

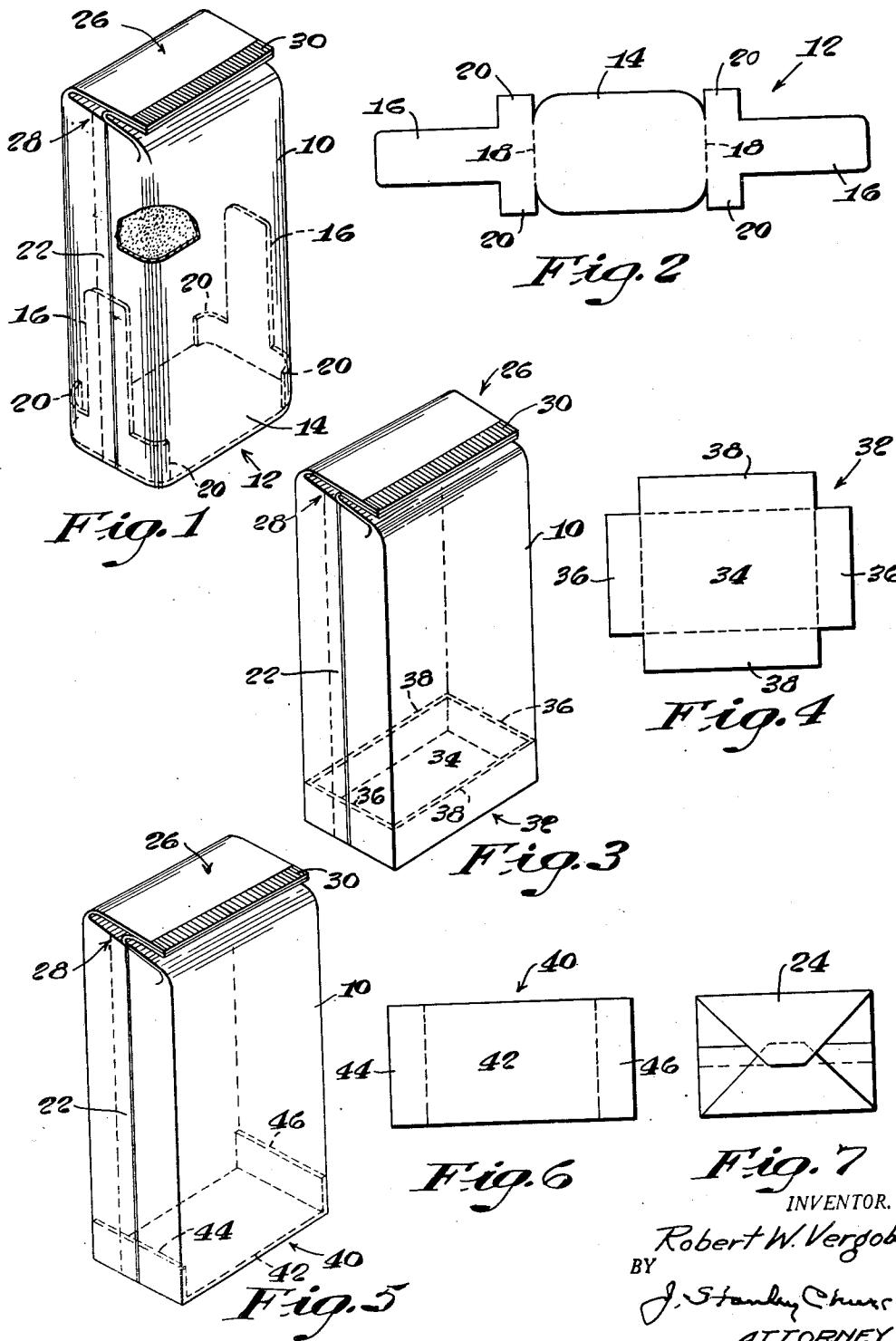
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REINFORCED BAG

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REINFORCED BAG

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This invention has for an object to provide a novel package comprising a filled bag-like container of flexible material, and preferably a transparent flexible material, having a novel, efficient and inexpensive re-enforcing member for the bottom part of the bag-like container by which the filled bag is rendered self-supporting in an upright position permitting most satisfactory display of the package.

With this general object in view, and such others as may hereinafter appear, the invention consists in the package hereinafter described and particularly defined in the claims at the end of this specification.

In the drawings illustrating the preferred embodiment of the invention, Fig. 1 is a perspective view illustrating one form of the present package; Fig. 2 is a developed plan view of the base structure for the package shown in Fig. 1; Fig. 3 is a perspective view of a modified form of the present package; Fig. 4 is a developed plan view of the base structure for the package shown in Fig. 3; Fig. 5 is a perspective view of another modified form of the present package; Fig. 6 is a developed plan view of the base structure for the package shown in Fig. 5; and Fig. 7 is a bottom view showing a preferred form of bottom closure for the present package.

In general, the present invention contemplates a novel construction of package comprising a filled flexible bag-like container, and preferably a bag-like container of flexible transparent material through which the packaged commodity is visible for display purposes. In the conventional bag-like package, the commodity within the package effects rounding or bulging of the sides and bottom of the filled package so that such prior packages are not self-supporting in an upright position and must usually be stacked on their sides on the grocer's shelves, thus concealing a major portion of the package and the advertising thereon, and also destroying the sales appeal associated with the display of the commodity in a transparent container. In accordance with the present invention, the flexible container is provided with a reinforced base structure disposed within the flexible container providing a relatively rigid and flat bottom surface enabling the package to stand upright on the grocer's shelves or other support without tipping over. The present package structure is also of convenience to the consumer whereby when the package is opened and the contents are partially used, the package may be placed in an upright position to prevent tipping and spilling of the remainder of

5 the contents through the open mouth of the package. The container forming sheet material may comprise any of the usual or preferred container forming materials, but preferably may comprise a sheet of cellophane or other relatively strong transparent sheet material, and the inner base structure may be constructed of a relatively stiffer and heavier material, such for example as carton board.

10 Referring now to the drawings, the package illustrated in Fig. 1 comprises a sheet of flexible transparent material 10 folded to form a substantially rectangular container filled with a commodity, and, a reinforcing base member, indicated 15 generally at 12 is disposed within and secured to the bottom of and within the container to provide a flat and rigid bottom structure rendering the flexible package self-supporting in an upright position. As shown in Fig. 2, the base member 12 may comprise a blank of relatively rigid material, such as carton board, having a bottom panel 14 and partial side panels 16 formed integrally with the bottom panel and folded along scored or creased lines 18 to extend a short distance along the opposed narrower sides of the container. The extended panels 16, as illustrated 20 in Fig. 1, may and preferably will be narrower than the width of the narrower sides of the container so as to permit the longitudinal corners of the container to be rounded out by the commodity, and, the lower ends of the extended panels 16 may be provided with laterally extended flaps 20 which may be curved to conform to the rounded corners formed by the material in the container. As shown in Fig. 2, the bottom panel 25 14 may also be rounded at the corners to conform to the rounded portions of the flaps 20 in the completed package. In practice, the flexible transparent sheet material 10, such as cellophane, may be folded and secured in any usual or preferred manner to form the container substantially rectangular in cross section, and, as herein shown, the longitudinal edges of the sheet material may be overlapped and adhesively secured 30 to form the side seam 22, and, opposed sides of the lower extensions of the tubular container thus formed may be folded against and adhesively secured to the underside of the bottom panel 14 to form a conventional triangular or geometric bottom closure 24 sealing the bottom of the container, as shown in Fig. 7, after filling of the container with the commodity being packaged, any suitable top closure may be formed, the top closure herein illustrated comprising a re-entrant type fold 26 in which the narrower sides of the 35 40 45 50 55

upper extensions of the container material are folded inwardly to form pleats 23, the mouth of the container being then sealed along the upper edge and folded down upon the top of the package, as illustrated. The mouth closure may comprise a crimped seal, as indicated at 30, wherein opposed faces and the intervening pleated portions of the material may be adhesively secured, or, when the container is formed from a heat sealable sheet material the mouth closure may be formed by the application of heat and pressure in the usual manner. In practice, the base member 12 including the extensions 16 and laterally extended flaps 20 may and preferably will be adhesively secured to the sheet material 15 whereby to prevent leakage of the commodity between the sheet material and the base member during filling of the container or during subsequent handling and transportation.

Referring now to Fig. 3, a modified form of package embodying the present invention may comprise the flexible transparent sheet material container 10 having a reinforcing base structure, indicated generally at 32, which may comprise a rectangular bottom panel 34 having four relatively short side panels 36, 38 as shown in Fig. 4, the side panels being folded upwardly at right angles to the bottom panel in the assembled container whereby to provide reinforcement of the lower portion of the container on the bottom and along all four sides adjacent the bottom of the container. The construction of the remainder of the package shown in Fig. 3 may be similar to that described with reference to Fig. 1 except that the longitudinal corners of the container may be substantially square instead of rounded. Another modified form of the invention, as shown in Figs. 5 and 6, may comprise a similar flexible transparent sheet material container 10 having a base reinforcing member 40 provided with a bottom panel 42 and opposed relatively short side panels 44, 46 for reinforcing the bottom and the narrower sides of the container adjacent the bottom.

The present container lends itself to economical manufacture wherein the base member may be folded over one end of a suitable forming block and the flexible transparent sheet material may then be wrapped and formed about the block and adhesively secured to the base member whereupon the bottom closure may be formed. Thereafter, the container may be stripped from the forming block and filled and the mouth of the container sealed, as above described. The package thus formed presents transparent material on a major portion of all four sides of the container

through which the commodity is visible, and provides a flat and relatively rigid base structure for the flexible container whereby the package is rendered self-supporting in an upright position for display upon the grocer's shelves or other suitable support. It will be understood that non-transparent flexible container forming sheet materials may be used to produce the bag-like container if desired.

While the preferred embodiment of the invention has been herein illustrated and described it will be understood that the invention may be embodied in other forms within the scope of the following claim.

Having thus described the invention, what is claimed is:

A reinforced bag comprising a bag of flexible, transparent material and a reinforcing structure within the bottom portion of the bag, said reinforcing structure comprising a bottom panel disposed within the bag and composed of a material substantially stiffer than the bag material and being adhesively secured to the bottom of the bag, said bottom panel having rounded corners and two integral side panels provided with relatively short, laterally extended flaps adjacent the lower portions of the side walls and curved to conform to the rounded corners of the bottom portion of the reinforcement, said integral side panels extending upwardly for a portion of the height of the bag along two opposed side walls, said side panels being substantially narrower than the side walls of the bag to which they are adjacent to permit the longitudinal corners of the bag to assume a rounded form corresponding to the rounded corners of the bottom panel when the bag is filled.

References Cited in the file of this patent
UNITED STATES PATENTS

Number	Name	Date
1,613,282	Mayhew	Jan. 24, 1927
1,701,097	Broderick	Feb. 5, 1929
1,767,274	Broderick	June 24, 1930
1,988,691	Lovett	Jan. 22, 1935
2,011,179	Krout	Aug. 13, 1935
2,012,483	Schlegel	Aug. 27, 1935
2,052,015	Crosby	Aug. 25, 1936
2,071,399	Gambell	Feb. 23, 1937
2,143,957	Petter	Jan. 17, 1939

FOREIGN PATENTS

Number	Country	Date
429,241	Great Britain	May 27, 1935