May 6, 1969 C. R. MANN 3,442,437

BAG CONSTRUCTION WITH CLOSURE CARRIER

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Fig. 3.

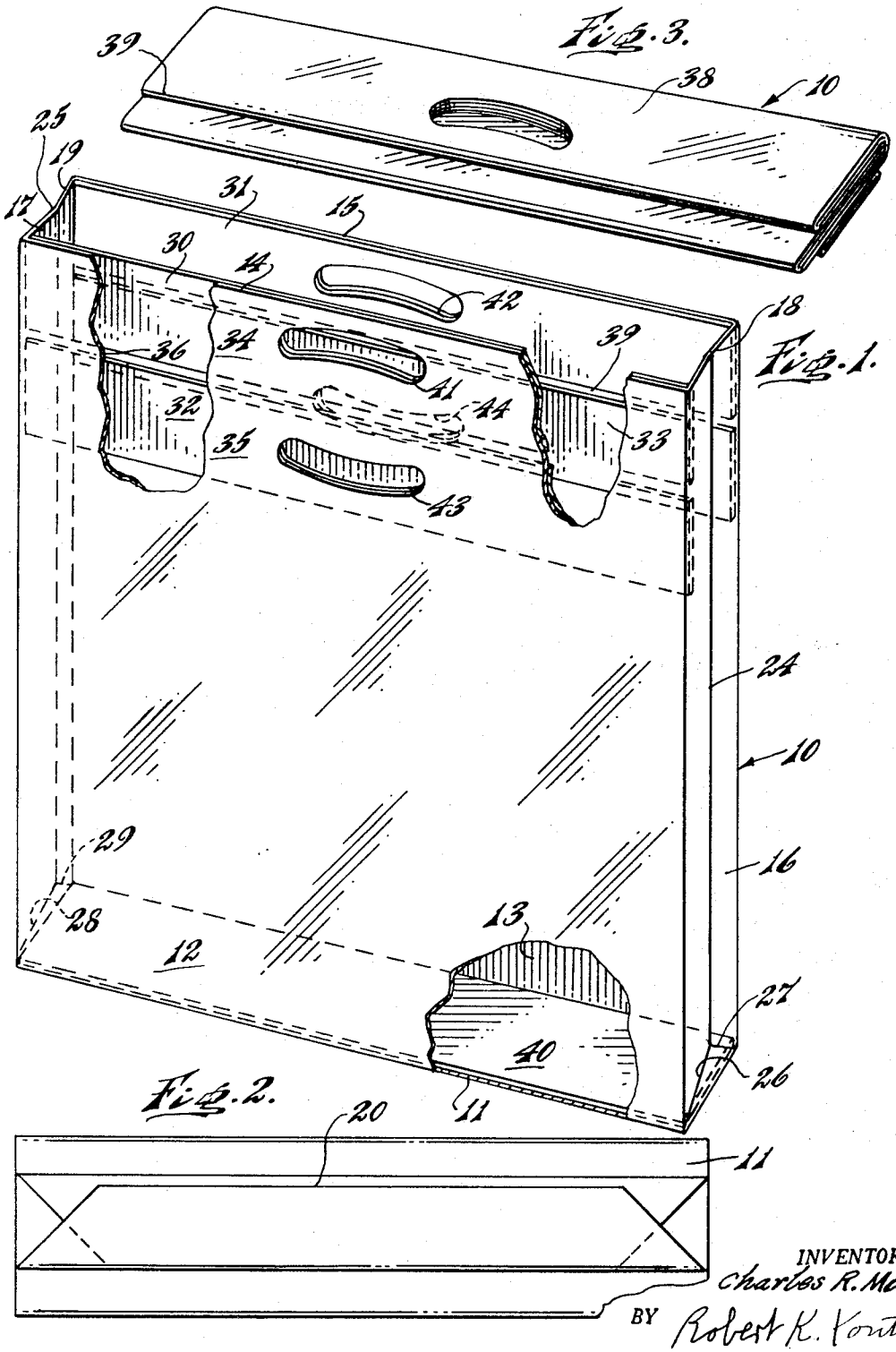


Fig. 1.

Fig. 2.

INVENTOR.
Charles R. Mann
BY Robert K. Kontie
ATTORNEY

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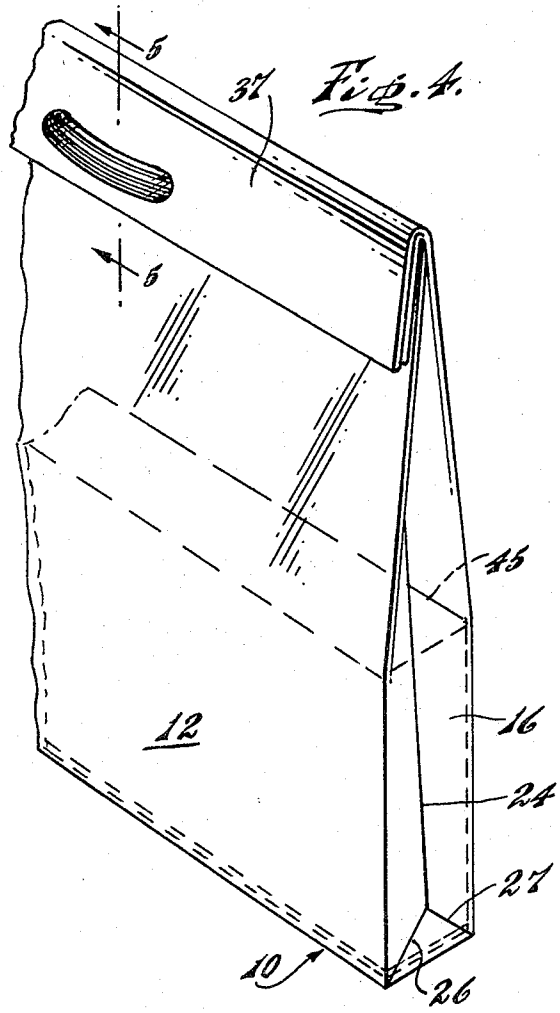


Fig. 4.

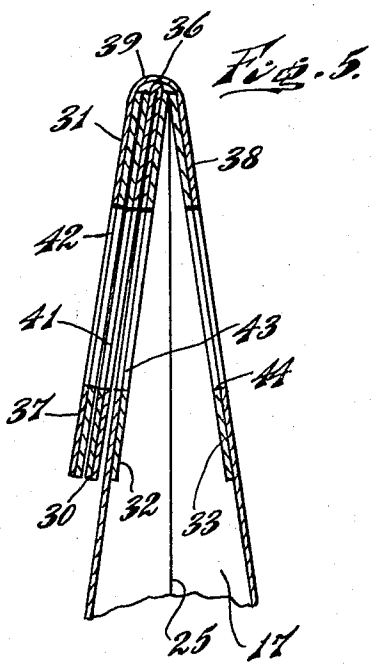


Fig. 5.

INVENTOR.
Charles R. Mann
BY Robert K. Voutie
ATTORNEY

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BAG CONSTRUCTION WITH CLOSURE CARRIER

Charles R. Mann, % Embassy Packaging Corp., 411 Morris Drive, Cherry Hill, N.J. 08034

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ABSTRACT OF THE DISCLOSURE

This invention is essentially concerned with a bag construction of generally rectangular form having an open top with front and back walls reinforced along the upper edges and foldable together to maintain the top closed while affording full-width bag support and providing a hand carrier for the bag.

Background of the invention

As is well known to those versed in the container arts, particularly concerning the containers dispensed by retail establishments, as for containing soft goods and the like, there has heretofore been the choice of relatively expensive box constructions, or less-protective bags. While it has in the past been proposed to provide bags simulating the appearance of a box, these have not been entirely satisfactory, as involving relatively complex constructions and undue expense, and resulting in less than satisfactory protection to the contents and inconvenience to the wrapper.

Summary

Accordingly, it is an object of the present invention to provide a unique and highly improved bag construction which affords substantially the same protection to contents as a box, effects substantial savings in cost over even inexpensive boxes, is extremely easy to fill and close so as to require very little time and effort by a cashier or wrapping personnel, and which is neat and attractive in appearance, capable of a wide variety of printed-design and desirable esthetic effects.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings, which form a material part of this disclosure.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts, which will be exemplified in the construction hereinafter described, and of which the scope will be indicated by the appended claims.

Brief description of the drawing

FIGURE 1 is a top perspective view showing a bag construction of the present invention in an open condition, with parts broken away for clarity of understanding.

FIGURE 2 is a bottom view of the open bag of FIGURE 1.

FIGURE 3 is a perspective view showing the bag of FIGURE 1 folded to occupy a small space.

FIGURE 4 is a partial perspective view showing the bag of FIGURE 4 in an operative condition of use.

FIGURE 5 is a partial sectional elevational view taken generally along the line 5—5 of FIGURE 4, enlarged for clarity.

Description of the preferred embodiment

Referring now more particularly to the drawing, and specifically to FIGURE 1 thereof, a bag of the present invention is there generally designated **10**. The bag **10** may include a generally rectangular bottom wall **11** having generally congruent, substantially rectangular front and rear walls **12** and **13** upstanding from the front and rear edges of the bottom wall. That is, the front and rear walls **12** and **13** are coextensive with the front and rear edges of the bottom wall **11**, upstanding therefrom and terminating at substantially coplanar upper front and rear edges **14** and **15**. A pair of opposite side walls **16** and **17** upstand from opposite edges of the bottom wall **11**, being coextensive therewith. The side walls **16** and **17** extend forwardly and rearwardly between the front and back walls **12** and **13**, and terminate in upper edges **18** and **19** extending between the upper front and back wall edges **14** and **15**.

The bottom wall **11**, front wall **12**, back wall **13**, and side walls **16** and **17** may all be fabricated of suitable flexible sheet material, such as paper or other. In practice, it has been found advantageous to form the bottom, front and back walls **11**, **12** and **13**, and side walls **16** and **17** all of a single sheet of paper, say having glued seams along the bottom, as at **20**, and along one side wall (not shown). Further, the side walls **16** and **17** are advantageously formed with inwardly folding creases, as at **24** and **25**. That is, the creases **24** and **25** each extend generally vertically downwardly from respective upper side wall edges **18** and **19**, being spaced medially between the front and back walls **12** and **13**, and terminate adjacent to and spaced above the bottom wall **11**. From the lower ends of creases **24** and **25**, there may be formed in respective side walls **16** and **17** a pair of forwardly and rearwardly declining creases, as at **26** and **27** in wall **16**, and **28** and **29** in wall **17**, which declining creases terminate at the front and rear corners of the side walls.

Thus, from the open condition show in FIGURE 1, with the front and back walls **12** and **13** in spaced facing relationship, the side walls **16** and **17** are foldable inwardly along creases **24** and **25** to move the front and back walls into adjacent facing relation. The bottom wall **11** is simultaneously foldable upwardly, say against the back wall **13**.

A pair of upper, front and back stiffener strips **30** and **31** are disposed in parallel spaced facing relation, as seen in FIGURE 1, inward of and between the front and back walls **12** and **13**, respectively extending along the upper edges **14** and **15** of the front and back walls. That is, the stiffener strips **30** and **31** are of generally rectangular configuration, extending laterally across the upper regions of the front and back walls **12** and **13**, respectively, and each terminating at its opposite ends contiguous to respective side walls **16** and **17**.

An additional pair of generally rectangular laterally extending lower stiffener strips **32** and **33** are arranged in parallel spaced facing relation with each other, as seen in FIGURE 1, inward of and between the front and back walls **12** and **13**. That is, the lower stiffener strips **32** and **33** are located respectively in spaced relation below the upper stiffener strips **30** and **31**, each being coextensive therewith and terminating at its opposite ends contiguous to respective side walls **16** and **17**. In practice, the upper and lower pairs of stiffener strips **30**, **31** and **32**, **33** may advantageously be fabricated of card stock or other suitable relatively stiff sheet material. The stiffener strips **30–33** may be adhesively or otherwise fixedly secured in facing engagement with adjacent portions of the front and back walls **12** and **13**. Thus, the upper front stiffener strip **30** may be adhesively secured in facing engagement with the inner surface of upper front wall region **34**, while the lower front wall stiffener strip **32** may be adhesively secured in facing engagement with a front wall region **35** adjacents to and spaced below the front wall region **34**. An intermediate front wall region **36**, between the upper and lower front stiffener strips **30** and **32** remains unsecured and relatively flexible.

Similarly, the back wall **13** has its upper stiffener strip **31** secured to an upper back wall region **37**, and its lower stiffener strip **33** secured to a back wall region **38** spaced below the upper back wall region, leaving therebetween an intermediate, relatively flexible back wall region **39**, unsecured to stiffener strips.

The opposed upper pair of stiffener strips **30** and **31** may be congruent to each other, as may be the lower opposed pair of stiffener strips **32** and **33**. In addition, the upper and lower stiffener strips may be congruent to each other.

A bottom wall stiffener strip is designated **40**, and may consist of a generally rectangular card or other suitable relatively stiff sheet material adhesively secured in congruent facing relation with the inner surface of bottom wall **11**.

In addition, there are formed upper front and rear handhold openings **41** and **42** extending through the upper front stiffener strip **30** and its adjacent front wall portion **34**, and through the upper rear stiffener strip **31** and its adjacent rear wall portion **37**. The front and rear handhold openings **41** and **42** are generally congruent to each other and move into registry with each other upon movement of the front and back walls **12** and **13** into adjacent facing relation. Similarly, lower handhold openings **43** and **44** are formed respectively through the lower front stiffener strip **32** and its adjacent front wall region **35**, and through the lower rear stiffener strip **33** and its adjacent rear wall region **38**. The configuration of lower handhold openings **43** and **44** is generally congruent for movement thereof into registry with each other upon front and back wall movement into facing relation. Further, with the upper pair of stiffener strips **30** and **31** in adjacent facing relation, they are swingable together about the relatively flexible intermediate front and rear wall regions **36** and **39** to the condition shown in FIGURE 4. In this condition, the several handhold openings **41, 42, 43** and **44** are all in substantial registry with each other for receiving a person's hand.

This condition is shown in FIGURES 4 and 5, the former illustrating an article of contents **45** within the bag **10**, resting on the bottom wall stiffener strip **40** and upstanding between the front, back and side walls **12, 13, 16** and **17**. It will therefore be appreciated that the bottom wall stiffener member **40** serves to effect full distention of the bottom wall **11** for properly shaping the bag, and also affords reinforcement for the bottom wall under the weight of contents in the bag.

While the bag **10** may be fully open in its lower region, as in FIGURE 4, its upper region may be completely closed by movement together of the upper front and back wall regions, and folding of the stiffener strips **30–33** into their overlying relation of FIGURES 4 and 5. In this condition, it will be appreciated that the several stiffener strips **30–33** combine to insure full lateral distention of the bag **10** while effecting support of the bag over its entire width, so as to maintain the desired bag configuration for neat and attractive appearance, as well as long-lasting durability. Also, the overlying stiffener strips **30–33** in the condition shown in FIGURES 4 and 5 insure positive and complete closure of the bag to prevent removal of articles inadvertently or otherwise.

In nonuse condition of the bag **10** it may be stored flat as a conventional square bag, or may be folded upon itself to the condition shown in FIGURE 3 to occupy relatively small space.

From the foregoing, it is seen that the present invention provides a bag construction which fully accomplishes its intended objects and is well adapted to meet practical conditions of manufacture and use.

What is claimed is:

1. A bag construction comprising a generally rectangular bottom wall; a pair of facing spaced front and back walls upstanding from front and back edges of said bottom wall; a pair of facing spaced side walls upstanding from opposite side edges of said bottom wall extending forwardly and rearwardly between said front and back walls and terminating at their upper edges coterminous with the upper edges of said front and back walls; said bottom, front, back and side walls being fabricated of flexible sheet material; said side walls being creased for inward folding between said front and back walls with said front and back walls in adjacent facing relation; a first pair of generally rectangular laterally extending stiffener strips disposed in parallel spaced facing relation inwardly of and adhesively secured to respective front and back walls along and substantially co-extensive with the upper edges thereof; and a second pair of generally rectangular laterally extending stiffener strips disposed in parallel spaced facing relation inwardly of and adhesively secured to respective front and back walls substantially co-extensive with the lateral dimension thereof and spaced below respective first mentioned stiffener strips; each pair of stiffener strips being movable with their adjacent regions of said front and back walls into adjacent facing relation in generally vertical planes when said side walls are folded inwardly; and said first mentioned pair of stiffener strips together with their adjacent front and back wall regions being swingable downwardly approximately 180 degrees into generally overlying relation with said second mentioned pair of stiffener strips and their adjacent front and back wall regions about the front and back wall regions intermediate said first and second pairs of stiffener strips; there being handhold openings extending through said first and second pairs of stiffener strips and the adjacent front and back wall regions, said openings being in substantial registry when said pairs of stiffener strips are in said overlying relation, whereby said pairs of stiffener strips are disposed in adjacent vertical planes to effect maximum support throughout the bag width.

2. A bag construction according to claim **1**, in combination with a generally rectangular stiffener strip substantially congruent to and adhesively secured in facing engagement with the interior of said bottom wall, to effect full distention of said bottom wall and reinforced support to contents of said bag.

3. A bag construction according to claim **2**, said walls being fabricated of paper, and said stiffener strips being fabricated of card stock.

4. A bag construction according to claim **3**, said front and back walls being substantially congruent to each other; and said first and second pairs of stiffener strips being substantially congruent to each other.

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DAVID M. BOCKENEK, *Primary Examiner.*

U.S. Cl. X.R.

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