May 1, 1951 J. M. WHEATON 2,551,203

DISPENSING CLOSURE

Filed Oct. 1, 1945

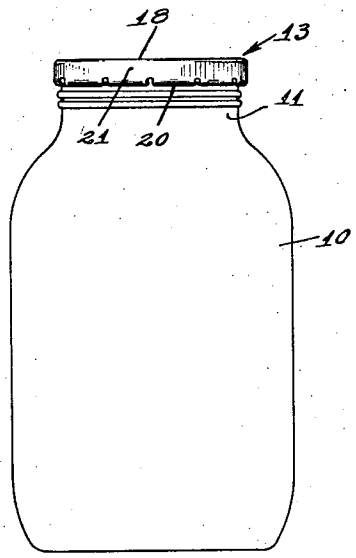


Fig. 1.

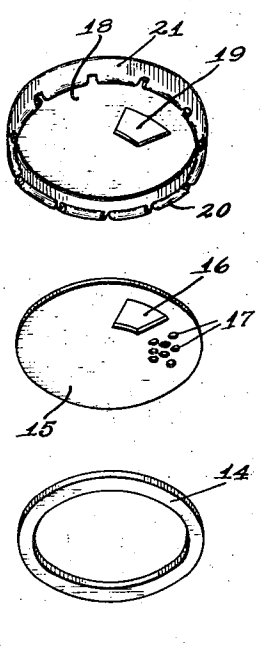


Fig. 4.

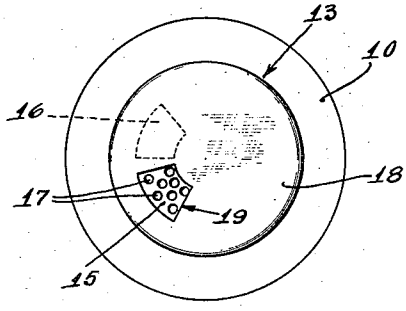


Fig. 2.

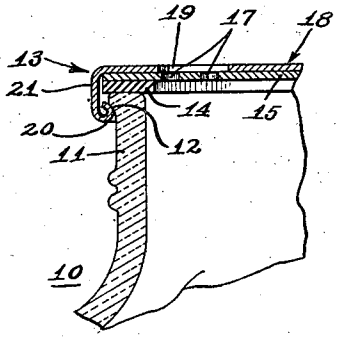


Fig. 3.

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DISPENSING CLOSURE

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2 Claims. (Cl. 222—548)

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My invention relates to improvements in dispensing closures and more particularly to the so-called sifter-top type wherein a multi-part closure is so formed that, incident to relative movement of specified parts, an outlet may be opened or closed.

An object of my invention is the provision of a novel and simple, yet effective closure which may with unusual ease be applied to containers by means of automatic closing machines and at a very high speed.

Other objects of my invention will appear hereinafter.

In the drawings:

Fig. 1 is a side elevational view of a container and closure embodying my invention;

Fig. 2 is a top plan view thereof;

Fig. 3 is a fragmentary detail sectional view; and

Fig. 4 is a perspective view showing the several parts separated, but in the relationship of assembling.

In the illustrated embodiment of my invention, it consists of a container 10, in this instance a wide-mouth glass jar, including a neck wall 11 defining a filling opening. At the outer end of this wall, there is formed an external shoulder 12 which cooperates with a portion of the closure 13 in retaining the latter upon the container.

This closure consists of a sealing gasket 14 formed of pulp or similar material and having more or less tacky surfaces, one for engagement with the top surface of the glass, or wall of the filling opening, and the other adapted to contact a cover disk 15. This tacky surface, or any other means, such for example, as roughening the glass surface may be utilized in securing the gasket against rotation or turning upon the container.

The metal disk 15 rests upon the gasket and is provided with an outlet opening 16 and/or a group of closely spaced dispensing opertures 17. Moreover, this disk is intended to remain stationary with relation to the gasket and container and does so by reason of its contact with the tacky surface of the sealing gasket 14.

A rotary cut-off 18 for the outlet opening, or openings, consists of a sheet metal disk having an opening 19 adapted at times to be brought into registry with said outlet in the first named disk 15. This cut-off is rotatively secured to the container so that it may be moved independently and thereby open or close said outlet opening or openings as aforementioned. Accordingly, this cut-off disk is provided at its margin with spring

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means, in this instance an annular series of fingers 20 formed on the lower edge of a depending continuous flange 21 or wall. These fingers have their free end portions rolled inwardly, upwardly and thence outwardly to present bead-like elements for gripping engagement beneath the shoulder. These bead-like elements also provide guide means which facilitate application of the closure to the container. Mere positioning of the closure loosely upon the container and the application of top pressure to the closure easily and quickly expands the fingers and permits them to snap inwardly beneath and into contact with the shoulder. The pressure is sufficient to seal the container, and prevent accidental opening thereof, while permitting independent manual rotation of the cut-off. Also, there is sufficient resilience in the spring fingers to compensate for normal variations in the contour and/or dimension of the shoulder at the filling opening.

Modifications may be resorted to within the spirit and scope of my invention.

I claim:

1. In combination, a container having a continuous wall defining a filling opening, and an annular external shoulder in close proximity to said opening, a sifter type closure for said opening comprising a ring gasket positioned upon the outer end of the opening defining wall, said gasket having tacky upper and lower surfaces a disk engaging the upper side of said gasket and held against rotary movement by the tacky surface, said disk having a dispensing opening, a rotary cut-off consisting of a disk formed with an outlet adapted to be moved into and out of registry with the dispensing opening incident to rotation of the cut-off about its axis and an annular series of independent spring fingers formed at the periphery of the cut-off disk, said fingers shaped to snap over the shoulder incident to the application of top pressure to the cut-off disk and then securely yet slidingly engage said shoulder and retain the closure and container assembled.

2. In combination, a container having a continuous wall defining a filling opening, and an annular external shoulder in close proximity to said opening, a sifter type closure for said opening comprising a ring type sealing gasket having tacky upper and lower surfaces for engagement with the outer end of the opening defining wall, a metal disk substantially closing the opening and having a dispensing opening therein, a rotary cut-off consisting of a sheet metal disk positioned in sliding contact with first named disk and hav-

ing an outlet adapted incident to rotation thereof to be moved into and out of registry with said dispensing opening, and an annular series of depending spring fingers at the periphery of the cut-off for rotatively engaging beneath said shoulder, each finger being rolled inwardly and upwardly at its free end to provide a guiding surface facilitating application of the closure to the container solely through the application of top pressure.

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