

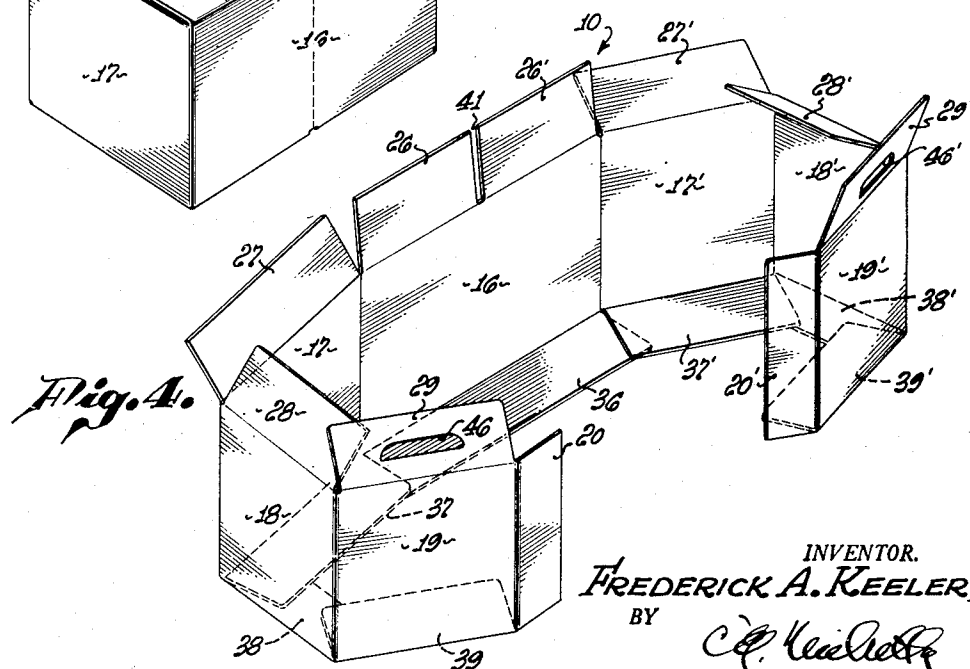
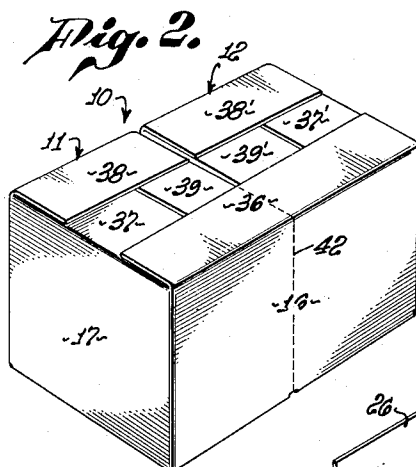
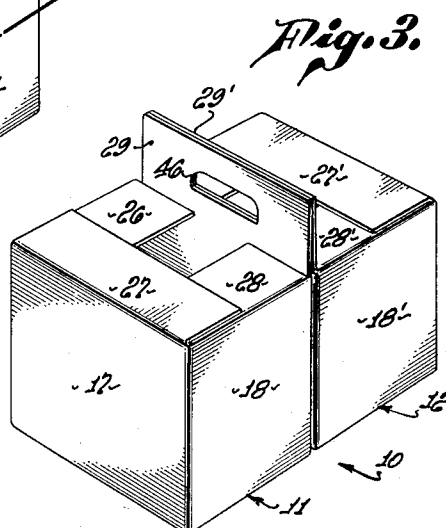
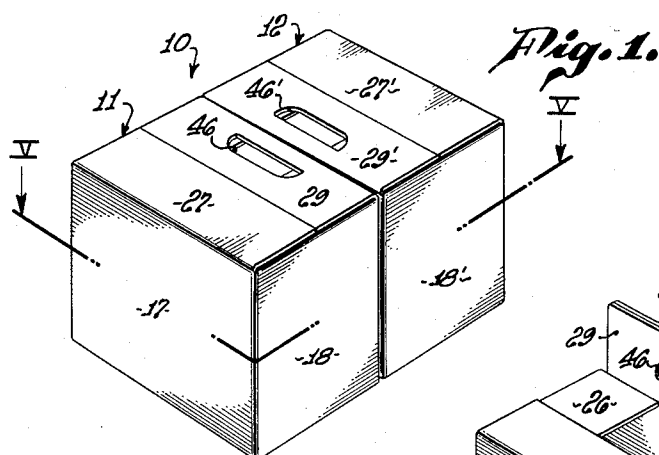
July 20, 1954

F. A. KEELER
DIVISIBLE CARTON

2,684,178

Filed Feb. 23, 1950

2 Sheets-Sheet 1



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F. A. KEELER
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2,684,178

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2 Sheets-Sheet 2

Fig. 5.

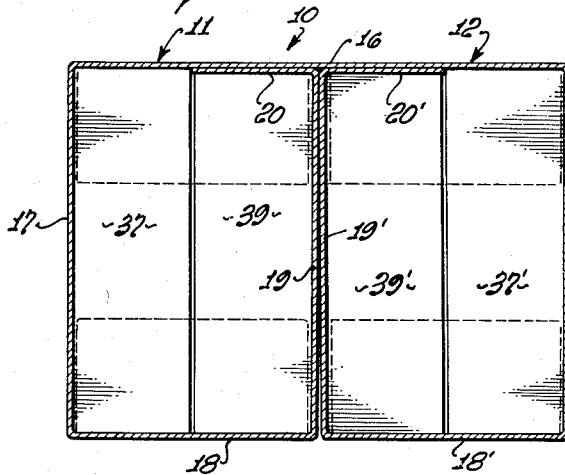


Fig. 8.

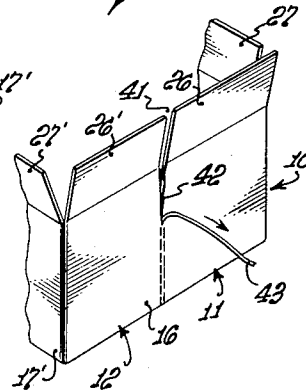


Fig. 7.

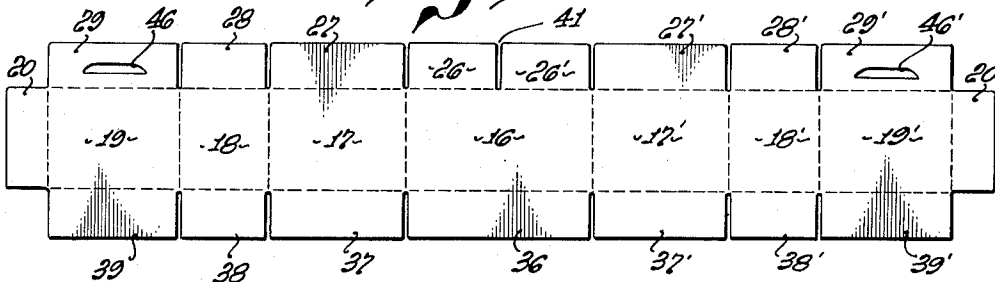


Fig. 9.

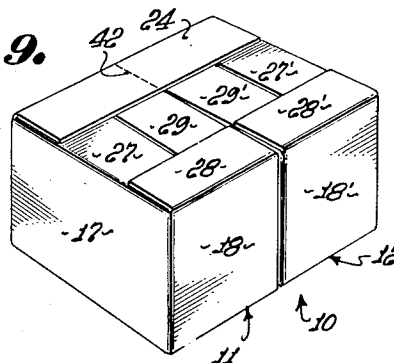
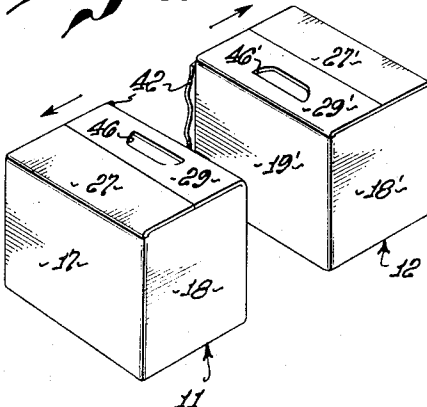


Fig. 6.



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DIVISIBLE CARTON

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4 Claims. (Cl. 220-107)

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This invention relates generally to the art of box construction and more particularly to the provision of a divisible carton having two sealed compartments, the entire carton being formed from a single sheet of cardboard, pasteboard or the like.

In the merchandising of individually packaged articles such as canned goods, individually wrapped bars of soap and bottled goods, it has long been observed that a carton which is economical from the standpoint of shipping and handling costs contains more items than the ultimate consumer is accustomed to buy at one purchase. It has been proposed in the past to facilitate the handling, shipment and sale of such individually packaged articles by the provision of a shipping carton containing, say, a dozen of the merchandized articles, and forming the carton in such a way as to permit the ultimate purchaser to buy a half-dozen articles in a separable container within the carton.

In order to facilitate such purchases of half the total quantity, it is desirable that each half of the entire carton be a completely sealed compartment and that the two compartments be easily separated one from the other at the time of sale. Heretofore small, individual packages or cartons (each made from a separate blank of material) have been packaged in large cartons or crates, but this is not an economical procedure. The increased cost of carton manufacture incident to the use of more than one blank has thus far prevented the wide use of divisible cartons containing sealed compartments.

Attempts have been made to form such divisible cartons from a single blank, but the cartons heretofore produced have used blanks irregular in outline and hence wasteful of material stock in manufacture.

Carton construction in accordance with my invention solves the above problems in a novel and efficient manner and affords additional conveniences and advantages to be described hereinafter. I have devised a blank, substantially rectangular in outline, which may be slotted, cut and folded to form a rigid carton strong enough to withstand rough handling in shipment and storage (even when filled with heavy commodities such as canned fruit, vegetables, bottled beverages or the like) and yet easily severable into its component sealed containers when desired. Furthermore, a convenient carrying handle may be provided by unfastening two top flaps of the carton, thus permitting the purchaser to carry the complete carton if desired.

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It is an object of my invention to disclose a novel divisible packing carton formed from a single sheet of packaging material.

Another object of my invention is to provide such a carton so formed as to be inherently stable and coherent in handling until optionally severed into its two component sealed compartments.

A further object of my invention is to provide a divisible carton having a centrally disposed carrying handle integrally formed therein, whereby the entire carton may be carried by the ultimate purchaser.

A still further object is to disclose a novel carton construction having, in one of its embodiments, a member to facilitate severing of the component compartments.

Another object is to provide such a carton formed from a blank having a substantially rectangular shape whereby wastage of material stock is minimized.

These and other objects of my invention will become clear from a study of the following description thereof taken in connection with the accompanying drawings in which:

Fig. 1 is a perspective view of a carton embodying my invention showing the top, rear and a side.

Fig. 2 is a perspective view of a carton in accordance with my invention showing the bottom, front and a side.

Fig. 3 is a perspective view similar to Fig. 1 showing the central flaps extended to form a carrying handle.

Fig. 4 is a semi-exploded view of a blank cut, scored and folded to form a carton in accordance with my invention.

Fig. 5 is a sectional view taken on the plane V-V of Fig. 1.

Fig. 6 is a perspective view similar to Fig. 1 showing the separate sealed compartments after severing.

Fig. 7 is a plan view of a blank in accordance with my invention.

Fig. 8 is a fragmentary perspective view of a carton including a severing member.

Fig. 9 is a perspective view similar to Fig. 1 showing a modified arrangement for closing the carton.

Referring now in detail to the drawings, a carton indicated generally at 10 includes two compartments 11 and 12. Carton 10 includes a front wall 16, common to compartments 11 and 12, exterior or outer side walls 17 and 17',

rear walls 18 and 18', interior or inner side walls 19 and 19' and tabs 20 and 20'.

In the preferred embodiment of my invention, each successive wall lies in a plane perpendicular to the adjacent wall when the carton is assembled. Moreover, each wall includes top and bottom flaps foldingly connected thereto and integral therewith, said top flaps being indicated by characters 10 greater than the numbers assigned to their corresponding walls and the bottom flaps by characters 20 greater than the numbers assigned to their respective walls. Front wall 16 may have foldingly connected thereto two flaps 25 and 26', separated by a slot 41 formed between said two flaps.

As appears in Figs. 4 and 7, the carton is formed of a single blank of cardboard, corrugated paper board, or the like having a substantially rectangular outline and it will be noted in the embodiment illustrated that front panel 16 and its connected bottom flap 36 extend continuously across corresponding portions of both the compartments 11 and 12. As best seen in Fig. 2, this construction results, in the assembled carton, in the provision of two integrally connected, continuous, unscored, plane elements extending in mutually perpendicular planes, and it will thus be understood that compartments 11 and 12 are thereby inherently held in stable side-by-side relation. The carton can therefore be handled, stacked and moved as an integral unit without risk that the component sealed compartments will move relative to one another.

When it is desired to sever the two compartments 11 and 12 from one another, front wall 16 and bottom flap 36 may be cut along the parting line 42 indicated by a dotted line in Fig. 2. In one embodiment of my invention parting line 42 may be perforated in order to facilitate severing but at a slight sacrifice of the strength of the carton. In order to facilitate severing without impairing the strength of the carton, I may provide a narrow, elongated severing member 43, as shown in Fig. 8. Severing member 43 may be in the form of a string, a wire or the like and is arranged to extend along the inner surface of front wall 16 and bottom flap 36 coincident with the transverse medial line 42 on which it is desired that the carton be severed. Severing member 43 is preferably fastened to wall 16 and flap 36 as by glue or other suitable fastening means, and one of its ends extends outwardly of the carton so that it may be manually grasped and pulled to sever the carton.

In order to facilitate carrying of the unsevered carton, I preferably provide in top flaps 29 and 29', excised openings 46 and 46', large enough to admit the fingers of one hand. A particularly appears in Fig. 3, when top flaps 29 and 29' extend upwardly in the center of the carton 10, openings 46 and 46' register with each other to provide a convenient centrally disposed handle. It will be especially noted that when the handle is used, the weight of the contents of carton 10 is borne by inner side walls 19 and 19' transmitted directly from the bottoms of compartments 11 and 12 through bottom flaps 39 and 39'.

Bottom flaps 36, 37, 38 and 39 and their primed counterparts may be fastened together at their overlapping areas by adhesives, cement glue, staples or other fastening means well known in the art. Similarly top flaps 26, 27, 28 and 29 may be so fastened, preferably allowing flap 29 to be somewhat less firmly fastened than the remaining

top flaps in order to permit flaps 29 and 29' to be easily unfastened when desired to be used as a carrying handle. Tabs 20 and 20' are arranged to extend along the inner surface of front wall 16 and are fastened thereto by glue, staples or other suitable fastening means.

To withstand especially rugged handling I may provide three unscored members common to both compartments rather than only front wall 16 and bottom flap 36 as previously described. As appears in Fig. 9, by first folding flaps 27 and 29 inwardly after filling the carton and by omitting the cutting of slot 41 between top flaps 26 and 26', an integral top flap 24 may be formed extending across both compartments 11 and 12. It will be seen that this construction affords added strength to the carton by reason of the fact that three unbroken members extend across corresponding areas of each of the compartments 11 and 12, one of the members lying in a plane perpendicular to the planes of the other two.

Thus it can be seen that I have provided a novel carton having two sealed compartments which is easily severable into its two components and which is formed from a single sheet of material. Moreover, it will be noted by reference to Fig. 7 that the blank may be formed with a minimum of wasted material and with only two longitudinal folds. The blank is therefore adapted to be economically formed by automatic boxing machines conventionally used.

It will be obvious to those skilled in the art that many modifications and changes may be made from the specific embodiments illustrated and described. For instance, tabs 20 and 20' may extend completely across the width of each of the compartments 11 and 12 instead of only partially as shown, and by this means exactly rectangular compartments are provided if desired. It will be seen that although I have described my carton as including two identical compartments symmetrically disposed with respect to a medial plane, the compartments need not have the same size so long as their juxtaposed inner side walls are substantially the same length. It will be noted that severing of the component halves may be accomplished by the use of a cutting instrument, such as a knife or the like, and in the case of cartons fabricated of relatively thin cardboard or pasteboard they may be severed manually without the use of a tool.

All changes and modifications within the spirit of my invention are included in the scope of the following claims.

I claim:

1. A divisible carton having a pair of compartments formed from a single substantially rectangular sheet comprising: an integral, plane front wall constituting the front walls of both said compartments, said integral front wall having foldingly connected thereto an integral bottom flap extending longitudinally beneath both compartments and a pair of top flaps; an exterior side wall foldingly connected to each end of said integral front wall including a foldable top flap and foldable bottom flap; a rear wall for each compartment opposing substantially one-half of said integral front wall, each of said rear walls being foldingly connected to one of said side walls and having top and bottom flaps foldingly connected thereto; and interior side wall for each compartment foldingly connected to each of said rear walls and having top and bottom flaps foldingly connected thereto, the top flap foldingly connected to each of said interior side walls be-

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ing provided with an excised opening, said openings being arranged to register with each other when their flaps are extended upwardly from the carton whereby to afford a centrally disposed carrying handle for the carton; and a tab foldably extending from each of said interior side walls, said tab arranged to lie adjacent the inner surface of said integral front wall and to be fastened thereto, the bottom flaps of outer and inner side walls of each compartment being fastened to the common bottom flap of the integral front wall, said walls and flaps being rectangular, all said top flaps having a common width and all said bottom flaps having a common width.

2. A divisible carton having two parallelepipedal compartments and formed from a single blank of sheet material comprising: rectangular front, outer side, rear and inner side walls for each compartment formed of sequential portions of said blank, the inner side wall of one compartment and the inner side wall of the other compartment lying in parallel juxtaposition; and rectangular top and bottom flaps foldably connected to said walls for forming a top and a bottom for each compartment, said top flaps having a common width transverse of said blank and said bottom flaps having a common width transverse of said blank, the top flaps connected to said juxtaposed inner walls having excised openings formed therein so disposed as to register when their flaps are juxtaposed in upward extension from the carton whereby to provide a carrying handle for the carton.

3. A substantially rectangular blank of sheet material for forming a divisible carton having two compartments comprising: a rectangular central integral panel bounded by four rectilinear scores and constituting a front wall for both compartments, said panel having top and bottom flaps foldably connected thereto along a pair of opposed scores thereof; two rectangular exterior side wall panels, each foldably connected to said central panel along one of the remaining two scores thereof and having top and bottom flaps foldably connected thereto along scores perpendicular to the scored junctures with said central panel; a rectangular rear wall panel foldably connected to each of said side wall panels and having top and bottom flaps foldably connected thereto; two rectangular interior side wall panels, each foldably connected to one of said rear wall panels and having top and bottom flaps foldably connected thereto, all said flaps being rectangular; and a tab foldably

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connected to each of said interior side wall panels, all of said flaps extending equidistantly from their foldable lines of juncture with their respective panels, each of the top flaps connected to said interior side wall panels being provided with an excised opening, said openings being disposed symmetrically with respect to the transverse medial line of said central panel.

4. A rigid carton divisible into two sealed compartments, each provided with rectangular side, rear and front walls, a top and a bottom, said divisible carton being formed from a single, substantially rectangular sheet having a pair of longitudinal fold lines extending the entire length of said sheet, comprising a front wall panel portion common to adjoining front walls of adjacent compartments, each of the vertical margins of the common front wall panel being provided with a multi-panel extension folded to form the outer side, rear and inner side walls of a compartment and a terminal tab fastened to the inner surface of the front wall panel, the terminal tabs of said extensions being fastened to the front wall panel in adjacent relation; rectangular top and bottom flap extensions foldably connected to upper and lower margins of each of the wall portions of each multi-panel extension and arranged to form a top and a bottom for each of the compartments, and a single rectangular flap foldably connected to the lower margin of the front wall panel portion and fastened to said bottom, said single flap co-operating with the front wall panel portion to normally hold both compartments in stable, side-by-side relation, said top flap extensions having a common width and said flap and bottom flap extension having a common width, each of the top flap extensions carried by said inner side walls being provided with an excised opening, said openings being arranged to register with each other when their flaps are extended upwardly from the carton whereby to afford a centrally disposed carrying handle for the carton.

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