Dec. 26, 1950 H. A. FINK 2,535,845

POWDER DISPENSING CONTAINER WITH MEASURING TRAP

Filed July 31, 1945

Fig. 1.

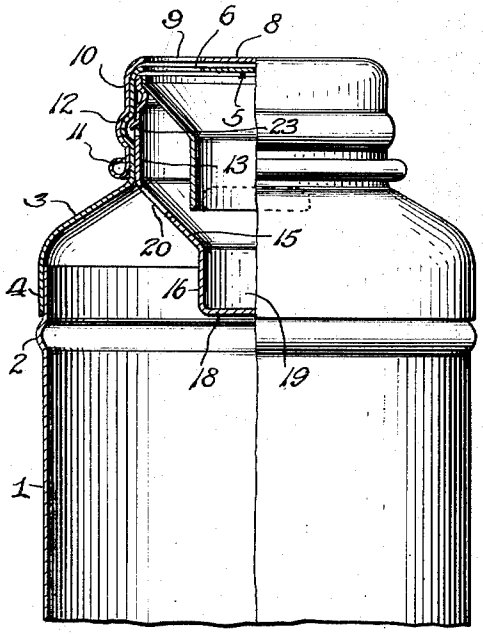


Fig. 3.

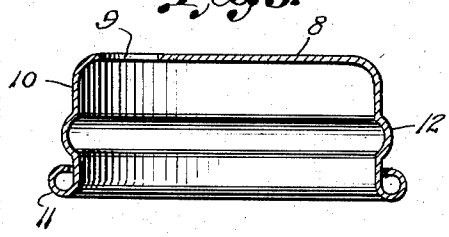


Fig. 4.

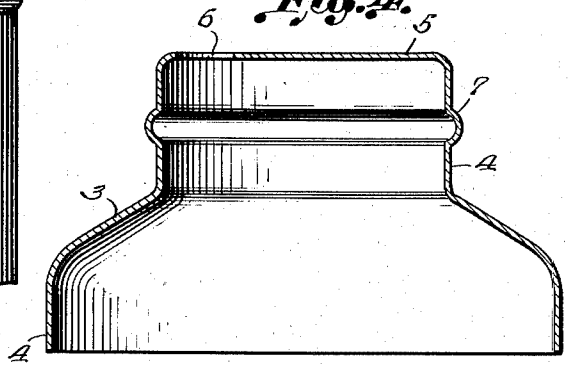


Fig. 2.

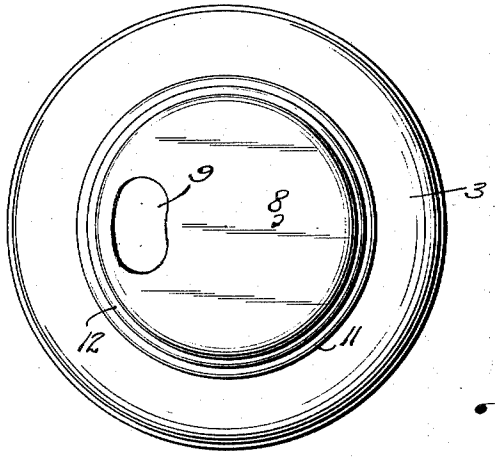
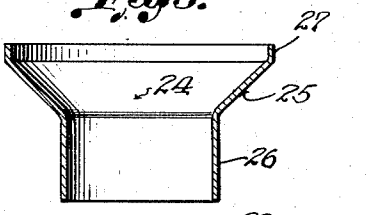


Fig. 5.



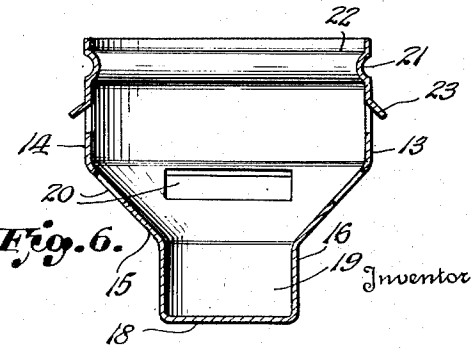


Fig. 6.

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POWDER DISPENSING CONTAINER WITH MEASURING TRAP

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1 Claim. (Cl. 222—455)

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The invention relates to new and useful improvements in a powder dispensing container, and more particularly a container wherein a segregated portion of powder is dispensed each time the container is inverted.

An object of the invention is to provide a container of few parts which can be cheaply made and assembled and wherein the powder to be dispensed may be separated from the bulk of the powder and completely discharged from the container when inverted.

A further object of the invention is to provide a container of the above type wherein the powder to be dispensed is segregated from the bulk by a perforated partition and a collecting wall disposed between the partition and the dispensing opening and wherein the partition and collecting wall are secured in place in the container by self-locking lugs.

These and other objects will in part be obvious and will in part be herinafter more fully disclosed.

In the drawings:

Figure 1 is a view partly in side elevation and partly in vertical section showing a container embodying the improvements.

Figure 2 is a top plan view of the container shown in Figure 1.

Figure 3 is a vertical sectional view through the closure cap for the container.

Figure 4 is a vertical sectional view through the breast and nozzle of the container.

Figure 5 is a vertical sectional view of the collecting wall.

Figure 6 is a vertical sectional view of the separating partition.

In the drawings the container embodying the improvements includes a body portion 1 which is beaded at 2. Secured to the body portion is a breast 3 having a depending skirt 4 which makes frictional contact with the body wall above the bead and retains the breast on the container body. The breast 3 terminates at its upper end in a nozzle 4. The nozzle 4 is provided with an integral top 5 having a dispensing opening 6 formed therein adjacent one side of the top. The nozzle 4 is also provided with an outwardly projecting bead 7.

Associated with the nozzle is a closure cap 8. Said cap has a top portion provided with a dispensing opening 9. The cap has a depending skirt 10 rolled into a bead 11 at the lower edge. Said cap is also provided with a bead 12. The cap is placed on the nozzle and the nozzle and the cap are beaded so that bead 7 will engage within the bead 12 and thus the cap is rotatably retained

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on the nozzle. By turning the cap, the opening 9 therein may be turned into and out of alignment with the dispensing opening 6 in the nozzle.

Disposed within the container is a separating partition 13 which is used for segregating from the bulk a so-called shot of powder which is to be dispensed when the contained is inverted. This partition 13 includes a cylindrical portion 14 and inwardly and downwardly tapered portion 15 and a cylindrical portion 16 which is closed at its lower end as indicated at 18. This cylindrical portion with the closed end forms a cup 19. The portion 15 of the partition is provided with openings 20 which are elongated and disposed between the cup and the cylindrical portion 14 of the partition.

The cylindrical portion 13 is beaded inwardly at 21 so as to provide a supporting ledge 22. The cylindrical portion is cut so as to provide outwardly and downwardly projecting lugs 23.

Disposed between this separating partition and the upper end of the nozzle is a collecting wall 24. This collecting wall includes a tapered portion 25 and a cylindrical portion 26 which is open at its lower end. The tapered portion 25 terminates in a flange 27.

This collecting wall is dimensioned so that it may be placed in the separating partition and the flange part of the collecting wall will rest on the ledge 22. After the collecting wall and the partition have been assembled in the manner stated, then the assembly is inserted in the nozzle 4. The cylindrical portion 13 of the partition fits within the nozzle and the lugs 23 will snap into the groove in the nozzle formed by the bead 7. This will hold the assembled partition and collecting wall firmly in the container.

It will be noted that the breast, nozzle, separating partition and collecting wall can readily be die-shaped from metal and they can be assembled and held firmly in position within the container without the use of solder or any other type of securing means. Likewise, the cap may be drawn from sheet metal and secured to the nozzle so that it may rotate thereon by the beading of the nozzle wall and skirt of the cap.

The breast can be removed from the container body and the container filled with the powder which is to be dispensed. When the container is inverted the powder therein will pass through the openings 20 to a limited extent. The collecting wall will prevent the powder from passing out through the dispensing opening and a segregated amount of powder for one dispensing operation will be trapped between the collecting wall and

the partition. When the container is righted some of the powder will pass back through the openings, but sufficient powder for a dispensing operation will pass into the cup 19 and be retained therein. The next time the container is inverted, the powder in the cup will pass through the opening through the collecting wall and out through the dispensing opening 9. At the same time that this segregated portion of powder is being dispensed, other powder from the bulk will pass through the openings 20 so as to again charge the cup when the container is righted.

It is obvious that minor changes in the details of construction and the arrangements of the parts may be made without departing from the spirit of the invention as set forth in the appended claim.

I claim:

A dispensing container comprising a body, a dispensing nozzle carried thereby having a closed end with a dispensing opening adjacent one side of the nozzle, a closure cap rotatably attached to said nozzle and having an opening adapted to be moved into and out of register with the opening in the nozzle, a partition disposed in the nozzle and having a cylindrical portion extending the length of the nozzle and contacting therewith, means for securing said partition to the nozzle, said partition having an inwardly projecting bead adjacent the upper end thereof and an inwardly and downwardly extending tapered portion having a measuring cup at the lower end thereof, said tapered portion having spaced openings adjacent the upper end thereof through which a

segregated portion of powder passes when the container is inverted, said partition and said cup being formed integrally with the partition merging into the wall of the cup so as to provide a smooth unobstructed surface over which the segregated powder freely flows into the cup when the container is righted, a collecting wall disposed between the partition and the end of the nozzle, said collecting wall being supported on said bead at the upper end of the partition, said collecting wall terminating at its lower end in a cylindrical portion of slightly larger diameter than the cup and positioned directly above said partition between the openings therethrough and the cup for directing the segregated portion of powder onto the partition and into the cup when the container is righted, said cylindrical portion of the collecting wall being adapted to receive and direct the powder collecting in the cup through the dispensing opening when the container is again inverted.

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