

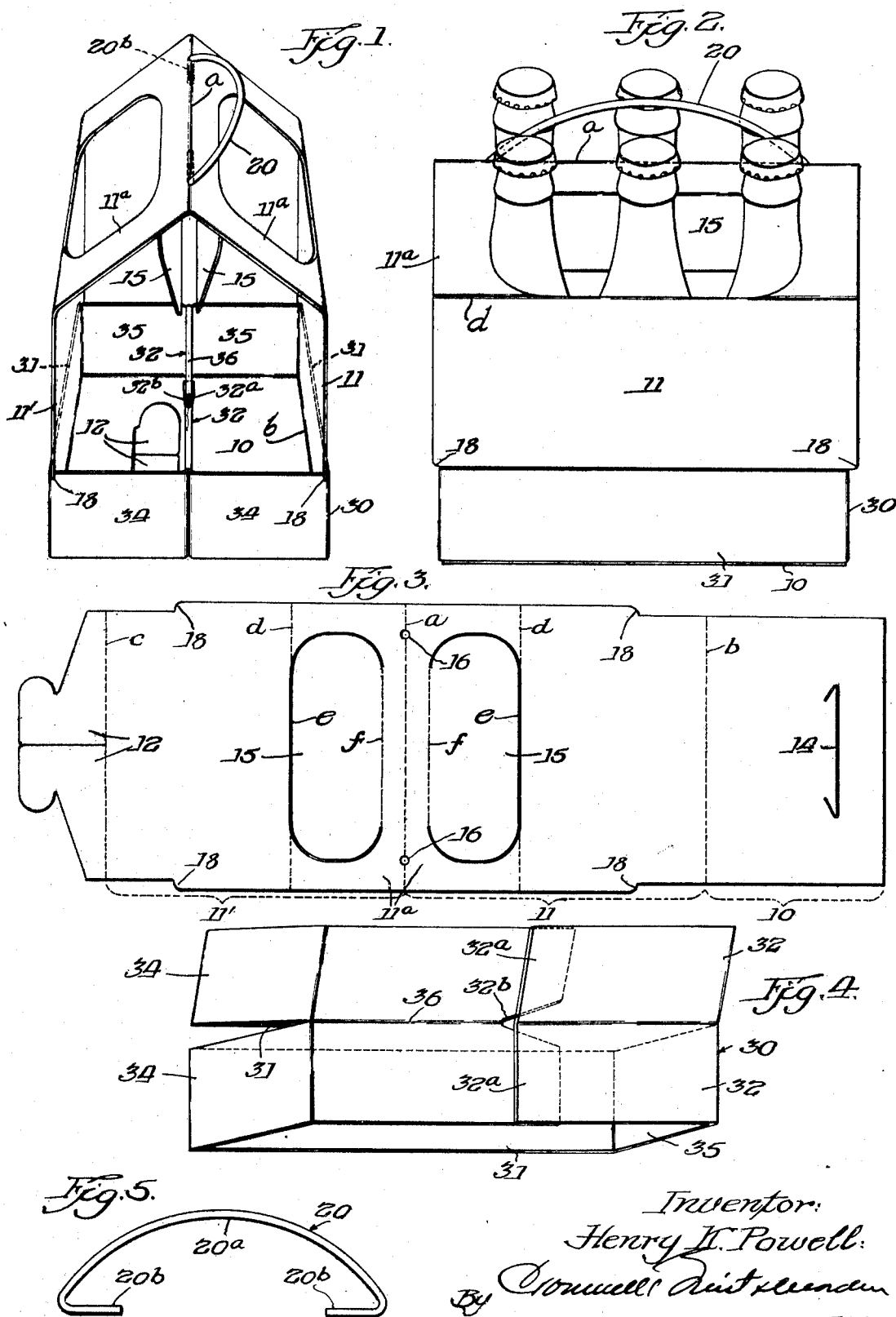
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BOTTLE HOLDER

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BOTTLEHOLDER

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21 Claims. (Cl. 229—27)

This invention relates to receptacles for holding bottles or other articles so as to constitute a package which may be carried conveniently.

A general object of the invention is to provide a receptacle of this character which may be fabricated easily and economically of paper board or other appropriate low-cost material, which is of knock-down character, permitting its being packaged in quantities in collapsed or flat form and easily set up by the user without requiring special apparatus or additional fastenings, and which is adapted to retain a plurality of bottles or similar articles securely against falling out, yet permit them to be removed and replaced individually or collectively when desired.

Another object is the provision of such a receptacle which retains its proper form and functions even though it is not filled to capacity, and consequently remains effective as a convenient receptacle or holder after one or more of the bottles or other articles have been removed from it.

Yet another object is the provision of a device having the characteristics above specified and which effectively protects the contained articles against external blows and against violent impact with one another and which forms a package which may be easily and conveniently carried by the hand and from which one or more of the contained articles may be removed with facility and without mutilating or dismantling the device in any respect.

Yet another object is the provision of a device having the characteristics above specified and which with its contents forms a type of package adapted to be stacked one upon another, or packed in association with others of like kind in a crate or shipping case.

Yet another object is the provision of a device having the characteristics above specified and which maintains its proper set-up form and functions even in the absence of any contents whatever, and thus constitutes a suitable and convenient repository for empty bottles or the like.

A particular object of the invention is the provision of a device having the characteristics above specified and which affords a suitable play or flexibility for the handle by which it is carried, thereby relieving the body portion of stresses which would tend to strain or tear it when the package is swung or shifted while being carried by the handle.

Other and further objects of the invention will be pointed out or indicated hereinafter or will be apparent upon an understanding of the illus-

trative embodiment herein shown and described or upon actual use of such a holder.

For purpose of aiding in an understanding of the invention I show in the accompanying drawing forming a part of this specification, and hereinafter describe, one form in which it may be embodied. It is to be understood, however, that this is presented merely by way of example and is not to be construed in any fashion for the purpose of limiting the appended claims short of the true and most comprehensive scope of the invention in the art, as the device may be varied in construction and in detail without departing from the spirit of the invention.

In said drawing,

Fig. 1 represents an end perspective view of a bottle holder or bottle carrier constituting an embodiment of my invention;

Fig. 2 is a side perspective view, as seen from a position slightly above the top of the article;

Fig. 3 is a plan view of the blank which forms the body member of the device shown in Figs. 1 and 2;

Fig. 4 is a perspective view of the partly collapsed retaining member which constitutes a part of the device illustrated in Figs. 1 and 2; and

Fig. 5 is a side elevational view of a form of handle shown in Figs. 1 and 2.

The present application constitutes a continuation in part of my copending applications Serial No. 168,887, filed October 14, 1937, and Serial No. 189,061, filed February 7, 1938, with certain improved or additional features.

The nature of the invention will be most quickly ascertained from a detailed description of the illustrative embodiment shown in the drawing.

The device comprises a body member shown in Fig. 3, a girth or retainer member shown in Fig. 4, and a handle shown in Fig. 5. The body member is formed of a sheet of suitable material such as paper board having the necessary stiffness and strength, and is blanked out in the form shown in Fig. 3 and creased or scored to provide a bottom portion or panel 10, and side panels 11 and 11' which remain connected at their upper ends along a line *a*. The lower end of panel 11 remains joined to the bottom panel 10 along a crease line *b*, while panel 11' is provided at its lower end with a locking tab comprised of two sections 12 connected to said panel along a crease line *c*. These locking tabs are adapted for locking engagement in a slot 14 of the bottom panel 10, to connect the lower end of panel 11' to the bottom panel so that panel 11' may extend upwardly

from the margin of the bottom panel opposite the panel 11, thus forming the bottom and side panels into a continuous loop adapted to carry the intended load of bottles. Crease lines *d* mark off the upper portions 11*a* of the side panels from the lower portions thereof, and these upper portions 11*a* are slit or cut through along the solid lines *e* to form transversely extending apertures having rounded ends. The tongues or tabs 15 which occupy these apertures remain attached to the side sections along the crease lines *f*, at a distance from the crease line *a*, and on the crease line *a* holes 16 are punched through the sheet at a short distance from its respective margins. The lower portions of the side panels 11 and 11' are of a width corresponding to the length of the bottom panel 10, but at a suitable distance from the crease lines *b* and *c* are widened so as to form outwardly jutting shoulders 18.

A suitable handle, designated generally by the reference numeral 20, preferably formed of heavy wire having some resiliency, is provided for insertion through the handle holes 16. This handle is shown in Fig. 5 wherein it will be seen that it is formed with a bail portion 20*a* having at its ends journal portions 20*b* which extend toward each other. The spacing of the ends of the bail corresponds with the spacing of the handle holes 16 and the handle is assembled with the body sheet by flexing the sheet along its longitudinal axis so as to bring the handle holes sufficiently close together to permit insertion of the ends of the journal portions 20*b* into them, then releasing the flexed sheet and permitting it to spring back to its flat form, thus bringing the handle holes 16 out to the ends of the bail portion 20*a* and locking the handle to the body sheet. The journal members 20*b* are adapted to engage the under side of the body sheet along the crease line *a* and thus support the holder when it is carried by the bail portion, and the engagement of the outer extremities of the handle, viz., the portions at the junctions of the bail and journal portions, in the handle holes, holds the journal portions against spreading apart under the weight imposed upon them.

The girth member or retaining member, which is illustrated in Fig. 4 and designated generally by the reference numeral 30, is formed from a flat sheet of paper board or the like suitably slit and scored to form a pair of outer walls 31, conjoined inner walls 32 and end walls 34 and 35. The inner walls 32 which are formed from contiguous portions of the ends of the sheet, are left conjoined with each other along a crease 36 which defines their contiguous longitudinal margins, said crease facilitating their being flexed into lateral abutment with each other. The ends of the sheet are overlapped at 32*a* and glued together, and the portion at the outer or convex side of the crease 36 is slotted out, as shown at 32*b* so that the material is not doubled across the crease. The lap joint formed at 32*a* is preferably about midway the length of the inner walls 32. The girth or retainer member thus formed comprises two collaterally disposed rectangular compartments when it is set up, as illustrated in Fig. 1, but by swinging the inner walls apart and folding it at diagonally opposite corners, it may be collapsed to a flattened form wherein the inner walls 32 are in the same plane, and lie flat upon the side walls 31. In Fig. 4 it is shown in a partly collapsed condition. The dimensions of the body sheet and the girth or retainer member are related in the following particulars, the internal

width between the side walls 31 of the retainer member, when it is set up with the inner walls 32 in contact with each other and the end walls at right angles to the side walls, is approximately the same as the external width of the bottom section, or the distance between the outer surfaces of the side panels when they are positioned perpendicularly to the opposite margins of the bottom panel; the margin-to-margin length of the bottom panel 10 and width of the lower portions of side panels 11 and 11' is approximately the same as the distance between the inner surfaces of the end walls 34 and 35 when said walls are in parallel relationship; the distance of the shoulders 18 from the adjacent crease lines *c* and *b* respectively is slightly greater than the height of the end walls 34 and 35.

The devices are shipped to the users in quantities and in knocked-down condition. The body members are shipped flat, in the form shown in Fig. 3, a suitable number being stacked and properly packaged. The retainer members are stacked in their collapsed or flat condition. The handles are packaged in suitable containers. Thus large quantities of the devices may be shipped in relatively small space.

The device is set up as follows: the handle having been locked to the body sheet as above described, the body sheet is flexed along the crease lines *a* and *d* until the free ends are close enough to each other to permit their being introduced through the compartment spaces of the retainer member. After being so inserted, the bottom panel 10 is flexed inwardly across the lower margins of the inner walls 32, the locking tongue sections 12 are flexed inwardly against the lower surface of the bottom section 10, and overlapped one upon another so that their hooks may be introduced through the slot 14 of the bottom panel, and after being so inserted, the locking tongue sections are then swung back to collateral association, so that their hook portions are held against withdrawal from the slot.

In the set-up condition, the device has the form illustrated in Fig. 1, with the exception that the tabs 15 still may remain in the planes of the sloping upper portions of the side panels. The lower margins of the inner walls 32 of the retainer member rest on top of the bottom panel 10. The outer walls 31 of the retainer member reinforce or support the lower portions of the side panels and relieve the locking tongue sections 12 and slot portion 14 of much of the tension to which they otherwise would be subjected, thus contributing very materially to the security and stability of the connection between the bottom panel 10 and side panel 11'. The shoulders 18 jut over the upper margins of the end walls 34 and 35 and hold the retainer member against sliding upwardly.

In the drawing I have shown a holder designed to accommodate six bottles in two rows of three each. The slitting of the upper portions of the side panels along the lines *e* provides apertures through which bottles may be inserted into the holder. Said bottles are inserted bottom first through said apertures, the tabs 15 being bent inwardly along the lines *f*. After the bottom of a bottle is thus inserted through the aperture, it is seated on the bottom panel in the compartment therebelow, and moved to the end thereof. The second bottle is inserted likewise and moved to the other end of the compartment, and then the third bottle is inserted between the two. Three other bottles are introduced in the same fashion

into the other compartment through the other top aperture, the tabs 15 aiding to reduce interference from the bottles already in place. The width of the compartments is preferably such that the bottoms of the bottles will be rather tightly gripped between the lower portions of the side panels 11, 11' and the inner walls 32 of the retainer member, and the height of the side panels is such that the necks or upper portions of the bottles will remain projecting through them, as illustrated in Fig. 2, the tabs 15 then acting as separators between the two rows. By virtue of the gripping of the inner walls 32 between the bottoms of the bottles in the two compartments, said walls are securely retained against withdrawal, even though the joint at 32a should separate. The walls 32, of course, perform the further important function of holding the bottles in the two rows apart from each other, and, by being gripped tightly between the side panels and the inner walls, the bottles in the same row are held against rattling against one another.

When carried by the handle 20, the body member is free to swing on the journal portions 20b, and consequently the paper board material is not subjected to twisting or weaving action which might tend to tear the relatively narrow portions at the ends of the wall openings. Moreover, the side panels are held against such weaving or twisting action by the stiff construction formed by the bottom and side panels and retaining member at the bottom and by the stiff strut-like construction at the top. It will be appreciated that the angular relationship of the conjoined side panels at the sides of the top crease or crest line *a*, plus the angular structure formed by the inwardly deflected tongues 15 along the lines *f*, produce, along the top of the body member, a beam-like structure which is quite stiff, so that the narrow portions at the ends of the wall apertures are definitely stayed against being drawn toward each other at their upper ends, and the material below the handle bail is supported against buckling downwardly under the weight of the bottles. By virtue of these features, the construction is very much less subject to tearing strains than if the handle were fixedly connected with or formed as a part of the body sheet. In addition to this, it does not afford any opportunity for the person who is carrying the package to twist, crumple or collapse the handle, as is the case in constructions where the handle is formed as a part of the body sheet. Likewise, the bottom structure is very much more secure than are those in which apertures are provided in the body sheet for holding the bottom portions of the bottles in position, and the fact that the bottles are gripped by the side panels against the intermediate walls 32 gives the assembly a cushioned characteristic which greatly reduces the stresses upon the side panels when the package is picked up or jolted when carried.

The package is particularly adapted for stacking, inasmuch as the bottles are all held upright and maintained definitely against swinging apart and in proper relative position with their tops projecting above the upper end of the body member so that they form a stable support for similar packages disposed upon them. The handle is of such height that it may be swung laterally to a position where it does not project above the tops of the bottles. These packages are of particular advantage for packing in cases, viz., four, six or eight to the case, as the contents of each package are visible from the top, and it

can be ascertained at a glance whether or not any bottles are missing from the case. Moreover, the holders occupy such little space that cases of customary dimensions can be used.

A particular advantage of this holder resides in the fact that it does not have to be mutilated or disassembled in any particular for the removal of part or all of its contents. The bottles may be removed as desired, provided the middle bottle is always removed first. Likewise, after all of the bottles are removed, the holder retains its proper shape and set-up condition, so that it is ready to receive the same or other bottles, which may be placed in it with facility, as above described. Thus it continues to function as a convenient repository for the used bottles and as a means for returning them.

Certain of the matter disclosed but not claimed herein is claimed in my Patent No. 2,296,228, issued September 15, 1942, on a copending application.

What I claim is:

1. A holder for bottles and the like comprising a body member and a retainer member both formed of sheet material, the body member comprising a bottom panel and oppositely disposed side panels which are connected to the bottom panel at their lower ends and to each other at their upper ends, the retainer member encompassing the lower portions of the side panels and having portions forming a bottle separator midway between them and upstanding walls at the ends of the bottom panel, said body member being provided with a handle at its upper end and with apertures in the upper portions of the side panels through which bottles may be introduced and withdrawn while said retainer member is in place.
2. A holder for bottles as specified in claim 1 and wherein the bottle separator of the retainer member is connected to end wall portions of the latter and extends along the bottom panel intermediate the side panels.
3. A holder for bottles as specified in claim 1, and wherein the bottle separator of the retainer member is adjacent the bottom panel, and the side panels comprise upper bottle separators depending in the upper portion of the holder.
4. A holder for bottles and the like comprising a body member and a retainer member both formed of sheet material, the body member comprising a bottom panel and oppositely disposed side panels which are connected at their upper ends, the retainer member encompassing lower portions of the side panels and forming upstanding walls at the ends of the bottom panel, the body member and retainer member having portions forming bottle separators midway between the side panels, the body member being provided at its upper end with a handle whereby the holder may be carried and with apertures in the upper portions of the side panels through which bottles may be introduced and withdrawn.
5. A packaging holder for bottles and the like comprising a body member formed of sheet material and having a bottom on which the bottles may rest and side panels extending upwardly from opposite margins thereof and connected at their upper ends, said side panels being provided with apertures a short distance below their upper ends, some of the sheet material within the apertures being bent inwardly along lines following the upper margins of said apertures whereby to form stiffening struts at the tops of the apertures, and a handle connected to the body member at the junction of the side panels.

6. A packaging holder for bottles and the like as specified in claim 5 and wherein the side panels extend in divergent relationship from their line of connection.

7. In a holder for packaging bottles and the like, the combination of a flexible body member of sheet material formed with a bottom panel and side panels which extend upwardly therefrom and are joined to each other at a crest from which they diverge downwardly, said body member having spaced handle-receiving holes through it on the crest, and a stiff handle member extending through said holes and comprising a bail disposed above the crest and journal portions extending from the ends of the bail and underlying the body sheet in the crotch below the crest to support the body member pendulously, the side panels having apertures in their upper portions for accommodation of bottles standing upright in the body member, portions of the sheet material from within said apertures being bent inwardly at the upper margins of the apertures to stiffen the body member between the handle holes.

8. A knock-down holder for bottles and the like comprising a body sheet creased to form a bottom panel and a pair of side panels movable to positions opposite each other, and a retainer member having outer walls, inner walls and end walls connected to form collaterally disposed compartments, said side panels being insertable through said compartments to a position wherein said outer walls embrace the lower portions of said side panels and said inner walls occupy a position between them.

9. A knock-down holder for packaging bottles and the like comprising a body sheet creased to provide a bottom panel and a pair of side panels which are movable to positions opposite each other, and a retainer member having outer walls spaced apart a distance corresponding to the width of the bottom panel and an inner wall between the outer walls and end walls connecting the inner wall and outer walls, said retainer member affording collaterally disposed compartments through which the side panels are insertable to a position wherein the lower margin of the inner wall may rest upon the upper surface of the bottom panel and the outer walls about the outer sides of the side panels respectively.

10. A knock-down holder for packaging bottles and the like comprising a body sheet creased to afford a bottom section and a pair of side sections adapted to be positioned opposite each other, and a collapsible retainer member comprising outer walls, inner walls which are conjoined along a margin, and end walls connecting said inner and outer walls at their ends so that when said end walls are at right-angles to the outer walls the latter are spaced apart a distance approximating the width of the bottom panel and the retainer member affords collaterally disposed compartments of a length approximating the width of the lower portions of the side sections.

11. A holder for packaging bottles and the like comprising a body member formed of sheet material and having a bottom panel and side panels, said side panels extending upwardly from opposite sides of the bottom panel, and a retainer member comprising inner, outer and end walls conjoined to form collaterally-disposed approximately rectangular compartments, said retainer member being disposed with its inner wall overlying the bottom panel and its outer walls embracing the outer sides of the side panels and its

end walls along the end margins of the bottom panel.

12. A holder as specified in claim 11 and wherein the body member has a portion jutting over a part of the retainer member to hold it against slipping upwardly on the side panels.

13. A holder for packaging bottles and the like comprising a body member of sheet material having a bottom panel and upwardly extending side panels at opposite sides thereof, the upper portions of said side panels extending inwardly and upwardly in converging relationship at a distance above the bottom panel, and a retainer member having end walls extending along the end margins of the bottom panel and outer walls extending along the outer sides of the side panels and an inner wall extending from end wall to end wall approximately midway between the side panels, said walls being only a fraction of the height of the side panels, and the body member being provided at its upper end with a handle whereby the holder may be carried.

14. A container comprising a collapsible body member formed of a sheet creased to provide a bottom panel and a pair of side panels adapted to be positioned opposite each other, and a collapsible retainer member comprising inner, outer and end walls conjoined to form collaterally disposed approximately rectangular compartments, said retainer member being collapsible to a flattened condition by flexing it along the corners, the side panels being insertable through said compartments to position said outer walls along their outer surfaces and said end walls along the end margins of the bottom panel.

15. In a knock-down holder for packaging bottles and the like, a retainer member formed of a sheet of paper board or the like creased into a quadrangular tubular form and having its ends overlapped and connected, three of the walls being severed into aligned sections and the fourth being creased to form wall sections which may be bent into lateral abutment with each other, the overlapped portion of the ends of the sheet occurring in said creased wall sections, the overlapped end portion at the outer side of the crease being slotted out so that the material is not doubled at the crease.

16. In a container for carrying bottles and the like, a body formed of paper board material or the like and including a bottom on which the bottles may rest and side panels extending upwardly at opposite side margins thereof, said side panels being provided adjacent their upper ends with a handle connected to them at transversely spaced points, said side panels being also provided in their upper portions with bottle-receiving apertures extending across the greater portion of their width and stiffening tabs bent inwardly at an angle along the upper margins of said apertures and cooperating with the conjoined material to stiffen the portions of the side panels between the points of connection of the handle.

17. In a holder for packaging bottles and the like, a body member formed of sheet material and having a bottom and side panels extending upwardly at opposite sides of said bottom, the upper portions of said side panels extending inwardly and upwardly in converging relationship over the bottom and being provided with apertures extending for the greater portion of their width, to permit insertion and removal of bottles through said side panels to and from upright positions on the bottom, said body member being provided at its upper end with a handle spaced

from the apertures by portions of the side panels, and tabs flexible inwardly along the upper margins of said apertures to form depending bottle separators in the upper middle portion of the body member.

18. A packaging holder for bottles and the like comprising a body member formed of sheet material and having a bottom on which the bottles may rest and side panels extending upwardly from opposite margins thereof and connected to each other at their upper parts, said side panels being provided with bottle-receiving apertures in upper areas thereof, and portions of the sheet material within said apertures being bent inwardly along lines following the upper margins thereof whereby to form stiffening struts adjacent the connections of said portions, said body member being provided with a handle at the upper ends of the side panels.

19. In a container for carrying bottles and the like, a collapsible body member formed of paper board and having a bottom portion on which bottles may stand and side panels which are connected thereto and formed to occupy positions where they extend upwardly at opposite side margins thereof, said side panels having their upper portions meeting over the middle of the bottom portion and being provided with apertures in said upper portions of size such as to permit insertion and removal of bottles therethrough to and from upstanding positions on the bottom portion, and tabs flexed inwardly along the upper margins of said apertures to stiffen the contiguous sheet portions thereabove, said body member being provided with a handle at the upper ends of the side panels whereby the container may be carried.

20. In a container for carrying bottles and the like, a body member formed of sheet material shaped and creased to provide a bottom on which bottles may stand and side panels which extend upwardly at opposite sides thereof and have their upper portions converging upwardly at a distance above said bottom, said side panels being connected adjacent their upper ends and provided with an upwardly extending handle and with apertures in their upper portions below the handle, said apertures being of size to permit insertion and removal of bottles therethrough to and

from upstanding positions on the bottom and being disposed in positions where bottles for which the device is designed project upwardly through them when said bottles are standing in rows on the bottom, said side panels also having tabs formed of portions of the sheet from within the apertures and bent inwardly from the upper portions of the side panels to positions where they form depending separators disposed for engagement between body portions of bottles in the opposite rows, said handle being movable on the body member to a position where it may be engaged by hand above the tops of the upstanding bottles for purpose of transportation and to another position where it is entirely below the tops of the bottles while the side panels remain connected at their upper ends and in normal upstanding positions, so as to permit other packages to be supported directly on them.

21. In a container for carrying bottles and the like, a body member formed of sheet material shaped and creased to provide a bottom on which bottles may stand and side panels which extend upwardly at opposite sides thereof and have their upper portions converging upwardly at a distance above said bottom, said side panels being connected adjacent their upper ends and provided with an upwardly extending handle and with apertures in their upper portions below the handle, said apertures being of size to permit insertion and removal of bottles therethrough to and from upstanding positions on the bottom and being disposed in positions where bottles for which the device is designed project upwardly through them when said bottles are standing in rows on the bottom, said side panels also having tabs extending downwardly from the upper limits of said apertures to form depending bottle separators approximately midway between the side panels, said handle being movable on the body member to a position where it may be engaged by hand above the tops of the upstanding bottles for purpose of transportation and to another position where it is entirely below the tops of the bottles while the side panels remain connected at their upper ends and in normal upstanding positions, so as to permit other packages to be supported directly on them.

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