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1,576,207

C. W. MUMMERY

PRIMING CAN FOR STOVES

Filed July 9, 1925

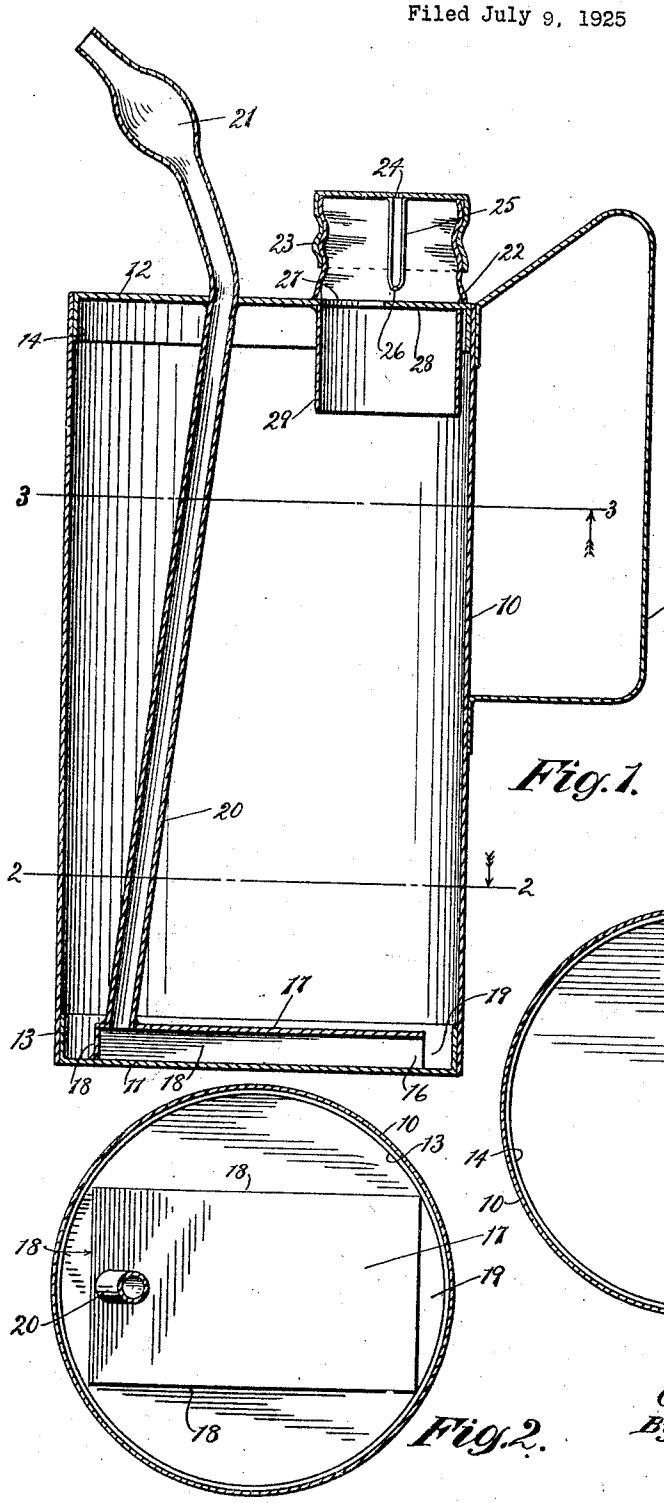


Fig. 1.

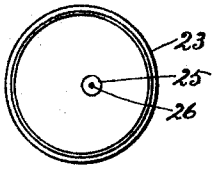


Fig. 4.

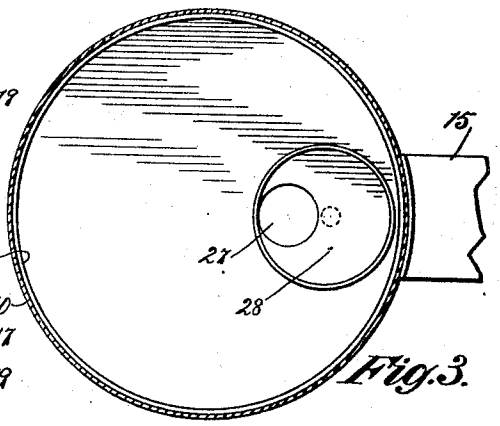


Fig. 3.

Fig. 2.

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UNITED STATES PATENT OFFICE.

CLYDE W. MUMMERY, OF CHICAGO, ILLINOIS.

PRIMING CAN FOR STOVES.

Application filed July 9, 1925. Serial No. 42,417.

To all whom it may concern:

Be it known that I, CLYDE W. MUMMERY, a citizen of the United States, and resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Priming Cans for Stoves, of which the following is a specification, and which are illustrated in the accompanying drawing.

This invention relates to measuring and dispensing devices and has for its principal object to provide a container for priming the fuel used to start wickless oil burners, that will permit a series of measuring charges to be delivered by an inexperienced or careless operator without having unintentional discharges either from the delivery spout or the vent.

The preferred form of the invention is illustrated in the accompanying drawings in which—

Fig. 1 is a vertical section through a priming can or container embodying the invention;

Fig. 2 is a transverse section taken on the line 2—2 of Fig. 1;

Fig. 3 is a plan view with the closure cap removed, and

Fig. 4 is a plan view of such cap.

The body of the can or container is made of a cylinder 10, a bottom 11, and a top 12. The bottom and top are circular and provided with circumferential flanges 13 and 14 respectively which telescope with the cylinder 10 and are soldered thereto. A handle 15 is secured to the body of the can and converts one portion of it into what may be called back.

The bulk of the space enclosed by the can, or container, is used as a storage chamber from which the measuring chamber 16, located at the bottom of the can, is replenished after each priming charge is delivered. The measuring chamber is formed by a plate 17 having flanges 18 on three sides soldered to the bottom. The sector-shaped opening 19 between the fourth side and the wall of the cylinder 10 forms a port through which the fuel readily flows into the measuring chamber.

Fuel is discharged from the measuring chamber through a delivery spout 20 connected with it at the front side, inclined towards the back of the can to a point adjacent the top, then bent somewhat abruptly towards the front. Preferably the delivery spout is made from commercial tubing of suitable diameter and adjacent to the delivery end it is enlarged into a bulb 21. This may be formed by operating on the tube with one die to expand it to the desired diameter and subsequently operating on the end portion with another die to reduce the diameter again.

A generally cylindrical filling neck 22 is soldered to the top of the can and extends upwardly therefrom. The neck is threaded to receive a closure cap 23 perforated at 24 and equipped with a vent tube 25 soldered to the underside of its top portion surrounding the perforation and extending downwardly adjacent to the bottom of the neck it is reduced in diameter, as indicated at 26. The neck communicates with the body of the can through a filling opening 27 and a portion 28 of the top is left intact opposite to the end of the vent tube 25. A tubular skirt 29 is soldered to the underside of the top and projects downwardly into the body of the can.

The can is charged with the fuel by removing the closure cap 23 and pouring the fuel into the neck 22. As soon as the fuel rises to the bottom of the skirt 29 air will be trapped between the skirt and the surrounding cylindrical wall 10 and prevent the can from being filled to any greater height, except in the skirt and the neck. A charge of fuel enters the measuring chamber 16 through the port 19 filling that chamber and a portion of the discharge spout. Upon tilting the can forwardly the air trapped in its upper portion moves along the rear wall and stops the flow of fuel through the port 19. Continued movement of the can to the front results in a measured charge contained within the chamber 16 and the spout being discharged. By returning the can to upright position, the air within the can is moved away from the port 19 and another charge flows from the storage chamber through that port into the measuring chamber and the spout. Heretofore this refilling of the measuring chamber has been accompanied by a spurt of spray from the discharge end of the spout. This was probably due to the rush of air through the spout picking up the fuel contained on the walls of the spout and collecting towards the bottom. With the present construction the spurt takes

place in the bulb and thus no fuel escapes from the spout.

If the can is comparatively filled when it is turned to dispensing position, the fuel will pass through the opening 27 into the filling neck, but due to the vent tube 25 with its small opening 26 at the bottom and the small opening 24 in the cap, a seal is formed that prevents the escape of any fuel through the cap. This is probably due to the relationship between the diameters of the tube and the openings 26 and 24 and the relative position of the lower end of the tube and the wall formed by the portion 28 of the top. By experiment I have found that an opening 24 made with a No. 62 drill gives the best results when a one-eighth inch pipe is used and is reduced to about the diameter shown, and terminated within about one-sixteenth inch of the portion 28 of the top. The passage thus formed also gives ample ventilation for gas or air above the level of the fuel in the storage chamber and affords sufficiently free passage for air to permit the measuring chamber to fill rapidly when the can is turned to normal position after delivering a charge.

The delivery spout must, of course, connect with the measuring chamber at its front portion in order to permit all the fuel contained in that chamber to be discharged; but in priming cans heretofore used where the spout extends along the front of the storage chamber, it begins to deliver priming fuel when the can has been rotated through only a small angle. As a result priming fuel is often spilled on the floor and on the stove, thus being wasted in addition to involving a source of danger. By inclining the discharge spout towards the rear, then bending it again towards the front the discharge of fuel is delayed until the can has been tilted through a relatively large angle and, therefore, it is more likely that the discharge end of the spout has been placed over or upon the receptacle for priming the fuel. This feature in connection with the bulb 21 and the vent permits the can to be handled by inexperienced and careless persons without spilling any of the measured charge of fuel or spurting the fuel through the spout or the vent in handling the can.

I claim as my invention:

1. A measuring and dispensing device including a storage chamber, a handle at the back of the storage chamber, a measuring chamber at the bottom of the storage chamber and in communication therewith adjacent to the back, a delivery spout connected with the front of the measuring chamber, a neck on top of the storage chamber, a cap on the neck and having a small opening therein, and a vent tube extending downwardly from said cap with its upper end connected to the cap around the small opening.

2. A measuring and dispensing device including a storage chamber, a handle at the back of the storage chamber, a measuring chamber at the bottom of the storage chamber and in communication therewith adjacent to the back, a delivery spout connected with the front of the measuring chamber, a filling opening in the top of the storage chamber, a neck surrounding said opening, a cap on the neck and having a small opening therein, and a vent tube extending downwardly from said cap with its upper end connected to the cap around the small opening and having a reduced bore in its lower end.

In testimony whereof I affix my signature.

CLYDE W. MUMMERY.