April 26, 1966 E. J. JENSEN 3,247,995

DISPENSING PACKAGE

Filed June 15, 1964

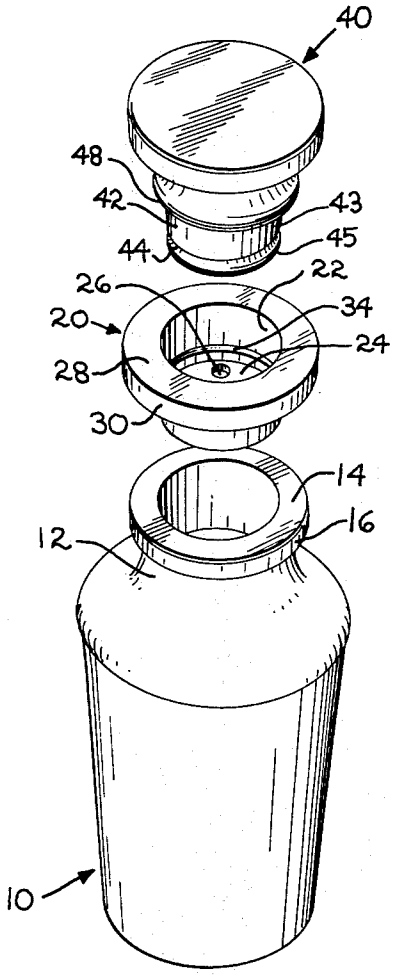

FIG. 1

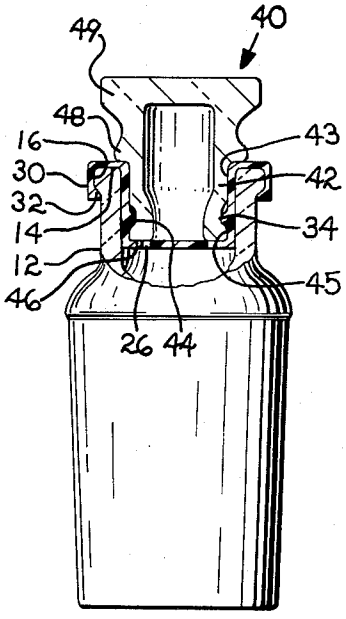

FIG. 2

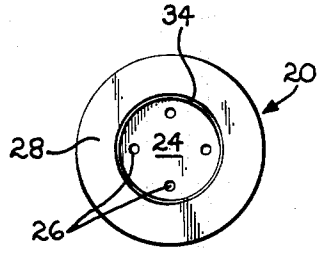

FIG. 3

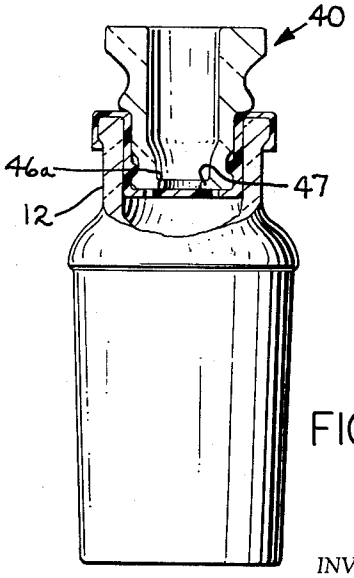

FIG. 4

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DISPENSING PACKAGE

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3 Claims. (Cl. 215—73)

This case relates generally to a dispensing package and more particularly to the combination of a container, a dispensing fitment, and a plug-type stopper.

Dispensing packages utilizing plug-type stoppers have had widespread use for the dispensing of dry granular products, such as seasoning and spices for example. Typically such a package may comprise a glass jar or bottle having a plastic sifter fitment secured thereto and a glass plug-type stopper which snugly fits in the fitment to close the package. In the interest of economy of material and ease of molding, these stoppers are normally hollow. A typical example of such package may be had by reference to United States Patent No. 3,070,251 to Mangravite. The stopper therein shown is formed with its lower end open. As a result, granular material contained in the package is free to flow through the apertures of the fitment into the hollow portion of the stopper unless separate means are provided to prevent such flow. Under one embodiment of the invention disclosed in that patent, a liner is provided with snaps over the lower open end of the stopper. Such separate liner obviously increases the cost of the overall package.

It is an object of the present invention to provide a new and novel dispensing package.

It is a further object of this invention to provide a package having a hollow plug-type stopper for closing an apertured dispensing fitment which prevents the entry of granular material from the fitment into the hollow portion of the stopper without relying upon a separate element.

Other objects and advantages of this invention will become readily apparent from the following detailed description taken in conjunction with the annexed sheet of drawings on which:

FIGURE 1 is an exploded perspective view of the dispensing package of the present invention.

FIGURE 2 is an elevational view partly in section showing the relationship of the various components of the dispensing package in assembled position.

FIGURE 3 is a top plan view of the sifter fitment portion of the dispensing package of the present invention.

FIGURE 4 is a view similar to FIGURE 2 illustrating another embodiment.

In brief, this invention comprises a container having a sifter fitment engaged therewith and having a hollow plug-type stopper adapted to be snugly received in the dispensing fitment so that the lower end face of the stopper firmly engages the perforated fitment panel, the perforations being so positioned and the stopper end face being so sized that said stopper end face will overlie and thus sealingly close said perforations to thereby prevent the flow of granular material to the interior of the hollow stopper.

Referring now to the drawings, there is provided a container generally designated **10** having an annular neck portion **12** terminating at its upper end in a rim **14** having an annular outwardly facing bead **16**.

Secured to the container **10** is a fitment generally designated **20** having an annnular wall **22** adapted to be received within the neck **12** of the container. Extending radially inwardly from the lower end of the annular wall, i.e. that end projecting into the interior of the container **10**, is a disc-like panel **24** having a plurality of perforations **26** formed therein. For reasons which will become

readily apparent from the following description, the perforations are positioned near the periphery of the panel **24** (see FIGURE 3).

Extending radially outwardly from the upper end of the wall **22** is a flange **28** the under surface of which seats against the rim **14** of the container. The flange **28** has a downwardly directed depending attaching skirt **30** which has an inwardly facing annular bead **32** at the lower end thereof. The bead **32** of the fitment **20** snaps over the bead **16** of the container **10** to secure the fitment thereto.

In addition, there is provided an annular bead **34** extending inwardly from the inner face of the fitment annular wall **22** in spaced relationship with the upper surface of the panel **24**.

The stopper **40** includes a core member **42** having an outer surface **43** sized to be snugly received within the fitment annular wall **22**. The core member **42** includes an annular groove **44** adapted to receive the bead **34** of the fitment **20**. Below the groove **44** is an annular bead **45** which snaps under the bead **34** to assist in retaining the stopper **40** in the fitment **30**. The core member **42** terminates at its lower end in an annular end face **46**. The beads, the groove, and the end face, respectively, are so dimensioned with respect to one another that when the stopper **40** is positioned in the fitment **20** with the bead **34** of the fitment engaging the annular groove **44** of the stopper, the annular end face **46** will firmly engage the upper surface of the fitment panel **24**. The core member end face **46** is substantially flat and is sized relative to the perforations **26** of the fitment **20** to overlie and thus sealingly close such perforations to thereby prevent granular material from flowing through the perforations to the interior of the stopper **40**. Additionally, the stopper is formed with an enlarged grasping portion **49** and, if desired, may have radially enlarged shoulder **48** engaging the fitment flange **28**. The enlarged shoulder **48** absorbs the thrust of any loads placed on top of the stopper **40** and thus insures against the rupturing of such perforated panel which otherwise may result from such loads.

In the embodiment illustrated in FIGURE 4, the core member **42** is formed with a flange **47** extending radially inwardly from the lower end thereof to provide an end face **46***a* adapted to cover a larger area of the fitment panel **24** than is possible in the previous embodiment. Under this embodiment then, the perforations **26** obviously may cover a large area of the panel. In order to form the inwardly directed flange **47** of the stopper **40** illustrated in the embodiment in FIGURE 4, the stopper **40** may be formed with an open top which, if desired, may subsequently be closed by a plug subsequently adhered thereto. If desired, the inwardly directed flange **47** may extend completely across the panel **24**.

It should be readily apparent from the foregoing description that the present invention provides a package utilizing an inexpensive hollow stopper but yet one which effectively prevents granular material from flowing to the interior thereof and creating a messy appearance. It is obvious that many changes and modifications may be made in this invention without departing from its spirit and scope which is to be limited only by the following claims.

I claim:

1. In combination: a container having an annular rim defining the periphery of an open mouth; a fitment affixed to said container comprising an annular wall sized to be snugly received within said mouth, a transverse panel attached to the lower end of said annular wall, said panel having one or more perforations in the vicinity of said annular wall, an annular bead extending inwardly from said annular wall in spaced relationship to said transverse

panel, a flange extending radially outwardly from said annular wall and overlying said container rim, and means for securing said fitment to said container; and a stopper affixed to said fitment comprising a hollow core member snugly received in said fitment annular wall, said core member terminating at its lower end in an annular end face, a radially inwardly directed flange the lower surface of which forms an extension of said end face, said end face and said extension being seized to overlie said perforations, an outwardly facing annular groove in said core member adapted to be engaged by said fitment annular bead to secure the stopper to the fitment with said end face firmly engaging said transverse panel to sealingly close said perforations, and an outwardly directed shoulder engaging said fitment flange to limit the downward movement of said stopper in said fitment.

2. In combination: a container having an annular rim defining the periphery of an open mouth; a fitment affixed to said container comprising an annular wall sized to be received within said mouth, a transverse panel attached to said annular wall below said annular rim, said panel having one or more perforations, a flange extending radially outwardly from said annular wall and overlying said container annular rim, an annular bead extending inwardly from said annular wall, and means for securing said fitment to said container; and a stopper affixed to said fitment comprising a hollow core member snugly received in said fitment annular wall, said core member terminating at its lower end in an annnular end face sized to overlie said perforations, an outwardly facing annular groove in said core member engaging said fitment annular bead to secure the stopper to the fitment

with said end face firmly engaging said transverse panel to sealingly close said perforations, and an outwardly directed shoulder engaging said fitment flange to limit the downward movement of said stopper in said fitment.

3. In combination: a container having an annular rim defining the periphery of an open mouth; a fitment affixed to said container comprising an annular wall sized to be received within said mouth, a transverse panel attached to said annular wall below said annular rim, said panel having one or more perforations, and means for securing said fitment to said container; and a stopper affixed to said fitment comprising a hollow core member snugly received in said fitment annular wall, said core member terminating at its lower end in an annular end face, an integrally formed radially inwardly directed flange the lower surface of which forms an extension of said end face, said end face and said extension being sized to overlie said perforations, and means for securing the stopper to the fitment with said end face firmly engaging said transverse panel to sealingly close said perforations.

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