Aug. 5, 1941. R. BERNHARDT 2,251,392

DISPENSER CLOSURE TOP

Filed June 26, 1939

Fig. 1.

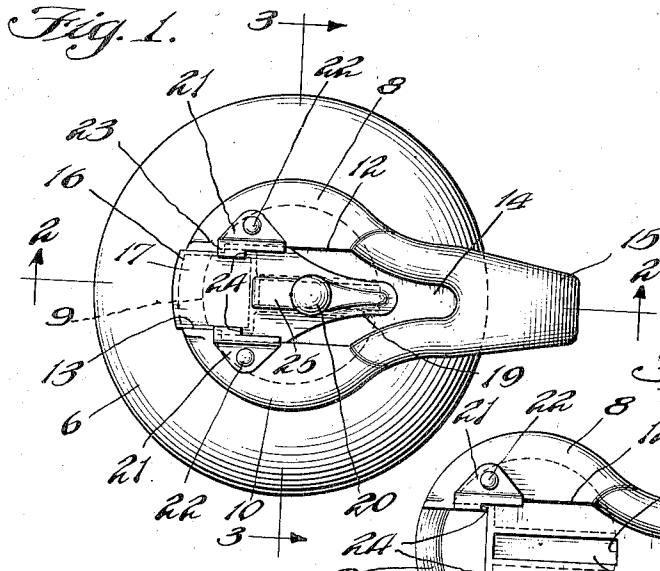


Fig. 4.

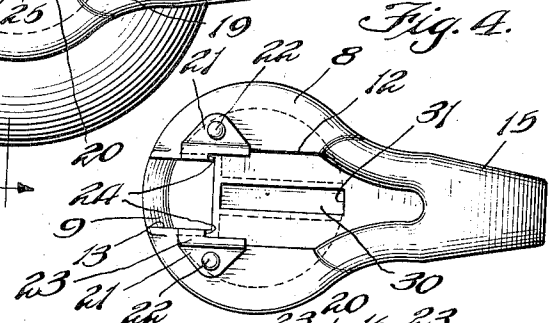
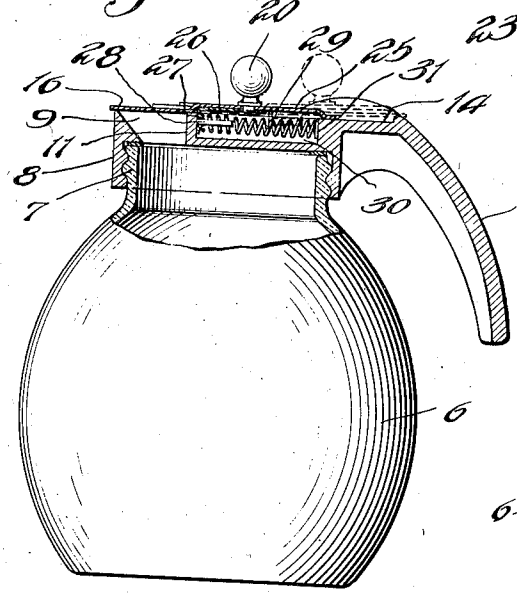


Fig. 2.



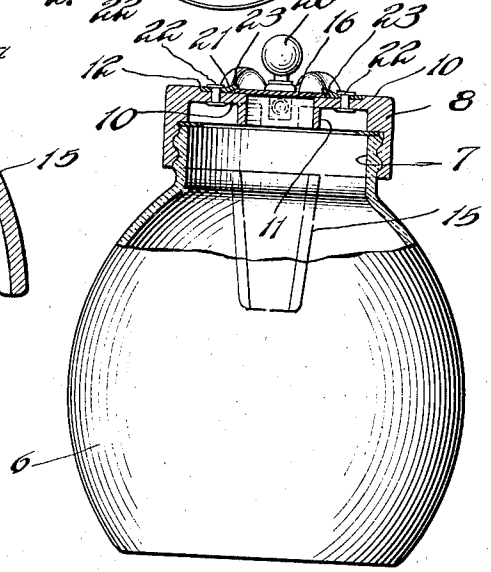
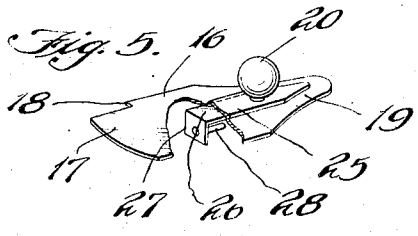


Fig. 3.

Fig. 5.



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DISPENSER CLOSURE TOP

Rudolph Bernhardt, Chicago, Ill.

Application June 26, 1939, Serial No. 281,075

2 Claims. (Cl. 65—31)

Dispensers having pouring spouts with slidable or movable closure devices for cutting off the stream and also for normally closing the spout are in more or less common use. The present invention relates to devices of this kind and particularly to improvements in the structural features and general assembly of the parts.

The principal objects of the invention are to simplify and improve the pouring or dispensing mechanism whereby the dispensing top may be cheaply made; to provide a dispensing container top with a closure slide having means for guiding the same and means for urging the slide to closing position, the arrangement being such that the slide may be readily removed for cleaning; to provide a dispensing container with a top or cap formed of plastic material with spout closing means secured thereto; and to provide such other novel features and improvements as will appear more fully hereinafter.

In the accompanying drawing illustrating this invention,

Figure 1 is a top plan view showing a preferred form of the invention;

Figure 2 is a side view of the container with the top portion broken away and showing a substantially longitudinal sectional view of the closing means;

Figure 3 is a front view of the container with the top broken away and showing substantially a cross section of the closure means;

Figure 4 is a plan view of the top with slide removed; and

Figure 5 is a perspective of the cut-off or closing slide or blade.

The container 6 shown in the drawing is merely illustrative of any suitable form or shape of receptacle and it is illustrated as having a threaded neck 7 which is engaged by a similarly threaded cap 8 although other well known means may be utilized for holding these parts together. The cap 8 may be formed of any suitable material, the one shown being formed of plastic material. This cap or cover has an outlet opening or pouring spout 9 preferably extending to approximately the outermost edge as shown in Figure 2. The top 10 of the cap 8 is relatively thin and the peripheral portion, or side and back walls 11 of the outlet are also relatively thin and extend downwardly from the lower surface of the top as shown in Figures 2 and 3. The upper surface of the top has a transverse guideway or channel 12 extending substantially across the same in alignment with the spout 9. The guideway adjacent to the outer end or over the spout is somewhat narrower than the main portion as shown at 13 and the opposite end of the guideway terminates in a narrowed shoulder portion 14 as shown. The cap has a handle 15 extending on the side opposite from the spout, this handle being preferably formed integrally with the cap and cored out to provide relatively thin walls, the top surface or portion of which extends around over the end 14 of the guideway, thus providing the side walls thereof and also providing an abutment or stop.

A cut-off closure blade or plate 16 is slidably mounted in the guideway 12 and is shaped to conform generally with the guideway but being sufficiently shorter to be actuated therein and also for convenience in removal therefrom. The blade has a narrow end 17 which fits closely over the spout and in the narrow portion 13 of the guideway. Shoulders 18 are formed where the narrow end of the slide merges with the main portion. The opposite or rear end 19 of the slide is narrowed and curved to fit within the correspondingly shaped end 14 of the guideway and is adapted to strike against the walls thereof to limit its backward movement. The slide is provided with a knob or handle 20 for actuating the same. The slide 16 is held in operative position by means of keepers or retainers comprising clips 21 secured to the top of the cap on either side of the guideway. These clips may be fastened by any suitable means as for instance rivets 22. The inner or opposed edges of the clips are slightly raised as shown at 23 to extend over the slide and the raised portions are shouldered as shown at 24 to permit the insertion and removal of the slide. The arrangement is such that the space between the opposed edges of the retaining portions of the clips at the front portions thereof is narrower than the narrow end 17 of the blade while the space between the rear portions or beyond the shoulders 24 is wider than the narrow portion of the blade but slightly wider than the wide portion of the blade. By means of this arrangement, the blade or slide 16 may be inserted by positioning the same as shown in dotted lines in Figure 2 and sliding the forward end into position between the guides or keepers whereby the blade when in operative position will slide freely along the channel or guideway, the rearward movement thereof being stopped by the adjacent walls as above described. When the slide or cut-off member is to be removed as for cleaning, the rear end is slightly lifted and it may then be drawn out from between the keepers as indicated.

The forward end of the slide is of course intended to fully close the spout and preferably extends slightly beyond the wall of the spout as shown in Figure 2 to insure the cutting off of any drip. The blade has a slightly raised longitudinal portion 25 in the center which serves as an ornamental embossment and also provides a channel for receiving a strip 26 which is held therein by the riveted end of the handle 20. This strip has a downwardly extending abutment or end 27 having a point or projection 28 for engagement with one end of a closing spring 29. This spring is positioned in a channel or depression 30 in the top of the cover, the walls of the channel being relatively thin and formed integrally with the cap. The opposite end of the spring 29 engages with the end 31 of the channel which forms an abutment therefor.

These dispensing devices are adapted for use for holding and pouring various materials such as molasses, syrup, honey, or other liquids, and granular materials such as sugar, or the like. The present device which is preferably made principally of plastic material with the metal parts formed of suitable non-corrosive metal, is particularly adapted for catsup, chili sauce, or other products. With the parts assembled as shown the spring tends to bias the slide to closed position to cover the spout. When material is to be poured from the receptacle the handle 15 may be grasped with the hand and the knob 20 engaged by the thumb for drawing back the blade. Upon release of the knob the spring again returns the blade to closed position and tends to cut off any drip at the discharge portion of the spout. The forward or cutting off edge of the blade may be curved to correspond with the pouring lip or may be otherwise shaped as desired.

When the slide is to be removed, as for cleaning, it is drawn back as above described and when the rear end is raised the shoulders 18 will pass out of engagement with the keeper 21 whereby the slide is free for removal.

While I have shown a preferred form of invention, changes may be made in the details of construction to adapt the dispensing top for different containers or for different materials, without departing from the spirit of the invention as set forth in the following claims, in which I claim:

1. The combination with a dispensing cap for a container, having a pouring spout at one side thereof and having a transverse groove across the top in alignment with the spout, the portion of the groove adjacent to the spout being narrower than the remainder thereof and the opposite end of the groove terminating in a raised abutment, of a closure slide movable in said groove, the closing end of the slide being narrower than the body portion thereof and fitting in the narrow portion of the groove, the other end of the slide being adapted to engage with the abutment to limit the movement in the opening direction, shouldered keepers secured to the cap and projecting inwardly over the slide to hold it in operative position, the narrow portion of the slide at the closure end being adapted to pass between the keepers when the other end of the slide is raised for removing the slide, and a spring coacting with the slide and cap for pressing the slide to closing position.

2. In a dispensing device, the combination of a cap having a transverse guideway across the top which is depressed below the surface of the top to form longitudinal guides, and having a pouring spout with its upper surface substantially in alignment with the surface of the guideway, the guideway being narrower adjacent to the spout than throughout the main portion thereof, and also being narrowed toward the opposite end and providing a stop, a closure member slidably mounted in the guideway with the portion extending over the spout narrower than the body portion, an operating finger-piece on the slide for moving it to open position, said stop providing means for limiting the movement in such direction, clips secured to the cap and extending over the closure member, said clips being cut away so that the distance between the front portions thereof is narrower than the distance between the rear portion thereof whereby the narrow portion of the closure member may pass through the wider space between the clips, a channel in the upper surface of the cap, a projection extending downwardly from the closure member, and a compression spring between the projection and the rear end of the channel tending to force the closure member to closing position.

RUDOLPH BERNHARDT.

CERTIFICATE OF CORRECTION.

Patent No. 2,251,392. August 5, 1941.

RUDOLPH BERNHARDT.

It is hereby certified that error appears in the above numbered patent requiring correction as follows: In the grant, lines 1 and 13, name of inventor, for "Ralph Bernhardt" read --Rudolph Bernhardt--; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 23rd day of September, A. D. 1941.

Henry Van Arsdale,
Acting Commissioner of Patents.

(Seal)