverted, thus the lower end of the control tube 41 is always in communication with the liquid and with the tube 27 and the upper end of the control tube is always sealed against the intake of air. This will be true whether the can is vertically arranged or disposed at an angle between the vertical and horizontal. In the horizontal position, of course, it is immaterial which end of the tube 42 is in communication with the interior of the can. The openings 46 of the caps are arranged at those faces of the caps remote from the handle 11 so that these openings will remain submerged when the can is in horizontal position until the fluid within the can is substantially exhausted. The screen of the opening of the upper cap is split to permit the connections between the links 49 and the tube to pass therethrough as is more clearly shown at 51 in Figure 2. It will be obvious that the entire structure may be removable with the cover 12 and that all working parts are readily accessible for removal and repair.

Certain changes being possible in the structure hereinbefore set forth, I accordingly do not limit myself to such specific structure except as hereinafter claimed.

I claim:—

1. In an oil can, a casing, a removable cover therefor, a pump cylinder directed through and supported from the cover, a piston reciprocable therein and operable from the exterior of the casing, a tube with which the discharge of the pump communicates, a check valved spout carried by said cover, a connection between the spout and said tube, closures for opposite ends of the tube, one of which comprises a spring seated check valve normally closing communication between the tube and the interior of the casing, a second tube with which the check valved end of the first named tube communicates and extending vertically in the casing and provided at adjacent opposite ends thereof with valve seats, a member reciprocable through said second named tube and having valves coacting with said seats, said member being hollow and forming a conduit for the transmission of fluid from the interior of the casing to the interior of the second named tube and means for bringing the valve of said member which is arranged uppermost into engagement with the adjacent seat of the tube to thereby seal against communication of the corresponding end of the member with the casing.

2. In a force delivery oil can, a closed casing having a pump therein, the pump having a piston moving longitudinally of the casing and provided with a stem projecting exteriorly of the casing, a handle for the casing, a lever pivoted to the handle and having a hooked end extending over the upper end of the stem, means for maintaining the upper end of the stem in engagement with said lever, the upper end of said stem having spaced arms between which the lever is directed and a roller pivoted between said arms for contact with the lever.

3. In an oil can, a casing, a removable cover therefor, a pump cylinder directed through and supported from the cover, a piston reciprocable therein and operable from the exterior of the casing, a tube with which the discharge of the pump communicates, a check valved spout carried by said cover, a connection between the spout and said tube, closures for opposite ends of the tube, one of which comprises a spring seated check valve normally closing communication between the tube and the interior of the casing, a second tube with which the check valved end of the first named tube communicates and extending vertically of the casing and provided adjacent opposite ends thereof with valve seats, a member reciprocable through said second named tube and having valves coacting with said seats, said member being hollow and forming a conduit for the transmission of fluid from the interior of the casing to the interior of the second named tube, means for bringing the valve of said member which is arranged uppermost into engagement with the adjacent seat of the tube to thereby seal against communication of the corresponding end of the member with the casing, comprising an arm pivoted to said second tube, a weight carried by the free end of the arm and link connections between said arm and member.

In testimony whereof I hereunto affix my signature.

ANTON NOVAK, JR.