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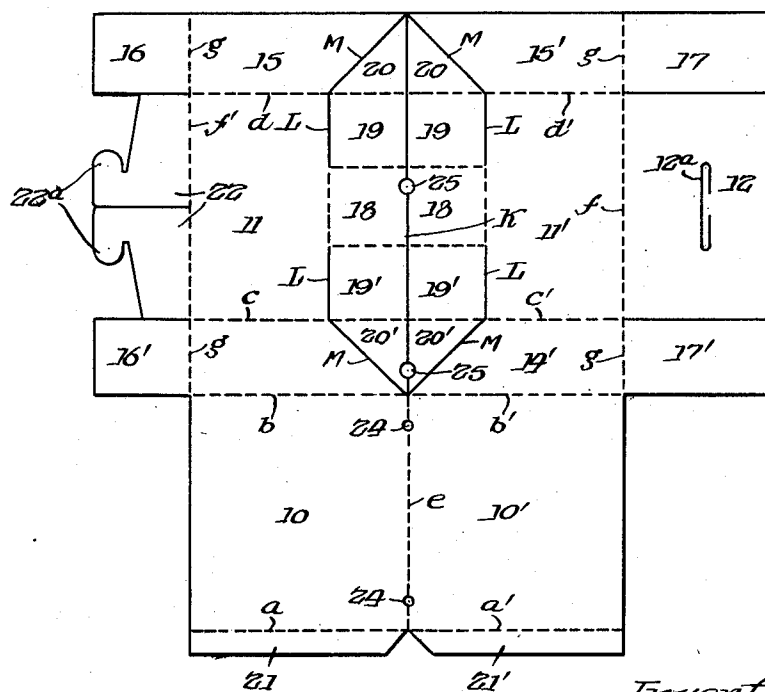
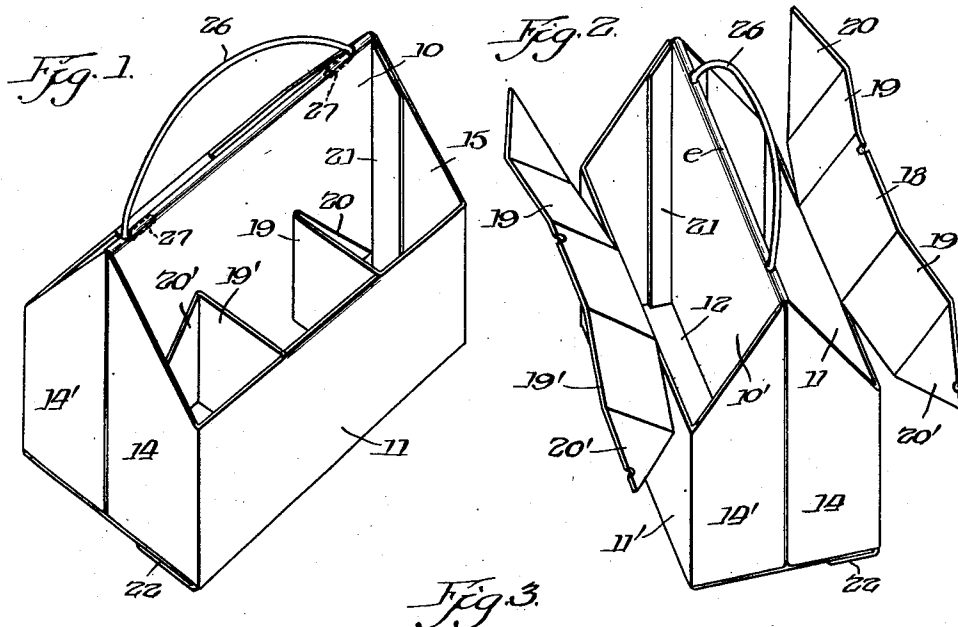
H. K. POWELL

2,163,290

BOTTLE HOLDER

Filed June 8, 1938

2 Sheets-Sheet 1



Inventor:

Henry K. Powell:

By: Cromwell Mitchell
Atty.

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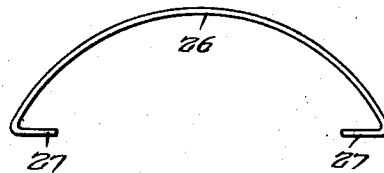
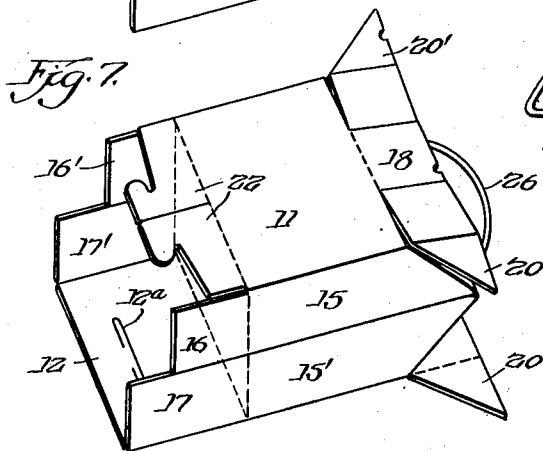
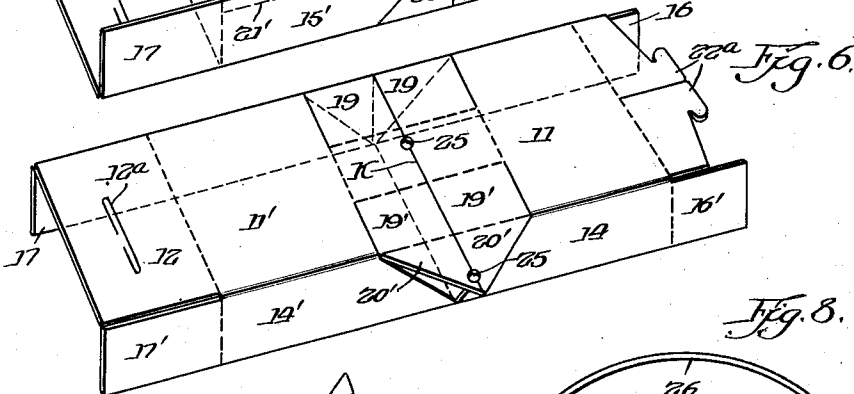
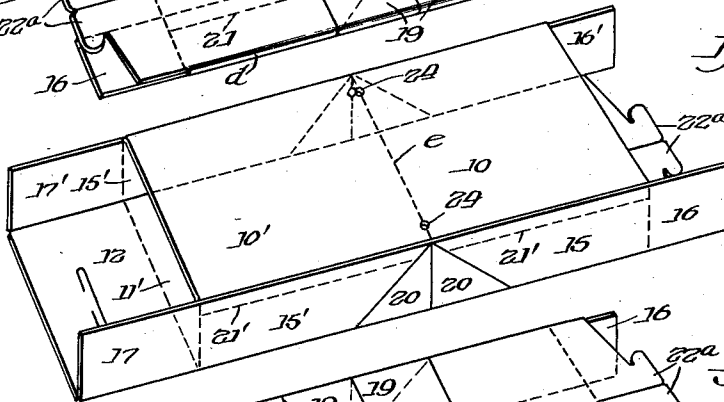
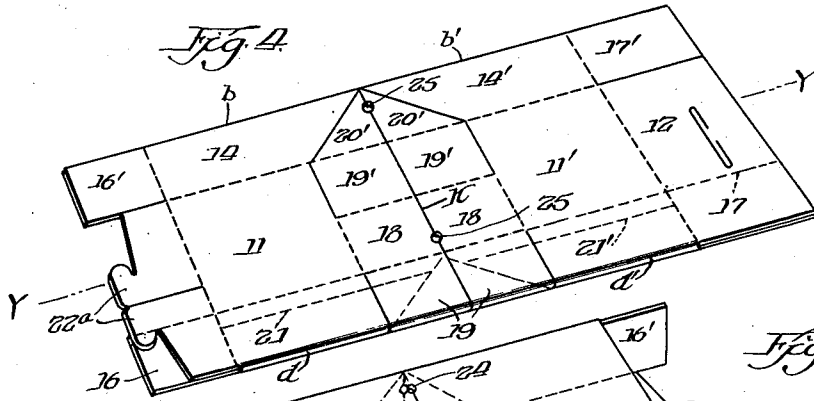
H. K. POWELL

2,163,290

BOTTLE HOLDER

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2 Sheets-Sheet 2



Inventor:
Henry K. Powell.
By Cromwell Christensen
Attys.

UNITED STATES PATENT OFFICE

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BOTTLE HOLDER

Henry K. Powell, Chicago, Ill.

Application June 8, 1938, Serial No. 212,413

9 Claims. (Cl. 229—27)

This invention relates to receptacles or containers designed for the purpose of packaging a plurality of bottles or the like in a manner such that they may be carried conveniently as a group.

General objects of the invention include the provision of such a receptacle which may be manufactured from paper board or similar inexpensive material, being fabricated from a single blank, and of knock-down character, so that it may be packaged and shipped in a substantially flat condition and set up at the point of use without requiring special apparatus or additional fastenings, and when so set up will form an effective packaging receptacle and carrier for a plurality of bottles or the like.

Another object is the provision of such a knock-down receptacle, which, after being properly set up, will retain its set-up form even though empty, thus facilitating the insertion of the bottles or other contents into it in the first instance and serving as a convenient repository for the bottles after they have been emptied, and which involves no mutilation or disassembling of it for the purpose of removing one or more of the contained articles.

A particular object of the present invention is the provision of such a receptacle which is specially qualified to carry a plurality of articles of considerable weight.

Other and further objects of the invention will be pointed out or indicated hereinafter, or will be apparent from the following description or upon actual use of one of the devices.

For the purpose of aiding in an explanation of the invention, I show in the accompanying drawings forming a part of this specification, and hereinafter described, one form in which it may be embodied. It is to be understood, however, that this is presented merely for purpose of illustration, and hence 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.

In said drawings,

Fig. 1 is a perspective view of a bottle holder or bottle carrier embodying the present invention, the view being taken from a position considerably above the device, so that some of the interior features may be shown;

Fig. 2 is a perspective view of the receptacle in a partially set-up condition;

Fig. 3 is a plan view of the complete blank from which the receptacle is formed;

Fig. 4 is a perspective view of the receptacle in

its flat or knocked-down condition after the blank has been folded and glued;

Fig. 5 is a perspective view of the knocked-down receptacle in partly unfolded condition;

Fig. 6 is a perspective view of the same in a position inverted from that shown in Fig. 5;

Fig. 7 is a perspective view of the receptacle in process of being set up; and

Fig. 8 is an elevational view of a handle which constitutes a part of the device.

The nature of the invention will be most quickly ascertained from a description of the illustrative embodiment shown in the drawings, which is as follows.

Referring first to Fig. 3, it will be understood that this represents a blank cut from a sheet of paper board having the necessary qualities of strength, stiffness and flexibility, same being slotted and scored to form inner side panels 10 and 10', outer side panels 11 and 11', a bottom panel 12, end panels 14, 14' and 15, 15', bottom flaps 16, 16' and 17, 17' and top flaps each comprising a fold section 18, two partition sections 19 and 19', and two spacer sections 20 and 20'. In addition, the inner wall panels 10 and 10' have glue flaps 21 and 21' along one margin, and the outer side panel 11 has a connecting member consisting of a pair of bottom tongues 22 extending from one margin and terminating in locking hooks 22a. Bottom panel 12 has a slot 12a which is adapted to receive said hooks when they are partially overlapped one upon another, said slot being of a length corresponding approximately to the space between the throats of the hooks when the locking tongues 22 are in lateral abutment with each other, viz., the position shown in Fig. 3.

The side panels 10, 10' and 11, 11' are of like width, their lateral margins being defined by fold creases *a*, *a'*, *b*, *b'*, *c*, *c'*, and *d*, *d'*, and the length of the bottom panel 12 corresponds to the width of said panels. The end panels 14, 14', and 15, 15' are of the same width. The top flaps and their correspondingly numbered sections are of identical form.

The inner side panels 10 and 10' conjoin each other along a crest crease line *e* and the bottom panel 12 conjoins the outer side panel 11' along a crease line *f*, and the locking tongues 22 conjoin the outer side panel 11 along a crease line *f'*. The bottom flaps are formed as extensions from the respective end panels, being conjoined thereto along the respective crease lines *g*.

The top flaps are separated from each other along a slit *K* and are severed from the respective

side panels 11 and 11' along slits L and from the end panels along diagonal slits M.

In fabrication of the device from the flat blank shown in Fig. 3, the blank is flexed along the crease lines b, b' and d, d', so that the end panels 15, 15', are overlapped upon the gluing tabs 21, 21', and are secured thereto by an adhesive on other suitable means. After being thus glued, and then inverted, the receptacle is in the collapsed or flattened form shown in Fig. 4. This is the form in which it is stacked for packaging and shipment. In the original blanking operation, or prior to the folding and gluing of the blank, handle anchorage holes 24 are formed on the crest crease line e, and handle insertion apertures 25, of considerably larger diameter, are formed on the slit K in such positions that when the blank is folded and glued, viz., in the flat or knock-down form illustrated in Fig. 4, the handle insertion apertures 25 are over the handle anchorage holes 24.

A suitable handle is provided for engagement in the anchorage holes 24, one form of such handle being shown in Fig. 8. Such handle may be conveniently made of a suitably stiff wire and formed with a bail portion 26 having aligned inwardly-directed journal portions 27 at its ends. The straight line length between the terminals of the bail portion or the outer ends of the journal portions, corresponds to the spacing of the handle anchorage holes 24, it thus being apparent that the inner ends of the journal portions 27 are considerably closer together than are said holes 24.

The receptacles are supplied to the user in the flat knocked-down form shown in Fig. 4, and the handles may be shipped separately. In order to affix the handle to a receptacle, the latter is bowed transversely or flexed into an arcuate form about the axis Y-Y, until the handle insertion apertures 25, and likewise the handle anchorage holes 24, are brought close enough to each other to permit the insertion of the inner ends of the handle journal portions 27 through them. When the handle journals have thus been inserted, the bowed container is released and allowed to resume its flat form, thus moving the apertures out to the outer limits of the journal portions, where they are stopped by the conjoined angularly related end portions of the bail. The handle is thus definitely locked to the container, the bail portion projecting through the slit K.

Now, in order to set up the container from this condition, it is flexed on the crest crease e so as to bring the inner side panels 10 and 10' into surface contact with each other, and then the outer side panels 11, 11' are drawn away from each other so that the device assumes approximately the appearance shown in Fig. 7. Then the bottom flaps 16, 16' and 17, 17' are folded inwardly, the bottom panel 12 is folded inwardly against them, and the locking tongues 22 folded inwardly upon the bottom panel, and their hooks engage in the slot 12a thereof. This converts the device to the form shown in Fig. 2. Then the spacer sections 20, 20' of the respective top flaps are folded inwardly against the adjacent partition sections 19, 19', and the entire flap folded inwardly between the outer and inner side panels. Thereupon, the partition sections 19, 19' are folded away from the outer side panels, so that their inner extremities contact the inner side panels 10, 10', and the spacer sections 20 and 21 assume surface contact with

the inner side panels, as illustrated in Fig. 1. Thus the partition sections 19, 19' are maintained in approximately parallel relationship and at right-angles to the inner and outer side panels 10, 10', 11, 11', and function as struts to brace the panels 11, 11' from the panels 10, 10' and partially to subdivide the intervening space into compartments or cells.

The device is now in completely set-up condition and ready to receive the contents, which, in the case of bottles or the like, may be introduced into the cells from above and set up on the bottom portions of the compartments.

In the embodiment illustrated, it will be observed that the receptacle is designed to accommodate six bottles, three in each of the two collaterally disposed compartments. One or more of these bottles may be removed without requiring any dismantling or mutilation of the device, and after removal of some or all of them, the device retains its set-up form, ready for reception of the emptied bottles.

The device may be carried very comfortably and conveniently by means of the handle, which, by virtue of the connection above described, permits the receptacle to have a rocking or swinging movement on the journals 27, thus relieving the body structure of tearing stresses or the like. The bottles are separated from one another by the partition sections and the inner wall panels, and the proportions of the receptacle may be so selected as to effect a clasping action on the bottles so that they are quite securely retained. Of course, the depth of the side panels may be varied, but it probably is preferable that they be of sufficient height to cover a substantial proportion of the height of the bottles, to protect them against external impacts. In order to permit the stacking of a plurality of the filled packages one upon another, the height of the inner side panels 10, 10' is selected so that it is somewhat less than the height of the bottles, the tops of the bottles thus projecting above it and above the handle when it is swung to one side, and conjointly forming a stable foundation or support upon which another similar package may be set.

What I claim is:

1. A container for packaging a plurality of bottles or the like, comprising a sheet slotted and creased to form a pair of inner side panels which are connected to each other at their upper ends, a pair of outer side panels of less height than said inner side panels and respectively connected to them by end panels disposed at the lateral ends of said side panels, thereby affording walls for two collaterally disposed compartments separated by the inner side panels, and a bottom for connecting the lower ends of the outer side panels and holding the inner side panels in collateral relationship and forming a bottom for said compartments, a handle being provided at the upper ends of the inner side panels whereby the container may be carried.

2. A container as specified in claim 1 and wherein said bottom comprises a bottom panel and a connecting member conjoined respectively with the lower ends of the outer side panels along crease lines which are parallel with each other and perpendicular to the end margins of said outer side panels, said bottom panel and connecting member having interlocking elements whereby they may be connected to each other to hold the outer side panels in outwardly spaced relation to the respective inner side panels.

3. A container as specified in claim 1 and wherein top flaps are conjoined with the upper ends of the outer side panels and foldable inwardly between the outer and inner side panels to form partitions subdividing the compartments, 5
5 respective top flaps each comprising a fold section conjoined to the upper margin of the outer side panel, a partition section flexible to a right-angle position relative to the fold section so as to extend across the compartment, and a spacer 10
10 section flexible to a right-angle relationship to the partition section so as to rest flat against the inner wall panel.

4. A container as specified in claim 1 and wherein top flaps are conjoined with the upper 15
15 ends of the outer side panels and foldable inwardly between the outer and inner side panels to form partitions subdividing the compartments, respective top flaps each comprising a fold section conjoined to the upper margin of the outer 20
20 side panel, a partition section flexible to a right-angle position relative to the fold section so as to extend across the compartment, and a spacer section flexible to a right-angle relationship to the partition section so as to rest flat against 25
25 the inner wall panel, the height of said top flap being approximately equal to the difference in height between the inner and outer side panels.

5. A container as specified in claim 1 and wherein the container is foldable to a knocked-down condition wherein the inner side panels 30
30 are disposed in approximately the same plane and the outer side panels lie flat against them.

6. A container as specified in claim 1 and wherein the inner side panels are integrally 35
35

conjoined along a crease line defining their upper margins.

7. A container as specified in claim 1 and wherein the inner side panels are provided with handle anchorage holes adjacent their upper 5
5 ends, and the handle has portions inserted through said holes to connect it to the container.

8. A container as specified in claim 1 and wherein the inner side panels are integrally conjoined along a crease line defining their upper 10
10 margins and are provided with handle anchorage holes spaced apart on said line, and the handle has aligned journal portions insertible through said holes when the inner side panels are in bowed condition. 15

9. In a knock-down container, a sheet of paper board or the like slotted and creased to form a bottom, inner side panels which are conjoined along a top crease line defining their top margins, outer side panels joined respectively to 20
20 lateral margins of the inner side panels by end panels, top flaps at the tops of said outer side panels and the conjoint height of said top flaps and outer side panels being approximately equal to the height of the inner side panels, the top 25
25 margins of said top flaps being parallel with and overlying said top crease line when the outer side panels and top flaps are resting flat upon the inner side panels, the sheet being provided with handle anchorage holes adjacent the line 30
30 of connection of the inner side panels, and the top flaps being provided with handle insertion apertures formed in their margins in overlying relationship to said handle anchorage holes.

HENRY K. POWELL. 35