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DISPENSING DEVICE FOR CONTAINERS

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6 Claims. (Cl. 65—51)

This invention relates to devices for covering and dispensing the contents of containers of viscous liquids, granulated sugars, or other flowable substances.

This invention provides a simple device for the dispensing of substances that have a tendency to drip and leave an ordinary container in a messy condition.

Another object of this invention is to provide a closure at the lowest possible cost so that it may be sold with a product in place of the regular cap or lid.

This invention also provides a means whereby a person who has lost the use of his thumb or forefinger can enjoy the features of this type of dispenser.

The simplicity of construction and other objects and advantages of this invention will be apparent from the description and drawing in which:

Figure 1 is a side view of the invention, partly in section, as it is attached to a container, part of which is shown;

Figure 2 is a plan view of Figure 1;

Figure 3 is a modified form of the invention, partly in section;

Figure 4 is a plan view of Figure 3;

Figure 5 is a side view of another modification of the device.

The numeral 5 refers to a container of any well known type to which is attached a base 7 which may be made by die-casting. This base has a pouring spout 8 and opposite thereto arms 10, 10 which terminate in a support 20 for one end of handle portion 11. The flexible handle portion 12, made of any spring material, is yieldably connected to handle portion 11 through the bend 12. The portions of the handle 11—12—13 taken together, will be considered as a handle. The flexible handle portion 13 in its upward course is adapted to close a vent hole 3 in base 7. The upper end of flexible handle portion 13 is flattened and bent at 14a to form a slide plate 14 normally closing spout 8.

By providing the slide plate 14, which is preferably made of a flexible and resilient material, with a normal or initial downward tension when it is attached to the end of the flexible handle portion 13 as shown at 14a in Figure 1, means for holding or guiding the slide plate may be omitted. The result of this initial downward tension of the slide plate is shown in Figure 1 where part of the slide plate, referring now to the dotted lines, is shown as being in contact with the upper surface of the base 7 although the point of attachment of the slide plate and the flexible handle portion at 14a is above the plane of the upper surface of the base. This initial downward tension of the slide plate is preferable as thereby the forward or drip cutting portion of the slide plate is maintained in contact with the upper edges of the pouring spout 8 thus producing the well known shearing action when the slide plate returns to a closed position after being manually retracted, cutting or shearing off the flow from the pouring spout. If the slide plate is not provided with this initial downward tension it will be clear of the spout and, although operable, does not produce the desirable shearing action. It is also apparent that the guides 18, 18 in Figures 3 and 4 may be omitted if the slide plate 14 is attached to the flexible handle portion 13 in a manner that will maintain the forward portion of the slide plate in contact with the upper edges of the pouring spout. One of many possible methods of attaching the slide plate to the end of the flexible handle portion so that it will have an initial downward tension is taught in Figures 1 and 2, and by tightly fitting the end of the flexible handle portion 13, of Figure 3, in the opening 18 in the slide plate 14 another method is disclosed.

The container is lifted by grasping the handle 11—12—13 which should be rigid enough to resist any distortion due to the weight of the full container. When it is desired to uncover spout 8 and pour the contents of the container the flexible handle portion 13 is compressed, by gripping the handle, into the approximate position shown by the dotted lines 13a thus uncovering vent hole 3 allowing the introduction of air and moving slide plate 14 which is attached to the end of flexible handle portion 13. When the gripping action is released the slide plate 14 returns to a closed position cutting off the flow from the spout.

The foregoing recital is applicable to Figures 3, 4 and 5 with the following exceptions:

In Figures 3 and 4 a pair of guides 18 are shown, under which the slide plate 14 moves. This slide plate has an opening 19 through which one end of the flexible handle portion 13 projects. The other end of the flexible handle portion is imbedded or otherwise attached to handle portion 11. This flexible handle portion when compressed retreats into the recess 21 in handle portion 11, moving with it the slide plate 14 through its connection with opening 18.

In Figure 5 the spout 16 is integrally connected with the container 18 through neck 17. The upper end of handle portion 11 is extended in a
horizontal direction forming one arm of the arms 10, 10 then, after encircling the neck 17 of container 15 it returns; parallel to the first mentioned arm and with sufficient space between to allow the flexible handle portion to move therein; to the upper end of handle portion 11 and is attached thereto, by soldering or other means, as shown at 20. The upper end of flexible handle portion 13 has a bend 22 before it is soldered or otherwise attached to slide plate 14. This modification does not show a vent hole.

While I have described my invention with some degree of particularity, I do not wish to be limited to the details of construction shown or to the combination and arrangement of the parts except as set forth in the following claims.

I claim:

1. In a device of the class described, the combination with a container and a cap therefore, of means for lifting said container, means for closing an opening in said cap, means for sliding said closing means across said opening, all of the foregoing means being constructed of an integral strip of resilient material and means attached to said cap for guiding said sliding means, said guiding means forming a support for said lifting means.

2. A combined closure and drip cutting dispenser for a container, comprising in combination, a cap having cast integrally at one side thereof a spout having a drip cutting edge and a pair of arms terminating in a support opposite the spout, a bent spring portion forming a handle being attached to said support by one end thereof, a resilient slidable closure plate normally closing said spout and being attached with an initial downward tension to the movable end of said spring portion the edge of said plate passing over and across said drip cutting edge, the said movable end passing between said arms which serve as guides therefore and being normally tensed against the side of said cap.

3. The combination set forth in claim 2, an air passage in said cap, and means whereby said spring portion closes said air passage in unison with the closing of said spout by said closure plate.

4. In a dispensing and drip cutting device for containers of viscous liquids, a cap with an opening in the top thereof and having means for engagement with said container, a support attached to said cap for one end of a U shaped handle, a cover slidable mounted on said cap normally closing said opening, said cover being attached to the free end of the U shaped handle, said free end being movable between the cap and the supported end, said support forming a guide for the said free end, and the said cover being responsive to movement of said free end thereby forcing the edge of said cover over and across said opening.

5. A dispensing and drip cutting device for containers of viscous liquids comprising a body portion having a discharge opening at one side thereof, a closure having an edge thereof slidable over and across said opening and adapted to cut away the drip therefrom, and a spring forming a handle having one end connected to said body portion and having the other end arranged to hold said closure yieldably normally closing said opening said closure being retracted toward said handle when subjecting the handle to operating pressure.

6. The combination with a container for flowable substances, of a cap attachable thereto, a pouring spout having a drip cutting edge at one side of said cap, a slide plate normally closing said spout and arranged to pass over and across said drip cutting edge, a pair of arms terminating at their outward extremities in a support, a handle having a stationary end secured to said support and having a movable end normally pressed against the side of said cap, said movable end being laterally movable between said pair of arms and having a connection with said slide plate thereby retracting the slide plate toward the extremity of said pair of arms from a position normally closing the pouring spout when subjecting the handle to the gripping action of the hand.

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