

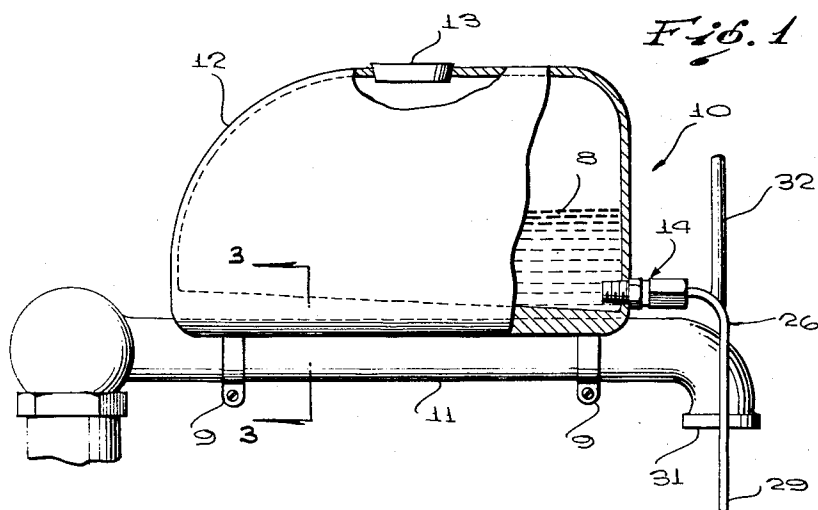
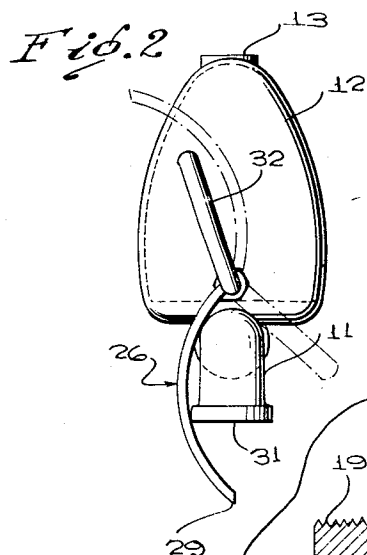
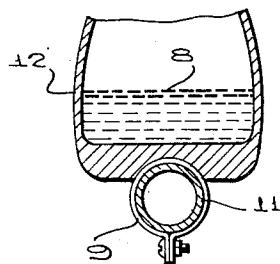
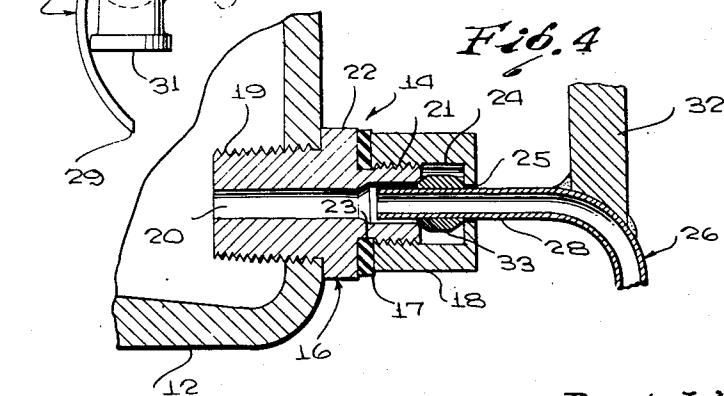
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LIQUID DISPENSER OPERABLE TO DISCHARGE ITS CONTENTS INTO
THE PATH OF FLOW OF FLUID FROM A CONDUIT OUTLET

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2,705,091

LIQUID DISPENSER OPERABLE TO DISCHARGE ITS CONTENTS INTO THE PATH OF FLOW OF FLUID FROM A CONDUIT OUTLET

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1 Claim. (Cl. 222—129)

This invention pertains to dispensers and, in particular, to a dispenser operable to discharge its contents into the path of flow of fluid from a conduit outlet.

An object of this invention is to provide a dispenser which has discharge means selectively movable into and out of engagement with a flowing liquid or fluid.

Another object of this invention is to provide a device for admixing a soap with the fluid being discharged from a conduit outlet.

A further object is to provide a soap dispenser which is simple in construction, efficient in operation, and easy to manipulate.

Other objects and advantages will become apparent from a consideration of the following description and appended claim in conjunction with the drawing.

In the drawing:

Figure 1 is an elevational view of a device constructed according to the present invention with parts broken away.

Figure 2 is an end view of the device shown in Figure 1, the solid lines showing the discharge tube in the path of flow of fluid from a conduit outlet and the dotted lines showing said discharge tube out of the path of flow of the fluid.

Figure 3 is a transverse view taken along line 3—3 of Figure 1.

Figure 4 is an enlarged fragmentary sectional view of the mounting of the discharge tube in the side wall of the storage tank of the device shown in Figure 1.

Referring now to the drawing wherein like reference numerals are used throughout, the numeral 10 designates generally the dispensing device according to the present invention mounted on a fluid conduit outlet, such as a water faucet 11, by the adjustable bands 9. The dispensing device 10 embodies a storage tank 12 which has a removable closure 13 in the top wall thereof through which the tank is filled with liquid 8. Positioned adjacent the bottom of the tank 12 and extending through the side wall thereof is a tube fitting 14 which includes a plug 16, a washer 17, and a cap 18, as shown in Figure 4. One end 19 of the plug 16 is externally threaded and in threaded engagement with the side wall of the tank 12. The other end 21 of the plug 16 is reduced in circumference and is also externally threaded. The plug 16 is provided with a longitudinal passageway 20 extending completely therethrough. Projecting from the plug 16 intermediate the ends 19 and 21 is a collar 22 which abuts the exterior face of the storage tank 12 when the end 19 is inserted through and threadedly connected to the side wall of the tank 12. The washer 17 is mounted on the reduced neck portion 23 of the plug 16 and forms a liquid tight seal between the plug 16 and the cap 18. As shown in Figure 4, the cap 18 has an opening 25 in its closed end and is only partially threaded on its interior face, leaving a smooth surface portion 24 contiguous to the opening 25.

A discharge tube 26 has one end 28 inserted through the opening 25 of the cap 18 and in communication with the interior of the tank 12 by virtue of the passageway 20. The other end 29 of the tube 26 is bent so that it

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is normally in the path of flow of fluid from the outlet opening 31 of the faucet 11, as shown in solid line in Figure 2. Secured to the end 28 of the tube 26 is a ring 33 which positions the end 28 within the smooth surface portion 24 of the cap 18 and permits the tube 26 to be rotated without becoming disengaged from the fitting 14. Thus, it is seen that by virtue of the fitting 14, the tube 26 is pivotally connected intermediate its ends 28 and 29 to the side wall of the tank 12 for movement of the end 29 from the operative position in the path of flow of fluid from the faucet 11 to a non-operative position out of the path of flow of fluid from the conduit or faucet 11, as shown in solid and dotted lines in Figure 2.

A counterweight 32 is secured to the tube 26 intermediate its ends for maintaining the end 29 in the out of path of flow or non-operative position, shown in dotted line in Figure 2. As illustrated in Figure 2, the tube 26 pivots about the end 28 as an axis and hence, the counterweight 32 is secured to the tube 26 on the opposite side of the axis with respect to the end 29 in order to counter-balance the end 29.

In operation, the tank 12 is filled with an appropriate liquid 8, such as a concentrated soap solution. A valve, not shown, which controls the flow of fluid through the conduit outlet 11, is opened and water flows into the conduit outlet 11 and through the outlet opening 31. When it is desired to introduce the liquid 8 into the fluid flowing from the conduit outlet opening 31, the discharge tube 26 is pivoted into the operative position in which the end 29 is located in the path of flow of fluid from the conduit outlet opening. When the operative position is reached, both hands of the operator are left free for washing, cleaning, and rinsing, either himself or some article, for example, dishes or clothing. The admixing of the liquid 8 with the fluid flow is ended by pivoting the tube 26 to the non-operative position in which the end 29 is out of the path of flow of fluid from the conduit outlet opening 31. The tube 26 is maintained in the non-operative position by virtue of the action of the counterweight 32.

Although the uses of the device of the present invention are many and diverse in particularity, the device may be employed specifically in sinks, wash basins, tubs, and showers, for cleansing purposes. Among its many other uses, the device may be employed in a soda fountain for introducing a flavoring into a potable liquid or for introducing a fire-fighting solution into the flow of water from a hose.

What is claimed is:

The combination with a conduit outlet for controlling the flow of fluid under pressure therefrom, of a dispenser mounted on said conduit outlet, said dispenser comprising a storage tank removably secured to said conduit outlet, a discharge tube having one end in communication with the interior of said tank and having the other end normally in the path of flow of the fluid from said conduit outlet, said tube being pivotally connected to said tank for movement of said other end from said path of flow position to a position out of said path of flow of fluid from said conduit outlet, and a counterweight operatively connected to said tube for maintaining the other end of said tube in the out of path of flow position.

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