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FOOD PACKAGE

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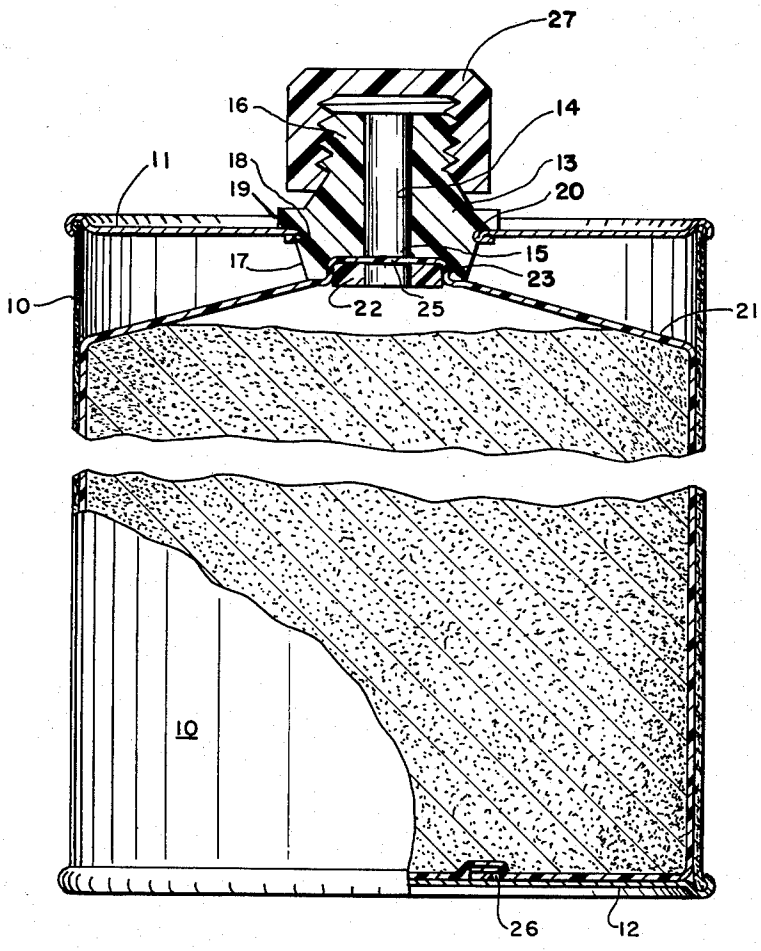

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This invention relates to a package of foodstuffs and, more particularly, to a package in which the contents are sealed in a pouch which is disposed within a rigid container and has means therein which permit the package to be opened easily.

The present invention resides in a package for foodstuffs and the like which is designed as a substitute for ordinary expensive metal cans. Some of the foremost problems in attempting to find an inexpensive substitute for a metallic container involve constructing a package which is rigid enough and rugged enough to withstand ordinary abuse of packing and shipping without fear of the contents wicking into and chemically attacking the body of the container, and which is preferably able to hermetically seal the contents therein. A further problem is to include means in the nonmetallic package which will allow ease of opening and reclosing of the package. It is a purpose of the invention to provide a package which meets all the requirements mentioned above and is nevertheless substantially less expensive to manufacture than ordinary metallic containers.

According to the invention, by constructing a container with a fiberboard body and metallic end closures, for example, a container can be provided which is sufficiently rigid to withstand ordinary physical abuses. Moreover, by packaging and hermetically sealing the contents in a pouch which is disposed in the rigid container, an excellent package which is suitable for packaging a variety of different products can be achieved. Finally, by constructing the package so that it can be opened easily and reclosed easily, a very desirable inexpensive substitute for metallic containers has been realized.

The package for foodstuffs of the invention is comprised of a rigid container with a pour spout mounted in the container with its mouth opening into the container and a portion thereof extending out of the container. A closed pouch is disposed within the container for holding the contents of the package therein. Sealing means are included within the container to hold a selectively rupturable portion of the pouch across the mouth of the spout. In an alternative construction a cap is removably secured on the portion of the spout extending out of the container. By means of this construction the package can be opened by selective rupturing of the pouch portion and subsequently reclosed and opened easily by means of the cap. (By "rigid containers," it is intended to include all types of containers, such as fiberboard containers having metal end closures, or metal foil and paper laminated containers or containers of any suitable construction which would provide sufficient rigidity to protect the pouch from physical abuse.)

One of the principal features of the new package resides in the fact that once the pouch is ruptured, the opening therein is maintained at the mouth of the spout, and by means of the cap effective reclosure of the container can be had. This construction preserves the protective qualities of the package which would ordinarily be lost immediately upon breaking of the pouch.

A preferred embodiment of the invention is described hereinbelow with reference to the drawing, wherein the FIGURE is a front elevation partly in section and partly broken away of the package of the invention.

The package shown consists basically of a container

having a fiberboard body 10 with metal end closures 11 and 12 crimped on the body and defining the top and bottom portions of the container. Mounted in the top closure cap 11 is a spout 13. The spout 13 shown in this embodiment is constructed from a plastic material. A bore 14 extends completely through the spout 13 with its mouth 15 opening into the container and the spout has a threaded portion 16 extending out of the container. The body of the spout has a tapered portion 17 which begins at an annular groove 18 formed just below an annular flange portion 19 substantially at the center of the body and terminates substantially at the mouth 15 of the spout. Aided by the tapered portion 17, the spout 13 can be forced past the edges 20 of the top closure cap 11, which define an aperture therein, until these edges are forced into the annular groove 18. The annular groove 18 preferably is of a larger diameter than the diameter of the opening in the top cap 11, thereby insuring the spout 13 to be tightly mounted in the cap. Alternatively, the spout 13 shown, or its equivalent, could be inserted through the body 10 of the container.

Disposed within the rigid container is a pouch 21 which is formed from a plastic sheet material. The pouch, as shown, contains a quantity of granulated or powdered foodstuff. Also disposed within the pouch 21 is a sealing ring 22. In assembling the package of the invention, this sealing ring 22 is pressed in mating relationship into an annular recess 23 formed at the mouth of the spout 13. Since the ring 22 is inserted within the pouch it carries a portion 25 of the pouch material with it as it is pressed into the annular recess 23. The sealing ring 22 is held within the annular recess by any suitable means such as internally expanding the ring in the recess 23, or by pressure and heat sealing. When the sealing ring 22 is firmly attached within the annular recess 23, the portion 25 of the pouch extends across and seals the mouth of the spout 13, and is in position to be selectively ruptured.

It is to be noted, that in order to insert the sealing ring 22 as described, it is necessary that it be done prior to filling the pouch 21 with any contents. Hence, after the sealing ring 22 has been inserted, the pouch is then filled with its contents and sealed at its lower end by means of a lapped seam 26 as shown in the drawing. The bottom closure cap 12 is then crimped onto the bottom of the container.

A cap 27 is threaded onto the threaded portion 16 of the spout 13 thereby providing means which is removably secured to the spout for opening and reclosing the package. It is, of course, not intended to limit the invention to such a threaded cap arrangement. Any hinged or snap-tight cap, or its equivalent, can be used as the cap to the container.

This package provides a most adequate substitute for expensive metal cans. The packages formed according to the invention can be used for packaging liquids, frozen products, and many type powdered products. These products can be hermetically sealed with the pouch 21 since upon initial packaging of the products they are completely maintained within the pouch and are protected by the outer shell of the container. When the package is first opened, the cap 27 is removed and the portion 25 of the pouch which extends across and seals the mouth 15 of the spout 13 is ruptured, thereby allowing the contents to be dispensed from the package. When the pouch 21 is ruptured along this portion 25, the only opening to the pouch is confined to the mouth 14 of the spout. Hence, if all the contents are not used after initially opening the container, the cap 27 can be screwed onto the threaded portion 16 of the spout, thereby pro-

viding an effective seal to protect the contents of the container for an additional period of time.

I claim:

1. A package of foodstuffs comprising a rigid container, a pour spout mounted on the container with its mouth opening into the container and a portion thereof extending out of the container, a closed pouch disposed within the container, a quantity of foodstuffs sealed in the pouch, and sealing means within the container to hold a selectively rupturable portion of the pouch across the mouth of the spout, whereby the package can be opened by selective rupturing of said pouch portion.

2. A package of foodstuffs comprising a rigid container, a pour spout mounted on the container with its mouth opening into the container and a portion thereof extending out of the container, a closed pouch disposed within the container, a quantity of foodstuffs sealed in the pouch, a sealing ring disposed within the pouch and attached to the spout adjacent the mouth thereof to hold a selectively rupturable portion of the pouch between the ring and the spout and across the mouth of the spout, and a cap removably secured to the portion of the spout extending out of the container, whereby the package can be opened by selective rupturing of said pouch portion and subsequently reclosed and opened easily by means of the cap.

3. A package comprising a rigid container, contents contained in said container, a pour spout mounted on the container with its mouth opening into the container and a portion thereof extending out of the container, a closed pouch disposed within the container for holding the contents of the package therein and sealing means within the container to hold a selectively rupturable portion of the pouch across the mouth of the spout, whereby the package can be opened by selective rupturing of said pouch portion.

4. A package comprising a rigid container, contents contained in said container, a pour spout mounted on the container with its mouth opening into the container and a portion thereof extending out of the container, a closed pouch disposed within the container to hold and seal the contents of the package, a sealing ring disposed within the pouch and attached to the spout adjacent the mouth thereof to hold a selectively rupturable portion of the pouch between the ring and the spout across the mouth of the spout, and a cap removably secured to the portion of the spout extending out of the container, whereby the package can be opened by selective rupturing of said pouch portion and subsequently reclosed and opened easily by means of the cap.

5. A package comprising a rigid fiberboard container having a cylindrical body and end closures sealed thereon, contents contained in said container, a pour spout sealed in an aperture formed in one of the end closures with its mouth opening into the container and a portion thereof extending out of the container, a closed pouch disposed within the container to hold and hermetically seal the contents of the package, a sealing ring disposed within the pouch and attached in mating relation to the spout adjacent the mouth thereof to hold a portion of the pouch between the ring and the spout across the mouth of the spout, and a cap removably secured to the portion of the spout extending out of the container, whereby the package can be opened by selectively rupturing of said pouch and subsequently reclosed and opened easily by means of the cap.

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