May 5, 1942. F. E. WOLCOTT 2,281,738

DISPENSER

Filed Dec. 13, 1938

Fig. 1.

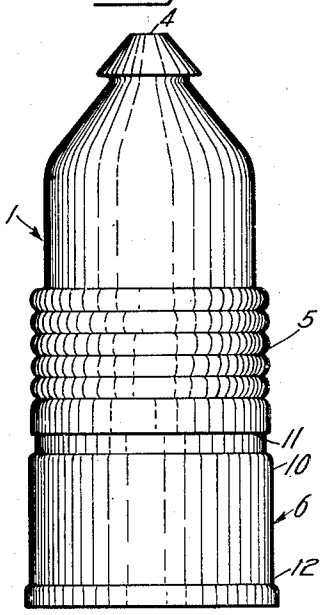


Fig. 2.

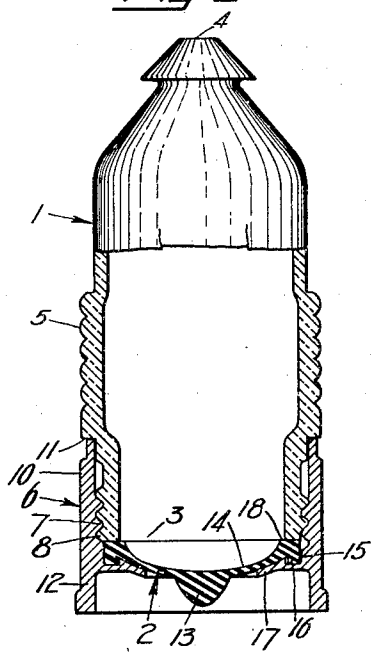


Fig. 5.

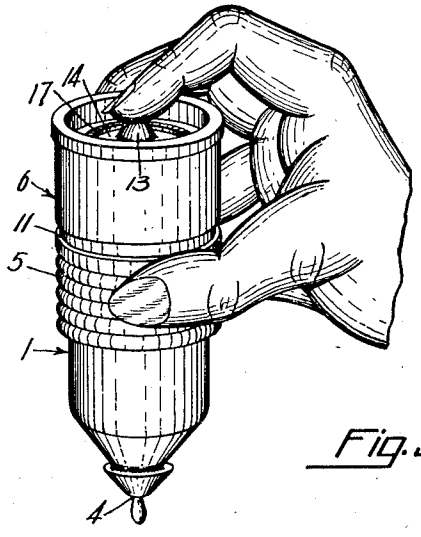


Fig. 3.

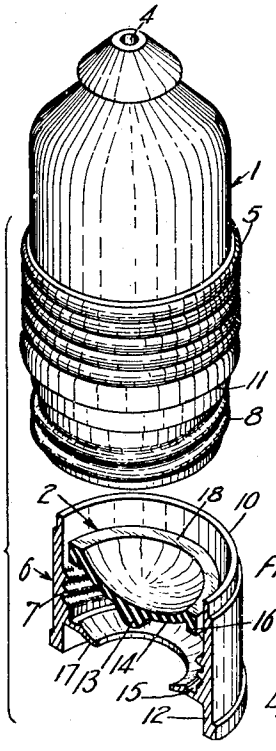
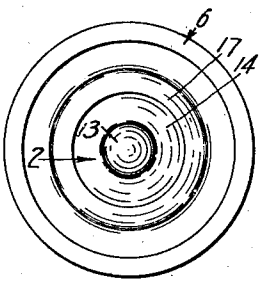


Fig. 4.



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UNITED STATES PATENT OFFICE

2,281,738

DISPENSER

Frank E. Wolcott, West Hartford, Conn.

Application December 13, 1938, Serial No. 245,459

3 Claims. (Cl. 221—76)

My invention relates to dispensers.

It has heretofore been proposed to provide dispensers for comestibles or the like comprising a dispenser element and a container element, the dispenser being supported vertically in the container element when not in use and removed therefrom when desired. Further, it has been the practice to provide an outlet at the bottom of the dispenser when so supported and to provide on the top of the dispenser element when so supported, a resilient actuating member or diaphragm, so that, after lifting the dispenser element from the container element and while holding the dispenser element over the food and between the thumb and middle finger, the user may depress this resilient member as desired with his forefinger to effect the desired discharge from the bottom outlet of the dispenser. Further, closure means have been provided in the container associated with this bottom outlet to prevent leakage of liquid from the dispenser either by dripping or as a result of operation of the resilient member, as by a curious person, while the dispenser element is disposed in the container.

My invention has among its objects to provide an improved dispenser, and, more particularly, one adapted to overcome various objections to the above dispensers. A further object of my invention is to eliminate the necessity for the separate container element or stand and the necessity for placing the dispenser therein or removing the same therefrom. A still further object of my invention is to eliminate the difficulty from operation of the resilient actuating member when the dispenser is not in use and the necessity for providing closure means for the bottom outlet of the dispenser element. Still further objects of my invention include the provision of an improved dispenser and supporting structure of unitary form adapted to make the above improved results possible while being convenient in use and of an improved and simplified construction as compared with the above described dispensers and others of the prior art. Other objects of my invention are to provide such an improved unitary construction having improved supporting means on the end of the dispenser carrying the resilient actuating member and such improved means adapted to provide a support on which the dispenser may be seated when not in use, while permitting the same to be readily inverted for use and when refilling, and to provide such an improved supporting construction associated in an improved manner with the removable means for connecting the resilient actuating member over the refilling aperture in the container and also adapted to be produced at markedly less expense than the previous constructions mentioned. These and other objects and advantages of my improved construction will, however, hereinafter more fully appear.

In the accompanying drawing, I have shown for purposes of illustration one embodiment which my invention may assume in practice.

In the drawing:

Figure 1 is a side elevation of a dispenser of my improved construction, the same being shown in inoperative vertical position;

Fig. 2 is a like view, the bottom portion of the dispenser being shown in central vertical section;

Fig. 3 is a perspective view showing the parts in spaced relation one above another, the two bottom elements here being shown in section;

Fig. 4 is a bottom plan view of the dispenser shown in Figure 1, and

Fig. 5 is a somewhat reduced view showing the dispenser in use.

In my improved construction, it will be observed that the dispenser is of the general type described and claimed in my copending application Serial No. 245,460, filed December 13, 1938 the same including a glass dispenser 1 having a resilient or rubber actuating disc 2 disposed over an apertured filling portion 3 at one end of the member 1, while a constantly open outlet 4 is at the other end of the member 1, and a suitably roughened or ribbed grasping portion 5 is provided intermediate the ends of the member 1; an improved member comprising a combined support and cap, generally indicated at 6, herein being provided and cooperating in an improved manner with the resilient actuating member 2, which herein is imperforate, in such manner as to form the improved unitary dispensing and supporting structure hereinafter more fully described.

Referring more particularly to my improved construction, it will be noted that the member 6 is threaded intermediate its ends, as at 7, to a corresponding threaded portion 8 on the bottom of the dispenser 1 and surrounding the filling aperture 3, herein at the bottom of the device, when in inoperative position, including a plurality of turns of threads. Herein, it will also be noted that the member 6 has an upstanding annular portion 10 extending above the threaded portion 7 in the inoperative position of the dispenser and engageable with an annular shoulder 11 at the bottom of the roughened or ribbed portion 5 on the dispenser. Moreover, the member 6 is also

provided below its threads 7 with a depending annular portion 12 which herein surrounds and extends below a depending and imperforate actuating projection 13 on the dome 14 of the resilient actuating member 2, which dome 14 herein also depends from the latter member. Here it will also be noted that this portion 12 herein is preferably of substantially the same maximum outside diameter as the grasping portion 5 on the dispenser 1 in order to facilitate swinging movements of the latter in the hand, as hereinafter described. Intermediate these annular portions 10 and 12 and herein just below the bottom thread 7, it will also be observed that the member 6 is provided with an upwardly opening annular groove 15 adapted to receive a corresponding depending flange 16 on the bottom periphery of the disc 2. Further, it will be observed that the member 6 is provided with an axially apertured abutment portion 17 extending inwardly, or toward the axis of the member 6, from this groove and underlying and conforming to and normally engaging a substantial portion of the dome on the disc 2, while exposing the axially located, depending actuating projection 13. Also, it will be observed that when the member 6 is threaded on to the threaded portion 8 on the bottom of the dispenser 1, a peripheral sealing flange 18 on the top of the disc and above the flange 16 is pressed tightly against the bottom edge of the apertured filling portion 3.

In the use of my improved construction, it will be evident that it is made possible for the dispenser to be supported when inoperative, upon the end thereof carrying the resilient actuating disc 2. Further, when so supported, it will be observed that the construction is such as, by reason of the new location of the disc 2, markedly to decrease the chance of inadvertent operation of the same. Further, it will be observed that when the dispenser is in inoperative position, the projection 13 is so disposed above the bottom of the annular supporting portion 12 as effectually to prevent operation while placing the device in inoperative position, as, for example, upon a table. On the other hand, when it is desired to use the dispenser, it is only necessary to grasp the same at its middle and swing it in the hand between the fingers to the position illustrated in Figure 5, which is the normal dispensing position for such devices and wherein the projection 13 of the resilient actuating disc 2 is exposed for depression by the finger in a usual manner. Further, after the material in the dispenser 1 has discharged as desired, it will be evident that any drop pendent from the outlet 4 will be sucked back due to the vacuum condition resulting from release of the projection 13 following depression thereof. Obviously, at the completion of dispensing, the device is simply again reversed in the fingers, and placed on the table in the position shown in Figure 1.

As a result of my improved construction, it will also be evident that all need for providing a usual separate tubular container with each dispenser is eliminated, my improved member 6 performing the supporting function thereof while also functioning as a detachable cap. Further, it will be evident that at the same time that individual containers for the dispensers are eliminated, it is also made possible to eliminate all need for any closure means ordinarily provided in the bottom of each container to close the outlet at the bottom of prior dispensers when not in use. Instead, as a result of my improvements, when refilling a series of dispensers, it is possible to invert them and fill them successively in a single container provided in the kitchen or pantry, the members 6 then being at the top and readily removable and replaceable, with the discs 2, as necessary incident to filling. Further, it will be evident that when in inoperative position, the disc 2 being without an aperture therein and securely clamped in sealing position by the member 6, there will be no leakage at the bottom of the device, while the outlet 4 is so small as to minimize objection. Attention is also directed to the fact that my improved construction is such as to enable, if desired, a standard dispenser glass and a standard disc 2 of the closed type to be used on both this construction and in that of my previously mentioned application. These and other advantages of my improved construction will, however, be clearly apparent to those skilled in the art.

While I have in this application specifically described one embodiment which my invention may assume in practice, it will be understood that the same is shown for purposes of illustration, and that the invention may be modified and embodied in various other forms without departing from its spirit or the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent is:

1. In a dispenser, an axially apertured and internally threaded base having an abutment portion below the threads therein, a container having an outlet at one end and a filling aperture at the opposite end thereof and having a grasping portion intermediate its ends and said opposite end reduced in cross section and threaded inside said base, and a resilient flow controlling member clamped between the bottom of the reduced end of said container and said abutment portion and operable through the axial aperture in said base, said base having a bottom portion projecting below said abutment portion and a top portion projecting above the threads therein and along said reduced portion into adjacency to said grasping portion.

2. In a dispenser, a member comprising a combined support and cap having an internally threaded portion, an axially apertured flange extending transversely toward the axis of the member from the inner wall of said member and at one end of said threaded portion, and a support on the opposite side of said flange from said threaded portion and extending from said flange longitudinally of said member in the opposite direction from said threaded portion, said flange having an annular groove therein in the face thereof toward said threaded portion.

3. In a dispenser, a member comprising a combined support and cap having an internally threaded portion, an axially apertured flange extending transversely toward the axis of the member from the inner wall of said cap and at one end of said threaded portion, a supporting portion on the opposite side of said flange from said threaded portion and extending from said flange longitudinally of said member in the opposite direction from said threaded portion, a resilient sealing and actuating member having an inverted domed portion in engagement with said flange, and an extension on said domed portion operable through the aperture in the flange and terminating above the bottom of said supporting member.

FRANK E. WOLCOTT.