

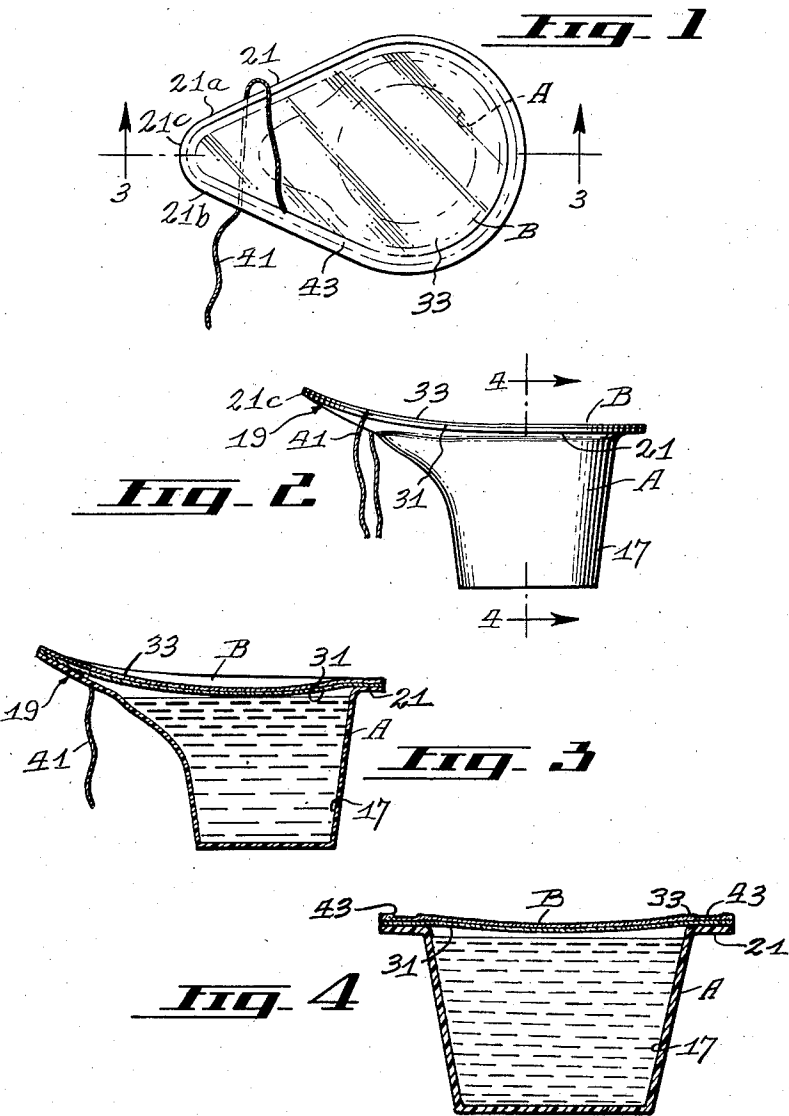
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2,898,003

INDIVIDUAL CONTAINER DISPENSER

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INDIVIDUAL CONTAINER DISPENSER

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9 Claims. (Cl. 222—107)

This invention relates to food packages of the general type shown in United States Patents 2,649,392, 2,705,579 and 2,736,656.

Packages of this type are used for containing individual portions of condiments, jams, jellies and other flowable food adjuncts to be dispensed at meals.

These packages are made up of a body enclosing a containing well, an outwardly extending peripheral flange or lip, and a web which covers the well and adheres to the lip, for example, by heat sealing or by adhesive means. Patent 2,736,656 discloses a structure in which the web projects beyond the lip of the body so as to provide a flap to grasp while the web is torn from the lip. The seal is such that the web can easily be broken and the web torn away.

This structure has the disadvantage that the relatively light seal which is necessary to enable the web to be easily torn off is sometimes inadvertently broken, allowing the contents to escape. Further, the making of such a seal is relatively critical in respect to temperature and pressure and materials used and is thus a disadvantage.

Applicants' development

The applicants have now developed a package of the general nature above described in which the web is held to the lip of the body portion by a strong seal which cannot normally be broken to remove the web from the lip. The body is provided with a spout portion and a tear strip is provided in the spout portion to remove a portion of the web from the lip and to provide a relatively restricted dispensing opening through which the contents may be squeezed or may flow. The applicants have also found that certain materials are essential in making a structure of this nature. The thickness of the material making up the body is sufficient to make the body self-supporting, while it still remains flexible, for example, 15 mils is a container of the type and size shown. The material which the applicants have found most suitable for the web is a lamination of sheet polyethylene of gauge from about .001 inch to about .003 inch with cellophane of a gauge from about .001 inch to about .0015 inch. The applicants also prefer to employ a tear strip from about .010 inch to about .040 inch in width which is all that is necessary to effect a tight seal and at the same time leaves a strip of a lesser width to be torn by the tearing strip.

The invention also contemplates a method of forming a seal in packages of this nature. According to this method the web is placed in juxtaposition to the lip, a tear member, for example a thread, is placed between the web and the lip at the spout portion extending across the spout portion from one fork of the lip to the other. Then, the web and the lip are sealed together at a temperature within the range from 440° F. to about 550° F. under a pressure within the range from about 100 pounds per square inch to about 150 pounds per square inch.

The invention has now been generally described and will be referred to in more detail by reference to the accompanying drawings, illustrating a preferred embodiment of the invention, in which:

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Figure 1 is a plan view of the container according to the invention.

Figure 2 is a side elevation of the package shown in Figure 1.

Figure 3 is a cross-section along the line 3—3 of Figure 1.

Figure 4 is a cross-section along the line 4—4 of Figure 2.

Referring more specifically to the drawings, the container is made up of a body portion A and having closure web B.

The body portion A is made of polyethylene and is extruded to the shape shown, i.e., which is a well portion 17 of a substantially circular cross-section widening slightly towards the top. The body portion has a spout portion 19 which encloses the bay extending from the well. The whole body is provided with a substantially flat flange or lip 21 which extends completely around the top of the well and spout portions.

The web B is a laminated construction made up of lamina 31 of polyethylene and lamina 33 of cellophane. These materials are heat sealed together in the usual manner as is well known in the art of sheet materials. The manner of lamination forms no part of the present invention.

The lip 21 is provided with a bifurcated portion having forks 21a and 21b meeting in a beak 21c. The portions 21a and 21b are somewhat wider than the remainder of the lip portion which extends about the well 17. Extending across the spout portion between the web and the lip portions 21a and 21b and cutting across the spout portion is a tear strip or cord 41. The web B and the lip 21 are heat sealed together about a sealing strip 43 as will be described in conjunction with the method.

In assembling the device according to the invention the package is filled with liquid or powdered material. Then the web B is brought into juxtaposition with the lip 21 with the cord 41 in position as described. Then the web and the lip are heat sealed together to close the package.

The package is securely closed and owing to the relatively heavy seal the contents will not inadvertently squeeze out between the lip and the web. But, the web can easily be ruptured by use of the tear cord 41 along the direction of the tear cord as shown to make an opening through which the contents may be dispensed. It will be noted that the sealing strip 43 extends about the periphery of the lip portion 21 and leaves a certain amount of web juxtaposed to the lip portions 21a and 21b without being sealed to these portions.

We claim:

1. A dispensing package comprising a receptacle well having a base and a wall extending upwardly therefrom to merge with an outwardly extending substantially flat peripheral lip, said well including a relatively large body portion and a relatively narrow bay portion projecting from the body portion in a spout, the lip portion continuing about the top of the spout and presenting a bifurcation, the lip portion throughout being substantially flat, the body being of a plastic material, a web of soft pliable material heat sealed to the lip along a sealing strip and closing the well including the bay, and a tearing member extending across the spout portion extending between the lip and web, the tearing of the strand being adapted to sever the web across the spout portion and leave an opening at said spout portion through which the contents of the well can be squeezed for dispensing.

2. A package according to claim 1 in which the body portion is made of a single thickness of plastic material and the web is polyethylene laminated to regenerated cellulose.

3. A package according to claim 1 in which the body portion is circular in horizontal cross-section apart from the spout portion.

4. A package according to claim 1 in which the body portion is circular in horizontal cross section apart from the spout portion and at the spout portion the lip is relatively wide and the sealing area extends only partly inward on the lip, leaving a portion of the lip juxtaposed to, but free from the web.

5. A package according to claim 1 in which the body is of polyethylene having a thickness from about .015 inch to about .020 inch.

6. A package according to claim 1 in which the web is a lamination of sheet polyethylene of gauge from about .001 inch to about .003 inch with cellophane of gauge from about .001 inch to about .0015 inch.

7. A package according to claim 1 in which the width of the seal strip is from about .010 inch to about .040 inch.

8. A method of forming a seal in a dispensing package of plastic material, said package comprising component portions, one of said portions of polyethylene, the other

of said portions of polyethylene laminated to regenerated cellulose, said method comprising placing between said component portions a tearing member and then compressing said component portions together polyethylene-to-polyethylene under heat and pressure to form a high-strength hermetic seal with a tearing member inserted between said portions at one area, whereby a seal is formed between the component portions which is not easily ruptured but which can be readily ruptured by the use of said tearing member.

9. A method according to claim 8 wherein a pressure within the range from about 100 pounds to 150 pounds per square inch is employed in a temperature of about 440° F. to about 550° F.

References Cited in the file of this patent

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