United States Patent [19]

Hennessey

[11] **3,901,386**

[45] **Aug. 26, 1975**

[54] **COMBINATION PACKAGE**

[75] Inventor: **Russell J. Hennessey**, St. Paul, Minn.

[73] Assignee: **Hoerner-Waldorf Corporation**, St. Paul, Minn.

[22] Filed: **Sept. 10, 1973**

[21] Appl. No.: **395,991**

[52] **U.S. Cl.** ..... **206/434**; 206/223; 206/427; 206/429; 229/29 C; 426/120.6

[51] **Int. Cl.**[2] **B65D 65/00**; B65D 5/48

[58] **Field of Search** ..... 206/223, 434, 427, 429; 426/120; 229/29 C

[56] **References Cited**

UNITED STATES PATENTS

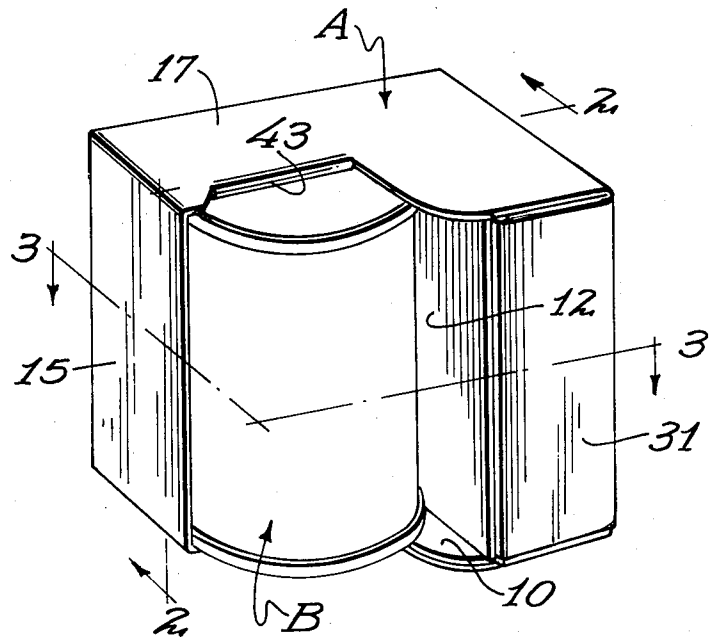
2,650,702	9/1953	Shanahan	206/223
3,080,049	3/1963	Arneson	206/223
3,241,738	3/1966	Frieman	206/223

Primary Examiner—William I. Price
Assistant Examiner—Douglas B. Farrow
Attorney, Agent, or Firm—Jerry F. Best

[57] **ABSTRACT**

A package acts to connect a recessed end can with a carton like enclosure for containing a second product, usually for use with the content of the can. The carton is substantially equal in depth to the diameter of the can so that the combined package may be confined within a generally rectangular area.

6 Claims, 7 Drawing Figures



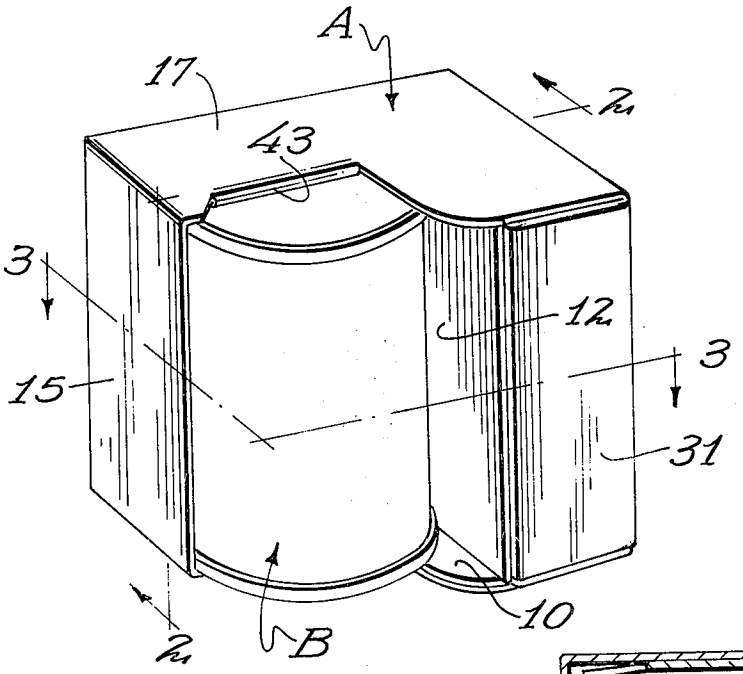


FIG. 1

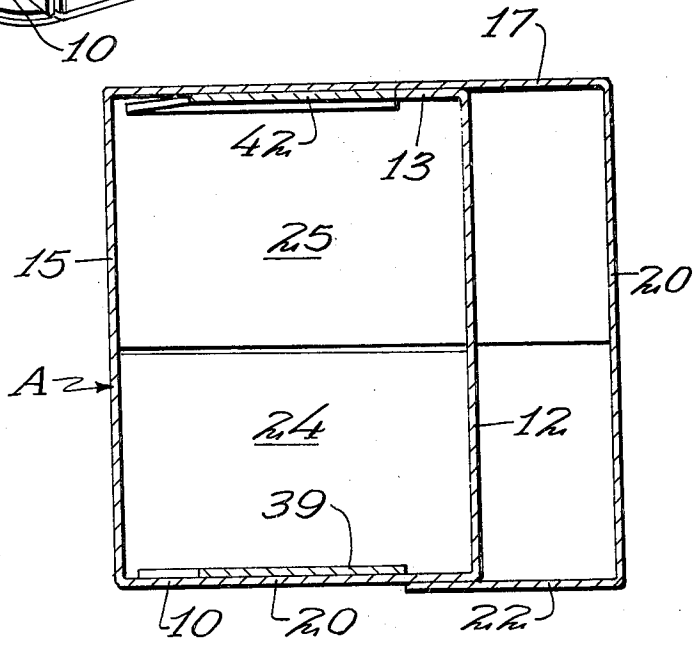


FIG. 2

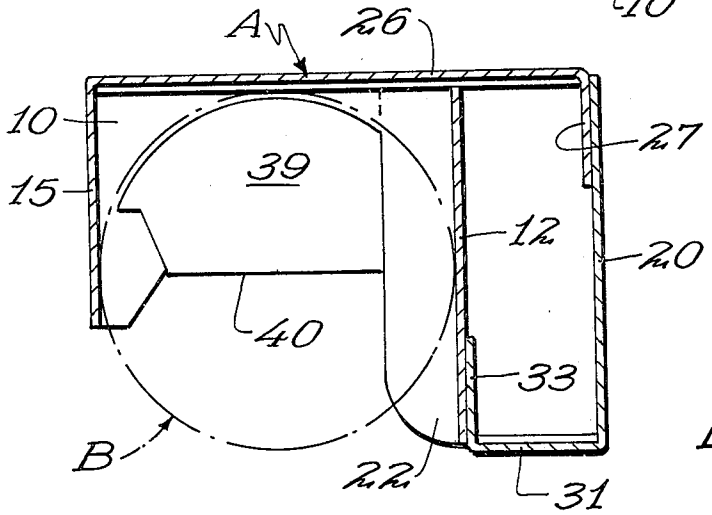


FIG. 3

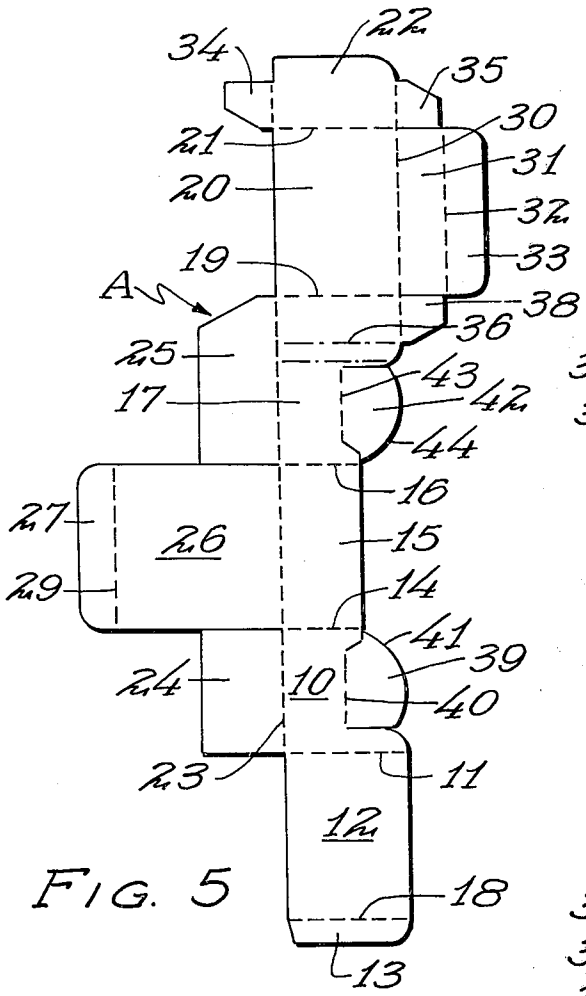


FIG. 5

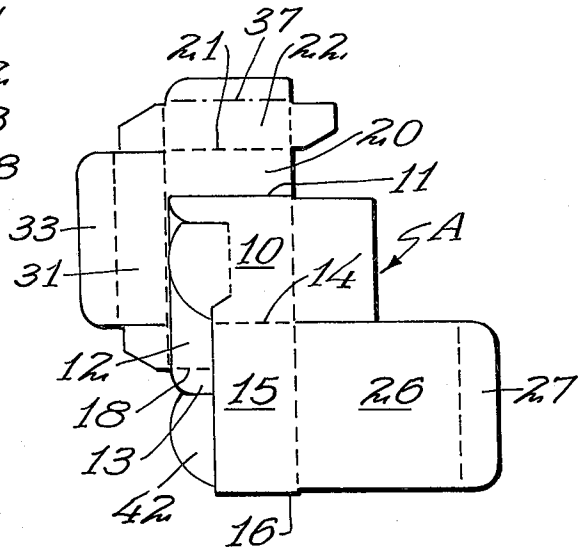


FIG. 6

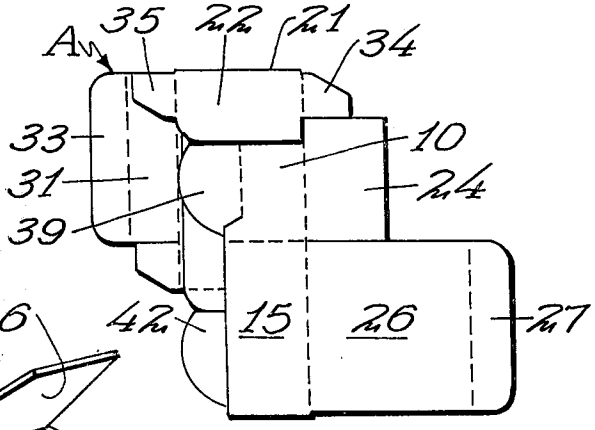


FIG. 7

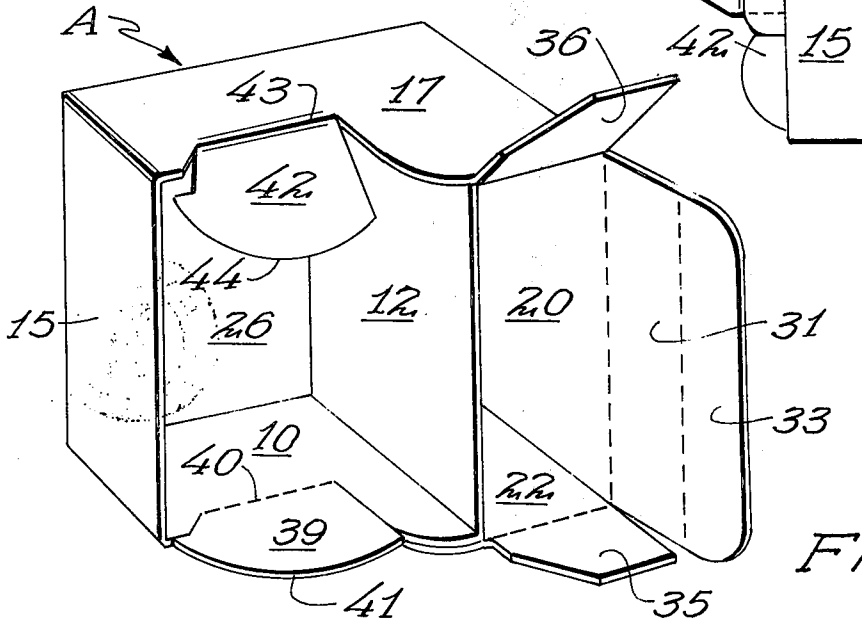


FIG. 4

COMBINATION PACKAGE

This invention relates to an improvement in combination package and deals particularly with a package designed to hold a can of product and an additional package of products such as one which may be contained in a bag or folder.

BACKGROUND OF THE INVENTION

In my previous patent issued May 22, 1951 as U.S. Pat. No. 2,544,190 for "Display Carton," I described a can carrier for chimed cans in which the cans were held in place by foldable flaps which extended into the recessed ends of the can to hold the can from accidental disengagement. It has now been found that in some instances, combination packages are desirable which are capable of holding a recessed end can and also containing an additional product which may be contained in a carton like enclosure. The present invention is designed to accomplish this result.

SUMMARY OF THE INVENTION

In the present construction, a combination carton is provided by means of a rectangular sleeve forming the top, bottom, and sides of the sleeve. A partition panel is hingedly connected to one end of the blank forming the sleeve, and is adhered to, the wall of the sleeve opposite that to which the partition is hingedly connected, the partition connecting the top and bottom walls of the sleeves at a point intermediate the side walls. Means are provided for retaining the cans in one compartment which is thus formed, and closure flaps are foldably connected to a side wall which form a closure for the forward end of the other of said compartments. The rear of the combination package is closed by a closure panel and tuck flap which encloses the entire rear portion of the package.

It will be understood that in the use of the term top, bottom, side walls and front and rear closures, these are merely relative terms used for the purpose of identification. In other words, the rear wall which will be described could comprise the bottom wall of the completed package if the can were to be displayed from the top of the package rather than from a side thereof.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the combination package, in its completed form.

FIG. 2 is a sectional view through the structure, the position of the section being indicated by the line 2—2 of FIG. 1.

FIG. 3 is a sectional view through the package, the position of the section being indicated by the line 3—3 of FIG. 1.

FIG. 4 is a perspective view of the combination package before it is filled.

FIG. 5 is a diagrammatic blank from which the carton is formed.

FIG. 6 is a plan view of the blank in partially folded form.

FIG. 7 is a diagrammatic view of the blank in completely folded form.

DESCRIPTION OF THE PREFERRED FORM

As illustrated in FIG. 5 of the drawings, the combination carton includes a bottom panel 10 connected along a fold line 11 to a partition panel 12. The partition panel 12 is provided with a glue flap 13 hingedly connected thereto along a fold line 14. The bottom panel 10 is also connected along a fold line 14 to a side wall 15 which, in turn, is connected along a fold line 16 to a top panel 17. The top wall 17 is connected along the fold line 19 to a second side wall 20. The side wall 20 is connected along the fold line 21 to a bottom panel 22 which is designed to overlap the bottom panel 10 and to be secured thereto. The fold lines which have been described are in parallel relation.

The rear edge of the bottom wall 10 is foldably connected along a fold line 23 to a rear closure flap 24. The top panel 17 is connected along an extention of the fold line 23 to a rear closure flap 25. An outside rear panel 26 is connected along the fold line 23 to the side wall 15. A tuck flap 27 is foldably connected to the rear wall panel 26 along the fold line 29 The fold lines 23 and 29 are in parallel relation and are at right angles to the fold lines previously described.

The side wall 20 is foldably connected along the fold line 30 to a front wall panel 31 which in turn is connected along the fold line 32 to a tuck flap 33. Inner front closure flaps 34 and 35 are connected to the bottom wall panel 22 along extentions of the fold line 23 and 30 respectively. A similar inner closure flap 38 is hinged to the forward end or a portion of the top panel 17.

In the folding operation, the partition wall 12 and glue flap 13 are folded along the fold line 11 to overlie the bottom panel 10 and the portion of the side wall panel 15. The folded structure is then folded along the fold line 16 so as to overlie the top wall 17 and the portion of the side wall 20. When folded in this manner, the blank appears as in FIG. 6 of the drawings. During this operation, the glue flap 13 is adhesively secured to the top panel along the area defined by the broken lines 36. From the position illustrated in FIG. 1, the bottom panel 22 is folded along the fold line 21, and the end area of the blank which is defined by the broken line 37 is adhered to the undersurface of the bottom panel 10 to complete the bottom of the carton.

A can retaining flap 39 is hingedly connected to the bottom panel 10 along a fold line 40 and has an arcuate edge 41 which engages into the bottom recessed end of a can B, the combination package being indicated generally by the letter A. In a similar manner, a can retaining flap 42 is hingedly connected to the top panel 17 along a fold line 43. The flap 42 includes an arcuate end 44 which engages into the recessed end of the can B to hold the top end of the can engaged.

FIG. 4 of the drawings shows the combination carton in partially set up form. In this figure the side walls 15 and 20 are shown in right angular relation to the bottom walls 10 and 22 and the top wall 17. The partition walls 12 extends vertically parallel to the side walls 15 and 20.

In order to engage the can B in place, the flaps 40 and 42 are folded inwardly through approximately 180 degrees until they rest in face contact with the bottom panel 10 and the top panel 17. The can is inserted between these can retaining flaps until a chime of the can passes the arcuate ends 41 and 42 of the flaps 39 and

42. The flaps 39 and 42 then spring into the recessed ends of the can B due to the natural tendency for these flaps to unfold and return to their original position.

The rectangular back panel 26 is folded outwardly of the in turned flaps 25 and 34, the locking tongue 27 being inserted between the upper ends of these inner closure flaps 24 and 25, the tuck flap 27 lying inwardly of the side wall 20. This closes the rear of the combination package and holds the package in rectangular form.

The compartment between the top wall 17 and bottom wall portion 22, and between the partition 12 and the side wall 20 is then filled. The compartment is closed by first folding the flaps 35 and 38 into a common plane, folding the front panel 31 to lie outwardly of these flaps 35 and 36. The locking tongue 33 is then inserted between the edges of the closure flaps 35 and 36 and the partition wall 12 to form a closed compartment.

It will be noted that the fold lines 40 and 43 which hingedly connect the flaps 39 and 42 to the bottom and top walls respectively are spaced from the rear of the top panel a distance which is about half the width of the remainder of the bottom and top panels 10 and 17. Thus these portions of the bottom and top walls are only about one half the width of the side wall 20 and partition wall 12. As a result, as is evident from FIG. 3 of the drawings, the combination package is generally rectangular, permitting the packages A to be packed by side relation or in superimposed relation. Thus the problem of packaging a plurality of packages in an outer container are simplified.

In accordance with the Patent Statutes, I have described the principles of construction and operation of my improvement in Combination Package; and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A combination package for a chimed end can and another product including:

a sleeve of generally rectangular section including top, bottom and side walls connected in tubular relation,

a partition secured between said top and bottom walls parallel to said side walls, said partition dividing said sleeve into two rectangular compartments,

rear closure flaps secured to the rear edges of said top and bottom walls and folded into a common plane,

a rear wall connected to the rear edge of one of said side walls and folded outwardly of said rear closure flaps, and having a tuck flap adapted to extend inwardly of the other of said side walls,

can retaining flaps hinged to the forward edges of said top and bottom walls forwardly of one of said compartments and adapted to engage into the chimed ends of the can to hold the can against said rear closure flaps, and

a front closure for the other of said compartments.

2. The structure of claim 1 and in which said other compartment is formed by a portion of said top and bottom walls, one of said side walls and said partition.

3. The structure of claim 1 and in which said front closure includes a front closure panel secured to the front edge of said one of said side walls.

4. The structure of claim 3 and in which said front closure panel includes a tuck flap engaging against said partition panel.

5. The structure of claim 1 and in which said front closure includes inner closure flaps hinged to the forward end of said top and bottom walls and folded into coplanar relation, a front closure panel hingedly connected to one of said side walls, and a tuck flap hingedly connected to said front closure panel and folded between the edges of said inner closure flaps and said partition panel.

6. The structure of claim 1 and in which the bottom of said one compartment connects one side wall to said partition, and the bottom of said other compartment is hingedly connected to the other of said side walls and overlaps and is secured to the bottom of said one compartment.

* * * * *