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M. A. RILEY ET AL

2,462,676

BOTTLE CARTON

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2 Sheets-Sheet 2

FIG. 2

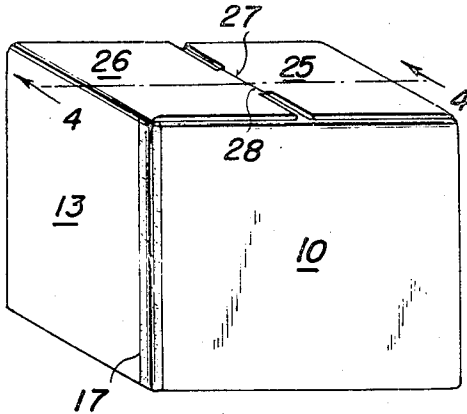


FIG. 3

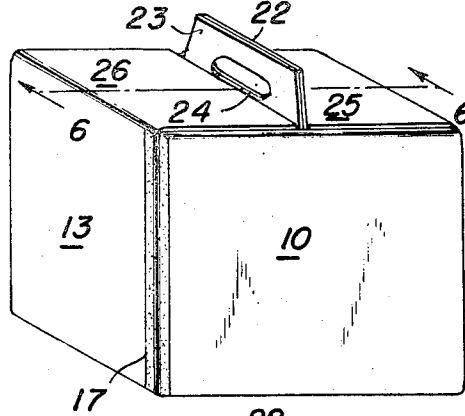


FIG. 4

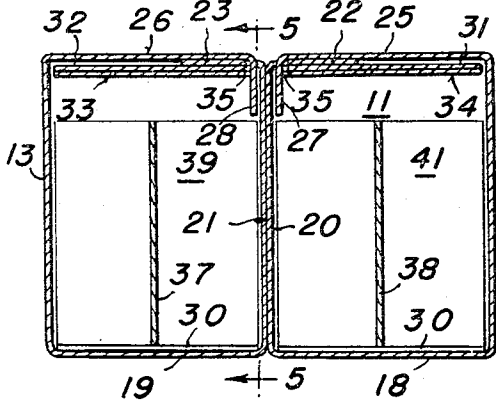


FIG. 6

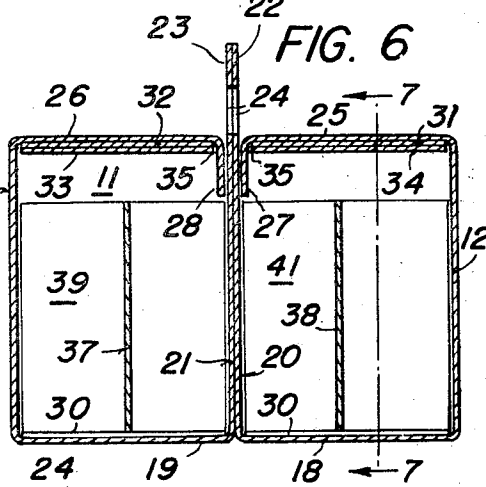


FIG. 5

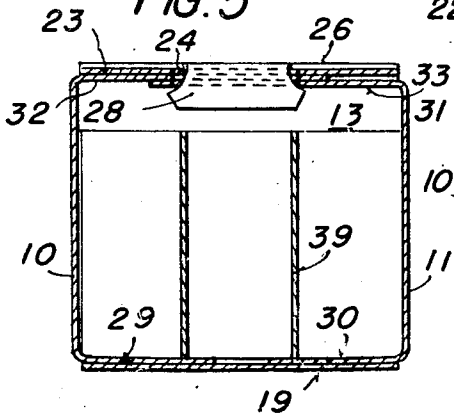
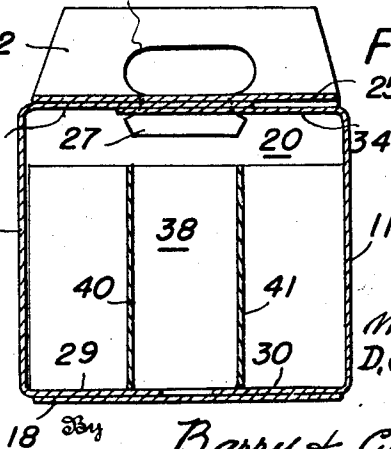


FIG. 7



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## UNITED STATES PATENT OFFICE

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## BOTTLE CARTON

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6 Claims. (Cl. 229—52)

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This invention relates to improvements in cartons for the shipment and carrying of bottles or the like, and more particularly to a novel carton made of fiberboard or similar sheet material.

One of the objects of the invention is to provide a carton designed to contain a half dozen or a dozen bottles of a beverage and which may be shipped by freight or the like with the top of the carton in flat condition, but with the top of the carton so constructed that handles that are within the carton during shipment, may be readily exposed to permit the carton to be carried by the hand of a customer who has purchased the contents of the carton.

Another object is to supply a carton of the above character with novel means for retaining the top in flat condition during shipment.

A still further object is to supply a carton having the above features and so designed that the carton may be shipped in flat condition and subsequently be set up by unskilled labor.

A still further object is to provide a carton of fiberboard or the like which may be cut from a substantially rectangular blank with little waste of the sheet material from which the blank is cut.

The above, as well as various other objects, will become apparent from the following description, considered together with the accompanying drawings, the latter of which illustrate exemplary forms of the invention.

In the drawings:

Fig. 1 is a top plan view of the blanks from which a carton may be formed for use in the shipment and carrying of twelve bottles.

Fig. 2 is a perspective view of a carton formed from such blanks and with the top of the carton in the flat condition in which it is shipped by freight or the like.

Fig. 3 is a similar view with the handle flaps exposed for use in carrying the carton and its contents.

Fig. 4 is a vertical sectional view taken on the line 4—4 of Fig. 2.

Fig. 5 is a similar view taken on the line 5—5 of Fig. 4.

Fig. 6 is a vertical sectional view taken on the line 6—6 of Fig. 3.

Fig. 7 is a transverse vertical sectional view on the line 7—7 of Fig. 6.

Fig. 8 is a horizontal sectional view of a carton of the same general character, but designed for use with six bottles and with a different type of partitions and dividers.

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Fig. 9 is a perspective view of one of the partition members shown in Fig. 8.

Referring first to Fig. 1, 10 and 11 designate the opposite side wall portions, and 12 and 13 the opposite end wall portions of the blank. The blank is folded along the score lines 14, 15 and 16 to provide a tube, and the meeting edges of the walls 10 and 13 are secured to one another by any suitable means, such as the tape 17 (Figs. 2 and 3).

Each of the end wall portions 12 and 13 is provided at its bottom with an integral half bottom portion 18, 19, and each of these portions is integral with a divider 20, 21, which, as best shown in Figs. 4 and 6, are arranged face to face in contacting relation and extend upwardly through the center of the carton. The partitions are integral with handle flaps 22, 23, provided with hand holes 24. The flaps 23 are designed to be folded either parallel to the top of the box for shipping purposes (Fig. 4), or to extend through the top of the box for carrying purposes, as illustrated in Figs. 6 and 7.

Each of the end wall portions 12, 13 terminates at its upper end in a half top flap 25, 26, and each of these flaps is provided with a securing tab 27, 28, designed to be tucked into the top of the box and to be interlocked with other top flaps, as will be explained hereinafter.

Each side wall portion 10, 11, is provided at its lower end with integral bifurcated bottom flaps 29, 30, which, when the carton is set up, rest on the half bottom flaps 18 and 19 of the end walls.

Each of the side wall portions 10 and 11 is also provided with a pair of top flaps 31, 32, 33 and 34, and the flaps 31 and 32 have confronting notches 35 to receive the tabs 27 and 28 and to permit such tabs to interlock with the flaps 31 and 32. The flaps 33 and 34 are also provided with confronting notches 36, for the same purpose.

If the carton is to be employed with twelve bottles, partition blanks 37, 38, 39, 40, 41 and 42, may be cut from sheet material at the same time as the main blank, and as the auxiliary blanks 37—42 are notched, as indicated at 43, they may be interlocked with one another so as to form vertical cells within the carton.

In setting up the carton, after the walls 10 and 13 have been joined by the tape 17, the bifurcated bottom flaps 29 and 30 are bent at right angles to the side walls, along the score lines 44 and 45 until they are at right angles to the side walls, and then the dividers or partitions

20 and 21 are threaded upwardly through the tube so that the half bottom portions 18 and 19 underlie the bottom flaps 29 and 30. During such threading, the slits 46 of the bottom flaps 29 and 30 accommodate the partitions, and the score lines 60 facilitate bending the dividers 20 and 21. After the carton has been set up in this way, each of the auxiliary blanks 37 and 38, may be interlocked with a pair of the auxiliary blanks 39, 40 or 41, 42, and the resulting partitions may be introduced into the carton at opposite sides of the double divider 20, 21.

If the carton is to be arranged for shipping the contents, the top flaps 31, 32, 33 and 34 are first folded down into flat condition and then the handle flaps 22, 23 are folded downwardly onto the flaps 31 to 34, inclusive. This will bring the holes 24 of the handle flaps into a position over the notches 35, 36 of the top flaps. Then the top flaps 25 and 26 can be folded down and the tabs 27, 28 can be passed through the holes 24 and notches 25, 36, until the notched ends 47 of the tabs interlock with the portions 48 of the top flaps which are arranged at the ends of the notches 35, 36. When the top flaps are thus folded and interlocked, the top of the carton will be flat, as indicated in Figs. 2, 4 and 5, so that other cartons may be piled on the same.

After such a carton and its contents have been delivered to a retailer, for example, he can sell the package to a customer, and to aid the customer in carrying the package, the dealer simply releases the tabs 27 and 28 and moves the flaps 25 and 26 upwardly. As this exposes the handle flaps, they can be raised to the vertical position shown in Figs. 3, 5 and 7, and then the flaps 25 and 26 can be again moved downwardly and the tabs 27 and 28 can be tucked into the notches 35 and 36, so as to interlock with the top flaps 31 to 34, inclusive.

In the construction shown in Fig. 8, the body, bottom, top and central dividers with their handle flaps may be similar to the structure shown in Figs. 1 to 7, inclusive, but for partition purposes, each of the dividers 20a and 21a may be cut to provide a pair of tongues 49 which may be bent at right angles to the dividers to form transverse partitions. If desired the partitions can be formed from separate blanks bent into U-shape, as shown at 50 in Fig. 9, which blanks may be introduced into the carton from the top thereof. In this way, a six cell carton may be readily produced by using either or both partition elements 49, 50.

While we have disclosed what we now consider to be some preferred embodiments of the invention in such manner that they may be readily understood by those skilled in the art, we are aware that changes may be made in the details disclosed without departing from the spirit of the invention, as expressed in the following claims.

What we claim and desire to secure by Letters Patent is:

1. A carton of the character described provided with first and second pairs of opposite walls, a pair of top flaps hingedly connected with the upper end of each wall of the first pair of walls, a double divider arranged in the carton and having hand hole flaps projecting upwardly between and above the top flaps, said hand hole flaps being adapted to lie flat on said top flaps or to extend upwardly side-by-side perpendicular to said top flaps, and other top flaps hingedly connected to the upper ends of the

walls of the second pair of walls, overlying the first-mentioned top flaps and provided with tabs adapted to extend downwardly through the holes of the hand hole flaps and to interlock with the first-mentioned top flaps.

2. A carton of the character described provided with first and second pairs of opposite side walls and a bottom, a pair of top flaps hingedly connected with the upper end of each wall of the first pair of walls, a double divider arranged in the carton and having its lower end connected to the bottom, said divider extending upwardly through the central portion of the carton and having hand hole flaps projecting upwardly between and above the top flaps, said hand hole flaps being adapted to lie flat on said top flaps or to extend upwardly side-by-side perpendicular to said top flaps, and other top flaps hingedly connected to the upper ends of the walls of the second pair of walls, overlying the first-mentioned top flaps and provided with tabs adapted to extend downwardly through the holes of the hand hole flaps and to interlock with the first-mentioned top flaps.

3. A carton of the character described provided with first and second pairs of opposite walls, a pair of top flaps hingedly connected with the upper end of each wall of the first pair of walls, said flaps being provided about midway between the first pair of walls with opposed registering notches, a double divider arranged in the carton and having hand hole flaps projecting upwardly between the notched portions of the top flaps to a position above said flaps, said hand hole flaps being adapted to lie flat on said top flaps or to extend side-by-side perpendicular to said top flaps, other top flaps hingedly connected to the upper ends of the walls of the second pair of said walls, overlying the first-mentioned top flaps and provided with tabs adapted to extend downwardly through the hand holes of the hand hole flaps and the notches of the first-mentioned top flaps and to interlock with those flaps.

4. A carton of the character described provided with first and second pairs of opposite walls, a pair of top flaps hingedly connected with the upper end of each wall of the first pair of walls, a double divider arranged in the carton and having its lower end integrally connected with the lower ends of one pair of said opposite walls, said divider having hand hole flaps projecting upwardly between and above the top flaps, said hand hole flaps being adapted to lie flat on said top flaps or to extend side-by-side perpendicular to said top flaps, and other top flaps hingedly connected to the upper ends of the walls of the second pair of walls, overlying the first-mentioned top flaps and provided with tabs extending downwardly at opposite sides of the divider through the holes in the hand hole flaps and interlocked with the first-mentioned top flaps.

5. A carton of the character described provided with first and second pairs of opposite walls, bottom flaps integral with the walls of one pair, a double divider integral with said bottom flaps, projecting upwardly centrally of the carton and terminating at its upper end in hand hole flaps, a pair of top flaps hingedly connected with the upper end of each wall of the first pair of walls, said hand hole flaps projecting upwardly between and above said top flaps, said hand hole flaps being adapted to lie flat on said top flaps or to extend upwardly side-by-side perpendicular to said top flaps, and other top flaps hingedly connected to the upper ends of the walls of the

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second pair of walls, overlying the first-mentioned top flaps and provided with tabs adapted to extend downwardly through the holes of the hand hole flaps and to interlock with the first-mentioned top flaps.

6. A carton of the character described provided with integral first and second pairs of opposite walls, a pair of hinged top flaps integral with the upper end of each wall of the first pair of walls, each pair of flaps being provided about midway between the first pair of walls with opposed registering notches, a double divider arranged in the carton and having hand hole flaps projecting upwardly between the notched portions of the top flaps to a position above said flaps, said hand hole flaps being adapted to lie flat on said top flaps or to extend upwardly side-by-side perpendicularly to said top flaps, bottom flaps integral with the double divider and the second pair of opposite walls, and other hinged top flaps inte-

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gral with the last-mentioned walls, overlying the first-mentioned top flaps and provided with tabs adapted to extend downwardly through the hand holes of the hand hole flaps and the notches of the first-mentioned flaps and to interlock with the latter.

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