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W. P. HARRISON

CLOSURE FOR CONTAINERS

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Fig. 1.

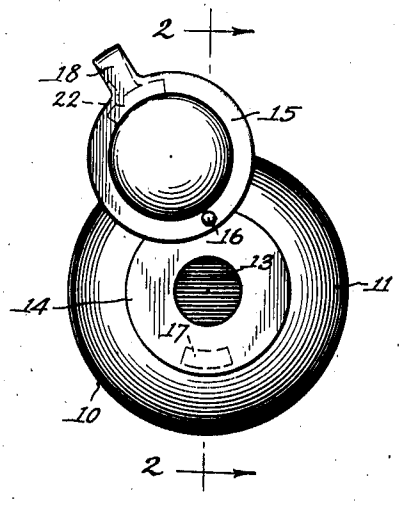


Fig. 2.

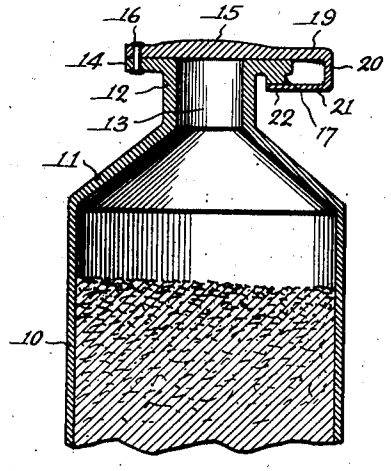
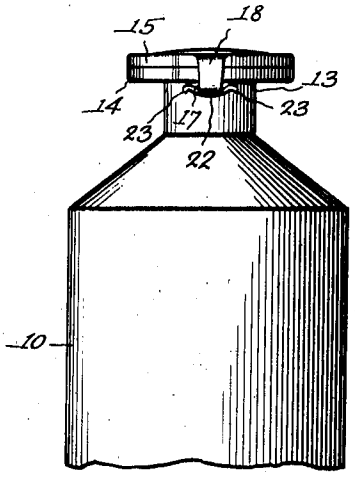


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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CLOSURE FOR CONTAINERS.

Application filed May 25, 1926. Serial No. 111,609.

This invention relates to closures for rigid and semi-rigid collapsible containers for controlling the discharge of the contents of the containers.

An object of the invention is the provision of a closure for containers of the indicated character which may be conveniently and easily actuated, which will be permanently associated with the container, and in which the closure member will be releasably retained in a closed position in a novel manner.

A further object of the invention is the provision in a closure construction of the indicated character having a closure member which may be moved in opposite directions for controlling an outlet in conjunction with means for releasably retaining the closure in a closed position, and which closure member may be moved in either direction to an open position from the influence of the retaining means.

The nature of the invention and its distinguishing features and advantages will appear when the following specification is read in connection with the accompanying drawing, in which—

Figure 1 is a plan view of one type of container with the closure of the present invention applied thereto, the closure member being shown in an open position.

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1, a portion of the container body being broken away, and the closure member being shown releasably retained in a closed position.

Fig. 3 is a side view showing the closure member in a closed position.

The practice of the present invention will essentially include the use of a container which may be of any of the types used either rigid or semi-rigid collapsible types, which contain divers commodities such as powder, pastes, creams and liquid lotions.

Referring now more particularly to the drawing, it will be apparent that, there is shown a container 10 having a discharge end consisting of a breast 11 having a neck 12. The neck has a discharge passage or outlet 13 which communicates with the interior of the container body. In the present instance the neck has formed thereon a flange 14 which forms a smooth even top surface. A closure member 15 is provided for controlling the outlet 13. The closure member 15 is connected for movement by a means in the form of a rivet 16 which extends through an edge portion of the closure member, and an edge portion of the flange 14 so as to permit the closure member to be moved to either side of the neck 12. Means is provided for releasably retaining the closure member in closed position, the said means being operable to retain the closure member in closed position in response to the movement of the closure member in either direction, said closure member being also releasable from the influence of the means which retains it in a closed position, upon movement of the closure member in either direction. The retaining means, in the present instance includes a convexed prominence or sector 17 on the under side of the flange 14 at a point diametrically opposite the point of connection of the closure member 15 with the flange 14. The retaining means also includes a spring 18 on the closure member 15 at a point diametrically opposite to the point of pivotal connection of the closure member. The spring 18 is formed with a portion 19 which extends laterally and in the plane of the closure member 15, a portion 20 which extends substantially at a right angle with respect to the portion 19, and a portion 21 which is substantially parallel to the portion 19. The portion 21 terminates in a concaved extremity or sector 22 having a cam-like terminal 23 at either side of the concavity. It will be apparent that the formation of the spring is such that a handle is in fact provided. It will be obvious that when the spring 18 is manipulated to impart pivotal movement to the closure member 15 from the position shown in Fig. 1, that coaction will be set up between the concaved extremity 22 and the prominence 17 on the under side of the flange 14, and as a consequence the closure member 15 will be releasably retained in a closed position as shown most clearly in Fig. 3. The coaction of the concaved extremity 22 and the prominence 17 results by virtue of the flexing of the spring 18, brought about by one of the cam-like terminals riding over the convex surface of the prominence 17 until the prominence is disposed in the concavity. This action takes place regardless of the direction in which the closure member is moved. Furthermore the closure member may be just as conven-

iently and easily moved to an open position regardless of the direction in which the closure member is moved.

When the closure construction of the present invention is applied to a comparatively large container, the flange on the neck may be omitted, and the closure member will be connected directly to the neck and so will the convex prominence 17, and the spring 18 may be obviously modified so that the concaved extremity and its cam-like terminals may coact with the prominence.

I claim:

1. A discharge end construction for a container comprising a neck having an outlet, a closure member for controlling the outlet, said closure member pivotally connected for movement to either side of the neck, a laterally disposed combination spring and handle on the closure member for effecting the movement thereof, said combined spring and handle embodying a concavity and convexities at opposite sides of the concavity respectively, a convex prominence on said neck, said convex prominence adapted to enter said concavity and to be removed therefrom by virtue of the action of said convexities on said convex prominence in the movement of the closure member in either direction.

2. A discharge end construction for a container comprising a neck having a flange and an outlet, a closure member for controlling the outlet, said closure member connected for movement by a means which permits the closure member to be moved to either side of the neck, a spring on the closure member formed with a central concaved portion with a cam-like portion at either side of the concaved portion, a convexed prominence on the under side of said flange, each cam-like portion riding on the convexed prominence to flex the spring in the movement of the closure member to a closed position to bring the concaved portion in place to receive the convexed prominence.

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