

July 10, 1928.

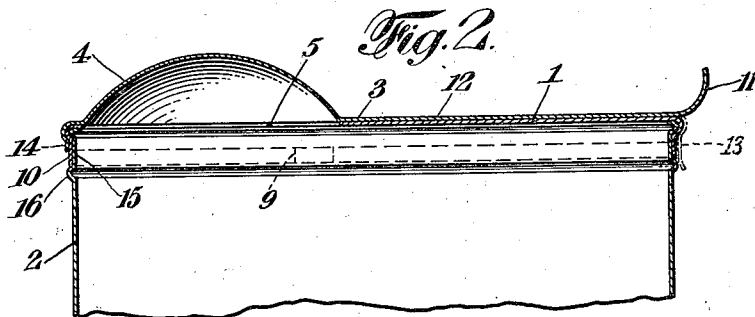
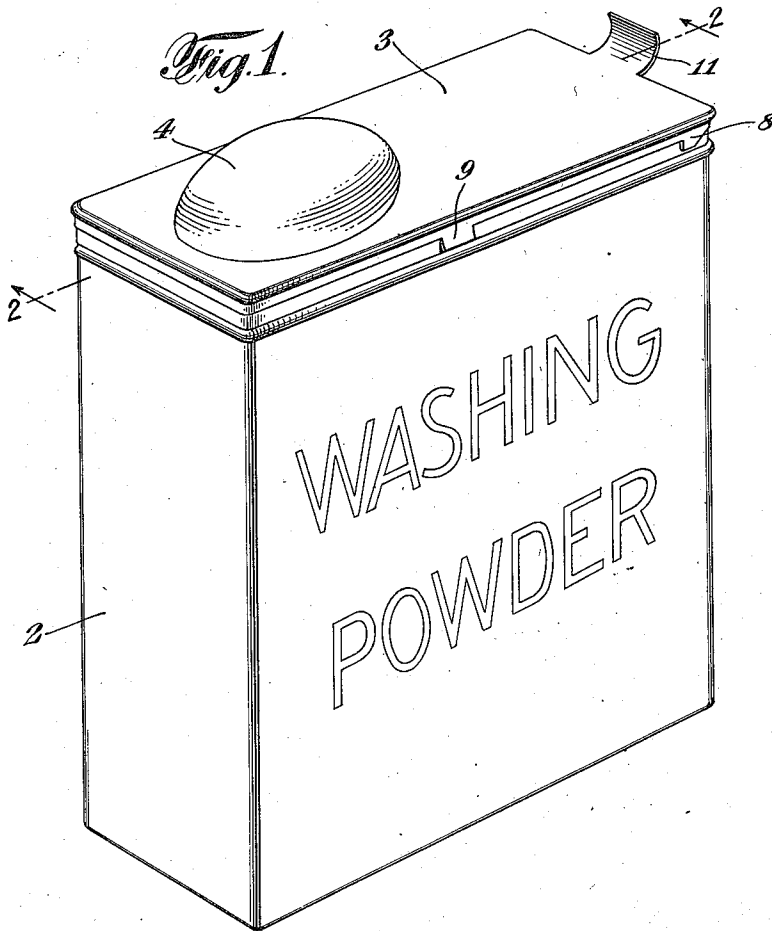
1,676,348

M. K. O'LEARY

DISPENSING CLOSURE FOR CONTAINERS

Filed March 14, 1925

2 Sheets-Sheet 1



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Fig. 3.

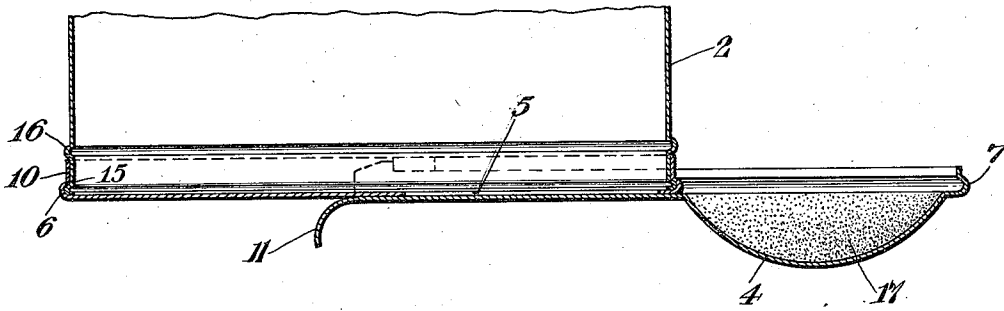


Fig. 4.

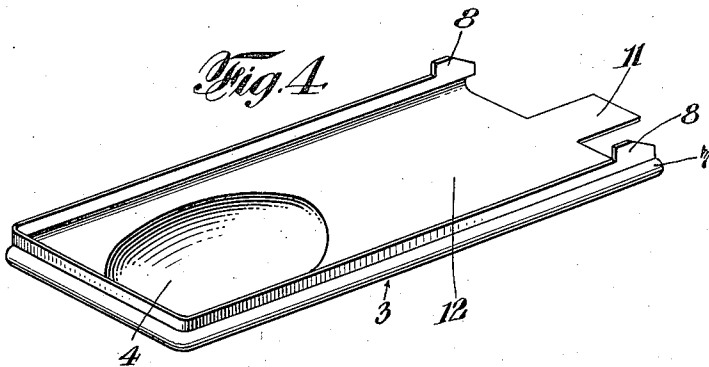


Fig. 5.

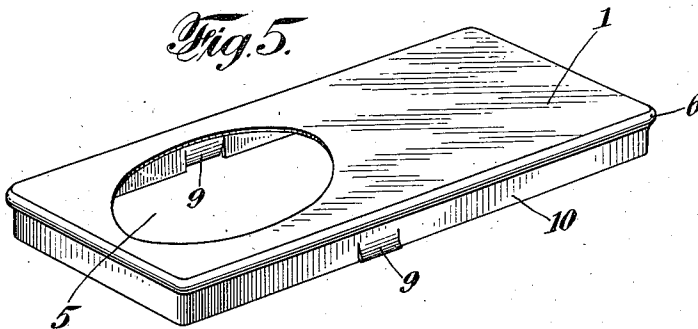
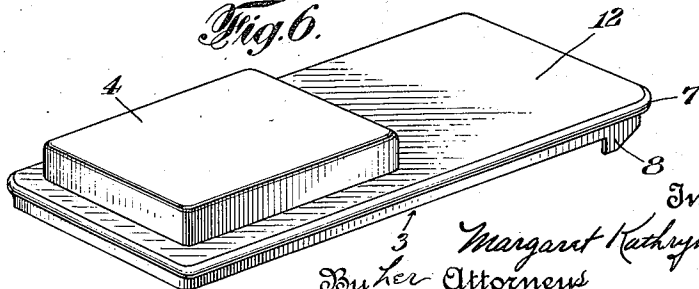


Fig. 6.



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DISPENSING CLOSURE FOR CONTAINERS.

Application filed March 14, 1925. Serial No. 15,437.

This invention relates to a dispensing closure for a container and the general object is to provide such a closure by which the contents of the container may be measured out and definite quantities of the contents delivered.

A further object of the invention is to provide a dispensing closure which is cheap and easy to manufacture.

Another object of the invention is to provide a dispensing closure which is easy to manipulate.

Another object of the invention is to provide a dispensing closure which may securely be locked in closed position for shipping the filled container, but which may easily be unlocked when it is desired to dispense the contents of the container.

A still further object of the invention is to provide a dispensing closure which may be removed from an empty container and placed on another similar container for use therewith.

Other objects and features of the invention will more fully appear from the following description and the accompanying drawings and will be particularly pointed out in the claims.

The drawings illustrate both in perspective and section a preferred form of construction adapted for use in a dispensing closure and embody the broad principles of the invention and show a manner in which the invention may be used.

In the drawings,

Fig. 1 is a perspective view of the dispensing closure applied to a container.

Fig. 2 is a partial section on line 2—2 Fig. 1.

Fig. 3 is a partial section through the closure and container with the parts in the position ready to discharge a measured quantity of material from the measuring device.

Fig. 4 is a perspective of the outer or movable member of the closure in inverted position showing the measuring device.

Fig. 5 is a perspective of the inner or fixed member of the closure.

Fig. 6 is a perspective of the outer or movable member of the closure showing a measuring device having a shape different from that of the measuring device shown in the other figures.

The closure is particularly designed to be used in connection with packages of more

or less finely divided bulk material, such as washing powder, and is designed to be retained at the upper edge of the container to cover the opening left after the top of the container has been removed or an opening cut in the top so that when the container is inverted, the material may escape through the opening into the measuring device. When the measuring device is filled, the closure is operated to move the measuring device into such a position that the material therein may be discharged.

The measuring device is normally in a position covering the opening into the container. When the container is inverted a portion of its contents falls through the opening into the measuring device which may then be moved beyond the edge of the container into such a position that the material therein may be discharged from the measuring device. When the measuring device is moved into its discharging position a part of the movable member of the closure with which the measuring device is connected closes the opening into the container to prevent the passage of more of the contents through the opening. After the material in the measuring device has been discharged the movable member and measuring device are returned to such a position that the measuring device is opposite the opening into the container ready to receive and measure out another portion of the contents of the container.

As illustrated in the drawings, the dispensing closure comprises an inner or fixed member 1 retained on a container 2 and a movable or outer member 3 to which is connected a measuring device 4 shown in Fig. 2 as being spoon shaped and in Fig. 6 as being rectangular in shape. The inner or fixed member 1 has an opening 5 providing communication with the inside of the container and is so positioned with relation to the measuring device 4 that the contents of the container may pass through the opening 5 into the measuring device when the outer or movable member and the measuring device are in their normal positions illustrated in Figs. 1 and 2 with the measuring device covering the opening. The measuring device may have any suitable shape. As illustrated in Figs. 1 to 4 it has a spoon shape and may be of such a size that it measures out the equivalent of a spoonful of the contents of the container. This is

a convenience for the person using the contents of the container, because often directions for use of the contents of the container call for the use of one or more spoonfuls. The measuring device may have the shape shown in Fig. 6. This shape has been found convenient for use on packages which are to be shipped because the packages may conveniently be packed.

In order to permit the easy and quick assembly of the parts of the closure, the end of the outer or movable member lying away from the measuring device is cut away so that the closure may be assembled when desired by placing the open end of the movable member on the end of the fixed member and then pushing the movable member into position. To retain the movable and fixed members in assembled relation, the fixed member is provided with a flange 6 and the movable member is formed with a beading 7 which fits around and closely embraces the flange 6 but still permits sliding relative movement of the members with regard to each other.

It is desirable to provide means by which the movement of the movable member is limited so that it will not readily slide off of the fixed member, but yet may have the movement necessary to permit the shifting of the measuring device from filling to discharging position. For this purpose one or more stops 8 are formed on the movable member and a corresponding number of tabs 9 are formed on the depending edges 10 of the fixed member. The stops and tabs are so positioned with relation to each other that when they are in engagement, as shown in Fig. 3, the measuring device is far enough beyond the edge of the container to permit the discharge of the material in the measuring device. The tabs 9 are preferably flexible or bendable so that when the inner and outer members of the closure are being assembled the tabs 9 can be bent down in line with the depending edge 10 of the fixed member and the movable member then slipped on to the fixed member without tabs 9 engaging with the stops 8, but when the movable member is on the fixed member the tabs 9 may be bent outwardly into the position shown in Figs. 1 and 5 in which the tabs and stops engage with each other if the movable member is moved to such a position that the measuring device may discharge the material which it contains.

To lock securely the movable member in position closing the container so that the contents of the container will not be lost during shipment and also to provide a means to assist the person using the closure to operate the same, a flexible finger piece 11 is formed on the end of the movable member adjacent the portion which is cut away. When the fixed and movable members are

being assembled to form the closure, the finger piece is in the plane of or above the flat top portion 12 of the movable member, so that the movable member may be slipped on the fixed member, but after the closure has been assembled the finger piece is bent down into the position shown at 13 in Fig. 2. With the finger piece in this position, the movable member is securely locked on the fixed member by the engagement of the finger piece with the depending edge 10 of the fixed member on one side of the container and the engagement of the edge 14 of the movable member with the depending edge 10 of the fixed member on the other side. When it is desired to use the contents of the container the finger piece is bent upwardly to the position 11 shown in Fig. 2 in which position the movable member is free to slide to the left until the stops 8 engage the tabs 9.

The closure may be retained on the container in any suitable manner. As illustrated the depending edge 10 of the fixed member is in frictional engagement with the upper edge 15 of the container which may be provided with a flange 16 to form a seat for the depending edge 10. Also, if the container is made of a soft material such as paper, and the closure is firmly pressed thereon, the uppermost part of the upper edge 15 will to some extent curl up inside of the flange 6 to assist in holding the fixed member in place on the container.

The closure is very simple and cheap to manufacture. It may be made of any suitable material, but is preferably made from metal of suitable thickness. The measuring device may be fastened to the movable member in any convenient manner. As illustrated, the measuring device is integral with the movable member and the combined measuring device and movable member may be formed at one operation by a stamping process. The fixed member may likewise be formed by a single stamping operation during which the opening 5 and the tabs 9 are cut. Having formed the fixed and movable members, they are assembled by slipping the movable member on the fixed member until the measuring device covers the opening 5 when, by bending the finger piece 11 down over the adjacent end of the fixed member the parts of the closure are securely locked in position. After the container is filled the assembled closure is placed on the end of the container which is then ready for shipment.

In using the closure the finger piece 11 is bent upwardly to permit movement of the movable member and the tabs 9 are bent outwardly into a position to engage the stops 8. The container is then inverted so that a portion of its contents 17 falls through the opening 5 into the measuring device 4 which is thereby filled. The movable member is

then moved to the position shown in Fig. 3 in which the measuring device projects beyond the edge of the container, the stops 8 and tabs 9 are in engagement, and the opening 5 is closed by the solid portion 12 of the movable member 3 to prevent further passage of the contents of the container through the opening. Then, by turning the container, the material in the measuring device is discharged after which the movable member is returned to its original position with the measuring device covering the opening 5 and ready to receive another portion of the contents of the container.

Although a particular and preferred form of the invention has been described, it is recognized that modifications may be made and it is distinctly to be understood that the invention is to be construed as broadly as the limitations in the claims taken in conjunction with the prior art, may allow.

I claim:

1. A dispensing closure for a container comprising an inner member adapted to be retained on the container and having an opening communicating with the inside of the container, an outer member movably retained on the inner member, a measuring device connected to said outer member normally covering said opening in a position to be filled therethrough with the contents of the container and movable to a position for discharging the material in the device while the opening is closed, a stop on said outer member and a flexible tab on said inner member adapted to lie either in non-engaging position or in position to engage

the stop to limit the movement of the outer member and measuring device.

2. A dispensing closure for a container comprising a fixed member having an opening communicating with the inside of the container, a movable member movably retained on the fixed member, a measuring device connected to said movable member normally covering said opening in a position to be filled therethrough with the contents of the container and movable into a position for discharging the material in the device while the opening is closed, a flexible finger piece on one of the members adapted when in one position to hold the members in fixed relation to each other and when in another position to assist in moving the movable member.

3. A dispensing closure for a container comprising a fixed member having an opening communicating with the inside of the container, a flange around the edge of the fixed member, a movable member having an open side to permit it to slide on to the fixed member, a beading on the movable member for engagement with said flange to retain the movable member on the fixed member, a flexible finger piece on the movable member adjacent said open side adapted to be bent over the edge of the container to hold the movable member on the fixed member and adapted when not over the edge of the container to assist in moving the movable member.

In testimony that I claim the foregoing, I have hereunto set my hand this 26th day of February, 1925.

MARGARET KATHRYN O'LEARY.