United States Patent

[11] **3,584,768**

[72] Inventors **Robert E. Ascough**
Bayonne;
Alexander L. Giroux, Edison; Daniel A. Serico, Lodi, all of, N.J.

[21] Appl. No. **782,977**
[22] Filed **Dec. 11, 1968**
[45] Patented **June 15, 1971**
[73] Assignee **Westvaco Corporation**

[54] **SHIPPER DISPENSER PACKAGE**
4 Claims, 5 Drawing Figs.

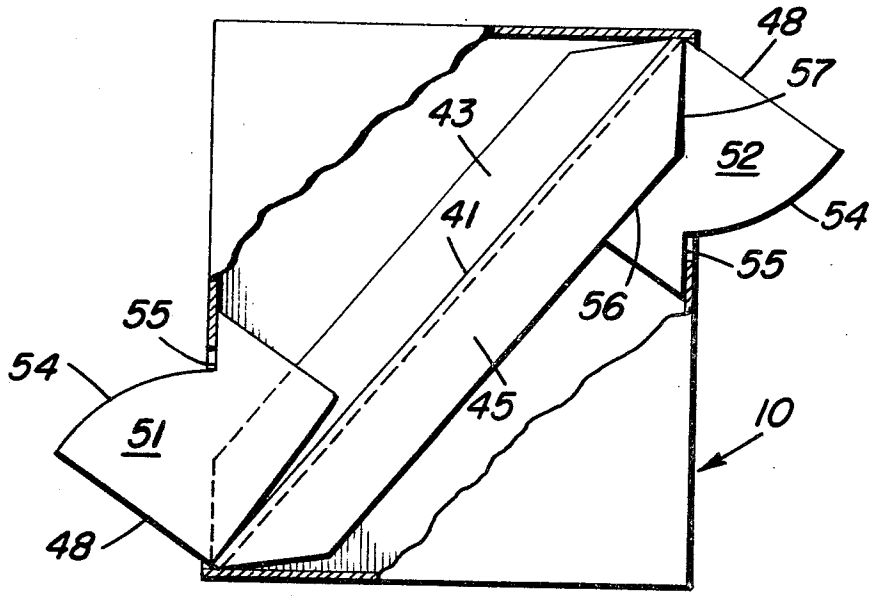
[52] **U.S. Cl.** **222/129,** 222/528, 229/17B
[51] **Int. Cl.** **B65d 5/48,** B65d 5/74
[50] **Field of Search** ..... 222/129, 142.1, 142.4, 528; 221/92, 124; 229/17 B

[56] **References Cited**
UNITED STATES PATENTS

1,985,585	12/1934	Stone	221/124
3,207,380	9/1965	Hennessey	229/17 BX

Primary Examiner—Samuel F. Coleman
Assistant Examiner—Frederick R. Handren
Attorneys—Larry C. Hall and Robert S. Grimshaw

ABSTRACT: A dispensing package is disclosed which is formed from two integral blanks of paperboard, one blank forming an outer container having two compartments formed by a diagonally positioned divider/dispenser member constructed from the second blank and having integral spout portions for dispensing the packaged articles from first one compartment then the second compartment.



PATENTED JUN 1 5 1971

3,584,768

SHEET 1 OF 2

FIG. 1

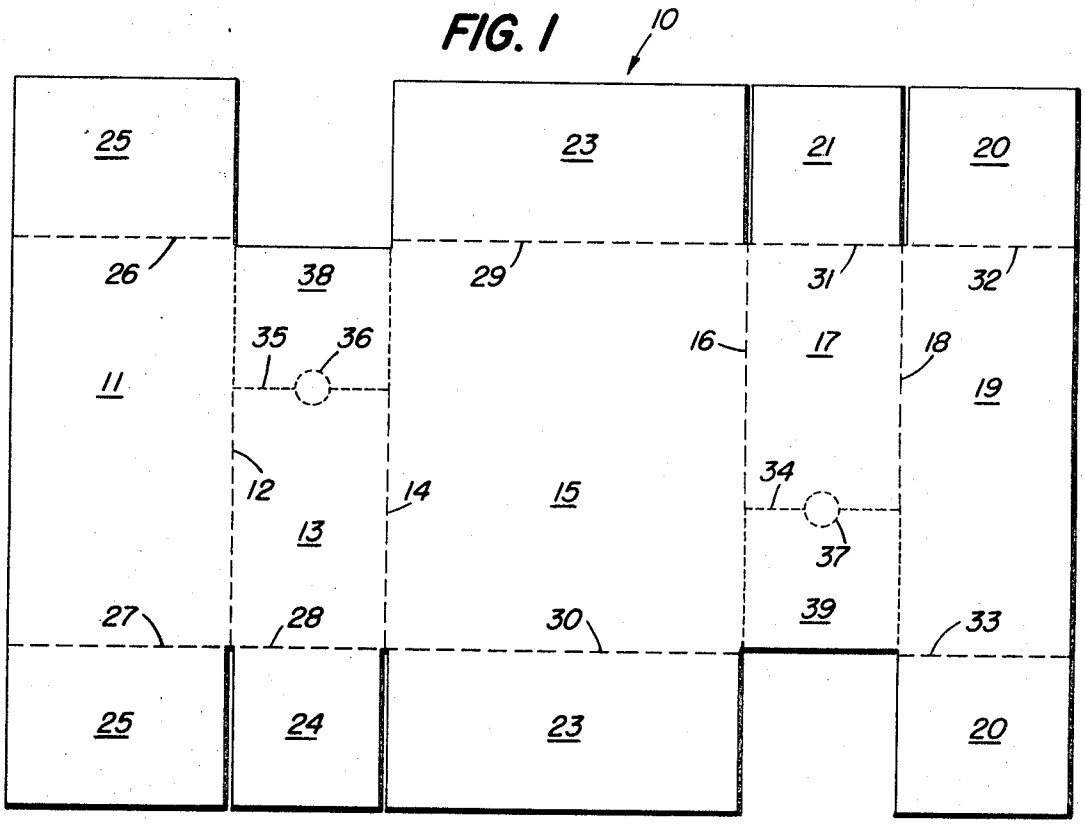
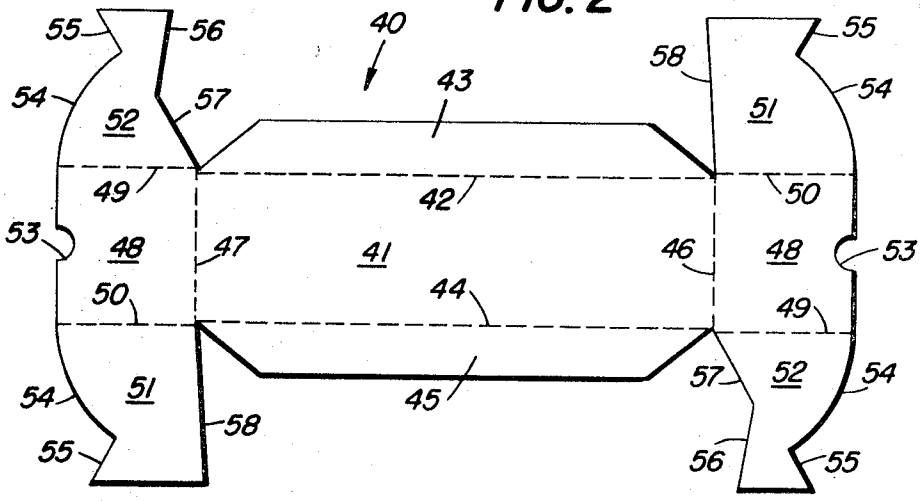


FIG. 2



INVENTORS
Robert E. Ascough
Alexander L. Giroux
Daniel A. Serico

BY
Larry C. Hall ATTORNEY

FIG. 3

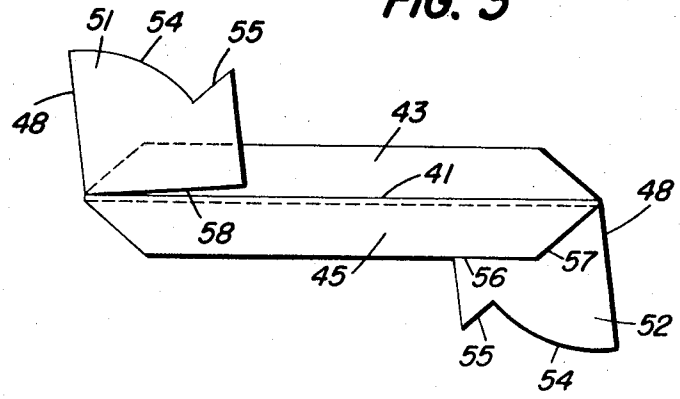


FIG. 4

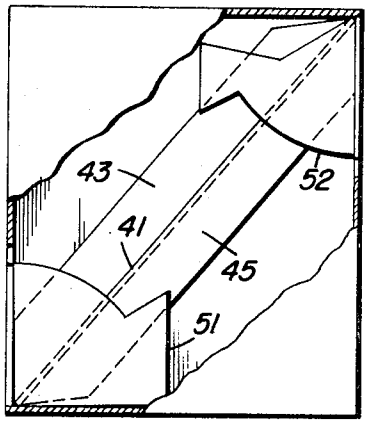
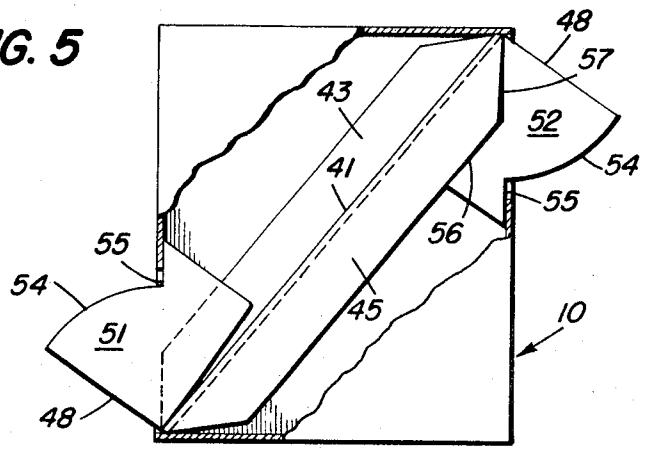


FIG. 5



INVENTORS
Robert E. Ascough
Alexander L. Giroux
Daniel A. Serico

BY
Larry C. Hall ATTORNEY

SHIPPER DISPENSER PACKAGE

SUMMARY OF INVENTION

This invention relates generally to the packaging field and more specifically to a dispenser package comprising an outer container with an inner divider/dispenser wall. The components of the present invention include two separate and distinct elements, namely, an outer container formed in any desirable manner, and a combination dividing and dispensing wall extending diagonally from one corner of the outer container to another.

In the preferred embodiment, the diagonal wall forms two independent triangular shaped compartments in the outer container so that articles may be packaged on either side. The diagonal wall further includes a spout portion on each end thereof which can be withdrawn from the outer container to allow facile removal of the articles from each end of the container compartments.

The basic purposes of the invention are to provide a new and improved dispenser package which holds two groups of articles in a manner which permits easy extraction of an article from the bottom of the group being dispensed. Bottom extraction dispensing packages rely on gravity to present the next article in the dispensing position. Accordingly, the items which are suitable for packaging in bottom dispensing containers must have some substance in order to alleviate hangups and irregular feed. As examples of the type of articles which may be packaged, such things are hard goods including food products, proprietary drugs, toys and hardware are suitable for the package of the present invention.

Moreover, because the package of the present invention offers the dual role of both a shipper and a dispenser, the user need only erect the container, fill it and seal it, for shipment directly to the customer where no unpacking or repacking is required. This feature is accomplished by providing a tear away panel in two of the outer container walls which allows access to each of the inner compartments. Each of these panels are removable to provide an opening for withdrawing the spout portions of the divider/dispenser member. The articles are arranged in the container to move down into dispensing position upon removal of the previous article. When the articles from one compartment are dispensed, the carton is turned over and those from the other compartment are removed.

Another feature of the present invention is the provision for making the container and divider/dispenser in blank form. The blank may be constructed of any suitable carton material, such as paperboard, cardboard, or other foldable sheet material. The blank may also be uncoated or coated with functional coatings such as heat seal coatings, barrier coatings, etc., as generally used in the packaging art. The various score lines, cut lines, and perforated lines are formed in the blank by any suitable creasing, scoring, cutting or perforating mechanisms as conventionally used in the art. The blanks may be stacked and stored in a flat condition until such time as they are converted into carton form, which is done either manually or mechanically.

DESCRIPTION OF DRAWING

FIG. 1 shows a plan view of a blank from which the outer container of the invention may be erected;

FIG. 2 shows a plan view of the blank forming the separate divider/dispenser element;

FIG. 3 shows the divider/dispenser of FIG. 2 properly folded in the dispensing position;

FIG. 4 shows a side view partially in section of the divider/dispenser element located inside the outer container; and,

FIG. 5 shows the package of FIG. 4 in the dispensing configuration.

DETAILED DESCRIPTION

The dispensing package of this invention is made up of the outer container **10** and the container divider/dispenser **40**, these parts being shown in blank form in FIGS. **1** and **2**. The outer container may be formed either as a regular slotted box with all flaps being the same length and the outer flaps meeting at the center, or as a full overlap slotted box where the outer flaps overlap one another. The choice of one form over the other being the same depending on how the box would be filled. FIG. **1** shows in blank form a full overlap slotted container which could be filled either from the top or the bottom. It should be noted however, that the unique manner in which the package of the invention is used prevents the normal use of the terms top and bottom. Depending on which compartment is being dispensed, either end may be both a top or a bottom. For the sake of clarity, the top and bottom of the outer container **10** will be referred to as a container ends.

Accordingly, the outer container blank **10** includes, in the FIG. **1** embodiment, five panels walls **11**, **13**, **15**, **17** and **19** defined by the parallel fold lines **12**, **14**, **16** and **18**. The fold lines are scored or creased on the paperboard material from which the blank **10** is cut. When the blank is folded into its container configuration, the wall panels **13** and **17** form the sides and panels **11**, **15** and **19** form the front and back sides. Panels **11** and **19** are dimensioned so as to overlap one another and be secured together when the container is erected.

The container ends are represented by a pair of closure flaps **20** jointed to panel **19** along fold lines **32**, **33**; a pair of closure flaps **23** joined to panel **15** along fold lines **29**, **30**; and a pair of closure flaps **25** jointed to panel **11** along fold lines **26**, **27**. Panels **13** and **17** each have only one articulated closure flap foldably attached thereto, namely flap **21** attached along fold line **31** to panel **17**, and flap **24** attached along fold line **28** to panel **13**. The opposite ends of panels **13** and **17** are left free as part of the means for allowing egress to the inside of the erected container. To achieve these desired results, i.e., to allow entrance to the inside of the opposite ends of the outer container, removable panels **38** and **39** are defined in the opposite ends of panels **13** and **17** by separate perforated lines **35** and **34**. Each of these perforated lines intersect the side panel fold lines **12**, **14** and **16**, **18**, and in order to insure that the panels **38**, **39** are completely removable, the fold lines **12**, **14**, **26** and **18** are also perforated in the region adjacent to the removable panels **38** and **39**. Further reference to FIG. **1** illustrates the openings **36**, **37** lying along perforated lines **35**, **34** respectively which offer a means for grasping the removable panels **38**, **39** and tearing them away from the container walls. This feature allows entrance to the opposite ends of the container for dispensing.

The container divider/dispenser element **40** illustrated in blank form in FIG. **2** is cut and scored so as to fit diagonally inside the container between the opposite end corners thereof. The blank includes a main portion **41** which serves as the diagonal divider defining a pair of triangular-shaped compartments on the inside of the erected container **10**. A pair of side rails **43**, **45** are foldably connected to the main portion **41** along respective fold lines **42**, **44**. These side rails are preferably folded at right angles to the main portion **41** but in opposite directions so that one side rail extends above the main portion **41** and the other extends below. This configuration allows the side rails to lie adjacent the front and back wall panels **11**, **15**, **19** of the outer container **10**. Each of the side rails **43**, **45** are cut and dimensioned to cooperate with the spout portion of the divider/dispenser in the operative position as will be explained later.

A dispensing spout portion is shown attached to each end of the divider/dispenser main portion **41** comprising in part a pair of spout base members **48**, foldably attached to the main portion **41** along fold lines **46**, **47**. Each spout base **48** includes a pair of spout wings **51**, **52** foldably connected to the base **48**

along fold lines 49, 50. Particular attention to FIG. 2 will illustrate that the wings 51 are identically shaped but on opposite side edges of their respective base members 48, and similarly the wings 52 are identically shaped but attached to the opposite side edges of their respective base members 48. The configuration and position assigned to each wing member is an important feature of the present invention. These features are particularly illustrated in FIG. 3 wherein the divider/dispenser element shown in blank form in FIG. 2 is erected and properly positioned for dispensing from the outer container 10.

The arrangement of the divider/dispenser illustrated in FIG. 3 shows the divider main portion 41 in a horizontal position with side rail 43 turned up and side rail 45 turned down. In the actual case, the divider/dispenser blank 40 is cored along fold lines 42 and 44 on opposite faces of the blank so that each associated rail is more easily folded in only one direction. This is done to insure that one rail is folded up and the other down when the package is assembled. It is particularly important to do this so that the correct relationship between the rail members 43, 45 and the spout members can be assumed in the dispensing position. Each of the spout wings 51 52 includes an arcuate edge 54 which extends from the front edge of the spout base member 48 back to a projected portion 55 to form abutment shoulders which abut the inside of the outer container wall panels 13 and 17 when the spout is pulled out of the container. The arcuate edges 54 are suitably curved so as to coincide smoothly with the wall panel edges remaining upon the removal of removable panels 38, 39 by the selection of an appropriate center of arcuation. This feature insures that there will be a smooth and leak-free fit between the opening left upon removal of the panels 38, 39 and the spoutlike members of divider/dispenser 40.

Another unique feature of the present invention and particularly the spouted divider/dispenser is the configuration of the back portion of the wing members 51 and 52. FIG. 4 shows the divider/dispenser element 40 as being completely collapsed and inserted in the container 10 between diagonal corners. In this condition the spouted portions of divider/dispenser element 40 are completely covered FIG. 5 shows the dispenser package with removable panels 38, 39 removed and the spouts of the divider/dispenser element pulled out. This condition is identical to that shown in FIG. 3 and brings to light the importance of the configuration of the backside of wing elements 51 and 52. It will be noted that when the spouts are pulled out, preferably using the cutout portion 53 of each spout base 48, the arcuate portions 54 of each wing member 51, 52 moves in close contact with the edges of side wall panels 13, 17 defined by the perforated lines 34, 35. This movement takes place until the abutments 55 reach the inside of the respective wall panels 13, 17. At this time, the backside of wings 52 extend beyond and come into contact with their adjacent rail member 43, 45.

Each wing element 52 has a backside configuration comprising surfaces 56, 57 cut in a shallow V-shape so as to engage the cooperating shape of the adjacent V-shape rail 43, 45. Under these conditions, as will be noted in FIG. 5, the spout members become rigidly positioned between the rail members 43, 45 and the inside of the side wall panels 13, 17 because of the abutments 55 and wing element surfaces 56, 57. The wing elements 51 also contribute to positively positioning the spout members in their proper position because, in a manner similar to that of wing members 52, the wing members 51 have a backside surface 58 which engages the surface of the divider/dispenser main portion 41 when the associated abutments 55 come in contact with the inner sidewall panels 13, 17.

This last described feature of the invention permits the use of a separate and distinct divider/dispenser which, because it is locked in position, cannot be accidentally removed or jarred out of position when the package is opened. In addition, because the divider/dispenser is securely locked in position, the different compartments defined by the diagonal wall portion 41 can effectively retain the items packaged therein in place without relative movement.

As pointed out hereinbefore, the type of outer container 10 that may be used with the present package can vary and the particular configuration described herein has been one which features an end loading capability. Using the described container, the package would be assembled and filled by the user with the following steps. Initially the outer container would be squared from its collapsed condition and the divider/dispenser properly folded and inserted therein in such a manner that the spout portions thereof would lie adjacent the removable panels 38, 39 of the outer container. Next the container would be filled and sealed one compartment at a time through the different ends because of the presence of the divider. It hold be clear that an outer container which could be entirely filled by leaving open one side only, thereby giving simultaneous access to the compartments on each side of the divider/dispenser portion 41, would be equally suitable and in some cases preferred to an end loading container. As a general rule, however, side loading containers which have the same volume as end loading containers require more paperboard thereby rendering their use limited when a savings in material is considered important. In either case the filling and sealing operation may be either mechanically or manually performed.

There has thus been described a dispenser package which is capable of satisfying the several objects of this invention. In its basis precepts, this invention is not limited to the specific construction described herein, but it may be embodied in structures which change one or several of the disclosed features of the illustrated carton. It is to be understood that the invention is intended to cover all changes and modifications of the example of this invention as herein illustrated, and other embodiments not specifically described, which do not constitute a departure from the true spirit and scope of this invention.

We claim:

1. A shipping and dispensing package comprising:
   a. a generally rectangular outer container having front, back, end and sidewalls;
   b. removable panels at the ends of each sidewall and located on opposite corners of said outer container, said removable panels extending the full width of said sidewalls and only partially the height thereof, with each removable panel being defined by perforated lines of separation with a means on one of said perforated lines for removing said panels;
   c. a divider/dispenser element substantially the same width as said outer container including a main portion lying within and extending diagonally between the opposite corners of said outer container to divide the container into two triangular compartments, and a dispensing means attached to each end thereof which lies substantially coextensive with the adjacent removable panel for dispensing the contents of each compartment;
   d. said divider/dispenser element further including a pair of side rails which are foldably attached to the sides of said main portion and which lie parallel to and in faCe contact with said outer container front and back walls;
   e. said dispensing means further including a base panel foldably attached to each end of said main portion with side wings hingedly attached to the opposite edges of said base panel; and,
   f. said side rails being positioned one above and one below said compartment dividing means and including angularly cut edges at each end thereof for cooperating with the adjacent dispensing means.

2. The shipping and dispensing package of claim 1 wherein said side wings each have arcuate edge portions which extend from the free edge of said base panel to abutment means which project radially outwardly from said arcuate edges to engage the inside of said sidewall panels in the dispensing condition.

3. The shipping and dispensing package of claim 2 wherein said side wings each further have cut edges on the backside thereof for engaging the adjacent side rails to lock the dispensing means in open position between the side rails and the abutment means.

4 A shipping and dispensing package comprising:

a. a generally rectangular outer container having front, front, back, end and sidewalls;

b. a removable panel in the end of each sidewall which extends the full width thereof and only partially the height thereof;

c. each removable panel being defined by perforated lines of separation with a means on one of said perforated lines for removing said panel; and,

d. a divider/dispenser element substantially the same width as said outer container including a main portion lying within and extending diagonally between the opposite corners of said outer container to divide it into two triangular compartments;

e. said divider/dispenser also including a spout portion on each end thereof for dispensing the contents of each compartment;

f. said removable panels being located on the opposite corners of said outer container and a spout portion lying adjacent and substantially coextensive with each removable panel;

g. said main portion including a side rail foldably attached to each side thereof;

h. said side rails each having cut edges at each end thereof and adapted to lie one above and one below said main portion for cooperating with an adjacent spout portion in the dispensing condition;

i. said spout portions each further including a base panel foldably attached to said main portion and side wings hinged to the opposite edges of said base panel;

j. said side wings each having arcuate edge portions which extend from the free edge of said base panel to abutment shoulders which project radially outwardly from said arcuate edges to engage the inside of said sidewall panels in the dispensing condition;

k. said side wings further having cut edges on the backside thereof for engaging the adjacent side rails to lock the respective spout portions in open position between the side rails and abutment shoulders.