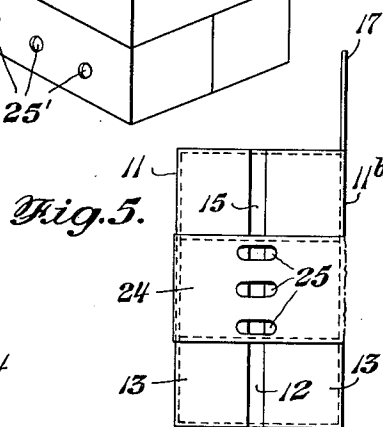
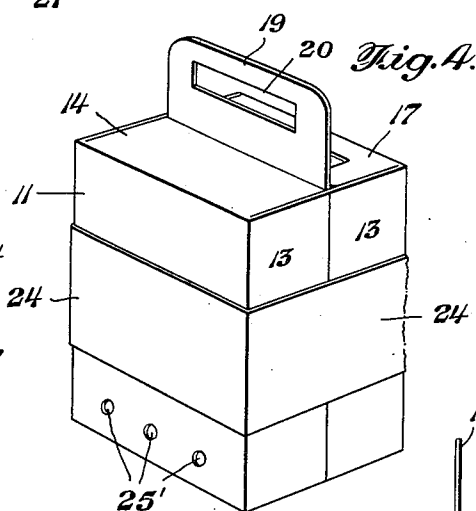
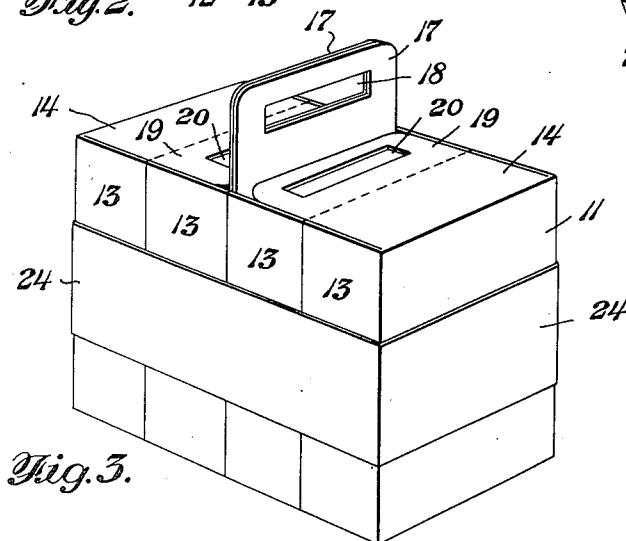
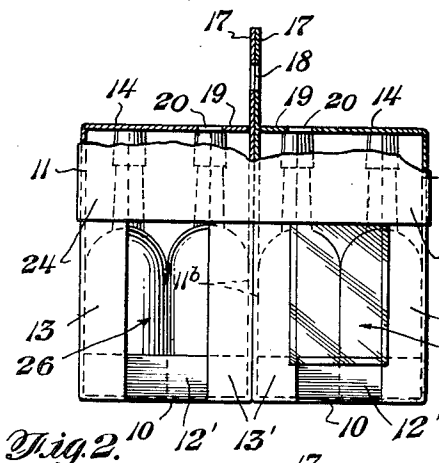
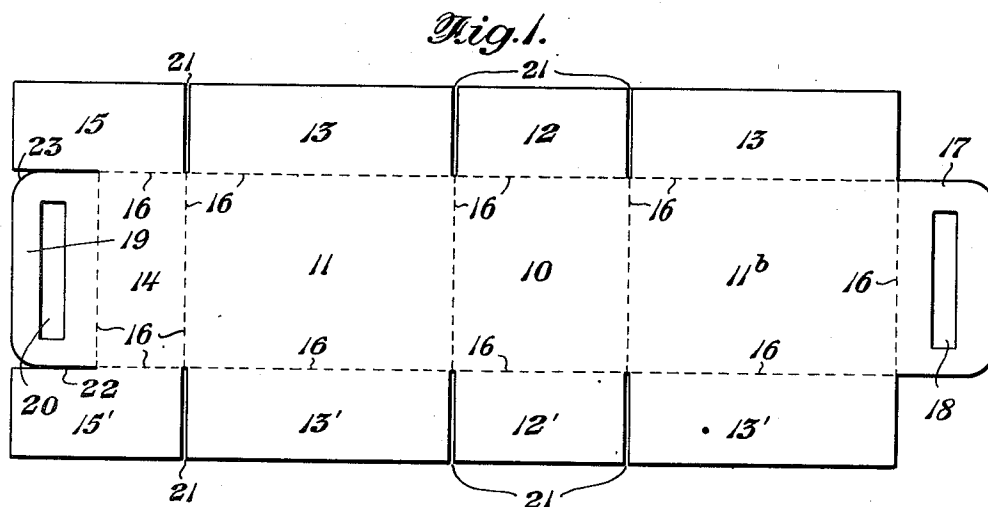


Nov. 16, 1954

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BOX-TYPE CONTAINER CARTON

2,694,518

Filed Feb. 27, 1950



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1

2,694,518

BOX-TYPE CONTAINER CARTON

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Application February 27, 1950, Serial No. 146,524

6 Claims. (Cl. 229—15)

Our invention relates to units of box type flexible carton construction of the character generally used for commercial shipment for canned and bottled goods, and in particular to such unit construction designed to be assembled with at least one other such unit into a duplex whereby the assembled container and contents may be marketed for sale as an independent unit, duplex where larger quantities are to be purchased, or frangibly separated into complete unit containers of smaller quantities.

Thus, in broader aspect, the invention provides a flexible carton adapted to hold a minimum number of merchandise units such as cans or bottles, which unit is assembled with one or more other such units by a frangible band such as a paper banner which may be torn at the point of sale to sell one carton or the whole assembly of cartons depending upon the needs of the purchaser.

In another aspect of this invention the cartons are formed with handle or gripping members useful alternatively to combine with the gripping member of another unit assembled into a duplex to form a reinforced single handle or carrying member, or an alternate handle useful for supporting a single number when the duplex has been separated into individual units.

Referring to the drawings, Fig. 1 shows the blank of paper or other material of which the unit box-type construction is formed by folding into a box.

Fig. 2 is an elevation in section of two assembled boxes, showing adjoining handles of each unit combined to a single handle and modified to show a banding member at the top with open portions or windows in the sides for rendering the contents visible.

Fig. 3 is a conventional assembly of units formed from two unit blanks of Fig. 1.

Fig. 4 is a perspective of a single unit separated from the duplex showing the alternate handle in raised position for carrying a single unit.

Fig. 5 is a detail of a modified flap construction.

The blank from which the carton is made, as shown in Fig. 1, is of typical packing board, cardboard or other flexible material normally used for cartons and comprises a single sheet which has been divided to form a bottom member 10 and two side members 11 and 11b with adjoining flaps 12 and 12' foldable upward from the bottom and flaps 13 and 13' foldable inward from the sides. An adjoining top member 14 is further provided with flaps 15 and 15' for folding downward. Each of the flaps will be folded along dotted lines 16 which are indicated on the drawing to show folding lines and may have no other significance. However, these positions of folding lines 16 may be mechanically weakened by initially folding or perforating to allow easy folding when the blank is to be assembled.

At one end of the rectangular blank, and integrally extending therefrom, is a handle member 17 shown as an extension of the side 11b. The handle member 17 which may be of any shape is shown with a cutaway central portion 18 for gripping as a handle member, but such cutaway portion 18 need not be actually cut away in the blank but may be merely a perforated element which is easily removed when the extending portion 17 is to be used as a handle. At the opposite end and forming part of the top closure surface 14 is another handle member 19 similarly centrally slotted at 20 for forming a finger containing or hand gripping means. Similarly this portion 20 need not be entirely

2

removed but may be removed only when the handle member 19 is to be used.

Each of the flaps 12, 13 and 15 are cut apart from each other by a series of cuts or grooves 21. The handle member 19 may be cut apart from the top surface 14 at the portion 22, however this section needs merely to be perforated for easy frangibility when the handle member 19 is to be used. It will also be noted that handle member 19 is rounded at the edge, but this portion need not be rounded but may be merely square, or any shape, to complete the top cover surface to avoid exposure of the contents to moisture, etc.

As thus described the blank may be folded and assembled into a box-like carton by folding any of the side or top flaps in sequence. Thus, the top may be left open and each of the side and bottom flaps 12, 12' and 13 and 13' may be folded inwardly and then the carton may be filled with cans or bottles from the top followed by the final closure of the top by folding flaps 15 and 15' inwardly. In this position handle 17 will extend straight upwardly while handle 19 will lie flat as part of the top surface 14.

It is also possible to first fold one set of flaps 12 and 13 including the top flap 15, leaving the other side flaps 12', 13' and 15' open so that the carton may be filled sidewise. It will be appreciated of course, that the bottles or cans may be inserted either from the open side or top to stand upwardly or vertically or they may be inserted to lie horizontally, whichever packaging form is more convenient for the product packaged. After filling from the side, the flaps 15', 13' and 12' are finally folded inwardly to complete the closure of the carton.

Thereafter two cartons are assembled with handle members 17 and adjacent sides 11b contiguous and a frangible band 24 is placed around both cartons to band the same into a unit duplex of the two cartons, both handle members 17 adjoining combine to form a single strong handle for the entire assembly as shown in Fig. 2. The banding member 24 may be merely strong wrapping paper easily frangible at the point of sale or it may be of stronger construction such as of fabric or cardboard. However, it will be appreciated that the same is readily frangible by cutting or tearing the same without need of severing the entire box. After the band 24 has been severed the duplex comes apart into two independent boxes. In this position the handle member 19 is lifted and folded essentially upward on the fold-line 16, so that such handle member adjoins the center line of the single unit for carrying the same in a balanced state. The handle member 17 may then be folded downwardly to take the place thereof and complete the closure of the carton as shown in Fig. 4.

The band 24 as shown in Figs. 3, 4, and 5 is generally placed, for convenience of packaging, about the middle of the assembled units. However for maximum support, the band should be positioned in the upper two-thirds area of the assembly. Thus, no great benefit is obtained from the standpoint of maximum strength by banding about the bottom, and the band should begin at about one-third of the distance of the top and bottom; but equal strength would be obtained if the band were placed merely about the top as shown in the modification of Fig. 2. The band may be of any width and of course may cover the entire side walls of the assembled units but as indicated it is merely necessary to place the same beginning about one-third from the bottom and generally terminating about one-third from the top for normal strength and ease of application of the band.

It will be noted that these boxes may be of any size, but as shown, the flap members 13 and 13' are each half the width of the rectangular side members 11 and 11b whereby in folded position they contact each other to close as a pair of gates, their outer edges being substantially in contact. The top flap 15 folds downwardly and is of the same width but merely serves to reinforce both of the gate members 13 for a portion of their longitudinal rectangular length. Similarly, flaps 12 and 12' folding upwardly and flaps 15 and 15' folding downwardly reinforce the gate-like flaps 13 and 13' to reinforce them over both the upper and lower portions of the assembled

carton. At the central portion which is to be covered by the band there is no reinforcement other than the banding member 24.

If desired the gate-like flaps 13 and 13' may be made slightly narrower as shown in the detail of Fig. 5 so that they will not touch each other and leave an open slit therebetween. In such modification banner 24 may be further perforated at 25 in a series of perforations to allow free ingress of air through the slit between narrower flaps 13 and 13' allowing the package to be inspected when the frangible band 24 is torn and to allow ingress and egress of air at about the perforation 25. Thus, the entire package may be rapidly refrigerated or cooled. For example, it is customary to refrigerate large boxes of beverages and they are commonly sold as refrigerated beverages. The perforations 25 and open slit section of the gate-like flaps 13 and 13' communicating therewith allows free air circulation and rapid refrigeration of the cartons.

As shown in Fig. 2 a desirable modification is to make the bottom, top and side flaps, 12, 12', 13 and 13' considerably shorter so that they do not fold to completely enclose the ends of the box, but instead leave an open window, so that the contents of the box may be quickly refrigerated and have the benefit of visual observation. Where such refrigeration is non-essential, i. e. the type of product packaged does not need refrigeration, the open window space may be covered by cellophane or other transparent film as window material, as shown at 27 of Fig. 2 in the right half of the drawing, the left half thereof being merely an open area 26, the contents of both units of the assembly being visible. It is of course possible to cut windows in other portions of the containers, if desired. With such modification as pointed out above the banding member 24 is applied around the top of the assembly in which position it will give substantially equal strength, moreover as indicated above the entire open portions 26 may be covered by the banding member which itself may be transparent.

It has been difficult in the past for a manufacturer to package small articles such as canned and bottled goods in units of a salable number. Thus, to arbitrarily elect a package of 12 units would require time consuming careful cutting along the middle line of such package by the vendor in order to sever a large box to sell six of the total. Such cutting of the package is laborious and produces an incompletely packaged and difficult to carry unit, and interferes with smooth flow of sales in a busy market.

By the present invention it is possible to package the half a dozen or dozen cans or bottles in a single unit and then band them together with other units so that the customer could purchase 6, 12 and 24 completely packaged cans or bottles as he pleased. Moreover, according to the present invention each sub-unit has a convenient and well-balanced handle whereby one handle serves to reinforce the next for a large carrying package where the entire duplex is purchased, using two handles 17 for such carriage. Or, where a single unit is to be purchased, then handle 17 is folded down and the package is carried centrally by the single handle 19, which is strong enough to support the individual unit as separated from the complete assembly.

Various modifications will occur to those skilled in the art, the exact number of units in a single multiplex package may be modified; thus two multiplex packages could be banded together by one or more bands 24, which may be ultimately severed into two or four sub-units. The exact materials of construction are not critical and are those flexible materials useful in the art for forming cartons; they may be made of corrugated board, of heavy wrapping paper, sized cloth, cardboard or even of plastic. Similarly band 24 may be made of strong paper, a transparent plastic material or even metallic wire frangibly separated at the point of sale.

It is accordingly intended that the description herein be read as illustrative and not limiting except as set forth in the claims appended hereto.

We claim:

1. A flat rectangular box board blank foldable into a box-type container carton having short lateral cuts separating the edges into flap members laterally adjoining each of two sides, a top and a bottom, said top member having two parallel longitudinal cuts spaced inwardly from the side edges thereof, the same distance as the

depth of said lateral cuts, and cut to the transverse center line of said top member to define a cutaway portion equivalent to half of said top member and foldable outwardly from the assembled carton to form an outwardly projecting flap, said flap being perforated to allow frangible removal of an intermediate portion thereof to define a slot adapted to form a finger-gripping means therein and being centrally foldable of the top portion contiguous therewith to define a handle member when folded upwardly, one of the sides of said carton disposed at the edge opposite to said top member of said blank having an extended portion integral therewith, said extended integral portion being centrally perforated to form a slot, said extended portion defining a second handle gripping means upon folding of said blank into a box whereby upon assembly said second handle gripping means extends upwardly in the same plane as said side member contiguous therewith, allowing assembly of another of such units into a duplex, whereby said second handle gripping means is useful in combination with the handle gripping means of another such unit as a reinforced gripping means of the assembly, and in a separate unit the first said handle gripping means may be folded upwardly of the top thereof and the second handle means folded down in place thereof to form a unitary carton centrally supported by the first handle gripping means.

2. A duplex package comprising two independently merchandizable unit packages, each unit comprising a foldable box type container unit adapted to be filled with cans, bottles and the like and assembled into a duplex having integrally formed sides, top and bottom having flap members integral with the edges thereof but severed from each other and foldable inward to form ends of said carton, the flap members extending from the top and bottom forming upper and lower reinforcement for the flap members foldable from the sides reinforcing the same over the top and bottom sections of their length but not in the center portion thereof, each of the flap members extending from the sides of said carton having a width substantially less than half of the width of said contiguous top, bottom and side members, one of the sides having an extended portion forming a handle member for the assembled unit, whereby upon closure to form ends thereof a wide open slot is left therebetween exposing the contents of each unit in assembled package form, said units being assembled into a duplex with the sides of each unit which bear the extended handle member portion contiguous and with a paper band bonding the units together, said paper band being perforated with slots located at about the open portion of the ends allowing air circulation and visual inspection of the exposed contents of each unit of said duplex, each carton of said duplex having adjacent sides as assembled integrally extended upwardly above the top of said duplex, each being slotted for finger gripping means and adapted in combination to form a single handle carrying means for the duplex assembly.

3. A duplex unit formed by banding two unit containers as defined in claim 2 together, said banding member being of sufficient width, to cover said slots and having perforation through said banding member aligned with said slots allowing atmospheric communication with the interior of each of said containers.

4. A duplex package consisting of an assembly of two independent paper board cartons, each carton having a half top closure extending from one side and continuing integrally into a second half top closure to complete said top, said second continuing half top closure being hingedly connected to the first half top closure and perforated to form a handle member, the opposite side of said carton having a second handle member of substantially the same size as said first handle member continuing upwardly as an extension of said side above the top of said carton and hinged to said side to be foldable into the top in approximately the same top closure position as the first handle member, whereby each handle member is alternately usable for support of said carton, said cartons being assembled into a duplex by securing them together with a frangible banding member with the second handle members of each carton adjacent, whereby said duplex assembly is supportable by both said second handle members, and each carton, separated from the assembly, is centrally supported by the first handle member folded upwardly from the top, with the second

5

handle member folded downwardly from the side in top closure substitution.

5. The duplex assembly of two paper board cartons as defined in claim 4, each paper board carton having openings in the sides thereof for atmospheric exposure of the contents, said frangible banding member securing said cartons into a single unit being placed near the top of both units to avoid covering of side openings.

6. A paper carton adapted for individual support by one handle member hinged to the center of the top thereof or alternatively supported jointly with another similar paper carton banded together therewith by a second handle member extending from a side thereof in cooperation with the handle member of another carton when assembled therewith, said carton having a half top closure extending from one side and continuing integrally into a second half top closure to complete said top, said second continuing half top closure being hingedly connected to the first half top closure and perforated to form a handle member, the opposite side of said carton having a second handle member of substantially the same size as said first handle member continuing upwardly as an extension of said side above the top of said carton and hinged to said side to be foldable into the top in approximately the same top closure position as the first handle member, whereby each handle member is alternately usable, the first handle member for support

6

of the individual carton when carried as a single carton and the second handle member for support in combination with a similar handle member of another carton of a duplex of two such cartons when banded together.

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