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[54] **MOUNTING MEANS FOR POURER DISPENSERS**  
**5 Claims, 3 Drawing Figs.**

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 222/542, 222/567

[51] Int. Cl..... **B67d 3/00**

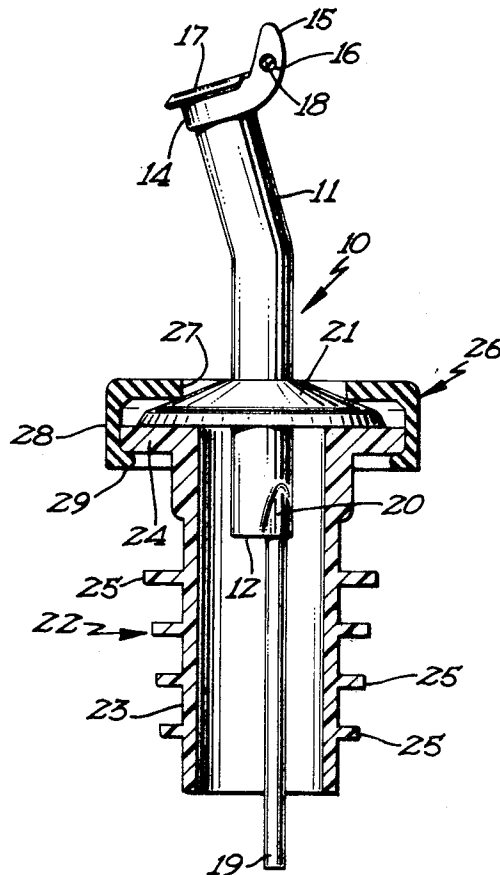
[50] Field of Search..... **215/73, 74;**  
 222/478, 542, 567, 479

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**ABSTRACT:** A nonmetallic coupling member and a non-metallic closure member are used to sealingly mount a conventional metal pourer dispenser in the neck of a bottle. The closure member is tubular and has radial bottle-engaging elements thereon for sealingly engaging the inner surface of a neck of a bottle. A coupler member is releasably clamped to the closure member and pourer dispenser to permit liquid to be dispensed through the pourer dispenser.



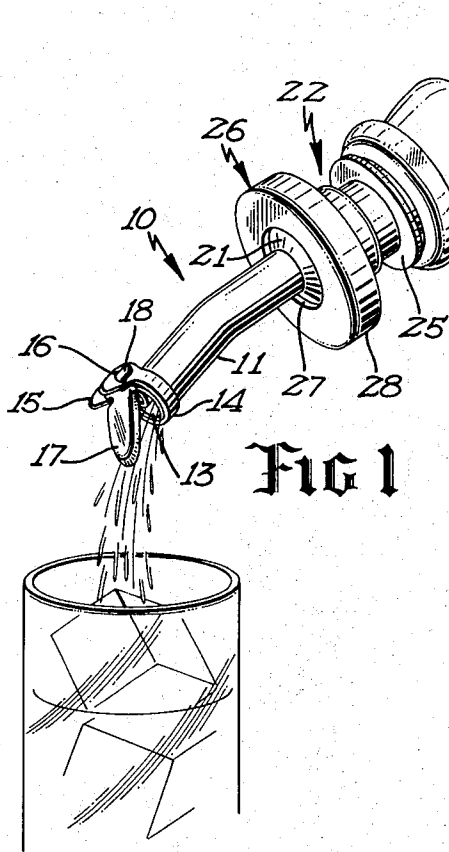


FIG 1

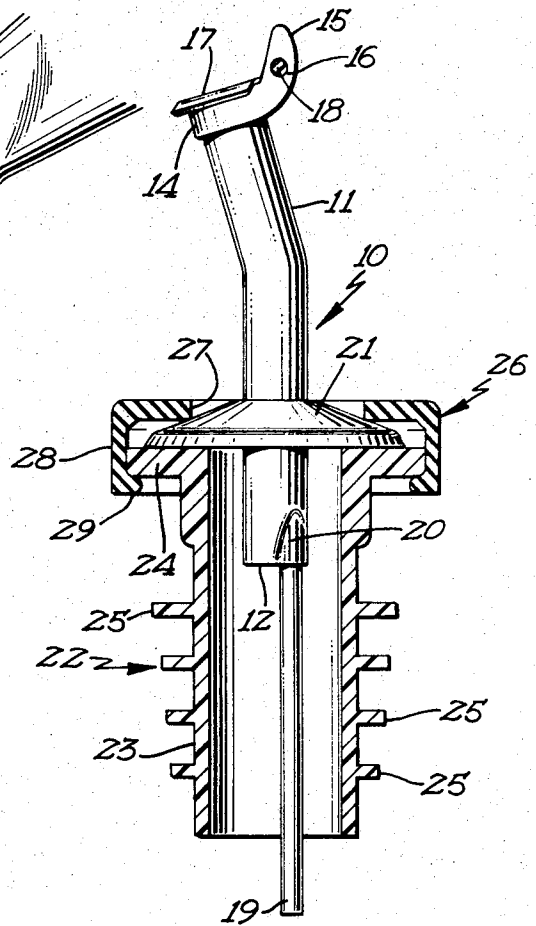


FIG 2

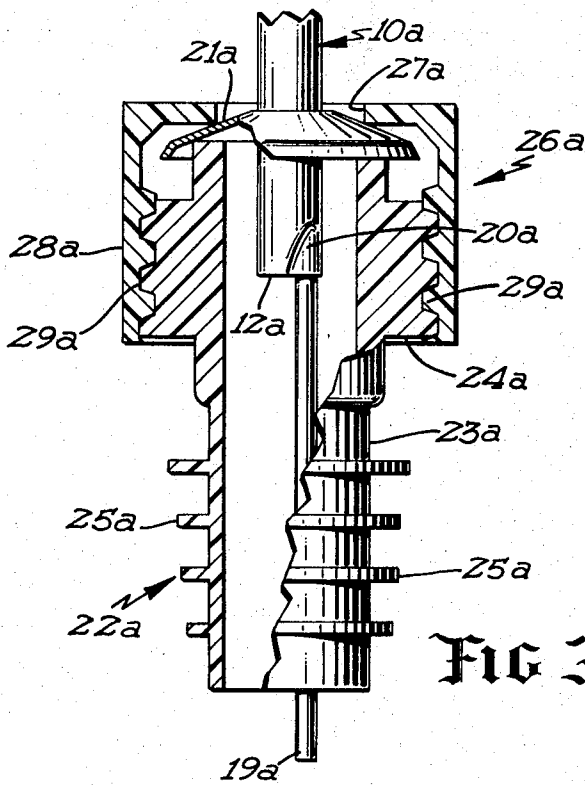


FIG 3

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## MOUNTING MEANS FOR POURER DISPENSERS

## SUMMARY OF THE INVENTION

There are many commercially available pourer dispensers for use with bottles but most of these pourer dispensers are mounted in the neck of the bottle by a conventional cork having an opening therein. Since different bottles have different neck sizes, it is necessary when using a pourer dispenser to have a plurality of different size corks to accommodate the various bottles.

It is therefore a general object of this invention to provide a closure member for closing the neck of a bottle but accommodating a pourer dispenser therethrough, and a coupler member releasably interlocking the pourer dispenser with the closure member. The closure member is of elongate generally tubular construction and has a plurality of radial bottle-engaging elements which vary in size and which project outwardly from the tubular body. These bottle-engaging elements nicely fit various neck sizes of bottle, and the coupler member releasably engages the closure member and clamps the flange of a pourer dispenser therebetween.

In one embodiment, the coupler member has an inturned lip which releasably engages a radial flange on the closure member, and in another embodiment, the closure member has external threads thereon which are threadedly engaged by the coupler member.

These and other objects and advantages of this invention will more fully appear from the following description made in connection with the accompanying drawings wherein like reference characters refer to the same or similar parts throughout the several views.

## BRIEF DESCRIPTION OF THE FIGURES OF THE DRAWINGS

FIG. 1 is a perspective view illustrating the closure and coupler members mounting a pourer dispenser in the neck of a bottle;

FIG. 2 is a cross-sectional view of the coupler and closure members as applied to a pourer dispenser; and

FIG. 3 is a side elevational view partly in section and partly in elevation illustrating a different embodiment of the coupler and closure members as applied to a pourer dispenser.

## DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings and more specifically to FIGS. 1 and 2, it will be seen that a conventional pourer dispenser, designated generally by the reference numeral 10, has been applied to the neck of a bottle B by means of the present invention. The pourer dispenser 10 is typical of the commercially available pourer dispensers which permit liquid such as liquors and other alcoholic beverages to be dispensed from a bottle B in an accurate manner.

The pourer dispenser includes an elongate dispensing tube 11 which is of generally cylindrical configuration and, as shown, includes a lower inlet end 12 and an upper outlet end 13. It will be noted that the upper end portion of the dispensing tube is angularly disposed with respect to the remaining portion thereof to facilitate dispensing of liquid through the dispensing tube.

The upper end portion of the dispensing tube has a collar 14 affixed thereto adjacent the outlet thereof and, it will be noted that the collar 14 has a pair of ears 15 projecting from the dispensing tube. Each of these ears has an opening 16 therein for accommodating the outwardly projecting ears 18 on a closure element or cap 17. Thus it will be seen that the cap 17 is readily swingable by action of gravity between a closed position, as illustrated in FIG. 2 to an opened position, as illustrated in FIG. 1.

The pourer dispenser also includes an elongate air tube 19 which is also of cylindrical configuration and projects downwardly beyond the lower inlet end of the dispensing tube. The dispensing tube is crimped adjacent its lower inlet end as at 20 to very closely confine a portion of the air tube 19. The

air tube is then secured to the inner surface of the dispensing tube by welding or the like. It will be noted that the upper end of the air tube is positioned closely adjacent and preferably coextensive with the upper end of the dispensing tube 11.

The pourer dispenser 10 also has a flange 21 integral therewith and projecting outwardly and downwardly therefrom. In the embodiment shown, the flange 21 is of generally frustoconical configuration. In use, the pourer dispenser 10 is mounted therethrough. The pourer dispenser is urged downwardly through the cork so that the upper end of the cork is positioned against the lower surface of the flange 21 and the cork is then inserted into the neck of the bottle. The problem normally encountered is that the neck size of different bottles varies, especially in cross-sectional dimension and this requires a large supply of corks of different sizes.

The means for mounting the pourer dispenser 10 includes a closure or bottle-engaging member 22, preferably formed of a suitable yieldable plastic material, and including a generally cylindrical body 23. In the embodiment shown, the upper end portion of the cylindrical body is slightly thickened but it is pointed out that the body may be of uniform thickness, if desired. The cylindrical body is provided with an upper radial flange 24 which, as shown, has its upper surface coextensive with the upper edge surface of the cylindrical body 23.

The closure member also has a plurality of axially spaced apart radially extending bottle-engaging elements 25 integrally formed therewith and projecting outwardly therefrom intermediate the ends of the body. It will be noted that these bottle-engaging elements 25 are uniformly spaced apart with respect to each other, and each bottle-engaging element is larger than the next adjacent lower bottle-engaging element. Thus the respective sizes of the bottle-engaging elements diminish uniformly in a downward direction. With this arrangement, when the closure member 22 is inserted into the neck of a bottle, one of the bottle-engaging elements will be of a size to engage the inner surface of the bottle neck in sealing relation so that an effective seal is thereby formed in the manner of a cork.

When the closure member is inserted into the neck of a bottle, the pourer dispenser 10 will be inserted through the interior of the closure member so that the flange 21 is positioned upon the upper surface of the upper radial flange 24 of the closure member. Means are provided for clamping the pourer dispenser in releasably clamped relation with the closure member, and this means includes an annular coupler member 26 which is also formed of a suitable yieldable plastic material.

The coupling member 26 is provided with a central opening 27 therein through which the pourer dispenser 10 projects. The coupling member has a depending cylindrical flange 28 which projects exteriorly of the flange 21 and exteriorly and in snug engaging relation with the upper radial flange 24. The lower end portion of the depending cylindrical flange 28 has an inturned annular lip 29 integrally formed therewith and this lip is urged past the radial flange 24 to engage the lower surface thereof with snap coupling effect. The lower surface of the coupling member is positioned upon the flange 21 when the lip engages the lower surface of the radial flange 24 so that the coupling member is releasably clamped to the closure member and to the pourer dispenser 10.

With this arrangement, the closure member can be used in conjunction with any of the conventional pourer dispensers since substantially all of these dispensers have a flange which flares outwardly in a manner similar to the flange 21. The closure member 22 accommodates and snugly engages the necks of various size bottles and the coupling member permits the pourer dispenser to be readily and easily clamped in sealed relation with respect to the closure member. It will also be noted that the closure member, pourer dispenser and coupling member may be readily applied to each other and to a bottle with a minimum of effort and may also be readily removed therefrom.

Referring now to FIG. 3, it will be seen that a slightly different embodiment of the closure member and coupling

member is there shown. The pourer dispenser, designated by the reference numeral 10a is identical to that shown in the embodiment of FIGS. 1 and 2 and includes a dispensing tube 11a, an air tube 19a, and a closure element or cap (not shown). The pourer dispenser also includes a flange 21 which is of frustoconical configuration.

The closure member 22a is formed of a suitable plastic and includes a cylindrical body 23a having a relatively thick upper radial flange 24a. It will be noted that the radial flange 24a is spaced substantially below the upper end of the cylindrical body 23a. The tubular body is also provided with a plurality of radially extending axially spaced apart bottle engaging elements 25a.

An annular coupling member 26a is provided for clamping the pourer dispenser to the closure member and this coupling member has a centrally located opening 27a therethrough and has a depending cylindrical flange 28a. The cylindrical depending flange 28a is internally threaded as at 29a and these threads coact with external threads 30a on the radial flange 24a. With this arrangement, the flange 21a of the pourer dispenser will be clamped against the upper peripheral edge of the closure member by the lower annular edge defined by the central opening in the coupling member 26a. Again it will be noted that the coupling member may be readily removed from the closure member by unscrewing the coupling member therefrom to thereby permit the pourer dispenser to be removed. Thus the application of the coupling member and pourer dispenser to the closure member may be readily accomplished in a manner similar to the embodiment of FIGS. 1 and 2.

From the foregoing description, it will be seen that I have provided a novel coupling member and closure member for use in conjunction with a conventional pourer dispenser to eliminate need of the conventional cork formerly used with such pourer dispensers. Further, the closure member accommodating and fitting in sealed relation within the necks of most commercially known bottles, is capable of being easily applied to and removed from the bottle. The coupling member permits the closure member to be used with various kinds and sizes of pourer dispensers and requires only that such pourer dispensers have an element corresponding to the flange 21. The closure member and coupling member may be easily and inexpensively manufactured as by a molding process and these components may be formed from many of the commercially available plastics.

Thus it will be seen that I have provided a novel closure member and coupling member which will accommodate bot-

ties whose neck sizes vary in configuration and size and which nicely mount a pourer dispenser in sealed relation in the bottleneck. It will therefore be seen that my novel closure member and coupling member are not only of simple and inexpensive construction, but function in a more efficient manner than any heretofore known comparable components.

What is claimed is:

1. In combination with a pourer dispenser for dispensing liquid from a bottle and including an elongate dispensing tube having a lower inlet end and an upper outlet end, an elongate air tube extending through the dispensing tube, and a flange secured to the dispensing tube intermediate the ends thereof and projecting outwardly therefrom,

a closure member formed of yieldable material including an elongate cylindrical body having upper and lower ends and having a flange at the upper end thereof projecting radially outwardly therefrom,

a plurality of axially spaced apart bottle-engaging elements integral with said body intermediate the ends thereof and projecting radially outwardly therefrom, each bottle-engaging element being slightly larger than the next adjacent lower bottle-engaging element, said flange on the closure member being substantially larger than any of said bottle-engaging elements,

a releasable annular coupling member having a central opening therethrough and having a cylindrical flange depending therefrom to permit the upper end portion of the pourer dispenser to project therethrough, means on said cylindrical flange engaging the radial flange on the closure member to releasably interlock said coupling member and closure member with the pourer dispenser so that the flange on the latter is disposed between the coupling and closure members.

2. The invention as defined in claim 1 wherein said means on said cylindrical flange comprises an inturned lip which engages the lower surface of said radial flange.

3. The invention as defined in claim 2 wherein the upper surface of said radial flange is coplanar with the upper edge of said cylindrical body.

4. The invention as defined in claim 1 wherein said radial flange is externally threaded and wherein said means on said coupling member comprises internal threads on said depending cylindrical flange engageable with the threads on the radial flange of the closure member.

5. The invention as defined in claim 4 wherein said radial flange on said closure member is axially spaced from the upper end of said cylindrical body.

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