

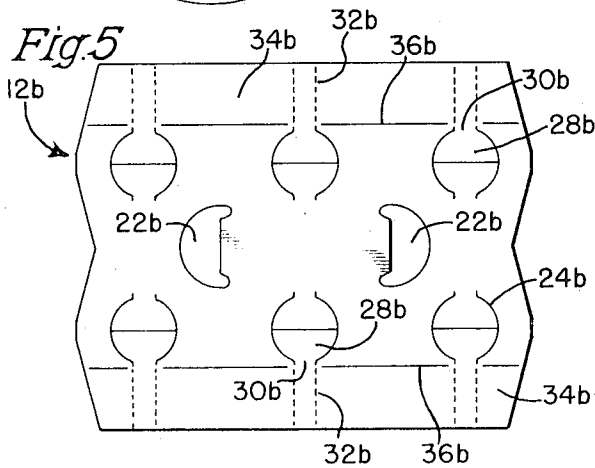
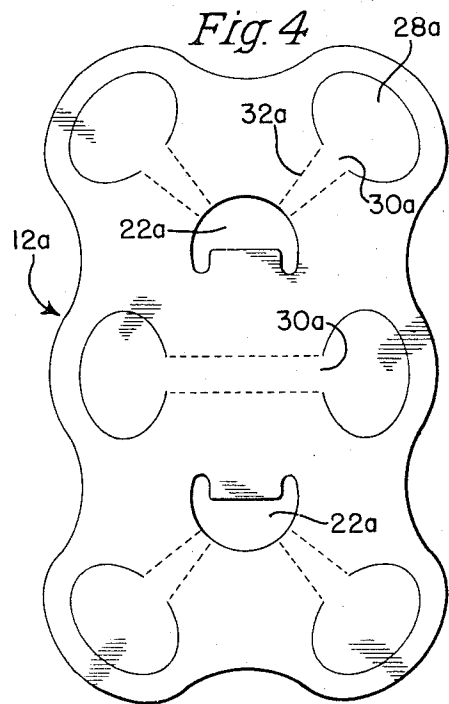
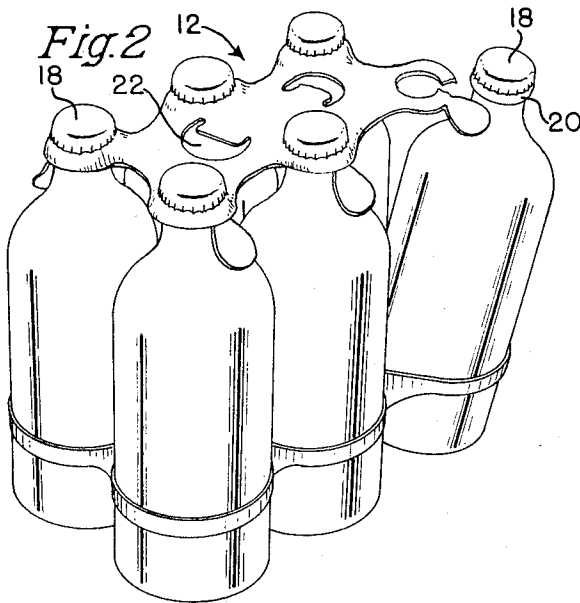
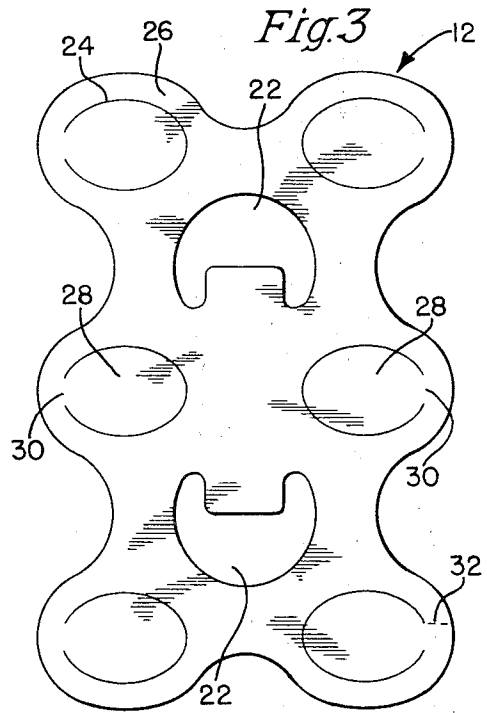
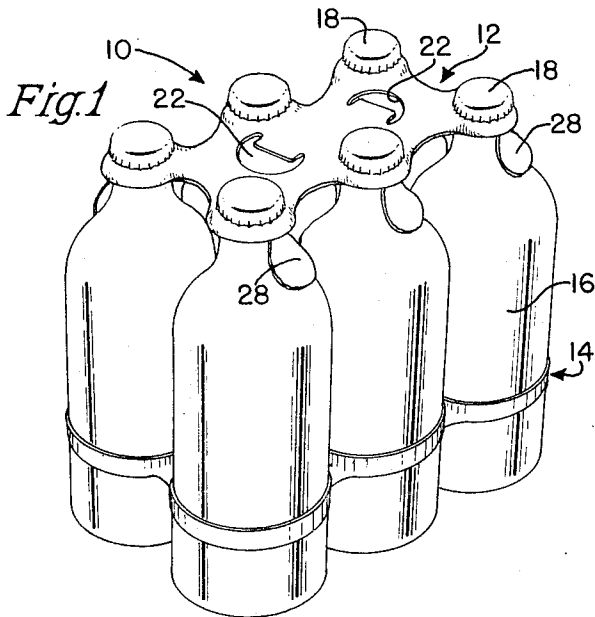
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L. C. BRAUN ET AL

3,721,337

QUICK OPENING CONTAINER PACKAGE

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INVENTOR
Leonard C. Braun
M. Julius Klygis
BY *Edgard L. Berno*
Robert W. Reart
Their Att'ys

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3,721,337

QUICK OPENING CONTAINER PACKAGE

Leonard C. Braun, Elk Grove Village, and M. Julius Klygis, Evergreen Park, Ill., assignors to Illinois Tool Works Inc., Chicago, Ill.

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5 Claims

ABSTRACT OF THE DISCLOSURE

A container package including a plastic sheet carrier device is provided for retaining and transporting a plurality of similarly configured containers mounted and held within the carrier device, there further being combined with the carrier device a plurality of certain finger engaging tab means which inherently facilitate the separation and removal of containers from the container package.

SUMMARY OF THE INVENTION

This invention relates to sheet material carrier devices, preferably of the sheet plastic type as disclosed and claimed in U.S. Pat. No. 2,874,835, where a plurality of containers are held and retained together in side by side relationship for transporting purposes. Such carrier devices have been extensively used all over the world for the multipackaging of containers, usually metal beverage containers, which are commercially sold generally in multiples of six.

In removing containers from known sheet plastic carrier devices, it is often a relatively simple task to tilt or swing a container away from the package in order to obtain leverage for pulling or twisting containers out of the carrier device. In some instances, however, inexperienced consumers have had difficulty in following the above steps for removing a container from the package. Further, the removal of containers from the package becomes more difficult where it is desired to utilize a pair of spaced plastic sheet carrier devices as disclosed and claimed; for example, in U.S. Pat. No. 3,086,651. Generally, a pair of spaced plastic sheet carriers is desirable where glass bottles and the like are used, since it is advantageous to maintain adjacent breakable containers such as glass containers against movement relative to each other. Where multiple carriers become necessary or desirable, the difficulty of removing containers from the package increases.

One patentable concept which achieves the bottle to bottle separation in a container package, yet permits removal of the bottles from the package is shown in U.S. Pat. No. 3,504,790. This concept requires gripping of two adjacent bottles in order to impart a separating force on a weakened line formed in the carrier between adjacent bottles to permit the removal thereof from the package. While this concept works quite well, it may not be fully apparent to consumers as to how removal of containers may be quickly achieved.

Accordingly, it is the principal object of the present invention to provide a container package including a new and improved sheet carrier device having visible, quick-opening means for removing containers from the sheet carrier device.

More specifically, it is an object of the present invention to provide a container package wherein the carrier device included therewithin is provided with exposed finger engaging tab means which can be gripped and torn free from the carrier device to remove individual containers from the package. It is important in the present invention that the carrier and tab means be so formed in combina-

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tion that it is inherently easy to tear the tabs from the carrier.

These and other objects and advantages of the present invention are attained by the provision of a container package for a plurality of similarly configured containers which are arranged in substantially abutting side-by-side relationship, the container package including a carrier device for retaining and transporting containers together as a package comprising an unsupported sheet of material having a plurality of apertures therein corresponding in number, arrangement and size to the containers, the material adjacent each aperture in the carrier device being in the form of circumferentially extending bands of material, and means for removing individual containers from the package including individual finger engaging tab means integrally connected to the carrier device along a limited inner marginal area thereof surrounding each aperture, each finger engaging tab means being formed from a section of material within each aperture and being arranged to extend outwardly relative to said containers for easy grasping thereof by user whereby a force exerted on the finger engaging tab means in a direction away from the carrier device causes tearing of the circumferentially extending bands of material surrounding each aperture for removing individual containers from the package. The arrangement wherein the tab means are formed to extend from the inner marginal area of the aperture for each container should be emphasized, because it is that arrangement which inherently provides tab means which may easily be torn from the carrier.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a container package incorporating one form of carrier device which is constructed in accordance with the teachings of the present invention;

FIG. 2 is a perspective view of the container package shown in FIG. 1, and further depicting the manner in which individual containers are removed from the package;

FIG. 3 is an enlarged top plan view of the carrier device used with the container package in FIGS. 1-2;

FIG. 4 is a top plan view of a slightly modified form of carrier device within the purview of the present invention;

FIG. 5 is a reduced-in-size top plan view of another form of a carrier device which is within the scope of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

In the discussion that is to follow, the container package will be described as including a plurality of breakable containers such as glass bottles or the like, it being understood that other types of containers such as metal, plastic, or paper cans and containers, whether of unitary or laminated construction, may be used, if desired.

As illustrated in FIGS. 1-2 of the drawings, the preferred form of container package 10 includes a pair of upper and lower carrier elements 12, 14 which are designed to engage the glass containers 16 adjacent the upper and bottom ends thereof. Where complete container-to-container stability is not required, a single carrier element incorporating the finger engaging tab means of the present invention can be used.

Both of the carrier elements 12, 14 are preferably of the sheet plastic type in that they are made from a resilient, elastic and deformable unsupported sheet of thermoplastic material such as polyethylene, the qualities of which are well known. The lower carrier element 14 is arranged to embrace and grip the bottles 16 adjacent the lower ends thereof in a manner well known in the art. A lower carrier element 14 is principally used for the

purpose of bottle-to-bottle stability in the container package 10 when used in conjunction with a second carrier element such as the carrier element 12 illustrated in FIGS. 1-2 of drawing.

In the FIGS. 1-2 embodiment, the carrier element 12 is positioned beneath the crowned caps 18 associated with each container 16. Alternatively, the carrier element 12 may be positioned below the annular shoulder or enlargement 20 formed in each of the containers 16 immediately below the crowned caps 18. In either case, the carrier element 12 is arranged to be located in a position slightly below the crowned caps 18 of the containers 16 to permit a user to insert his fingers within the fingerhold carrying means 22 without the risk of damaging the user's fingers by the sharp surfaces normally associated with the free ends of the crowned caps 18 or otherwise interfering with the carrying of the container package 10.

The carrier element 12 includes a plurality of apertures 24 therein which correspond in number, arrangement and size to the containers 16. Each of the apertures 24 is designed to be stretched upon the insertion of the crowned caps 18 therethrough to permit the material bands 26 surrounding each aperture 24 to underlie the crowned caps 18 or annular shoulder 20 as may be desired. In this way, it is possible for the carrier element 12 to permit the carrying of the containers 16 together as a group when the fingerhole engaging means 22 is gripped by a user.

As an important feature of the present invention, there is provided a plurality of individual finger engaging tab means 28 which are integrally connected to the carrier element 12 along a limited inner marginal area thereof surrounding each aperture 24. Specifically, each finger engaging tab means 28 is formed from the section of material which is within the confines of the aperture shape that is desired. In the embodiment illustrated in FIGS. 1-3 of the drawing, the finger engaging tab means 28 are connected to the material bands 26 surrounding each aperture 24 along a limited inner marginal area 30 thereof which is located adjacent the outer areas of the carrier element 12.

With a carrier element 12 so formed, it is intended that the individual finger engaging tab means 28 are folded or bent back relative to the carrier element 12 during the assembly of the carrier element 12 to the containers 16 to permit the finger engaging tab means 28 to extend outwardly relative to the container 16 for easy grasping thereof. This is best depicted in FIGS. 1-2 of the drawing where individual finger engaging tab means 28 extend downwardly and away from the carrier element 12. Because each of the individual finger engaging tab means 28 are connected to the carrier element 12 along a limited inner marginal area 30 thereof surrounding each aperture 24, it is possible for a user to exert a force on each finger engaging tab means 28 in a direction away from the carrier element 12 to permit tearing of the circumferentially extending bands of material 26 which surround each aperture 24 when it is desired to remove individual containers from the container package 10.

To enhance the tearing of the finger engaging tab means 28 into the circumferentially extending bands 26 of material surrounding each aperture 24, it may be desirable to connect the limited marginal areas 30 to weakened lines 32 as illustrated in FIG. 3 of the drawing which may be scored in the circumferentially extending band of material 26 between the inner marginal connecting areas 30 of each finger engaging tab means 28 and the outermost periphery of the carrier element 12. With such a scoring arrangement, the tab 28 will remain with the carrier element 12 as shown in FIG. 2 rather than be completely torn free as would generally occur without the scoring.

There may be instances where it is desirable to dispose the finger engaging tab means 28 in a direction which

extends upwardly and away from the carrier device 12. Where this is desired, the finger engaging tab means 28 are connected to limited inner marginal areas 30a which are located along the inner confines of each aperture 24a as illustrated in the FIG. 4 embodiment. Weakened lines 32a served to frangibly connect the individual finger engaging tab means 28a with the fingerhold carrying means 22a except for the intermediate pair of finger engaging tab means 28a which are frangibly connected by the weakened lines 38a to each other. Obviously, where only a four-pack container package is desired, each of the finger engaging tab means may be frangibly connected to a centrally located aperture formed in the carrier element 12.

The FIG. 5 embodiment shows that it is possible to form the finger engaging tab means from less than the entire section of material within the aperture of the carrier element. Specifically, the carrier element 12b in FIG. 5 of the drawing shows that the finger engaging tab means 28b is formed from approximately one-half of the material section which remains attached to the carrier element 12 along the limited inner marginal area 30b which partially surrounds each aperture 24b in the carrier element 12b. The remaining half-section of material within each aperture 24b may remain either attached to the carrier element 12b or be completely removed from the carrier element 12b as may be desired.

The FIG. 5 embodiment is further provided with side flange elements 34b which may be disposed in a position substantially normal to the carrier element 12b as a result of the fold line 36b formed in the carrier element 12b. Each of the side flanges can serve to provide a convenient location for printing indicia or embossments for advertising the products contained within each container 16. It will be noted that where the side flanges 34b are used, as in this embodiment, the individual finger engaging tab means 28b are designed to be connected to weakened lines 32b which traverse side flanges 34b. This is necessary in order that individual containers 16 may be removed from the package.

From the foregoing, it will now be appreciated that the present invention contemplates a novel quick opening means for a carrier element comprising individual finger engaging tabs which may be configured and arranged relative to the carrier element to suit the particulars that are required.

We claim:

1. A container package comprising a plurality of containers arranged in side-by-side abutting relationship, and a carrier holding said containers together, said carrier formed from a sheet of resilient deformable plastic material and having apertures therein, the marginal edge of each aperture terminating on the opposite sides of a tab formed from the material within the aperture, the circumferential extent of the marginal edge of each aperture and the material between said opposite sides of a tab being less than the circumferential dimension of said containers, said carrier being mounted on said containers with the marginal edge of each aperture and the material between said opposite sides of a tab being stretched to circumferentially encircle and resiliently grip one of said containers with the material about each aperture assuming a frusto-conical shape, and each tab being positioned between the surface of a container and said material about each aperture.

2. A container package as defined in claim 1, and finger gripping apertures in said carrier for transporting said package.

3. A container package as defined in claim 1, and a weakened line formed in said carrier substantially between one of said opposite sides of each of said tabs and the outer marginal edge of said carrier.

4. A container package as defined in claim 1, wherein said containers comprise bottles having reduced neck portions, said carrier being mounted on said bottles with the

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marginal edge of each aperture and the material between said opposite sides of a tab being stretched to circumferentially encircle and resiliently grip the reduced neck portion of one of said bottles with the material about each aperture assuming a frusto-conical shape and positioned substantially against the neck portion of the bottle, and each tab being downwardly directed relative to said bottles and positioned between the neck portion of the bottles and said material about each aperture.

5 A carrier for the upper reduced neck portions of a plurality of bottles arranged in two side-by-side rows, said carrier being formed from a sheet of resilient deformable plastic material, said sheet material being provided with two rows of apertures therethrough, the marginal edge of each aperture terminating on the opposite sides of a tab formed from the material within the aperture, the circumferential extent of the marginal edge and the material between said opposite sides of a tab being less than the circumferential dimension of the neck portion of the bottles intended to be associated therewith, whereby stretching of the marginal edge of each aperture and the

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material between said opposite sides of a tab is necessary for mounting said carrier on the neck portions of said bottles, and said material between said opposite sides of a tab being positioned immediately adjacent the outer edge portions of said sheet material, whereby said tabs are disposed outwardly of said two rows of bottles when said carrier is mounted on two rows of bottles.

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LEONARD SUMMER, Primary Examiner

U.S. CI. X.R.

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