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V. F. ANDERSON

3,283,964

SIDE-POURING DISPENSER AND CLOSURE

Filed Dec. 22, 1964

2 Sheets-Sheet 1

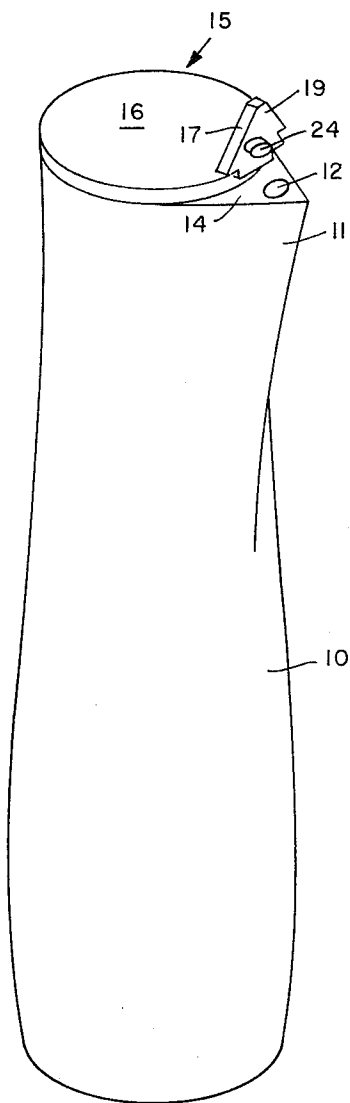


FIG. 1

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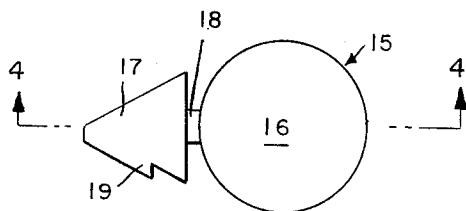


FIG. 3

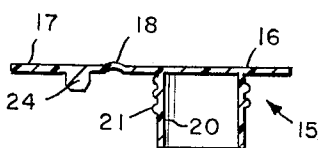


FIG. 4

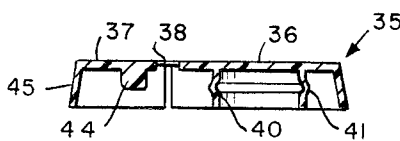


FIG. 6

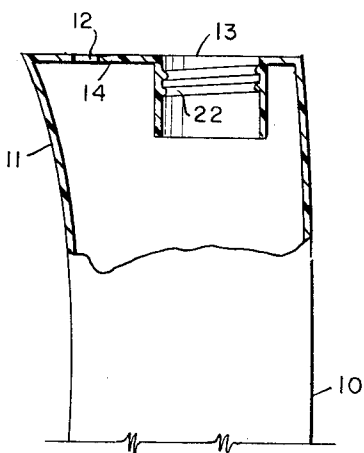


FIG. 2

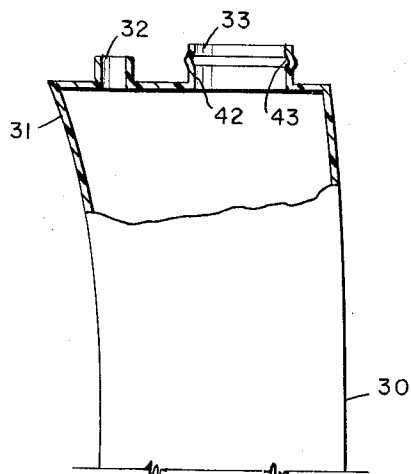


FIG. 5

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SIDE-POURING DISPENSER AND CLOSURE

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2 Claims. (Cl. 222-487)

This invention relates to a dispenser or container having a relatively large main filling opening and a smaller offset, side-pouring opening or spout. The invention further comprises a closure means which can be easily attached to the container for closing said main filling opening and which closure is further provided with a special hinged section for selectively sealing off the offset spout.

The device disclosed in the present invention has many very useful advantages over prior art dispensing containers which utilize a single opening for both filling and dispensing a product, such as, for example, powders and liquids. The construction of the present invention provides an integral closure capable of sealing a container having two openings with one of said openings being off-center with respect to the other. The novel construction of the side-pouring dispenser and closure of the present invention prevents excessive misuse of the product as is frequently encountered in conventional single opening containers. For example, the offset pouring spout provides better product direction dispensing and permits easy dispensing of the product through a regulated opening. The offset pouring spout gives better pouring control, permits a smaller angle of tilting while pouring, and eliminates messiness on the exterior portions of the container as is typically encountered when using conventional single opening dispensing devices.

The present invention has the further advantage of reducing spoilage through product air exposure since the offset dispensing opening is relatively small and the large filling opening is never exposed during the dispensing operation. Finally, the present invention provides a side-pouring dispenser and closure of simple construction having a minimum number of parts and which may be inexpensively manufactured.

Broadly, the invention comprises a receptacle having a large filling opening and a smaller offset dispensing opening, and a removable unitary closure means having a first member for sealing said large filling opening and a second member hingeably connected to said first member for selectively sealing and exposing said smaller dispensing opening.

The invention will now be described with reference to the accompanying drawings wherein:

FIGURE 1 is an isometric of a side-pouring dispenser and closure according to the invention;

FIGURE 2 is partly an elevation and partly a longitudinal section of a portion of a dispenser as shown in FIGURE 1;

FIGURE 3 is a plan view of a closure adapted for use with the container of FIGURE 2;

FIGURE 4 is a longitudinal section taken on the line 4-4 of FIGURE 3;

FIGURE 5 is partly an elevation and partly a longitudinal section of a modified embodiment of the invention; and,

FIGURE 6 is a longitudinal section of a closure adapted for use with the embodiment of FIGURE 5.

Referring to FIGURE 1, there is shown a container 10 having an offset spout member 11 formed on its upper end which terminates at the top of the container in a transverse plate member 14 having a small dispensing opening 12 formed therein. The top of the container is also provided with a large filling opening 13 (see FIG-

URE 2) through which the product to be dispensed may be easily admitted. The container is preferably constructed of a plastic material though metal or other suitable materials may be used. The spout 11 need not take the exact shape shown in the drawings so long as it provides the requisite dispensing opening 12 offset from the large filling opening 13.

As best shown in FIGURES 1, 3 and 4, the removable closure 15 is a unitary structure comprising two rigid sealing members 16 and 17 connected to each other by a suitable hinge 18. The closure 15 is preferably constructed of a plastic material, in which case the hinge means 18 may take the form of a thin, flexible plastic strip which is integral with the sealing members 16 and 17. It is to be understood that the closure 15 may be constructed of metal or any other suitable material and that any conventional hinge may be used to connect the members 16 and 17. A tab 19 projects from one side of the closure sealing member 17 to facilitate easy lifting of said member as will be better understood from the discussion, infra.

FIGURE 4 illustrates the manner in which the underneath portion of the closure 15 is constructed in order to provide an air tight seal for the large filling opening 13 and the smaller dispensing opening 12. As shown, the sealing member 16 is provided with a downwardly projecting cylindrical portion 20 having external threads 21. As shown in FIGURE 2, the large filling opening 13 extends downwardly as a hollow bore defined by the open-ended internally threaded cylindrical wall 22. By screwing the closure portion 20 into the bore 22 the large filling opening 13 may be effectively sealed off from the surrounding atmosphere.

FIGURES 2 and 4 further illustrate the manner in which the underneath portion of the closure sealing member 17 is provided with a downwardly projecting stopper 24 to effectively seal the offset side dispensing opening 12. The stopper 24 should fit tightly in the opening 12 and is preferably constructed of a resilient plastic or rubbery material. The tab member 19 (FIGURES 1 and 3) allows the user of the container 10 to easily free the stopper 24 from the dispensing opening 12.

In the embodiment shown in FIGURES 5 and 6, an offset dispensing opening 32 and a large filling opening 33 project upwardly from the top of a side-pouring container 30 having an offset spout 31. As shown, a removable unitary closure 35 comprises two sealing members 36 and 37 connected to each other by a suitable hinge means 38 (preferably a plastic flap). The sealing member 36 is provided with a downwardly projecting hollow cylindrical portion 40 having an outwardly projecting circumferential shoulder or tongue 41. The large filling opening 33 extends upwardly as a hollow bore defined by the open-ended cylindrical wall 42. The inner diameter of the bore 42 is substantially equal to the outer diameter of the cylindrical portion 40 of the closure sealing member 36. A circular groove or detent 43 is formed in the bore 42 to cooperate with the shoulder 41 of the closure sealing member 36.

When the cylindrical portion 40 of the closure sealing member 36 is inserted into the bore 42 of the container 30, either the portion 40 and/or the bore 42 is (are) slightly deformed or flexed while the shoulder portion 41 passes down through the bore 42 towards the groove 43. Further downward movement causes the shoulder 41 to mate with the groove 43 and establishes an efficient "snap-fit" between the cylindrical portion 40 of the closure sealing member 36 and the bore 42 of the container 30.

A resilient stopper 44 of the closure sealing member 37 cooperates with an upwardly extending small offset dispensing opening 32 in the manner previously described with respect to FIGURES 2 and 4.

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The aesthetic appearance of the closure 35, shown in FIGURE 6, is improved by the provision of a circumferential skirt 45.

I claim as my invention:

1. A combined side-pouring dispenser and closure there- 5
for comprising:
 - a closed-bottom elongated receptacle having an integrally formed offset spout member protruding outwardly from one side of said receptacle near the upper end thereof; 10
 - a top slab member formed across the top of said receptacle and said offset spout member and integral therewith, said top slab member having a large filling opening comprising an axially extending cylindrical wall defining an open bore, said bore having an internally formed groove intermediate of the ends of said cylindrical wall, said top slab member also having a small dispensing opening aligned with said spout member comprising an axially extending cylindrical wall defining an open bore; 15
 - a unitary closure comprising a plastic top sheet means having peripheral edges, a first member for sealing said large filling opening and a second member for sealing said small dispensing opening, said first sealing member comprising a hollow, downwardly extending cylindrical portion having an outer diameter substantially equal to the inner diameter of said filling opening bore, one end of said cylindrical portion being integral with said top sheet means, said cylindrical portion having a radially outwardly projecting circumferential shoulder adapted to matingly fit within said annular groove of said bore, said second sealing member comprising a resilient, downwardly

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- protruding stopper for sealing said small dispensing opening, one end of said stopper being integral with said top sheet means;
 - a substantial portion of said edges extending in contoured alignment with the periphery of said top slab member;
 - skirt means integrally formed with said top sheet means around said peripheral edges and adapted to extend flush with the plane of said top slab member;
 - said skirt means being interrupted along a transverse line between said first and second sealing members whereby said top sheet means constitutes a hinge means having an axis lying parallel to the plane of said top sheet means.
2. A combined side-pouring dispenser and closure there-
for as set forth in claim 1 wherein:
 - said top sheet means, said first sealing member, said second sealing member and said skirt means are integrally formed together from thermoplastic material.

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