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COMBINED FORCE FEED PUMP AND FAUCET

Filed July 23, 1926

Fig. 1.

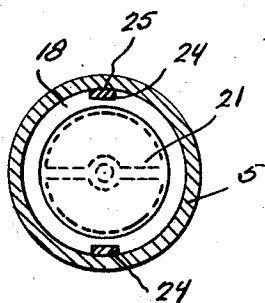
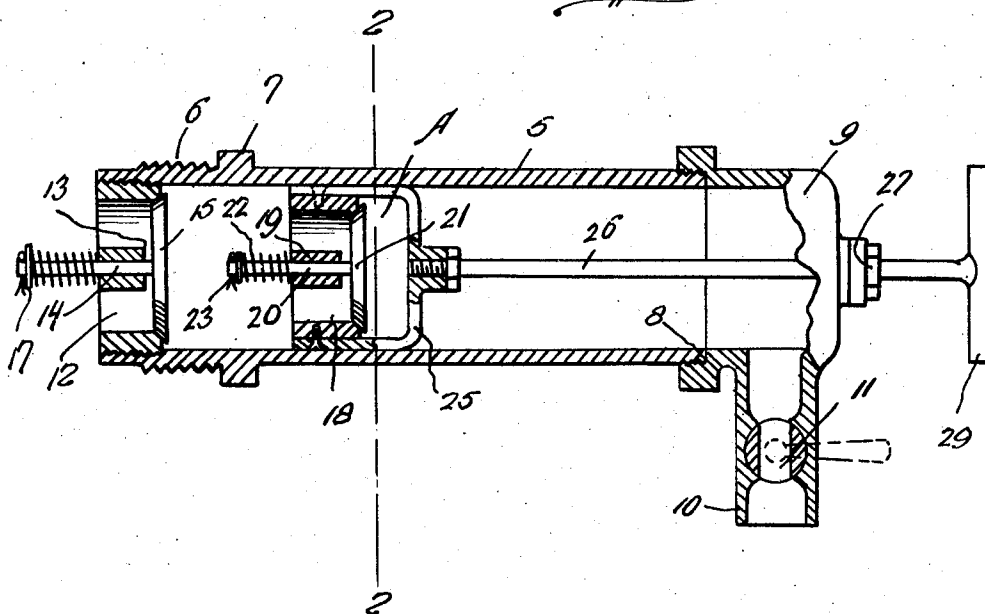


Fig. 2.

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COMBINED FORCE-FEED PUMP AND FAUCET.

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This invention relates generally to pumps, and has more particular reference to a combination force feed pump and faucet particularly, though not necessarily adapted for use in conjunction with oil barrels in order that the contents of the barrel to which the device is attached may be quickly withdrawn regardless of the level of the contents thereof.

10 An additional object of the invention is to provide a device of the before mentioned character that is relatively simple of construction, but yet very efficient for the purposes intended.

15 Other objects will become apparent as the nature of the invention is better understood, the same comprising the novel form, combination, and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

20 In the drawing wherein like reference characters indicate corresponding parts throughout both of the views:

Figure 1 is a detail longitudinal section through a combined force feed pump and faucet constructed in accordance with the present invention, and

Figure 2 is a transverse section taken substantially upon the line 2—2 of Figure 1 and looking in the direction of the arrow.

Now having particular reference to the drawing, my novel device constitutes the provision of a cylindrical barrel 5 threaded at its inner end as at 6 for disposition within a threaded opening in the particular container with which the device is to be associated, the barrel being formed externally at the inner ends of these threads with an angular flange 7 to permit the turning of the barrel into the opening of the container.

At the outer open end of the barrel 5 the same is externally screw threaded as at 8 for receiving the inner threaded and angularly flanged end of a cup shaped head 9, the side wall of which is formed with a laterally directed discharge nozzle 10 extending transversely through which is a handle attached valve plug 11 for closing the passage through the nozzle when desired.

The inner end of the barrel 5 is internally threaded for receiving an externally threaded annulus 12 the inner side of which is tapered for providing a valve seat. Formed centrally of this annulus is a guide sleeve 13 through which is slidably disposed a valve

pin 14 upon the inner end of which is a disc valve 15 complementary to the seat of said annulus. This valve is normally maintained closed by reason of an expansible coil spring 16 that surrounds the pin 14 between the sleeve 13 and a removable abutment 17 at the outer end of the stem.

Rectilinearly movable within the barrel 5 is a piston designated generally A. This piston constitutes the provision of an annulus 18, the front side of which is also tapered to provide a valve seat while formed centrally thereof is a guide sleeve 19 through which is slidably arranged a valve pin 20, the inner end of which carries a disc valve 21 also complementary to the seat of the annulus. In this instance also the valve is maintained normally closed by the action of a coil spring 22 surrounding the stem between the sleeve and the removable abutment 23 at the end of the stem.

At diametrically opposed points, the exterior surface of the annulus is longitudinally slotted as at 24—24 for receiving the arms of a yoke member 25, said arms being secured within the slots by set screws as disclosed in Figure 1.

Suitably detachably secured at its inner end to the center of the yoke 25 is a piston actuating rod 26 that extends horizontally within the barrel and outwardly through a packed opening 27 in the barrel head 9, the extreme outer end of the rod being equipped or formed with a handle 29 to facilitate the reciprocation of the piston A within the barrel.

Obviously, by drawing the piston A toward the front end of the barrel, a suction will be caused in the back of the piston for opening the valve 15 which will permit the fluid from the container to pass into the barrel. Upon a return movement of the piston the valve 15 will be automatically closed while the piston valve 21 will move to open position for permitting the oil to pass in front of the piston whereupon the same will discharge by gravity from the nozzle 10 when the valve therein is open, or the same will be forcibly ejected therefrom from the outward movement of the piston within the barrel.

In view of the foregoing description when considered in conjunction with the accompanying drawings it will at once be apparent that I have provided a highly novel, simple, and efficient form of combined force feed

pump and faucet for oil or other fluid barrels and containers, and even though I have herein shown and described the same as consisting of certain detail structural elements it is nevertheless to be understood that some departures may be had without departing from the spirit and scope of the appended claim.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

A device of the class described including, in combination, a cylindrical barrel externally threaded at its inner end for disposition within a threaded opening in a container, a cup-shaped head engaged on the outer end of the barrel and having a laterally directed discharge nozzle, said head being provided with an opening, an actuating rod slidable through the opening in the head, a yoke detachably engaged on the inner end of the rod, an annulus slidable in

the barrel and provided with a pair of external grooves for receiving the ends of the yoke, said ends of the yoke being fixed in said grooves, a guide sleeve in the annulus, a valve pin slidable in the guide sleeve, a disk valve on said pin and complementary with a seat formed on the annulus remote from the inner end of the barrel, a spring associated with the pin for normally holding said valve closed, an annulus threaded in the inner end of the barrel and having a valve seat formed on its inner end, a guide sleeve in the second annulus, a second valve pin slidable in the second sleeve, a second valve on the second pin closable against the seat of the second annulus, and spring means associated with the second pin for normally holding said second valve closed against its seat.

In testimony whereof I affix my signature.

DONALD A. HILL.