Dec. 16, 1969 E. KUGLER 3,484,037

BAG WITH UNFOLDING INSERT

Filed April 19, 1968

FIG. 1

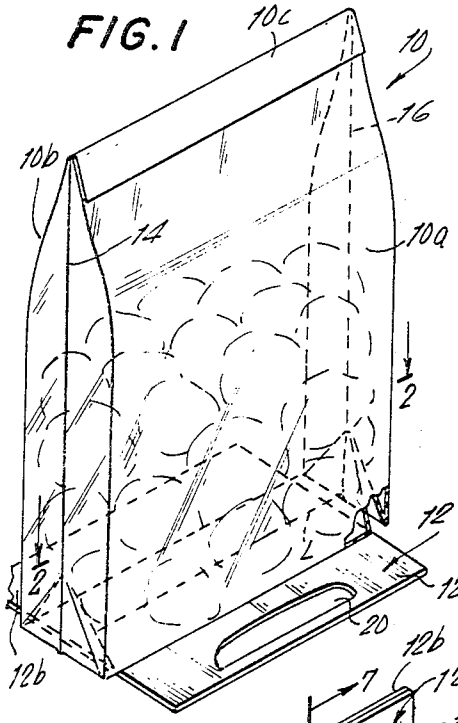
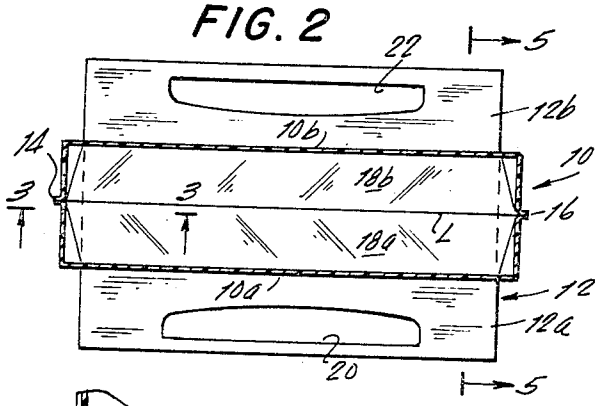


FIG. 2



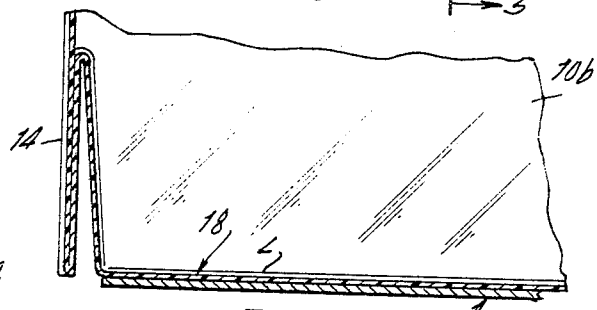


FIG. 3

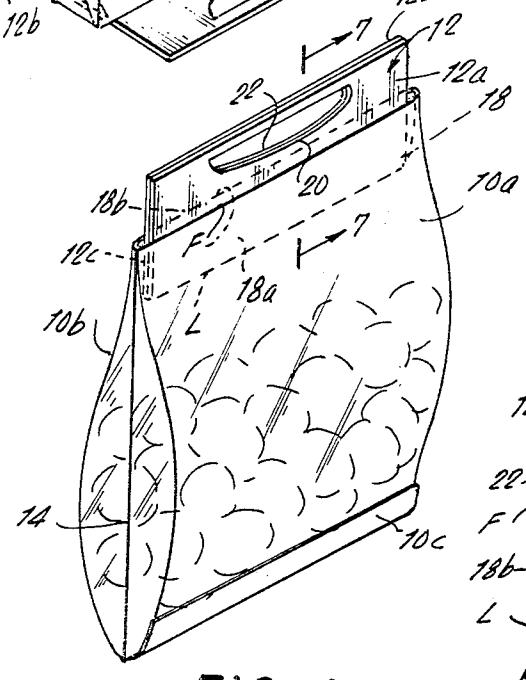


FIG. 4

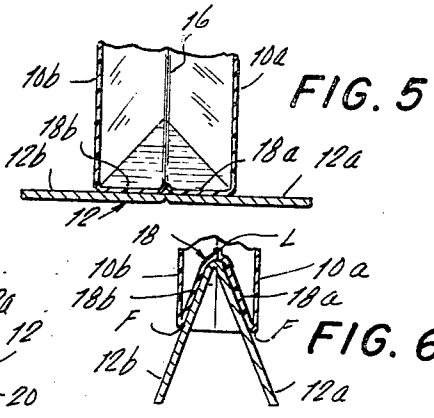


FIG. 5

FIG. 6

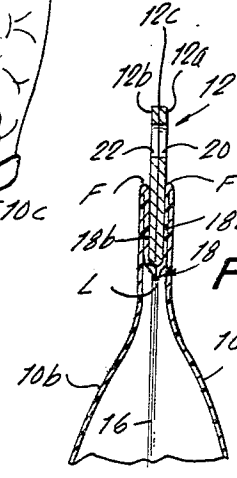


FIG. 7

INVENTOR.
EMANUEL KUGLER
BY Amster & Rothstein
ATTORNEYS

United States Patent Office 3,484,037 Patented Dec. 16, 1969

3,484,037

BAG WITH UNFOLDING INSERT

Emanuel Kugler, 124 Richmond Place, Lawrence, N.Y. 11559

Filed Apr. 19, 1968, Ser. No. 722,759
Int. Cl. B65d *31/00, 33/00;* A45c *13/26*
U.S. Cl. 229—54 4 Claims

ABSTRACT OF THE DISCLOSURE

A gusseted plastic bag having a foldable, preferably, cardboard, insert in the gusset which unfolds into a flat condition effectively serving as a standing base for the bag and, when in its folded condition, effectively serving as a carrying handle for the bag.

The present invention relates generally to plastic bags, and more particularly to improvements for a plastic bag which significantly increases the usefulness and convenience of using this type of package.

Despite the existing widespread use of plastic bags as packaging for diverse products, there is still considerable effort expended to make improvements in this area. In fact, the acceptance of this package has resulted in a highly competitive industry placing even greater importance, for each manufacturer, on individual service, efficiency of production, and better performance of the product of such manufacturer. Further, not only are imaginative and resourceful improvements difficult to achieve, but these improvements, even though contributing to the performance of the product, must not unduly increase material costs or interfere with economical mass production techniques which characterize the manner of producing this product.

Broadly, it is an object of the present invention to provide an improved plastic bag which, due to improved performance, better satisfies the commercial requirements of the users of this product. Specifically, it is an object to provide an improved plastic bag fabricated of conventionally used materials and in accordance with conventionally accepted efficient economical mass production techniques and yet having a significantly improved performance as a package, particularly for produce and other such bulk items.

A plastic bag demonstrating objects and advantages of the present invention may take the form of a conventionally produced gusseted bag and further includes a foldable member appropriately secured within the gusset and extending therefrom. In its folded condition, the extending portion of the member is convenient to grip and thus effectively serves as a carrying handle for the bag; in its unfolded condition, the member serves as a flat, standing base on which the bag contents balance, with the result that the bag stands without external support.

The above brief description, as well as further objects, features and advantages of the present invention, will be more fully appreciated by reference to the following detailed description of a presently preferred, but nonetheless illustrative, embodiment in accordance with the present invention, when taken in conjunction with the accompanying drawings wherein:

FIG. 1 is a perspective view of a filled plastic bag having an unfolded member functioning as a standing base for the bag;

FIG. 2 is a plan view, in section taken on line 2—2 of FIG. 1, of the standing bag;

FIG. 3 is a partial elevational view, in section taken on line 3—3 of FIG. 2, illustrating further structural features thereof;

FIG. 4 is a perspective view similar to FIG. 1 but illustrating the member in its folded condition in which it serves as a carrying handle for the bag;

FIG. 5 is a partial side elevational view, in section taken on line 5—5 of FIG. 2, illustrating further structural details of the standing base of the bag;

FIG. 6 is a view similar to FIG. 5 illustrating the member in its partially folded condition; and

FIG. 7 is a partial elevational view, in section taken on line 7—7 of FIG. 4, illustrating further structural features of the member when functioning as a handle for the bag.

Reference is now made to the drawings and in particular to FIGS. 1 and 4 respectively showing a filled plastic bag, generally designated **10**, having a foldable member **12** attached thereto which in an unfolded condition, as illustrated in FIG. 1, serves as a standing base for the bag **10** and in a folded condition, as illustrated in FIG. 4, effectively serves as a carrying handle for the bag. It will also be noted that the orientation of the bag is reversed depending upon what function is being served by the member **12**.

Referring specifically now to the construction of the bag **10**, it will be understood that except for the dual-function member **12** it is in many respects conventional. That is, the bag **10** is preferably fabricated of plastic and includes front and rear walls **10***a* and **10***b* appropriately secured to each other along confronting side edges by heat seals or welds **14** and **16**. In a preferred embodiment as illustrated herein, the rear wall **10***b* extends at one end slightly beyond the front wall **10***a* to provide a closure flap **10***c* to close the product-loading opening into the interior of the bag after the bag has been filled with its contents, which might be produce or some other bulk item which ordinarily would not support the bag in a standing position except for the unfolded member **12**. Any appropriate technique may be used to close the flap **10***c* such as by heat sealing it to the front wall **10***a* or by adhesively securing it to this wall.

Bag **10**, at its end remote from the flap **10***c*, is formed with a conventional gusset **18**. More particularly, gusset **18** includes a pair of facing walls **18***a*, **18***b* which are integrally formed as part of the front and rear walls **10***a*, **10***b*, respectively, and are folded inwardly along the lines of fold F into an interposed position between the front and rear walls and converge at the gusset fold line L. As generally understood, gusset **18** provides bag **10** with a capacity to expand, by virtue of the unfolding of the gusset, from the configuration illustrated in FIG. 4 into a generally rectangular bag configuration as illustrated in FIG. 1. In the process of unfolding, the fold line L is projected from its interposed position into an exterior position in which it lies in the flat plane of the unfolded member **12**.

The foldable member **12**, in the preferred embodiment as illustrated herein, is fabricated of cardboard and includes two panels of equal size **12***a*, **12***b* joined along an intermediate fold line **12**c. Although the panels **12***a*, **12***b* are not restricted to any particular dimensions, each of these panels is intended, in accordance with the present invention, to be of a larger extent than the height of each of the gusset walls **18***a*, **18***b*. In other words, each panel is larger than the distance measured from the gusset fold line L to the exterior fold lines F and thereby each has a portion extending beyond the fold lines F. Each extending portion of the panels **12***a*, **12***b* is provided with an aligning hand grip opening **20**, **22**, which, in an obvious manner, contributes to the ability of the member **12** to serve as a carrying handle for the bag.

The assembly of the member **12** to the bag **10** is preferably achieved by inserting the member, in its folded condition, into the gusset **18** such that the member fold line

12*c* is adjacent the gusset fold line L. The member **12** is then adhesively secured to the facing gusset walls **18***a*, **18***b*.

A latitude of modification, change and substitution is intended in the foregoing disclosure and in some instances some features of the invention will be employed without a corresponding use of other features.

What is claimed is:

1. A plastic bag comprising front and rear walls secured to each other to define an internal bag enclosure, said front and rear walls having, adjacent one end, a pair of unattached edges bounding a bag-loading opening into said bag enclosure and, at a remote opposite end, a pair of integrally connected infolded flaps terminating in a fold line located in an interposed position between said front and rear walls and forming a gusset for said bag, and a foldable member fabricated of a comparatively rigid material which serves as a carrying handle in its folded condition and as a standing base for said bag in its unfolded condition, said foldable member including a pair of panels foldable toward and away from each other along an intermeiate fold line, said intermediate fold line being positioned adjacent to the fold line in said gusset, said panels extending beyond said bag front and rear walls and having aligned hand-grip openings in the portion of said panels extending beyond said bag front and rear walls.

2. A plastic bag as defined in claim **1** wherein the folding member is fabricated of cardboard and said member is adhesively attached to each of the flaps of the gusset.

3. A plastic bag as defined in claim **1** having a generally rectangular shape and wherein the opposite ends thereof having respectively said bag-loading opening and said gusset are the two smaller sides of said bag.

4. A plastic bag as defined in claim **3** wherein one said bag wall is larger than the other said bag wall at said edges thereof bounding said bag-loading opening such that the extending portion of said larger wall serves as a closing flap for said bag-loading opening.

References Cited

UNITED STATES PATENTS

2,400,759	5/1946	Katz	229—54
3,016,983	1/1962	Studley	229—62 X
3,348,761	10/1967	Vetter	229—54

DAVID M. BOCKENEK, Primary Examiner

U.S. Cl. X.R.

150—12