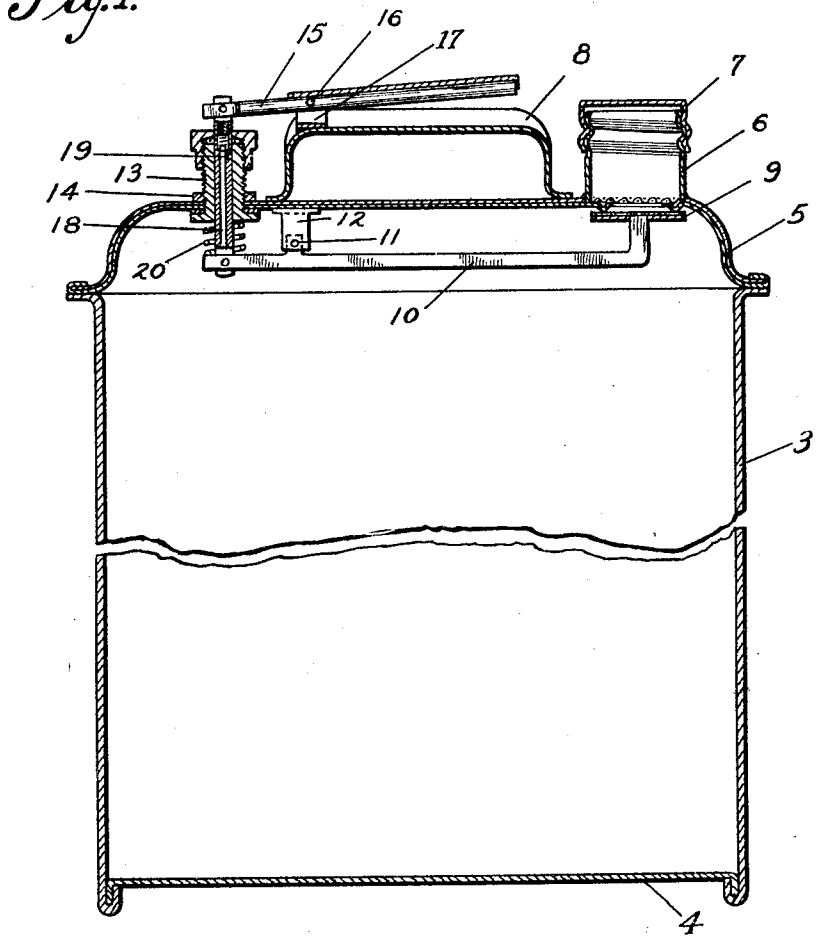
June 28, 1932. R. B. MUNDAY 1,865,269

LIQUID DISPENSING CONTAINER

Filed June 2, 1930

Fig. 1.



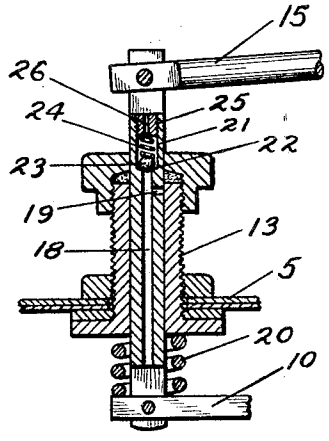


Fig. 2.

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Patented June 28, 1932 1,865,269

UNITED STATES PATENT OFFICE

RICHARD B. MUNDAY, OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE CINCINNATI BALL CRANK CO., OF CINCINNATI, OHIO, A CORPORATION OF OHIO

LIQUID DISPENSING CONTAINER

Application filed June 2, 1930. Serial No. 458,994.

My invention relates to liquid dispensing containers and more particularly to means for facilitating the filling and discharge thereof with increased safety in case of volatile fluids.

The principal object of my invention is to provide novel means for maintaining the container sealed at all times except when manually opened.

Another object of my invention is to provide novel means for facilitating the filling and discharge of the container.

Another object of my invention is to provide a container so constructed that it can be locked in open position.

Another object of my invention is to provide novel venting means which open and close simultaneously with the opening and closing of the valve.

Another object of my invention is to provide a container which permits the use of any size or shape of outlet or attachment on the outlet without interference from the valve mechanism. My internal valve obviates the possibility of damage in shipment or use and prevents tampering therewith by unauthorized persons. The weight of the liquid causes the valve to more securely seal the opening when the container is inverted.

Another object of my invention is the provision of novel means for relieving harmful or too great pressures in the inside of the can caused by the fumes of whatever liquid is used.

Another object of my invention is to provide a container which not only is extremely efficient but can be manufactured and used inexpensively.

Another object of my invention is to construct the outlet and vent aperture in such proportions as to prevent leakage through the vent when the container is inverted.

In the particular embodiment of my invention selected for illustration:

Figure 1 is a vertical section through a container using my invention, and

Fig. 2, a detail, is a vertical axial section through the valve and vent operating mechanism.

Referring now to the drawing, the container is comprised of any suitable sidewall 3 and bottom 4 which may or may not be integral as desired, and a top 5 which may or may not be integral with the sidewall 3. On the top 5 is an inlet and outlet opening 6 which may be closed by a removable cap 7 if desired. A handle 8 secured to the top 5 is provided to facilitate handling of the can and operation of the valve and vent mechanism hereinafter described. The outlet 6 to the container is normally closed by any suitable valve such as 9, which is opened and closed by the valve lever 10 pivoted at 11 on the lug 12 on the underside of the top 5.

A stuffing box 13 secured in any suitable manner in the top 5 and extending therethrough has a vent rod 14 pivoted at its lower end to the valve rod 10 and at its upper end to the valve operating lever 15. The lever 15 is pivoted at 16 on lug 17 attached to the handle 8 so that the lever may be manually depressed by grasping the handle and lever together. A vertically axial bore 18 is provided from the bottom of the rod 14 to a point near its top where it extends horizontally at 19 out through the side of the rod so as to form a complete air passage-way from the bottom of the rod out through the side of the rod at a point near its top. The bore 18 is preferably extended above the outlet 19 and is enlarged at 21 and in this enlargement is formed a seat 22 for the ball valve 23 normally maintained seated by means of the spring 24 compressed between the valve and a screw cap 25 threaded into the inside of the rod. Cap 25 has an axial bore through it so that when the valve is opened any gas in the container may escape out through the passage-way 18, passage-way 24 and the bore 26. A spring 20 around the lower part of the rod 14 tends to depress the rod, maintaining the valve 9 closed and the vent 18 and 19 closed. When the lever 15 is depressed the valve 9 becomes unseated and the vent 19 is above the top of the stuffing box 13 providing an air passage-way from the outside of the container through the vent 19 and 18 into the can.

It can readily be seen that the valve and the greater portion of the operating mecha-

nism are out of the way when the container is being filled and are so placed as not likely to become damaged. If the can upsets or is turned upside down, the valve becomes tighter because of the pressure of liquid on it and leakage will not result. When the valve is opened to discharge liquid from the container, the vent also opens supplying air to the inside of the can, so that the discharge takes place, much more rapidly than is possible with the can merely having a valve.

If desired, two valves may be used instead of a valve and a vent and the device will operate satisfactorily. However, I prefer to use the form of device herein shown and described. Although it may not be essential in all cases, a relief valve is preferably used to allow any fumes or gas within the container above a safe pressure to escape.

While the invention has been described above in its preferred form, it will be obvious that various changes and modifications may be made therein without departing from the spirit or scope thereof and it is therefore desired that only such limitations may be imposed thereon as are necessitated by the prior art or specifically set forth in the appended claims.

I claim as my invention and desire to secure by Letters Patent of the United States:

1. A liquid dispensing container comprising a body portion normally closed, an outlet in said body, a normally closed valve covering said outlet from within said body, a valve lever secured to said valve and fulcrumed on the inside of said container, a push rod extending through said body portion and secured at one of its ends to the other end of said valve lever, a manually operated valve lever on the other end of said push rod, a carrying handle on the outside of said container and so placed as to be in proximity to said manually operated valve operating lever, and a normally closed vent in said push rod, said valve and vent being so constructed as to be opened and closed simultaneously.

2. A liquid dispensing container comprising a body portion normally closed, an outlet in said body, a normally closed vent for increasing the rate of fill or discharge of liquid to or from said container and pressure relief means a part of which is formed by said vent.

3. A liquid dispensing container comprising a body portion normally closed, an outlet in said body, a normally closed valve covering said outlet from within said body, a valve lever secured to said valve and fulcrumed on the inside of said container, a push rod extending through said body portion and secured at one of its ends to the other end of said valve lever, a manually operated valve lever on the other end of said push rod, a carrying handle on the outside of said container and so placed as to be in proximity to said manually operated valve operating lever, a normally closed vent in said push rod, said valve and vent being so constructed as to be opened and closed simultaneously, a passage-way continuing upwardly through said push rod from said vent passage-way, and a normally seated valve in said passage-way above said vent outlet adapted to be opened by excessive pressure within said container.

4. The combination of a liquid dispensing container, a cover for the container having a discharge outlet and a handle for conveying the container, a valve within the container for closing said outlet, a lever within the container pivotally supported upon the under side of the cover connecting with the valve, a tubular push rod connecting with said lever and extending through the cover and having a port open to the atmosphere when the rod is moved to open the valve and thereby provide a vent for the interior of the container, and a hand lever connecting with the exterior end of said rod and positioned in relation to said container handle adapting both handle and lever to be grasped by the same hand.

In testimony whereof I have hereunto set my hand.

RICHARD B. MUNDAY.