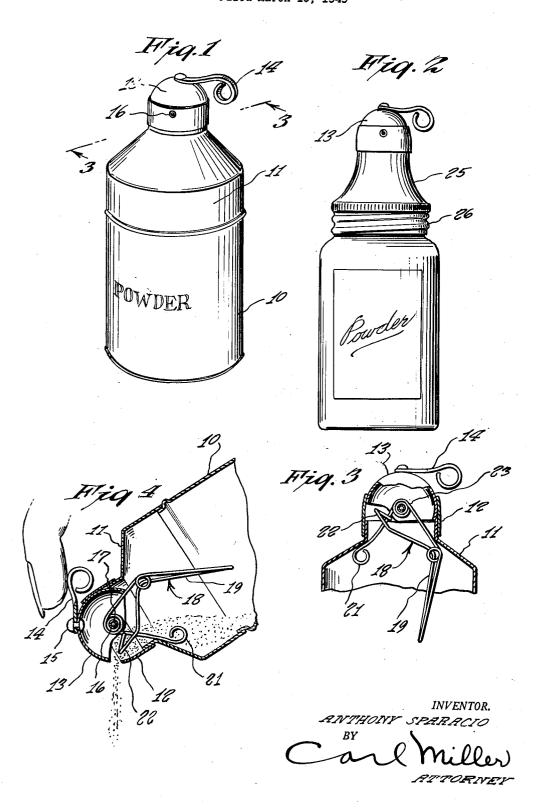
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DISPENSING CAP WITH SELF-CLOSING VALVE, HAVING AN AGITATOR INTEGRAL WITH THE MOVABLE VALVE ELEMENT Filed March 19, 1949



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DISPENSING CAP WITH SELF-CLOSING VALVE, HAVING AN AGITATOR INTEGRAL WITH THE MOVABLE VALVE ELEMENT

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1 Claim. (Cl. 222-228)

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This invention relates to a dispensing cap.

It is an object of the present invention to provide a dispensing cap which will be automatically returned to its closed position upon release of the handle serving to open the cap and wherein the means for returning the cap serves to maintain the cap within the container.

It is another object of the present invention to provide an automatic agitating means serving to break up the lumps of powder within the can 10 each time the closure element is operated and also to provide means located at the opening of the closure element to eject the powder to the opening when the dispenser closure is actuated.

Other objects of the present invention are to provide a dispensing container cap which is automatically returned to its closed position, which is of simple construction, inexpensive to manufacture and provide upon the container, has a minimum number of parts, provides a neat exterior appearance, compact, convenient to use and efficient in operation.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which

Fig. 1 is a perspective view of a container embodying the features of the present invention.

Fig. 2 is a side elevational view of a different $_{30}$ type of container utilizing the cap of the present invention.

Fig. 3 is a fragmentary sectional view taken generally on line 3—3 of Fig. 1.

Fig. 4 is a fragmentary sectional view of the 35 container tilted and the cap moved to an open position to permit the dispensing of the contents of the container.

Referring now to the figures, 10 represents a container having a top 11 on which is fitted a socket 12 for rotatably receiving a semi-spherical shaped cap 13 to the upper end of which is fixed a handle 14 by means of a rivet 15.

Extending through the cap is a transverse sleeve 16 serving as a trunnion for the cap and through which a pin 17 is extended for the securement of the cap to the socket member 12 for pivotal adjustment with respect thereto.

Surrounding the trunnion sleeve 16 is a spring device 18 having a bent and coiled portion 19 and a free end 21. The bent portion has a hook extension 22 for engagement with the portion 21 to limit the outward extension of the spring device and a coil portion 23 surrounding the cap sleeve 16.

When the handle 14 is depressed, the portion 21 will be sprung toward the portion 19 and the portion 21 will tend to spread from the portion 19 upon the handle 14 being released whereby the cap 13 will be automatically moved to its 60

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closed position and held by the spring device in tight engagement with the top II of the container.

In Fig. 2 there is shown a slightly modified form of the invention wherein the container has a screw top as indicated at 25. The container has a threaded portion for receiving the top 25. The cap 13 is mounted upon the upper end of the top 25 in the same manner as above described.

It will be apparent that the portion 19 will be in constant engagement with the powder so as to break up any lumps of the powder which may be formed within the container. The hook extension 22 is operable in the closure element and adjacent the portion or socket 12 for use in such a manner as to force the powder out over the edge of the socket.

Accordingly, upon each movement of the closure element 13 the spring device will be actuated to positively break up the lumps and to positively force the powder out of the opening provided by the socket 12.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claim.

Having thus set forth and disclosed the nature of my invention, what is claimed is:

A dispensing cap device for containers comprising a socket member adapted to fit the top of the container, a semi-spherical cap operable in the socket member, handle means on the cap for operating the same, a spring device expandable through the socket and adapted to extend into the container and adapted to be worked by the cap when the cap is moved between open and closed positions, said spring device having an extension extending substantially into the inte-40 rior of the container to break up the powder as the cap is operated, and a second extension disposed in the opening and forming a part of the spring device to force portions of the contents over the socket member and out of the container automatically as the cap is moved to an open position.

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