

Aug. 28, 1956

S. E. MIKA

2,760,693

MEASURING INSERTS

Filed Aug. 6, 1954

Fig. 1.

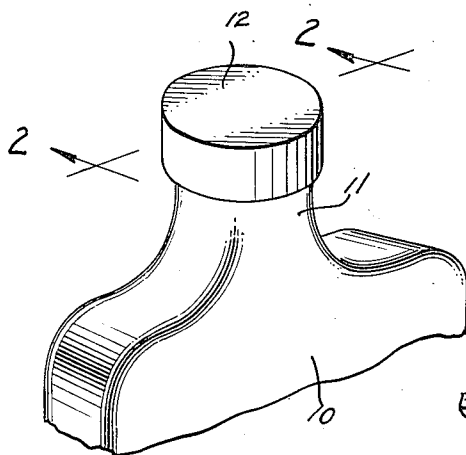


Fig. 2.

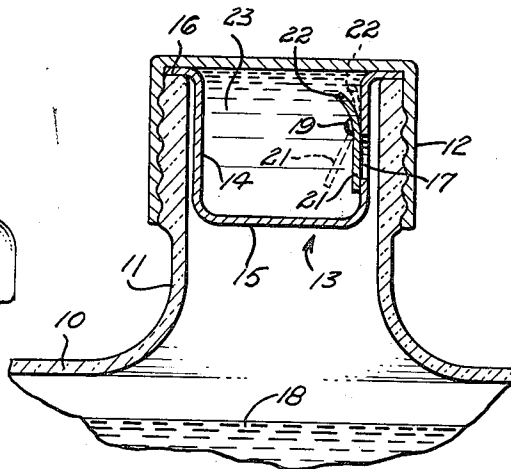


Fig. 3.

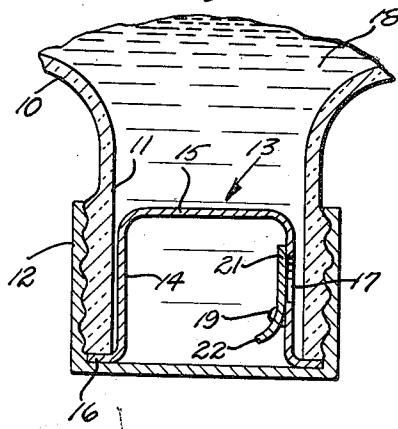
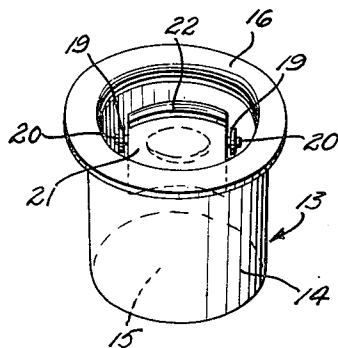


Fig. 4.



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MEASURING INSERTS

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Application August 6, 1954, Serial No. 448,341

5 Claims. (Cl. 222-454)

This invention relates to measuring inserts for bottles or the like.

It is an object of the present invention to provide an insert for bottles or the like adapted to fit within the neck of the bottle and be retained thereon by the bottle closure and which upon the bottle being inverted will receive therein a measured amount of the bottle contents and which will retain said contents upon the bottle being righted to permit a measured amount of the bottle contents to be drunk upon removal of the bottle closure.

It is another object of the present invention to provide a measuring insert of the above type which will be used to measure liquid in teaspoons, tablespoons or other measured amounts and which includes means for admitting the contents of the bottle into the insert when the bottle is inverted while at the same time retaining the admitted material when the bottle is righted.

Other objects of the invention are to provide a measuring insert for bottles or the like having the above objects in mind which is of simple construction, inexpensive to manufacture, has a minimum number of parts, is easy to use and efficient in operation.

For other objects and a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which:

Figure 1 is a perspective view of the upper end of a bottle incorporating the invention;

Fig. 2 is a vertical sectional view taken along the line 2-2 of Fig. 1;

Fig. 3 is a view similar to Fig. 2 but showing the bottle in an inverted position; and

Fig. 4 is a perspective view of the invention, shown alone.

Referring now more in detail to the drawing, 10 indicates a bottle having an externally threaded neck 11 on which is screwed a cap 12, substantially as illustrated.

In the practice of my invention, a measuring insert indicated generally at 13 is provided and includes a cylindrical portion 14 having a bottom wall 15, the cylindrical portion 14 being adapted to fit downwardly within the open neck 11 in freely spaced relationship thereto and supported therewithin by means of a circular flange 16 integrally formed along the open upper edge of the cylindrical portion 14. It will be noted that the flange 16 rests on the upper edge of neck 11 and is secured in position by the cover 12 which is screwed downwardly thereon. In order to maintain the insert 13 in position within the neck 11 when the cap 12 is removed and the bottle 10 is inverted suitable means such as a rubber ring (not shown) adapted to frictionally engage the outer peripheral surface portion of the cylindrical portion 14 adjacent the flange 16 and the inner surface of neck 11 is provided. Alternatively, lugs or ribs (not shown) struck from the cylindrical portion 14, could be utilized in lieu of the rubber ring to frictionally engage the interior surface of the neck 11 to secure the insert within

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the neck. It is to be understood that any suitable means could be employed to prevent inadvertent removal of the insert 13 from the neck 11 when being used without departing from the spirit and scope of the invention.

The cylindrical portion 14 is provided with a circular opening 17 permitting the contents 18 of the bottle to flow downwardly intermediate the cylindrical portion 14 and the inside of neck 11 and through the opening 17 into the insert when the bottle is inverted. As a means of permitting the liquid to enter the insert when the bottle is inverted (Fig. 3), while at the same time preventing the return flow to the body portion of the bottle (Fig. 2), the inside of the cylindrical portion 14 is provided with inwardly extending lugs 19 on each side of the opening 17, each of which pivotally mounts a pin 20 secured to opposite ends of a plate or door 21 having a curved upper end 22.

Thus, the pressure of the liquid 18 intermediate the inside of neck 11 and the outside of the insert 13 will force the plate 21 away from opening 17 (Fig. 3) to permit the liquid to enter the insert, the curved lower end 22 of the plate 21 permitting the rotational movement of the latter, as will be obvious. However, when the bottle is righted (Fig. 2) the pressure of the liquid 23 within the insert will force the plate 21 into the full line position of Fig. 2 and prevent the liquid 23 from returning to the bottle body. The insert 13 contains a measured amount of liquid, for example a tablespoon or a teaspoon. The tongue of the drinker is then placed on the plate 21 to retain the same in a closed position, whereupon the contents of the insert is drunk.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

What I claim as new and desire to protect by Letters Patent of the United States is:

1. A measuring insert comprising a substantially cylindrical container integrally formed with a bottom wall and open at the top, a circular outwardly extending flange integrally formed around the upper edge of said container and adapted to rest on the open upper edge of a bottle neck or the like and to be retained thereon by the undersurface of the bottle cover, said container in one of the sides thereof having an opening therethrough, said container being freely spaced from the inside of the bottle neck when inserted therein, an arcuate plate adapted to lie flush with the inside of said container and closing said opening, inwardly extending lugs on the inside of said container at opposite ends of said plate and opening, pins carried at opposite ends of said plate and pivotally mounted within said lugs, the upper end of said plate being curved away from said opening whereby to permit rotation of said plate away from said opening when said container is inverted within the bottle.

2. A measuring insert for bottles or the like comprising a container having a bottom wall and open at the top adapted to fit downwardly within the open neck of the bottle in freely spaced relationship thereto, said container having an opening in the side wall thereof, means for retaining said container within the bottle neck when the bottle is righted comprising a laterally extending flange extending outwardly from the open upper edge of said container and adapted to be received between the upper edge of the bottle neck and the undersurface of a closure screwed thereon, a plate on the inner face of said container pivotally mounted therein adapted to close said opening in said container side wall, the upper end of said plate being curved away from said container and opening so as to permit rotation of said plate away from said opening when said container is inverted while at the

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same time retaining said plate against said opening when the container is righted.

3. A measuring insert for a bottle or the like having a neck comprising an upwardly opening container supported in said neck, a portion of the side wall of said container being spaced from the interior surface of said neck and being provided with an opening, a one-way check valve plate pivotally mounted on the side wall of said container normally closing said opening when the bottle is upright and automatically rockable to uncover said opening when the bottle is inverted. 10

4. A measuring insert substantially as set forth in claim 3, in which, said valve plate is pivotally mounted on the side wall of said container for rocking movement about an axis normal to the longitudinal axis of the bottle. 15

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5. A measuring insert substantially as set forth in claim 4, in which, said bottle is provided with a removable cap for said neck, and the open end of said container is defined by a laterally extending flange adapted to bear against the outer end of said neck to limit downward movement of said container within said neck, said removable cap being adapted to abut said flange when said cap is secured to said neck.

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