June 3, 1930. O. M. WILSON 1,761,164

DISPENSING BOTTLE

Filed March 12, 1929 2 Sheets-Sheet 1

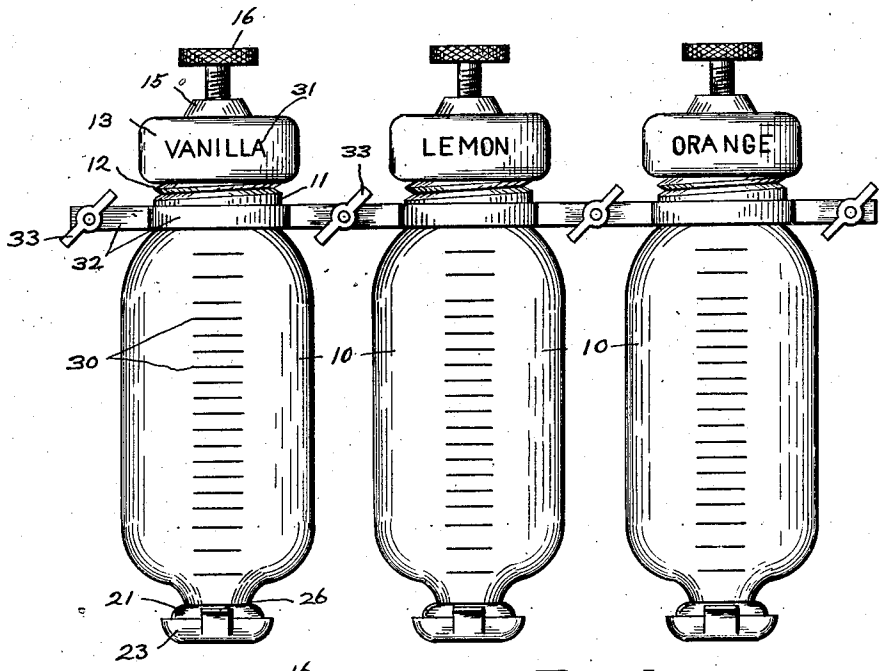


Fig 1

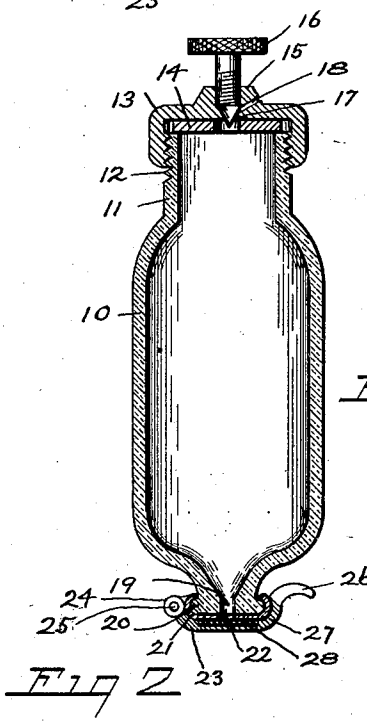


Fig 2

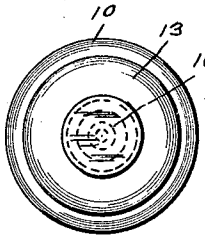


Fig 3

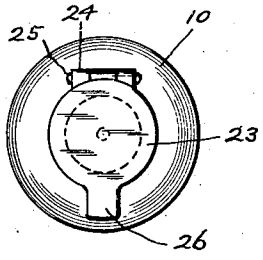


Fig 4

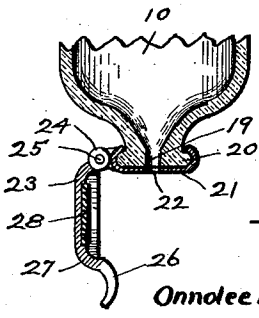


Fig 5

Inventor
Onnolee Magee Wilson.

By her Attorney
John J. Thompson

June 3, 1930. O. M. WILSON 1,761,164

DISPENSING BOTTLE

Filed March 12, 1929 2 Sheets-Sheet 2

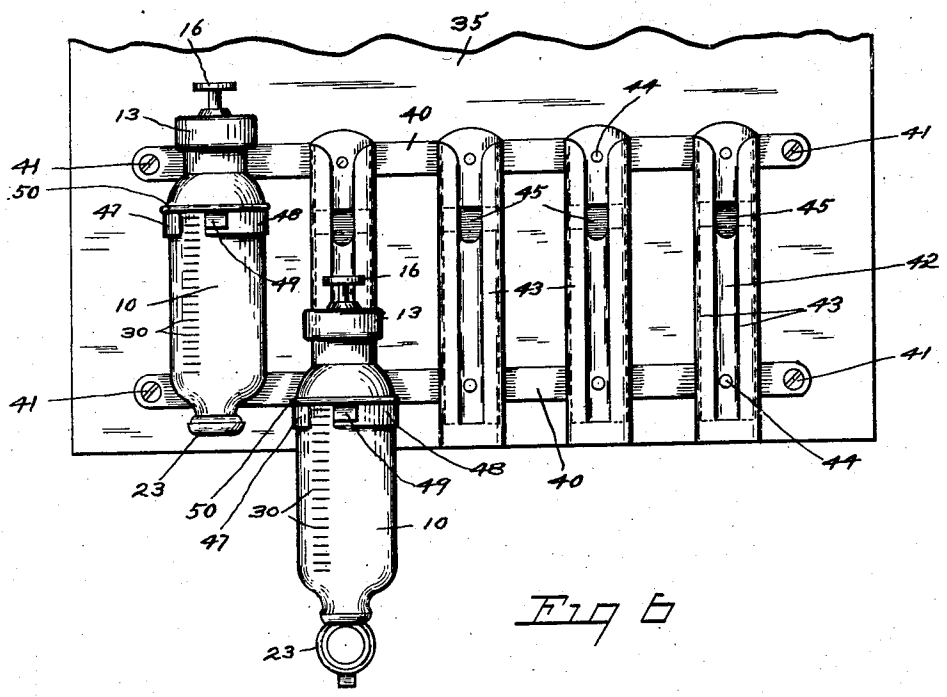


Fig 6

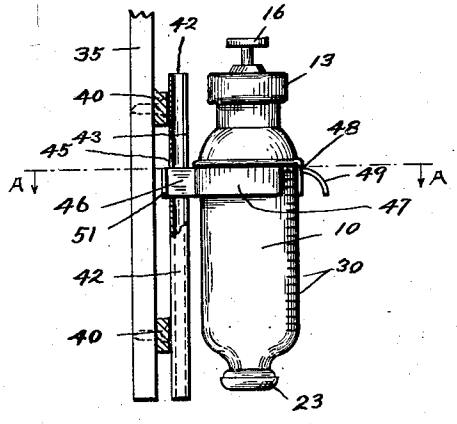


Fig 7

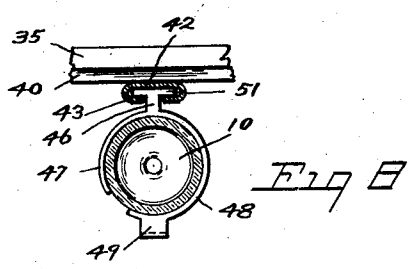


Fig 8

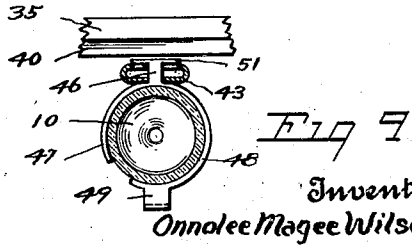


Fig 9

Inventor
Onnalee Magee Wilson

By her Attorney
John J. Thompson

Patented June 3, 1930 1,761,164

UNITED STATES PATENT OFFICE

ONNOLEE MAGEE WILSON, OF WILTON, CONNECTICUT

DISPENSING BOTTLE

Application filed March 12, 1929. Serial No. 346,304.

This invention relates to a dispensing bottle or container, and more particularly to a bottle for holding extracts and flavors such as are used in cooking, and of which a small quantity is used at a time owing to their strength. The invention is especially adaptable for use in a kitchen cabinet, where a number of these containers may be secured in the cabinet by a suitable rack or clamp, whereby they can be readily removed for filling and cleaning, but do not have to be removed for use, as they are provided with an opening in the lower end through which the contents is dispensed by the admission of air through a valve in the top, in such a manner that the liquid is delivered drop by drop or in larger quantities, and the face of the container may be provided with suitable marks or graduations indicating such as teaspoonfuls.

The object of the invention is to provide a dispensing bottle or container, that shall be simple, easily cleaned and filled and positive in its action.

Another object being to provide means whereby all loss through drip is prevented and change in the strength of the liquid through evaporation, as the container is air tight.

With these and other objects in view, my invention consists in certain construction and combination of parts as will be hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which like figures of reference refer to corresponding parts in all of the views, and it is fully understood that slight changes may be made without departing from the spirit of the invention.

In the drawings:

Figure 1 is a front elevation, showing a number of the containers secured together by one form of clamp which may be attached to the door or other part of a kitchen cabinet.

Figure 2 is a vertical sectional view, showing the manner of securing the top and drip cup to the bottle.

Figure 3 is a top plan view of one of the containers.

Figure 4 is a bottom view, showing the drip cup.

Figure 5 is a partial sectional view, showing in detail the drip cup in an open position.

Figure 6 shows my preferred form of rack for mounting the bottles to the inside of a cabinet door, and shows one of the bottles in its normal raised position, and another in its lowered or operating position, and the remaining members empty.

Figure 7 is a side elevation of the same partly in section.

Figure 8 is a cross sectional view of the bottle in its lowered position.

Figure 9 is a cross sectional view of the bottle in its raised position, on line A—A of Figure 7.

The bottle or container 10 is preferably of glass, but may be made of any suitable material, and of any desired size and shape.

The upper end of said bottle 10 is formed with a neck 11, provided with the external threads 12 to hold the screw cap 13, or said cap 13 may be held thereon in some other suitable manner, but it must be rendered air tight by the washer 14.

Said top cap 13 is formed with a central boss 15, provided with an orifice, threaded at the upper end for the valve screw 16 and at the lower end with a valve seat 17 for the needle point of said valve screw 16; and there is also provided one or more vents 18 allowing air to enter the valve seat, the amount admitted being controlled by said valve or needle point.

The lower end of the bottle 10 is formed with a neck having a small discharge opening 19 and an encircling bead or flange 20, upon which is crimped a cap member 21 which is formed with a hole 22 to register with the discharge opening 19.

For closing this discharge opening 19 and preventing any loss of the liquid through drip, while not in use, there is provided a a drip cap 23 which is formed with a hinge member 24 coacting with a similar member formed on the cap member 21, and held with a pin 25; while the other side of said drip cap 23 is provided with a finger grip 26, and

a curved portion 27 adapted to snap on the rounded edge of the cap member 21; while a washer 28 is secured in the drip cap 23 to render the device air tight.

For indicating at a glance the quantity of liquid to be delivered, the bottle 10 may be provided with the marks or graduations 30, indicating the desired amount such as drams, ounces, teaspoonfuls; also the name of the contents may be indicated on the side of the cap as at 31.

As shown in Figure 1, a number of these bottles or containers may be mounted together as on the inside of a door of a cabinet by a clamp 32, bent to embrace the neck of each bottle and being secured in a detachable manner to the cabinet by the thumb screws 33.

In the operation of the device, the containers having been filled with the extracts or flavors from the original bottles, the cover cap 13 is screwed down tight and the valve screw 16 turned to close the valve.

Should only a few drops of the liquid be required, the drip cap 23 is released by the finger, and the valve screw 16 is turned slightly to admit a small amount of air which will allow the liquid to be discharged drop by drop.

Should a larger amount be required, the valve screw 16 is turned to more fully open the valve, allowing a greater amount of air to enter, whereupon the liquid will be discharged in a greater amount; and, by watching the level of the liquid in the bottle being lowered from mark to mark, the required amount will be indicated.

In Figures 6, 7, 8 and 9, I have illustrated my preferred form of rack for mounting the bottles to the back of a door 35 of a kitchen cabinet, and this rack comprises, a pair of mounting bars 40 secured to the door 35 by the screws 41, and secured to these bars 40 by the rivets 44 are a series of vertical securing members 42 which are formed with the bent over edges 43 to form a guide way; and near the upper end thereof and in the back is provided a cut out portion 45, while the lower end of said members 42 is closed.

The bottle 10 is formed with an encircling shoulder 50, and in contact with the lower surface thereof to support the bottle is placed a pair of spring arms 47 and 48; the arm 48 being provided with a finger grip 49 by which the bottle may be moved up or down.

The rear ends of the spring arms 47 and 48 with a neck 46 of the proper width to pass between the edges of the sides 43, and the rear of this neck is provided with a head 51 which is adapted to slide within the guide way.

When it is desired to retain the bottle in its raised position, the same is raised by the finger grip 49 and the head 51, pushed through the opening 45 so that the neck will rest upon the edge of the back 42; and when it is desired to lower the bottle to bring it near the table top, the same is slightly raised to disengage it from the opening 45 and is then brought forward to enter the head 51 in the guide way, and is then lowered to the bottom of the guide.

There is a space between the ends of the arms 47 and 48 so that the indicating marks 30 on the bottle may be seen.

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

1. A dispensing bottle, comprising a container formed with a discharge opening on one end, an air tight cap secured on the other end, a valve in said cap for admitting air as desired, and a drip cover secured to the lower end of said container.

2. A dispensing bottle, comprising a container formed with a discharge opening at its lower end and a filler opening at its upper end, a drip cap hinged to the lower end and adapted to close the discharge opening, a cap secured to the upper end in an air tight manner, and an air valve mounted in said cap.

In testimony whereof I affix my signature.

ONNOLEE MAGEE WILSON.