

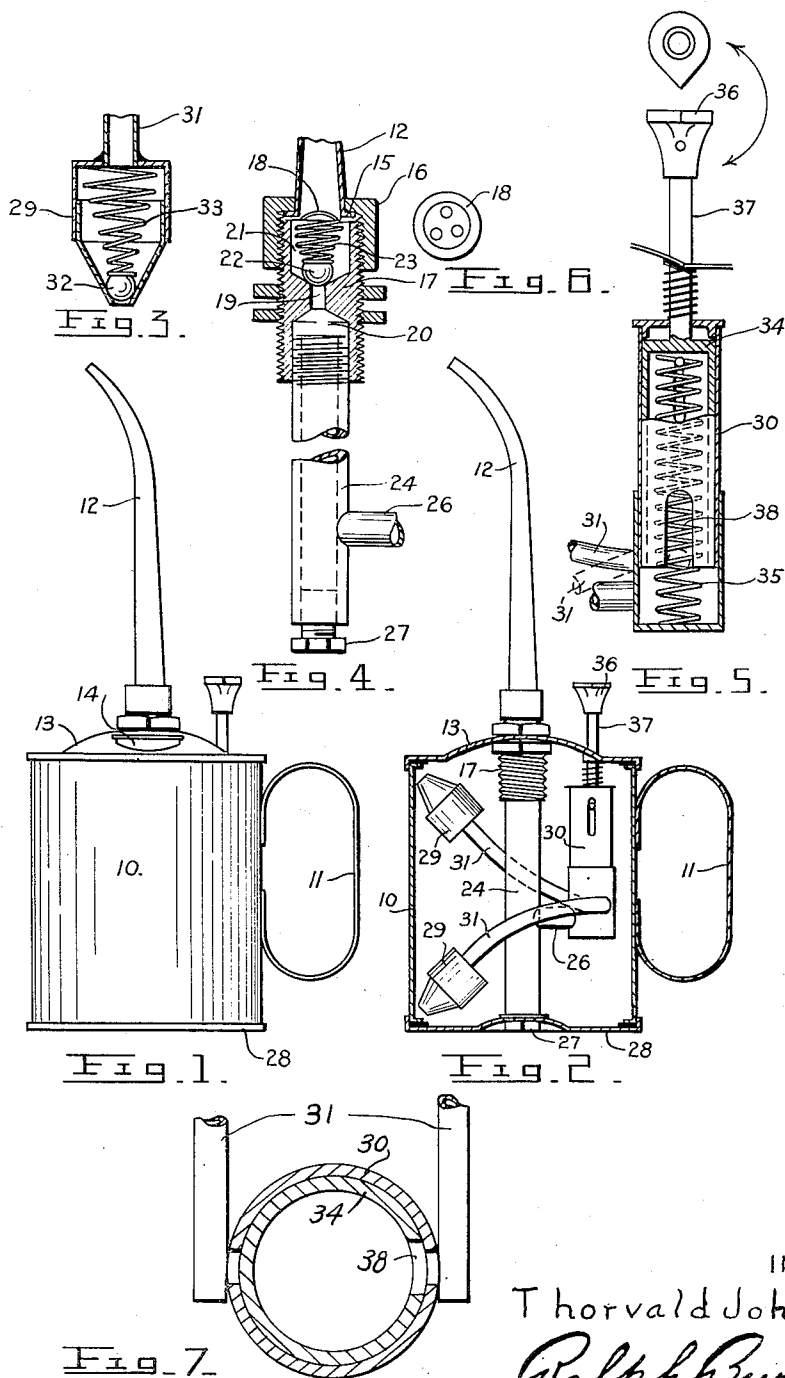
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OIL CAN

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OILCAN

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This invention relates to new and useful improvements in a pump type oil can.

Pump type oil cans are well known in the art but nevertheless they all present objectional characteristics which my invention overcomes, mainly that when the can is inverted and only partly filled with oil the pump becomes ineffective since the suction valve is not the oil bath.

To overcome this difficulty I have arranged for a suction valve at the top of the said can and one on the bottom thereof. The pump, per se, is also a two way device, but only operating one of said spouts at a time, since it would be impossible to pump oil if both valves were effective and only one of them immersed in the oil bath.

In brief my invention contemplates an oil can of the pump type having inlet valves disposed one at the top of the can and the other at the bottom thereof. This advantage will be mostly appreciated when it is necessary to apply oil from a can when it is in the upright position or in the inverted position. An indicator button set on the plunger of the pump can be turned from right to left to operate either the top or bottom suction valve.

The primary object of my invention is therefore to devise and provide an oil can of the character set forth having suction valves situated at the top and bottom of said can so that the device is effective in an upright or inverted position.

A further object is the provision of an indicator whereby the operator can render one or the other suction valve effective by merely turning said indicator from right to left or from left to right as the case may be.

Other apparent objects are the dependability, the usefulness, the novelty and the comparatively low manufacturing cost of the article.

With these and other objects in view that may appear while the description proceeds the invention consists in the novel arrangement of cooperating parts as hereinafter more specifically set forth, claimed and shown in the accompanying drawing forming part of the application and in which:

Figure 1 is a side elevational view of the oil can;

Figure 2 is a section through the can showing the various components;

Figure 3 is a detail of the suction valve;

Figure 4 shows the arrangement of the tube leading the oil to the spout,

Figure 5 is a cross section through the pump

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showing the switch over arrangement leading to either suction valves.

Figure 6 is a detail plan view of the washer mounted in the mouth of the spout, and

Figure 7 is a cross sectional view of the cylinder and piston shown in Fig. 5.

Referring more in detail to the drawings in which similar reference characters designate corresponding parts throughout the several views, it will be seen the invention consists of a can 10 on which is secured a handle 11, and a spout 12. On the top 13 of the said can is threadably engaged a removable closure 14 for the purpose of filling the can with oil.

The spout 12 is disposed centrally of the top 13 and has a flange 15 formed at the lower extremity thereof. A threaded cap 16 having an aperture of smaller diameter than the flange 15 is threadably engaged with a nipple 17 to secure the spout 12 in position. An apertured washer 18 is secured in the mouth of the spout between the top face of the nipple 17 and the underface of the flange 15.

The nipple 17 is formed with a drilled hole 19 adjacent the two larger holes 20 and 21. Within the hole 21 is located a ball 22 held firmly in position by a spring 23. The inside of hole 20 is threaded to engage with the oil tube 24 which is connected to the pump 30 by means of a nipple 26.

The oil tube 24 extends to the bottom of the can and is secured thereto by means of a stud 27 threadably engaged within said tube 24. The said stud 27 also serves to retain the bottom 28 in position, said bottom being removable for the purpose of inserting inside the can the pump and oil tube assembly.

As aforementioned, two suction valves 29 are secured to opposite sides of the pump cylinder 30. One of said suction valves extends downwardly while the other extends upwardly. The said valve consists of a tube 31 secured to the pump cylinder 30 and a funnel shaped spout attached to the other extremity of said tube 31. The said spout comprises two parts, one being a cup secured to the tube while the other part consists of a second cup one portion of which is cone shaped and is slidably inserted within the first mentioned cup. Housed within the cups is a ball 32 held securely against the mouth of the cup by means of a conical spring 33. The pump, per se, consists of a cylinder 30, a piston 34 slidably and rotatably mounted within said cylinder and a compression spring 35 disposed within the piston 34 for the purpose of returning

said piston to the inoperative position after the actuating button 36 secured at the extremity of the piston rod 37 has been pressed down.

As aforementioned only one of the suction valves operates at a time. Now in order to achieve this, a slot 38 is formed in the lower end of the piston wall and said slot is positioned by rotation of the piston to register with one of the tubes 31. The suction caused by the pump will be transmitted to the suction valve by way of the tube 31, and will cause the ball 32 to act against the spring 33 and thus transmit the suction directly to the oil contained in the can. The oil drawn through the suction valve by the upward movement of the plunger will come within the pump and on a further downward movement of said piston will be caused to flow to the oil tube and spout by way of a connecting tube 26 secured at the lower extremity of said pump.

If it is necessary to use the can in an inverted position, the indicator actuating button 36 is turned from right to left, or left to right as the case may be.

This action will cause the slot 38 to move from the tube of one suction valve to the other and the process of pumping is then repeated.

It is believed that the construction and advantages of the invention may be apparent from the foregoing paragraphs taken in conjunction with the accompanying drawings without further detailed description.

While the preferred embodiment of the invention has been disclosed it is understood that minor changes in the construction and arrangement of co-operating elements may be resorted to within the scope of what is claimed without departing from the spirit of the invention.

I claim:

1. An oil dispenser comprising a can having a discharge spout, a pump cylinder mounted in

said can having communication with the spout of said can, tubes extending from opposite sides of said cylinder adjacent its lower end, one of said tubes extending towards the top of said can and the other towards the bottom, suction valves at the free ends of said tubes, a piston slidably and rotatably mounted in said cylinder having a depending wall provided with a slot in its lower end, and means for reciprocating and turning said piston to bring the slot in the wall of the piston in register with one of said tubes.

2. An oil dispenser comprising a can having a discharge spout, a check valve mounted in said spout, a pump cylinder mounted in said can having communication with the spout of said can, tubes extending from opposite sides of said cylinder adjacent its lower end, one of said tubes extending towards the top of said can and the other towards the bottom, suction valves at the free ends of said tubes, a piston slidably and rotatably mounted in said cylinder having a depending wall extending below the connection between said tubes and said cylinder, said wall having a slot in its lower end adapted to register with one of said tubes upon rotation of the piston, means for depressing and rotating the piston and means for moving the piston upward.

THORVALD JOHNSON.

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