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P. M. WOODBURN
NON-DRIP POURING INSERT
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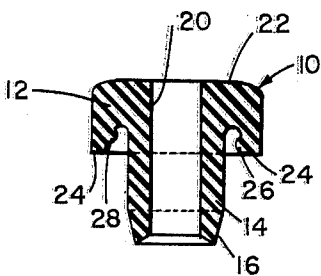


FIG. 1

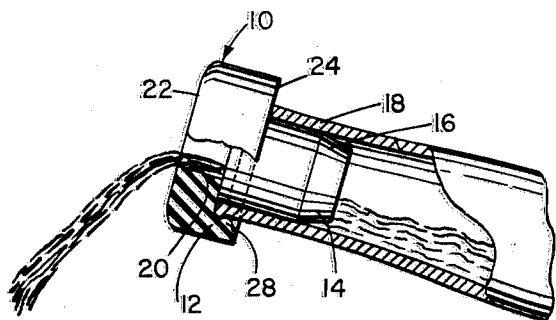


FIG. 3

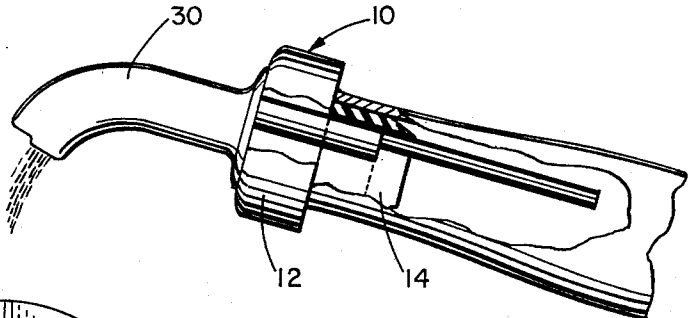


FIG. 4

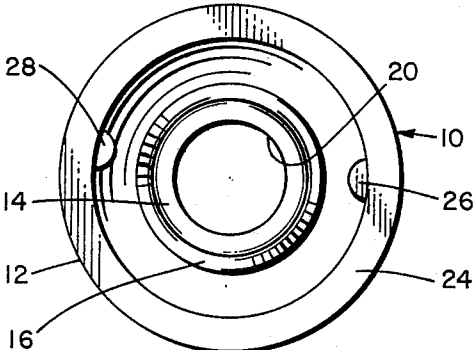


FIG. 2

INVENTOR

PAUL M. WOODBURN,

BY *N. Hamilton Hodges*

ATTORNEY

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NON-DRIP POURING INSERT

Paul M. Woodburn, 301 Melville St., Sandusky, Ohio

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1 Claim. (Cl. 215-47)

This invention relates to an improved sure fit non-drip pourer insert for bottles which may be positioned in the neck of a liquid containing bottle.

Normally, users of bottles which contain liquid, whether it be thick or thin, have found that the liquid may drip from the neck of the bottle after the desired amount of fluid has been poured therefrom. Many attempts have been made in the past to provide a means whereby the flow of liquid from a bottle may be cut off, or stopped, quickly after the desired amount of the fluid has been poured from the bottle. This has been reasonably successful, but most devices still allow a last drop or so to continue over the bottle neck edge.

The primary purpose of this invention is to provide a bottle neck insert which may be introduced into the neck of a bottle and be held there not only by the frictional engagement with the inside of the neck, but also by engagement with the outside of the bottle neck, which very generally has screw-threads thereon. The screw-threads on a bottle neck are usually of a standard pitch-diameter, and for that reason I provide suitable lugs which are positioned so that one lug will engage a screw-thread on one side of the bottle neck and another lug will engage the thread at a point not exactly diametrically opposite to the first lug.

With rare exceptions, all whiskey bottles, for example, have the same internal diameter neck, and the outside is standard also and is provided with threads to which a screw-threaded closure cap is normally applied. Common exceptions to this general rule are Scotch bottles, and many other bottles that contain foreign liquors, wine and liqueurs.

In the event that the bottle to be used and to which the pourer insert has been applied, does not have screw-threads on the outside edge of the neck, the insert will none the less tightly and frictionally engage the bottle neck on the inside thereof, and on the outside by the inwardly extending lugs that are formed on the inside of the folded over edge of the pourer insert.

An object of the invention is to provide a pourer insert for a bottle neck which will quickly prevent liquid from dripping down the outer peripheral surface of the bottle neck.

Another object of the invention is to provide a sure fit non-drip pourer insert for a bottle having a sharp internal edge which will quickly, or sharply, cut off the flow of liquid from the bottle.

An even further object is to provide a sure fit non-drip pourer insert for a bottle neck which is provided with a collar which is adapted to encircle the outer surface of the bottle neck.

Another further object is to provide a non-drip pourer insert for a bottle into which an air replacement spout may be inserted.

Additional objects will become apparent when an understanding is had of the following specification and the accompanying drawings, in which:

FIGURE 1 is a view in vertical cross section;

FIGURE 2 is an enlarged bottom plan view;

FIGURE 3 is a view partly in cross section and partly broken away, showing liquid being poured from the bottle which has a non-drip pourer inserted into its neck; and

FIGURE 4 is a view showing liquid being poured from a bottle which has a non-drip pourer inserted into its

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neck and into which a conventional air replacement spout has been placed.

The non-drip bottle insert is generally identified by the reference character 10, and is preferably made of polyethylene, or other material, so that it may be inserted into any of most whiskey bottles, and at the same time may be readily molded and/or machined to provide precise dimensions which will yield to a force-fit into a bottle neck. The insert 10 is provided with a convenient sized head portion 12 from which the bottle neck insert portion 14 extends. The end of the insert portion 14 remote from the head 12 is provided with a beveled edge 16 so that it may be easily inserted into a bottle neck, such as the bottle neck 18 shown in FIGURES 3 and 4. The end of the non-drip bottle insert 10 remote from the beveled edge 16 is cut precisely at right angles to the axis of the opening 20, as at 22. In that manner there is a sharp right angle formed by the intersection of the planes passing through the axis of the opening 20 and the flat edge 22 of the head 12. (Shown clearly in FIGURES 1 and 3.)

As can clearly be seen in FIGURE 1, the head 12 is provided with folded over edge portions 24 which are spaced apart from, and lie approximately parallel to, the neck insert portion 14. On the inside surfaces of these edge portions 24 I provide inwardly extending lugs 26 and 28. It will be noted that the lug 26 is approximately at the outer edge of the portion 24, whereas the lug 28 is slightly more away from the edge of the edge portion 24, and slightly closer to the flat edge 22 of the head 12. This provision is made because the lugs are not spaced at precisely diametrically opposite points, as the screw-threads into which they are adapted to become engaged will not be in the same plane relative to the edge of the bottle neck. It will be clearly understood that if there are no screw-threads on the bottle to which the non-drip pourer insert is being attached, the lugs 26 and 28 will bear against the plain bottle neck and tightly hold the insert in its adjusted position.

From the above description it will be understood that my non-drip bottle insert will be made from polyethylene or other suitable material, such as rubber, and will be provided with a portion which is adapted to be inserted into the neck of a bottle, and a portion which will embrace and cover the end of the bottle neck. The outermost portion of the head 12 is cut, as at 22, to be at right angles to the axis of the opening passing therethrough. With this cut, a right angle sharp edge is provided so that any liquid that is being poured from the bottle to which the non-drip insert has been applied will be sharply cut off at the instant that the tilt of the bottle has been changed to stop the flow of fluid therefrom. The sharp angle which is provided will prohibit or exclude the pull by capillary attraction normally found to be present when pouring liquid from a bottle.

In FIGURE 4 I have shown my non-drip bottle insert as having been introduced into a bottle neck, and into which a commercial air replacement spout 30 has been inserted. It will be understood that the commercial air replacement spout is normally introduced into a bottle by the use of a cork washer which is adapted to encircle the spout stem and be inserted therebetween and the inside of the neck of a bottle. Such cork washers fit and serve satisfactorily for a relatively short period of time, but after they have been used, and transferred from one bottle to another for a few times, they will no longer serve to hold the spout in a bottle neck properly. My non-drip bottle insert will last for this purpose for an indefinite period of time.

While I have found that my non-drip bottle insert may be used very satisfactorily in bottles containing almost

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any fluent liquid, I have found that probably its most beneficial and conveniently satisfactory use is in the matter of pouring measured amounts of whiskey from bottles. Pouring extra amounts of whiskey might not only be messy, but also wasteful and/or uneconomical.

I claim:

A non-drip pouring insert for a bottle neck comprising a tubular member having a beveled outside edge at one end thereof, an enlarged head portion at the other end thereof, said head portion being cut at its outer extremity 10

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at a sharp right angle to the axis of said tubular member, the periphery of said head portion being folded over upon the outer edge of said bottle neck and having a plurality of inwardly extending lugs irregularly spaced apart bearing against the outer surface of said neck.

References Cited in the file of this patent

UNITED STATES PATENTS

2,834,497	Wolf	May 13, 1958
2,978,134	Caine et al.	Apr. 4, 1961