Dec. 3, 1957 J. P. MOY 2,815,156

DISPENSING BOTTLE

Filed Dec. 27, 1955

Fig. 1

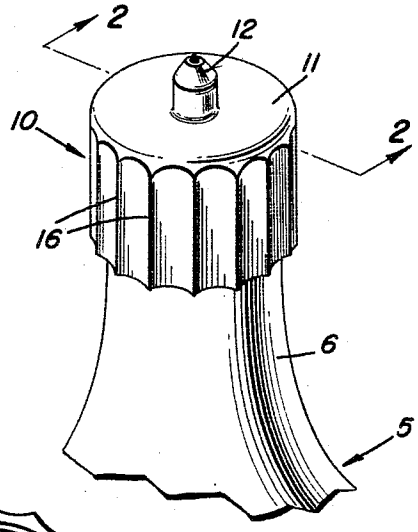


Fig. 3

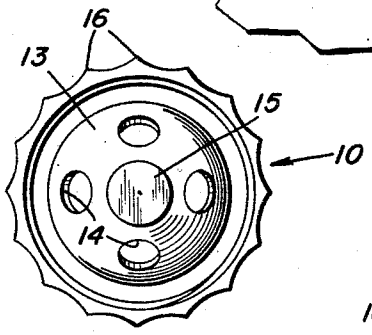


Fig. 4

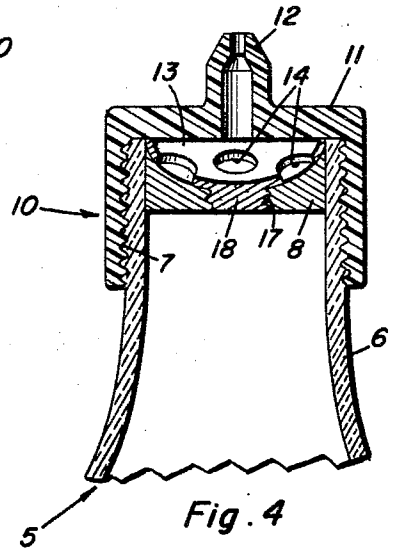
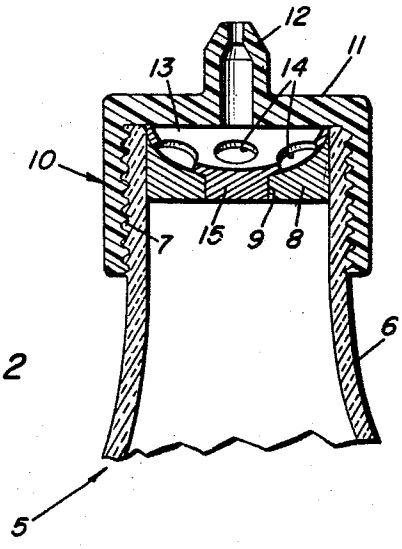


Fig. 2



Joseph P. Moy
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

United States Patent Office

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DISPENSING BOTTLE

Joseph P. Moy, Melrose, Mass.

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1 Claim. (Cl. 222—520)

The present invention relates to new and useful improvements in dispensing bottles and other containers and has for its primary object to provide, in a manner as hereinafter set forth, a bottle or container comprising a novel closure whereby liquids may be readily poured or sprinkled from said bottle or container without removing said closure therefrom.

Another very important object of the invention is to provide a closure of the character described which, when closed, will tightly seal the bottle or other container against leakage and contamination.

Other objects of the invention are to provide a dispensing bottle or container of the character described which will be comparatively simple in construction, compact, attractive in appearance, highly efficient and reliable in use, and which may be manufactured at low cost.

These, together with other objects and advantages which will become subsequently apparent, reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of the upper portion of a bottle provided with a closure constructed in accordance with the present invention;

Figure 2 is a vertical sectional view, taken substantially on the line 2—2 of Figure 1;

Figure 3 is a bottom plan view of the cap; and

Figure 4 is a vertical sectional view through a slightly modified form of the invention.

Referring now to the drawing in detail, it will be seen that reference character 5 designates generally a portion of a bottle of suitable shape, size and material. The bottle 5 includes a neck 6 having an externally threaded upper end portion 7.

Fixed in the upper end portion of the bottle neck 6 is a substantially concave seat 8 of suitable material. As illustrated to advantage in Figure 2 of the drawing, the seat 8 has formed therein a centrally located opening 9.

Threadedly mounted on the portion 7 of the bottle 5 is a cap 10 of suitable material. Formed integrally with the central portion of the top 11 of the cap 10 is a discharge nozzle 12.

Mounted in the upper portion of the cap 10 and affixed to the top 11 thereof is a substantially concavo-convex valve 13 of suitable material. The valve 13 has formed therein a plurality of ports 14. The valve 13 is engageable with the seat 8 for closing the ports 14. Depending from the valve 13 is a plug 15 which is engageable in the opening 9 for closing said opening.

It is thought that the operation of the invention will be readily apparent from a consideration of the foregoing. Briefly, with the valve 13 engaged with the seat 8 as shown in Figure 2 of the drawing, the plug 15 closes the opening 9 and the ports 14 are closed and tightly sealed by said seat. To dispense liquid from the bottle 5, the cap 10 is simply unscrewed a few turns to disengage the valve 13 from the seat 8, thus opening the ports 14 and withdrawing the plug 15 from the opening 9. The bottle is then inverted in an obvious manner and, if desired, shaken for pouring or sprinkling the contents of said bottle, the liquid passing through the opening 9, the ports 14 and the nozzle 12. Of course, to close and seal the bottle, the cap 10 is again tightened. The periphery of the cap 10 is vertically ribbed, as indicated at 16, to facilitate gripping and turning said cap.

In the modification of Figure 4 of the drawing, the seat 8 is provided with a centrally located threaded opening 17. Depending from the valve 13 is a threaded plug 18 adapted to be screwed into the opening 17 as the cap 10 is turned on or off the bottle. In other respects, this form of the invention is substantially similar in construction and operation to the embodiment of Figure 2 of the drawing.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

A dispensing bottle comprising a threaded neck, a concave seat fixed in the neck within the confines thereof and having a centrally located threaded opening therein, a removable cap threadedly mounted on the neck, a discharge nozzle on said cap, a concavo-convex valve in said cap engageable in the seat and having discharge ports therein, and an integral, threaded plug depending from the valve and threadedly engaged in the opening for closing same and connecting the valve directly to the seat for sealing engagement therewith for closing the ports.

References Cited in the file of this patent

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