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2,488,854

CONTAINER FOR DISPENSING MATERIALS

Filed May 20, 1946

2 Sheets-Sheet 1

FIG. 1.

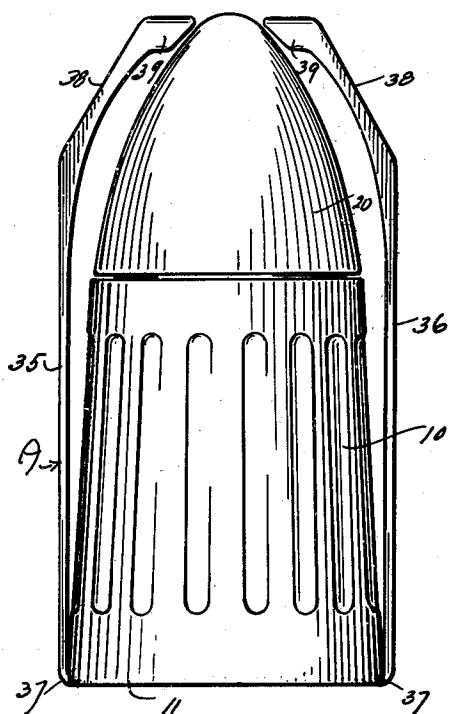


FIG. 2.

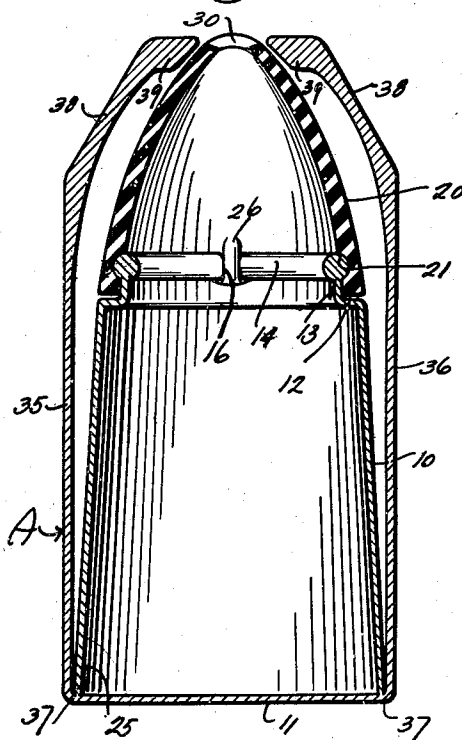


FIG. 3.

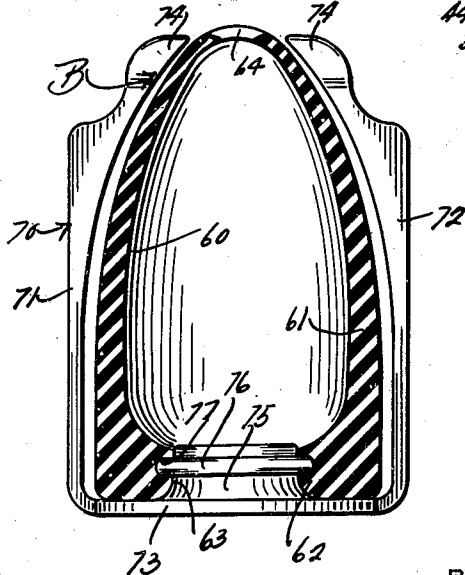


FIG. 4.

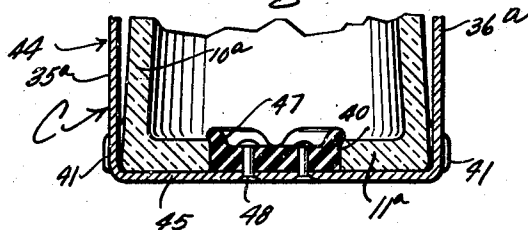
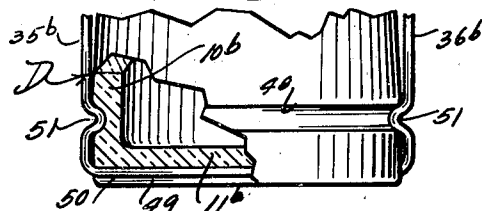


FIG. 5.



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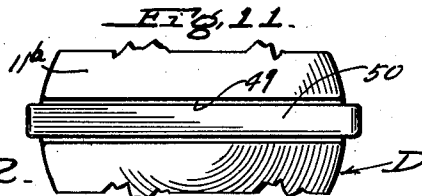
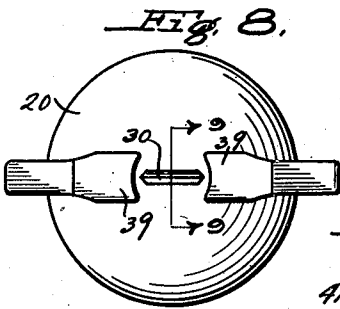
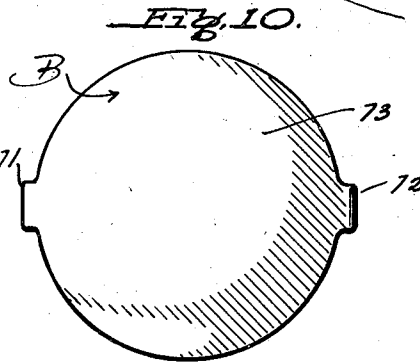
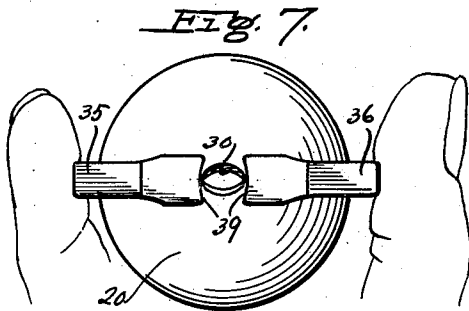
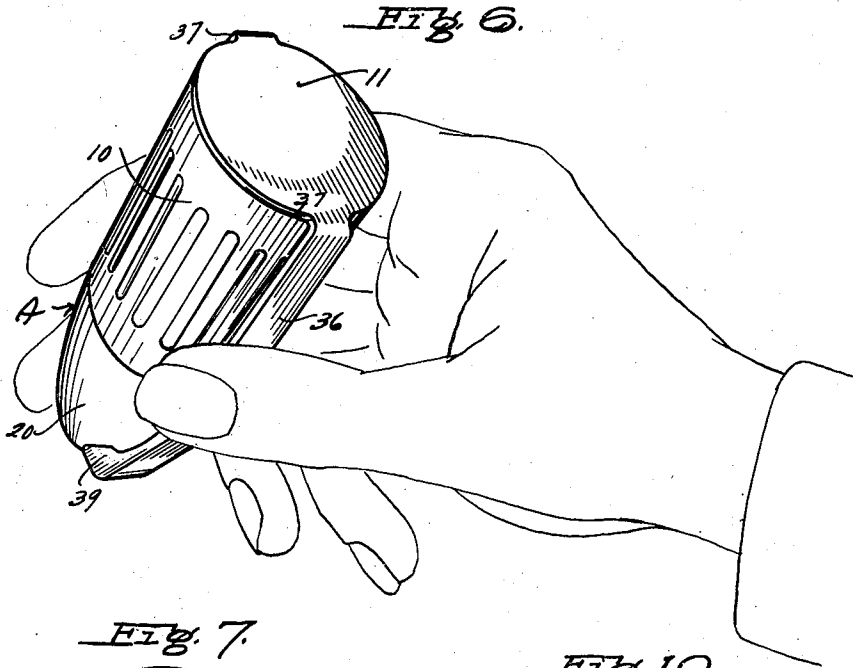
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CONTAINER FOR DISPENSING MATERIALS

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2 Sheets-Sheet 2



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CONTAINER FOR DISPENSING MATERIALS

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Application May 20, 1946, Serial No. 670,919

8-Claims. (Cl. 65-45)

1

This invention relates to improvements in containers for dispensing materials such as salt, pepper, or other comminuted materials.

The primary object of this invention is the provision of an improved container or shaker for dispensing comminuted materials such as salt and will maintain them in hermetically sealed relation against access of moisture thereto. It may with facility be operated by slight pressure of the hand to enable dispensing of the materials through an opening or openings which are dilated through such pressure.

A further object of this invention is the provision of a dispenser for receiving comminuted materials, including a body portion provided with a resilient tip or end having a dispensing slit therein normally closed to hermetically seal the contents against access of air or moisture; the improved container having ornamentally arranged manually operated spring arms associated therewith as a means to facilitate distension of the slit so that the material can be shaken from the tip of the container.

Other objects and advantages of the invention will be apparent from the following detailed description.

In the accompanying drawings, wherein for the purpose of illustration are shown preferred and modified forms of the invention—

Figure 1 is a side elevation of one form of the invention.

Figure 2 is a vertical cross sectional view taken through the form of invention shown in Figure 1.

Figure 3 is a vertical cross sectional view taken through another form of the invention.

Figure 4 is a fragmentary cross sectional view taken through the lower portion of still another form of invention.

Figure 5 is a fragmentary view, partly in section, showing the lower portion of still another form of the invention.

Figure 6 is a view showing the manner in which the receptacle or container is held in the hand of an operator to facilitate and enable dispensing of comminuted materials from the container.

Figure 7 is a top plan view showing the manner in which the container is held in the hand of a user to facilitate distension or dilation of a suitable slit provided in the tip end of the container.

Figure 8 is a view similar to Figure 7 but with the slit closed.

Figure 9 is a transverse sectional view taken substantially on the line 9-9 through the tip end of the container.

2

Figure 10 is a bottom plan view of the container shown in Figures 1 and 3.

Figure 11 is a fragmentary bottom view of the container form shown in Figure 5.

Figure 12 is a fragmentary bottom view of the container form shown in Figure 4.

In the drawings, wherein similar reference characters designate corresponding parts throughout the several views, the letters A, B, C and D may generally designate the forms of invention shown respectively in Figures 1, 3, 4 and 5.

In the form A, the container includes a rigid main body portion 10 which may be of cylindrical form or tapered divergently upward having a bottom wall 11. At its upper end it is inwardly flanged at 12 and has an upturned neck 13 of relatively large diameter; since the flange 12 is short. The neck at the top is provided with an enlarged rib 14 of circular cross section which is split at 16 defining a narrow space adapted to be utilized in properly locating the resilient cap portion 20 upon the container portion 10.

The container body 10 may be made of any approved material, such as metal or plastic. It is preferably rigid and not yieldable and the compartment 25 therein may receive any dispensable materials, preferably comminuted, altho this invention contemplates the use of other flow materials.

The tip 10 is of dome-shaped construction including a lower skirted portion having an annular groove 21 inwardly thereof for receiving the rib or split ring 14. The groove 21 extends just short of 360°; the same being interrupted by a boss projection 26 formed integral with the cap 20 adapted to seat in the opening 16 at the ends of the ring in order to properly center the dome for a purpose to be subsequently mentioned.

The skirt portion of the dome 20, below the groove 21, is of sufficient length to contact or just fall short of contact with the flange 12. In this respect it will be noted from Figure 2 that the external surface of the dome 20 lies substantially flush with the external adjacent surfacing of the body portion 10. At its upper end the cap 20 is provided with an elongated slit 30, normally closed, except upon the application of pressure at the ends of the slit.

The cap 20 may be made of rubber, as shown in the drawings, or of some resilient thermoplastic or thermosetting plastic.

In order to facilitate handling of the container and proper opening of the slit 30 I provide a tong arrangement consisting of a pair of spring

3

arms 35 and 36, which may be secured at 37 to diametrically opposed points of the body 10, preferably adjacent to the bottom wall 11 although these spring arms could be secured at any point along the body 10, as is quite obvious. The arms 35 and 36 may be made of the same material as the body portion 10 and they are so connected to the body portion 10 that normally they are spaced slightly from the body 10. They extend upwardly along the body 10 and encompass the dome 20 also; preferably sloping inwardly at their upper ends 38 to conform to the taper of the dome 20 and at their upper ends they may be provided with inward extensions 39, at the extreme tip end of the cap 20, immediately adjacent to the ends of the slit 30 and in position to engage the cap at the ends of said slit when the arms 35 and 36 are pressed inwardly.

It will be noted from Figure 7 of the drawing that upon pressure of the fingers the slit 30 will dilate or distend to provide an opening through which the comminuted materials may be shaken when the container is inverted, as shown in Figure 6 of the drawings. It is thus apparent that the tong arrangement or arms serve as a means to facilitate handling of the container so that the pressure will be applied at the proper location upon the dome for distension of the slits.

The arms 35 and 36, as well as the body portion 10, may be ornamentally formed. Preferably if they are formed of metal they will be plated to suit requirements.

In lieu of a single slit 30 I may provide a series of parallel slits which will open to enable proper shaking of materials such as salt, without an excess thereof.

In the form of invention shown in Figure 4, referred to as C, the body portion 10^a may be formed of glass, porcelain or some other molded material and it includes a bottom 11^a having a filler opening 40 therein. At opposite sides of the body 10^a there are pairs of spaced lugs 41 designated in Figures 4 and 12 of the drawings, to facilitate locating the tong arrangement 44. The tong arrangement 44 consists of a bottom disc 45 having the tong arms 35^a and 36^a secured thereto in a spring relation. The arms 35^a and 36^a are identically of the same nature as the arms 35 and 36 above described for the form of invention A, and it is intended that the body 10^a will be formed at its upper end the same as for the form of invention A. The disc portion 45 is provided with a rubber or other type sealing cork 47 secured as at 48 centrally upon the disc 45 and adapted to be compressed into the opening 40 for sealing the same.

The functioning of the form of invention is the same as that for the form of invention A, except that in the form A filling of the materials in the container is accomplished through removal of the cap 20 and in the form C filling may also be accomplished through removal of the closure insert 47. This also enables removal of the tong arrangement from the container portion, as is quite obvious.

In the form of invention D the container portion 10^b may be formed of glass or other rigid material and externally near the bottom wall 11^a it is provided with an annular groove 48, and upon its bottom it is provided with a diametrically disposed groove 49.

The tong arrangement for the form D consists of spring arms 35^b and 36^b connected by a bight strip or portion 50 which is adapted to fit in the groove 49 to properly center and dispose the tong

4

arrangement with respect to the slit in the cap, which is intended to be placed upon the receptacle portion 10^b, identically the same as for the form of invention A above described. To form a better pivoting arrangement for the spring arms 35^b and 36^b, that is, to enable their spring flexing, the same are crimped at 51, just above the bight 50, and these crimps are received in the groove 48.

In the form of invention B the entire receptacle 60 is formed of rubber or some other resilient plastic material and it includes the main body portion 61 having a bottom wall 62 provided with a rather large filler opening 63 therein. At the upper end the body portion 61 tapers convergently upwards in a dome-shaped arrangement similar to that of the cap 20 for the forms of invention A, C and D and at its tip end the receptacle or container 60 is provided with a slit 64 having the same characteristics as the slit 30 above described.

The tong arrangement 70 is somewhat similar to the tong arrangement for the form of invention C including a pair of spring arms 71 and 72 provided with a disc connecting or bight portion 73 upon which is integrally formed a closure stud 75 having an annular rib 76 thereon adapted to fit within a groove 77 provided in the bottom wall 62.

The arms 71 and 72 extend upwardly in conformity along the contour of the side walls of the receptacle portion 60 and at their upper ends they are shaped at 74 to engage the tip end of the receptacle 60 at opposite ends of the slit 64, as an incident of slight manual pressure, in order to dilate or distend the slit 64 to permit easy shaking of the comminuted materials from the chamber of the receptacle 60.

It will be quite apparent from the foregoing that the chamber of all forms of the invention is hermetically sealed against access of moisture when not in use. This will prevent clogging of salt and enable an easy dispensing of the materials at all times. In the form of invention B the tong arrangement 70 not only facilitates opening of the slit and proper dispensing but also holds the shape of the container.

It is entirely possible to eliminate the spring or tong arms in the formation of the dispensing container, but such are very useful in enabling a person without observing the line direction of the slit to open the same.

Various changes in the shape, size and arrangement of parts may be made to the forms of invention herein shown and described, without departing from the spirit of the invention or the scope of the following claims.

I claim:

1. In a dispensing container the combination of a container body having a dispensing tip of resilient material provided with a normally closed dispensing opening therein, and means connected with the container including yieldable arm portions at opposite sides of said opening and adjacent thereto to facilitate distension of said opening for removal of the contents of the container upon application of pressure upon said yieldable arms.

2. As an article of manufacture a container for dispensing comminuted materials comprising a body of yieldable resilient material having a dispensing normally closed opening at a tip end thereof, the opposite end of said body portion having a filler opening therein, closure means for the filler opening, and spring arms connected

5

with said closure means and extending upwardly at opposite sides along the body portion having pressure engaging portions at the upper ends thereof located at opposite sides of said normally closed opening

3. In a container for dispensing comminuted materials the combination of a rigid body portion having a chamber therein and an annular bead at the top thereof having an opening therein, a resilient dispensing cap having a normally closed opening therein, said cap having a stud adapted to extend into the opening of said bead to properly locate the cap upon said body, and yieldable arms mounted upon said body portion having their ends positioned adjacent to said normally closed opening of the cap whereby upon the application of pressure upon the arms the same will engage said cap adjacent to the opening for distending the latter.

4. In a dispensing container the combination of a body portion having a chamber therein and provided with a distensible dispensing opening, and a tong arrangement comprising spring arms and a bight portion, said bight portion having means for engaging said body portion to position the spring arms upon the body portion with movable ends thereof adjacent to said dispensing opening whereby upon pressure upon the arms the ends will engage the body portion to cause distension of said opening.

5. In a dispensing container the combination of a rigid container body having a material receiving chamber therein, a resilient cap upon the body having a dispensing opening, said body having a filler opening in the bottom thereof, a dispensing opening distension means comprising spring arms and a bight portion, a closure for the filler opening upon said bight portion, said spring arms, when the closure is in said opening, lying along opposite sides of the body and having the free ends thereof positioned adjacent to the dispensing opening.

6. In a dispensing container the combination of a receptacle body portion having a material receiving chamber therein, said body portion having a bottom wall provided with a transverse groove inwardly thereof arranged in diametrical fashion across the bottom, said body portion having a resilient cap provided with a normally closed dispensing opening therein, and a spring actuated U-shaped tong arrangement having a

6

bight portion adapted to fit in said groove and provided with side spring arms extending upwardly with free ends normally spaced from and adjacent to the opposite sides of said dispensing opening.

7. In a salt dispensing container the combination of a rigid body portion providing a chamber therein, a detachable resilient dispensing cap having releasable connection with the top of the body portion, said cap having a slit at the tip thereof, and a pair of yieldable arms connected with the body portion having free ends lying adjacent to and spaced from the opposite ends of said slit whereby upon application of pressure upon the arms they may be moved to engage the cap for distending said slit.

8. As an article of manufacture a container for dispensing comminuted materials comprising a body portion having a cap wall of yieldable resilient material having a normally closed dispensing opening therein, and a plurality of arms movably connected with the body portion aforesaid having ends disposed adjacent to the dispensing opening in relatively spaced locations thereabout whereby upon relative movement of the arms together to engage the yieldable resilient material therebetween, the dispensing opening will be opened to permit dispensing of the contents from the container.

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