

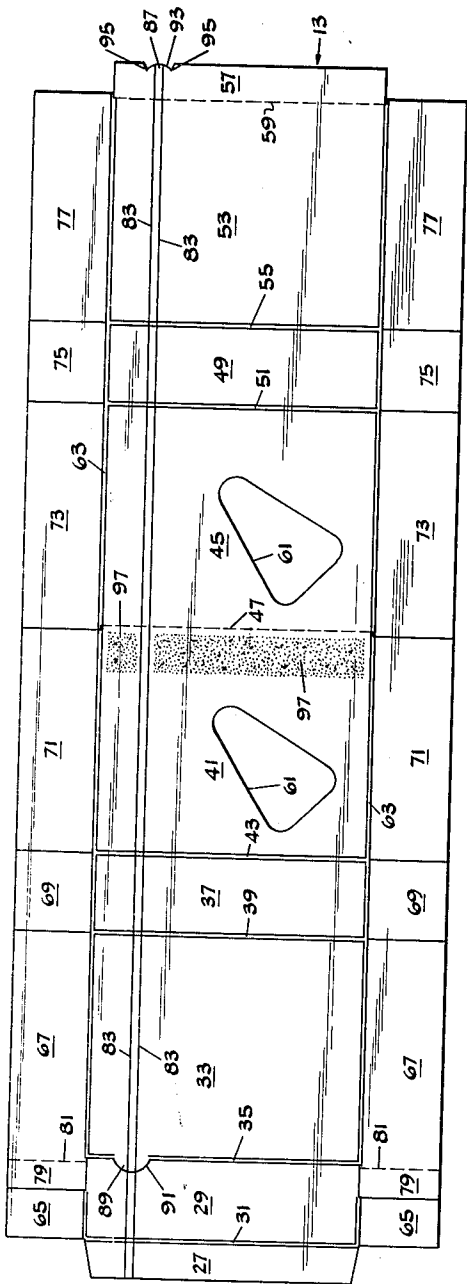
April 16, 1963

L. S. WYSOCKI
CARTON

3,085,735

Filed March 21, 1960

2 Sheets-Sheet 1



April 16, 1963

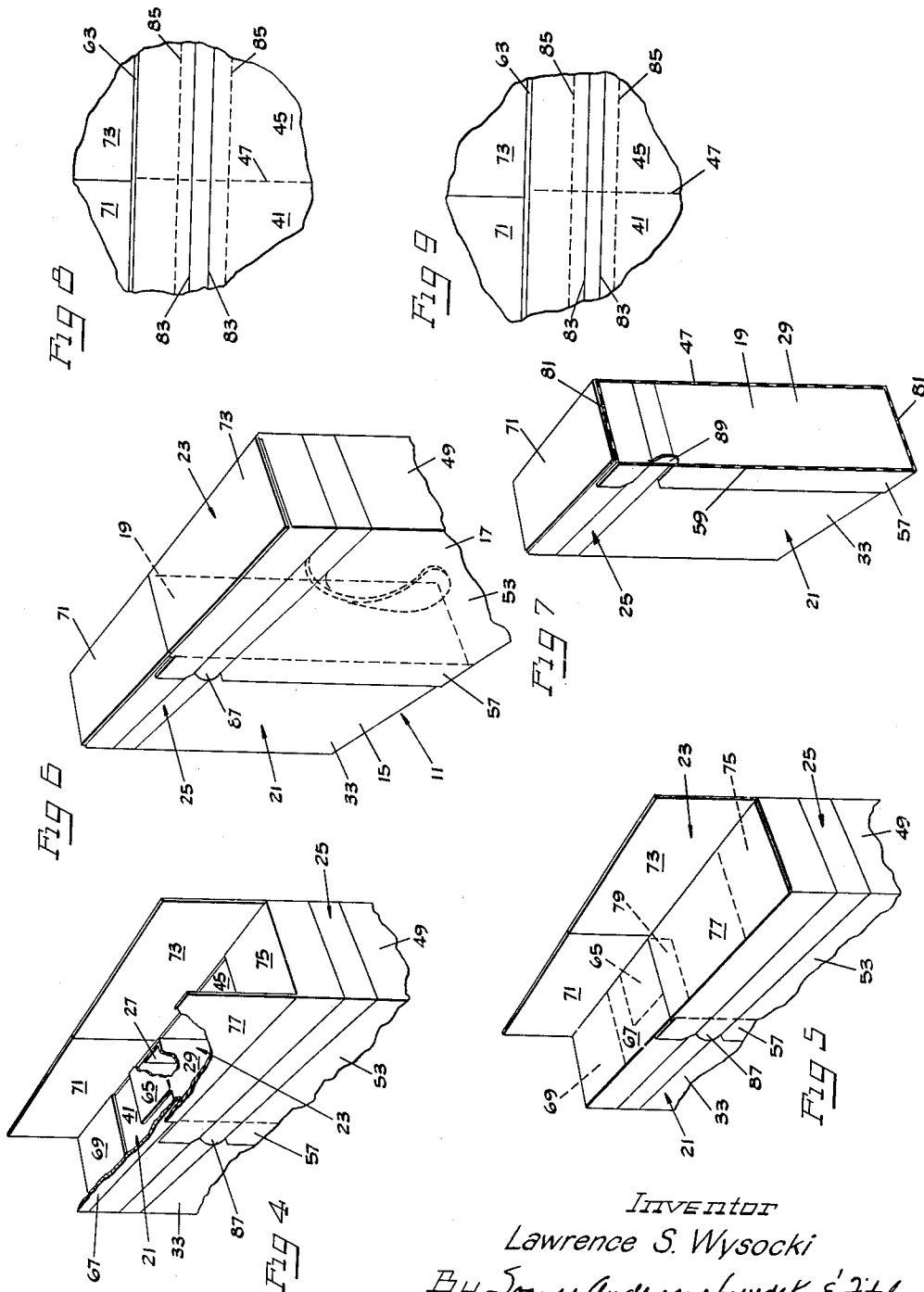
L. S. WYSOCKI

3,085,735

CARTON

Filed March 21, 1960

2 Sheets-Sheet 2



Inventor
Lawrence S. Wysocki
By *Joane, Anderson, Luedke & Fitch*
Att.

1

3,085,735

CARTON

Lawrence S. Wysocki, Chicago, Ill., assignor, by mesne assignments, to Chicago Carton Company, a corporation of Delaware

Filed Mar. 21, 1960, Ser. No. 16,448

5 Claims. (Cl. 229—51)

This invention relates generally to cartons and more particularly to a unitary twin-pack carton constructed with a tear tape to permit successive opening of the packs, and with means facilitating severance of the packs to permit discarding of the empty pack without disturbing the integrity of the remaining unopened pack.

In various merchandising areas, such as in the marketing of cake mixes, individual servings of breakfast cereal, in introductory offerings and in other like situations, it is often desirable to package two units of any given commodity, or of two related commodities, as a unitary package. Most often, these commodities are not necessarily intended for consumption at one time and, more often than not, the second pack will be opened for consumption of its contents only after an intervening period of time has elapsed since opening and consumption of the first pack. For purposes of economy and utility, such double packaging can be most efficiently accomplished in a twin-pack fabricated from a unitary blank incorporating a tear tape arranged to afford successive opening of the packs. In addition, it is most desirable, both from the appearance standpoint and in order to conserve storage space, to retain only the unopened pack after emptying the contents of the initially opened pack.

Accordingly, the principal object of the invention is the provision of an improved twin-pack carton. A further object is the provision of a twin-pack carton which incorporates the selective openability and severability features referred to above. A still further object of the invention is the provision of a carton of the type referred to above which can be economically fabricated from a unitary blank on conventional carton forming equipment. Other objects and advantages will become apparent by reference to the following description and accompanying drawings in which:

FIGURE 1 is a plan view of a blank from which a twin-pack carton in accordance with the invention can be fabricated;

FIGURE 2 is a broken away, fragmentary plan view of a portion of the blank shown in FIGURE 1, illustrating one stage in the conversion of the blank to an erected carton;

FIGURE 3 is a plan view of the blank shown in FIGURE 1, illustrating a further stage in the conversion of the blank to an erected carton;

FIGURE 4 is a fragmentary, and partially broken away, perspective view illustrating the closure of the top of the twin-pack carton;

FIGURE 5 is a view similar to FIGURE 4 showing a subsequent stage in the closure of the top of the twin-pack carton;

FIGURE 6 is a fragmentary perspective view showing the completed twin-pack carton;

FIGURE 7 is a perspective view illustrating one of the packs after severance therefrom of the other pack;

FIGURE 8 is an enlarged plan view of one portion of the blank shown in FIGURE 1 illustrating one arrangement of the tear tape in relation to a perforated line; and

FIGURE 9 is a view similar to FIGURE 8, showing a second arrangement of the tear tape relative to a perforated line.

In general, the drawings are illustrative of a generally rectangular twin-pack carton 11 which is fabricated from

2

a blank 13 and which embodies various features of the invention. As shown in FIGURE 6, the carton 11 incorporates, in addition to the usual outer walls including top and bottom closures, a series of lines of weakness extending circumferentially around the carton to divide the carton into two portions 15 and 17, and an interior transverse or common wall 19 extending within the carton portion 15 between the opposed outer walls. Thus, the transverse wall 19, together with the outer walls, define two adjacent compartments or packs 21 and 23, the compartment 21 being associated with the carton portion 15, and the compartment 23 being principally associated with the carton portion 17. In addition, the carton 11 also includes a tear strip or tape 25 which extends transversely to the lines of weakness within both carton portions 15 and 17, and which is utilizable for initial opening of the container 23 and for subsequent opening of the container 21. After the container 23 has been opened and its contents emptied, the carton portion 17 can be severed from the portion 15 along the lines of weakness to permit discarding of the carton portion 17 without disturbing the integrity of the compartment 21.

The blank 13 from which the twin-pack carton of FIGURE 6 is fabricated, is generally rectangular in outline, as seen in FIGURE 1. As shown therein, the blank comprises a series of aligned panels including an attachment flap 27, a transverse wall panel 29 connected to the attachment flap 27 along a fold line 31, a first rear side wall panel 33 connected to the transverse wall panel 29 through a fold line 35, a first end wall panel 37 connected to the first rear wall panel 33 through a fold line 39, a first front wall panel 41 connected to said first end wall panel 37 along a fold line 43, a second front wall panel 45 connected to the first front wall panel 41 through a line of weakness 47 which, in the illustrated embodiment, is constituted by a perforated line, a second end wall panel 49 connected to the second front wall panel 45 through a fold line 51, a second rear wall panel 53 connected to the second end wall panel 49 along a fold line 55 and finally, a second attachment flap 57 connected to the second rear wall panel 53 along a line of weakness 59 which is constituted, in the disclosed construction, by a perforated line.

As seen in FIGURE 1, each of the front wall panels 41 and 45 can be formed with a window 61. If desired, the windows 61 can be covered by any suitable transparent film.

The wall panels 29, 33, 37, 41, 45, 49 and 53 have foldably connected thereto along parallel fold lines 63 at each of their aligned opposite ends, respective closure flaps 65, 67, 69, 71, 73, 75 and 77. As can be readily observed, all of these flaps extend for the entire length of the edge of the respectively adjacent wall panels, except for the flaps 65 extending from the transverse wall panel 29. Each of the closure flaps 65 is foreshortened relative to the length of the edge of the transverse wall panel to permit the inclusion of a flap 79 extending from the end edge of the adjacent flap 67 through a line of weakness 81 which is generally aligned with the fold line 35 and which is constituted by a perforated line. The division of the paperboard material at the end of the transverse wall panel 29 into the two flaps 65 and 79, as described, permits at each end of the containers 21 and 23, the formation of a closure from four flaps, one of which projects inwardly from each of the compartment defining walls.

The blank 13 also includes the tear strip 25 which is formed by an inner pair of spaced, parallel semi-cut lines 83 on the inside surface of the blank 13, as shown in FIGURE 1, and by an outer pair of spaced, parallel semi-cut lines 85 located outside the inner semi-cut lines 83 in the outer surface of the blank, as seen in FIGURES 2

through 6. This arrangement of semi-cut lines, i.e., cut lines which extend only partially through the depth of the paperboard, provides for lateral rupture within the paperboard from the outer semi-cut lines 85 to the inner semi-cut lines 83 during opening of the carton by the tear tape.

While the tear tape 25 is shown extending continuously for the entire length of the blank 13, certain of the advantages of the invention can be effectively realized without extension of the tear tape across the transverse wall panel 29 or across the attachment flap 27.

The tear strip 25 includes two gripping tabs 87 and 89, one of which, 87, is located at the end of the blank 13 along the edge of the attachment flap 57, while the tab 89 projects from the first rear wall panel 33 into the adjacent margin of the transverse wall panel 29. The tab 89 is severed from the transverse wall panel 29 by an arcuate cut line 91 having its ends terminating in alignment with the fold line 35 beyond the outer semi-cut lines 85. Within the area between the ends of the cut line 91, creasing of the blank for the fold line 35 is omitted.

The tab 87 at the outer edge of the attachment flap 57 has an arcuate edge 93 which extends beyond the outer semi-cut lines 85 into the margin of the attachment flap 57 and which has its ends terminating at the inner end of a pair of outwardly diverging cuts 95, in the manner illustrated, so as to facilitate initial gripping of the tab.

In erection of the carton 11, any suitable adhesive or glue is first applied within the areas 97 located in the first front wall panel 41 to either side of the tear tape 25 adjacent the perforated line 47. In the next operation, the attachment flap 27 is folded back upon the transverse wall panel 29 and then, in this condition, the attachment flap 27 and the wall panels 29 and 33, together with their attached closure flaps 65, 67 and 79, are folded along the line 39 to a position in overlying relation to the wall panels 37 and 41 and their associated closure flaps 69 and 71. This folding also serves to secure the attachment flap 27 to the first front wall panel 41 within the glue areas 97, as illustrated in FIGURE 2.

Subsequently, glue is applied, also as shown in FIGURE 2, to the outer surface of the first rear wall panel 33 in the areas 99 located adjacent the fold line 35 to either side of the tear tape 25. At this point, the wall panels 49 and 53, together with the attachment flap 57, and the associated closure flaps 75 and 77, are folded along the fold line 51 into overlying relation to the panels 33, 29 and 45, and their respective closure flaps, thereby also securing the attachment flap 57 to the first rear wall panel 33 within the areas 99.

When the partially fabricated carton is extended, as a preliminary to closure of the top and bottom from the collapsed condition shown in FIGURE 3, to a position with the outer walls in spaced, opposed relation, as shown in FIGURE 4, the transverse wall panel 29 extends between the opposed front and rear wall panels 41 and 33, constituting the interior wall 19 which divides the carton 11 into two containers 21 and 23.

Complete erection of the carton is accomplished by closing the bottom, filling the compartments, and closing the top. As closure of the carton at the top and at the bottom is identical, only the closure of the top will be described. As shown in FIGURES 4 through 6, the closure flaps 65 and 69 are first folded inwardly of the compartment 21 while the closure flap 75 is folded inwardly of the compartment 23. The flap 67 is then folded over and adhesively secured to the closure flaps 65 and 67, thereby locating the flap 79 in inwardly projecting relation to the compartment 23 at its top end. The flap 77 is then folded over and adhesively secured to the flaps 75 and 77. Finally, the flaps 71 and 73 are folded over and adhesively secured to the flaps 67 and 77, thereby completing closure of the carton.

When it is desired to empty the contents of the com-

ment 23, the gripping tab 87 on the rear wall of the carton can be grasped and pulled to rupture the wall panels 53, 49 and 45, as shown in dotted outline in FIGURE 6, thereby permitting upward swinging of the top closure about the line of weakness 81.

After the contents of the compartment 23 have been completely emptied, the wall panels 53, 49 and 45, together with their respective attached flaps 77, 75 and 73 and the flap 79, can be separated from the compartment 21 by severing the paperboard along the lines of weakness 47, 59 and 81. When these panels have been thus discarded, the integrity of the compartment 21 will remain intact, the carton appearing, as shown in FIGURE 8, with the gripping tab 89 projecting beyond the transverse wall panel 29 in the plane of the wall panel 33.

When it is desired to open the remaining compartment 21, the tab 89 can be grasped to pull the tear strip 25 out of the wall panels 33, 37 and 41, thereby permitting upward hinged movement of the top closure about the foldable connection between the transverse wall panel 29 and the closure flap 65.

Of course, if desired, both compartments or packs 21 and 23 can be opened at substantially the same time. In this connection, the arrangement of the semi-cut lines 83 and 85 relative to the perforated line 47 is important. In one construction, as illustrated in FIGURE 8, the perforated line 47 can be located so that its individual cut segments lie between and do not intersect the various semi-cut lines 83 and 85. This arrangement facilitates continued separation of the tear tape along the first front wall panel 41 to open the compartment 21 after complete rupture of the tear tape 25 from the second front wall panel 45. Thus, the tear tape in this arrangement can be grasped once and manipulated around the entire carton to simultaneously open both packs. Preferably, the arrangement of the intersection between the semi-cut lines 83 and 85 and the line of weakness 59 is, as shown in FIGURE 8, to prevent unintended disconnection of the gripping tab 87 from the tear tape extending through the wall panel 53.

On the other hand, the individual cut segments of the perforated line 47 can be positioned to intersect with the semi-cut lines 83 and 85 to materially weaken the tear tape 25 so that it tends to part at the perforated line 47 joining the panels 41 and 45. When parting of the tear tape at the line 47 does occur, the panel 53 must be separated along the line 59 from its attachment flap 57 to expose the other gripping tab 89 to permit its employment for opening the compartment 21.

The twin-pack carton 11 disclosed herein provides a novel unitary package incorporating a pair of compartments capable of containing separate charges of material. The compartments can be opened and emptied, through the use of a common tear tape either at substantially the same time or at any desired time interval therebetween. Moreover, after the contents of the compartment 23 have been emptied, the emptied portion 19 of the carton can be severed from the undisturbed compartment 21 to save storage space and to avoid the unsightly appearance resulting from rupture of the compartment 23. Removal of the emptied carton portion 17 additionally serves to uncover the gripping tab 89, thereby facilitating opening of the compartment 21 by the tear tape 25.

Various changes and modifications may be made in the disclosed construction without departing from the principles of the invention. Various features of the invention are set forth in the appended claims.

I claim:

1. A carton formed from a unitary blank, said carton comprising a generally closed outer structure having a pair of opposed continuous side walls, a circumferential line of weakness extending, at least in part, through said opposed side walls and dividing said structure into two portions, an interior single ply wall extending on one

5

side of said line of weakness from and between said opposed side walls forming a part of one of said portions of said outer structure, said interior wall and said one portion of said outer structure defining a first compartment, said interior wall and the other of said portions of said outer structure defining, at least in part, a second compartment, and a tear tape extending transversely of said line of weakness within each of said portions of said outer structure, said tear tape being operable to initially rupture said second portion of said outer structure to thereby open said second compartment without disturbing the integrity of said first compartment, said portions of said outer structure being severable from each other along said line of weakness without disturbing the integrity of said first compartment, and said tear strip being subsequently operable to rupture said one portion of said outer structure to thereby open said first compartment.

2. A carton formed from a unitary blank, said carton comprising a generally closed outer structure having a pair of opposed continuous side walls, a circumferential line of weakness extending, at least in part, through said opposed walls and dividing said structure into two portions, an interior single ply wall extending on one side of said line of weakness from and between said opposed side walls forming a part of one of said portions of said outer structure, said interior wall and said one portion of said outer structure defining a first compartment, said interior wall and the other of said portions of said outer structure defining, at least in part, a second compartment, said portions of said outer structure being severable from each other along said line of weakness without disturbing the integrity of said first compartment, and a tear tape extending transversely of said line of weakness within each of said portions of said outer structure, said tear tape being selectively operable to rupture said outer structure for substantially simultaneous opening of both of said compartments or to successively open said compartments by initially rupturing said second portion of said outer structure to thereby open said second compartment without disturbing the integrity of said first compartment, and by subsequently rupturing said one portion of said outer structure to thereby open said first compartment.

3. A carton formed from a unitary blank, said carton comprising a generally closed outer structure having a plurality of outer walls including a pair of opposed continuous side walls, a circumferential series of lines of weakness in said outer walls dividing said structure into two portions, an interior single ply wall extending on one side of said line of weakness between said opposed side walls forming one part of one of said portions of said outer structure from an integral foldable connection with one of said opposed side walls to a hinged connection with the other of said opposed side walls, said interior wall and said one portion of said outer structure defining a first compartment, said interior wall and the other of said portions of said outer structure defining, at least in part, a second compartment, said portions of said outer structure being severable from each other along said lines of weakness without disturbing the integrity of said first compartment, and a tear tape extending continuously around the outer walls of said structure transversely of said lines of weakness, said tear tape having a first gripping tab to facilitate initial rupturing of said other portion of said outer structure and having a second gripping tab extending integrally from said one side wall and cut out of said interior wall to facilitate rupturing of said one portion of said outer structure when said other

6

portion of said outer structure is severed from said one portion.

4. A unitary blank for a carton which incorporates two successively openable compartments and which is severable to permit discarding of the empty portion of the carton after discharging the contents from the initially opened compartment, said blank comprising a series of aligned panels including a first attachment flap, a transverse wall panel foldably connected to said first attachment flap, a first side wall panel foldably connected to said transverse wall panel, a first end wall panel foldably connected to said first side wall panel, a second side wall panel foldably connected to said first end wall panel, a third side wall panel connected to said second side wall panel through a line of weakness, a second end wall panel foldably connected to said third side wall panel, a fourth side wall panel foldably connected to said second end wall panel, and a second attachment flap connected to said fourth side wall panel along a line of weakness, and a tear tape extending continuously through and from said first side wall panel to and through said second attachment flap with a gripping tab at one end.

5. A unitary blank for a carton which includes two successively openable compartments and which is severable to permit discarding of the empty portion of the carton after discharging the contents from the initially opened compartment, said blank comprising a series of aligned panels including a first attachment flap, a transverse wall panel foldably connected to said first attachment flap, a first side wall panel foldably connected to said transverse wall panel, a first end wall panel foldably connected to said first side wall panel, a second side wall panel foldably connected to said first end wall panel, a third side wall panel connected to said second side wall panel through a line of weakness, a second end wall panel foldably connected to said third side wall panel, a fourth side wall panel foldably connected to said second end wall panel, and a second attachment flap connected to said fourth side wall panel along a line of weakness, a closure flap foldably connected to the aligned edges of each of said wall panels, said closure flaps connected to said transverse wall panel extending along a portion of said aligned edges adjacent said first attachment flap, additional closure flaps extending from each of said closure flaps connected to said first side wall panel to adjacent said closure flaps connected to said transverse wall panel, said additional closure flaps being interconnected with said first side wall closure flaps through a line of weakness in alignment with the foldable connection of said transverse wall panel and said first side wall panel, and a tear tape extending continuously through and from said first side wall panel to and through said second attachment flap with gripping tabs at each end.

References Cited in the file of this patent

UNITED STATES PATENTS

1,046,337	Schoettle	Dec. 3, 1912
2,283,856	Hoenig	May 19, 1942
2,287,729	Fallert	June 23, 1942
2,608,341	Eckman	Aug. 26, 1952
2,678,724	Andriot	May 18, 1954
2,909,312	Conerty	Oct. 20, 1959
2,973,130	Cottrill	Feb. 28, 1961

FOREIGN PATENTS

739,899	Great Britain	Nov. 2, 1955
---------	---------------	--------------