

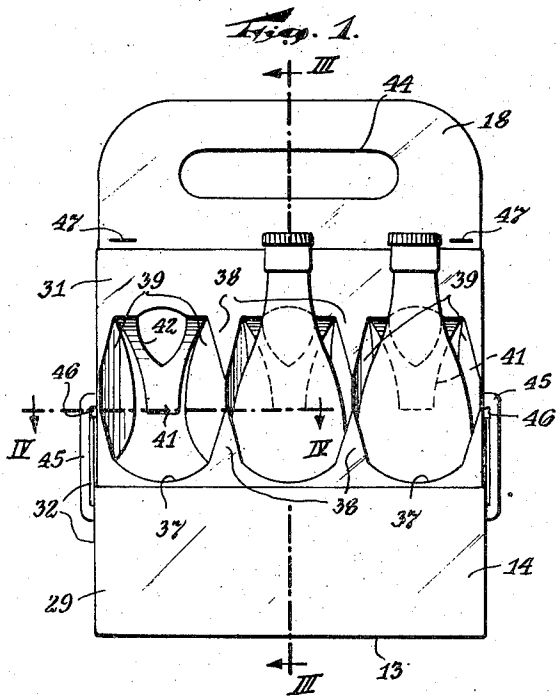
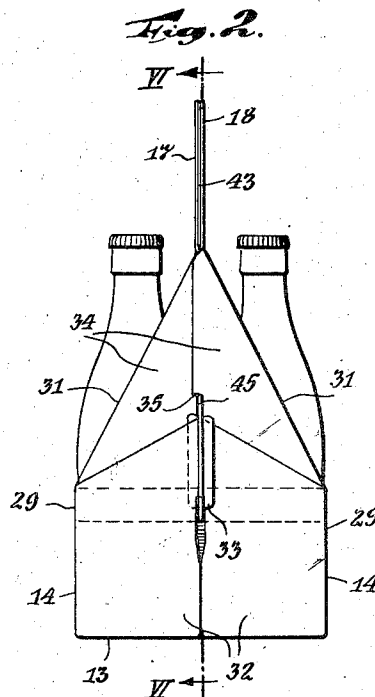
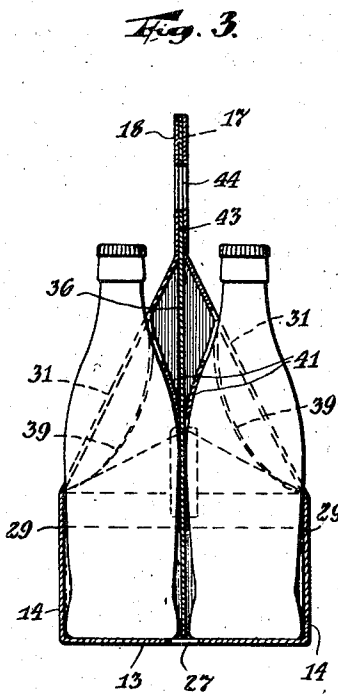
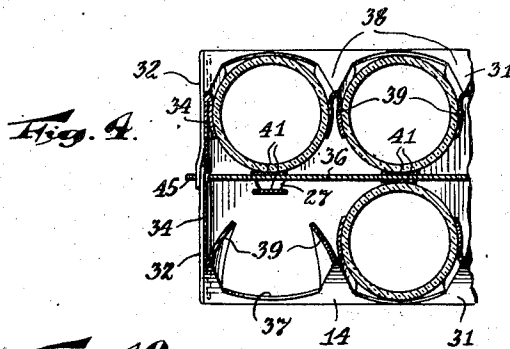
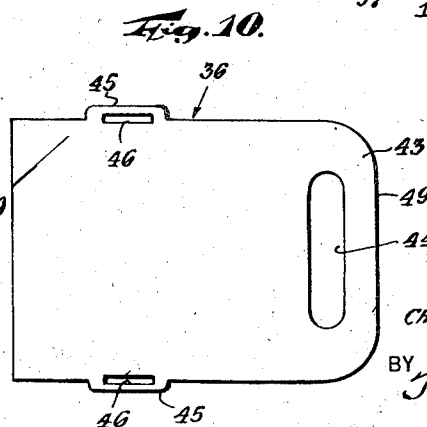
July 27, 1948.

C. S. PRICE
BOTTLE CARRIER

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3 Sheets-Sheet 1



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3 Sheets-Sheet 2

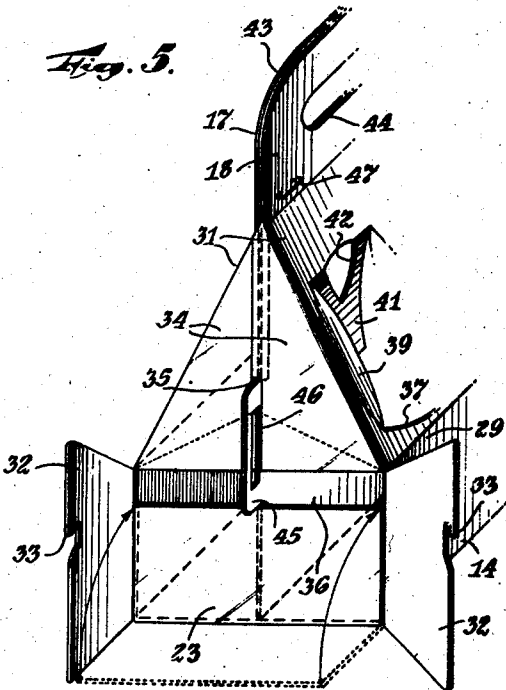
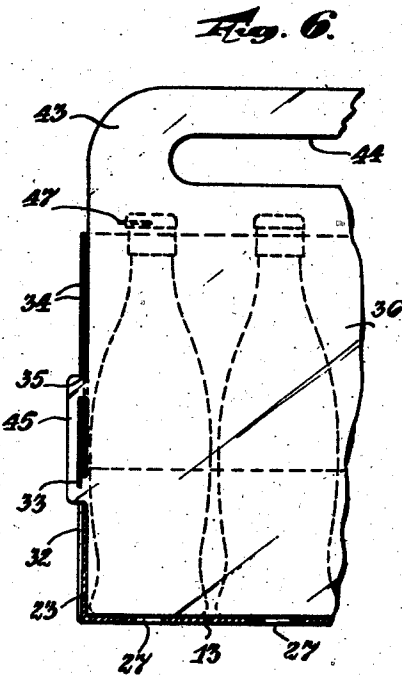
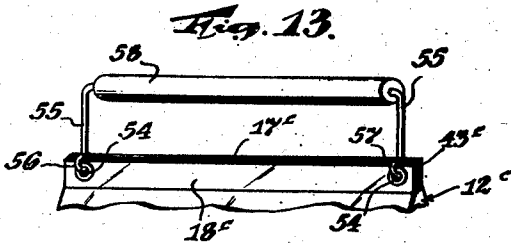
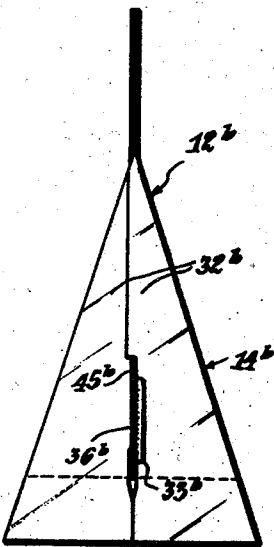
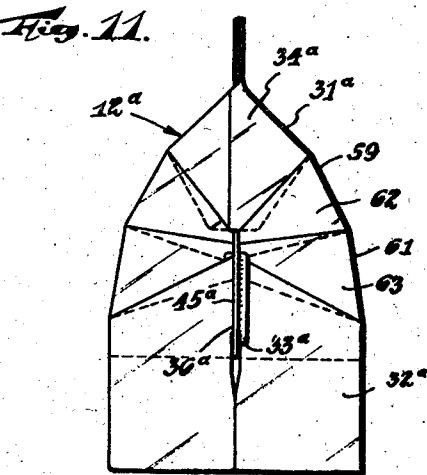


Fig. 12.

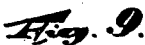


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BOTTLE CARRIER

3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE

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BOTTLE CARRIER

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Application January 19, 1946, Serial No. 642,259

7 Claims. (Cl. 229—52)

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This invention relates to bottle carriers or cartons of the type adapted for the packaging and carrying of a plurality of bottles or similar articles.

The principal object of my invention, generally considered, is to provide a bottle carrier of light weight which may be manufactured economically from resilient sheet material, such as foil-covered board.

An object of the invention is to produce a bottle carrier from a one-piece wrapper portion and one-piece partition portion, or a single piece of material including both portions, and which is of such a nature that it may be packed and shipped to a user flat or partially knocked down, and may be set up by such user quickly and easily without the necessity for any machinery for the purpose or involving the use of complicated fasteners; and, when in set up condition, may be loaded with bottles or the like rapidly and easily, and then will resiliently retain them against falling out during use of the carrier, yet allow for application and removal without damage to said carrier.

Another object of the invention is to provide a cheap yet substantial bottle carrier, in which sloping sides are provided with access openings through which bottles may be inserted or withdrawn, each access opening being defined by bottle gripping means including flaps on stiffening struts between the said openings, the outer surfaces of said bottles being gripped by the lower generally-vertical portions of the side walls of the carrier, and said bottles being engaged, spaced, and gripped, by the partition at the lower portions thereof and depending side wall tongues at the neck portions.

A further object of my invention is to provide a bottle carrier having means cut from a wrapper blank of resilient material and an associated partition blank or portion for separating said bottles, including top-hung partition tabs engaging the inner surfaces of the bottles adjacent the necks thereof, partition stiffening flaps engaging the sides of said bottles, with the partition portion disposed between rows thereof, whereby said bottles are separated by the partition portion at their lower portions, depending side wall tongues at the neck portions, and stiffening strut flaps between the bottles of each row thereof.

A still further object of my invention is to provide a bottle carrier formed from a wrapper member and a partition member or portion, said partition portion carrying slotted ears receiving locking tabs of end or lower end panels of the wrapper member.

An additional object of my invention is to provide a bottle carrier in which the ends thereof are closed by upper end panels overlapping one another and overlapped and held shut by lower

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end panels which have locking tabs received in slotted ears of the partition member, the outer or upper portions of both members being fastened together to form a handle portion or stiff flange to which a handle is secured.

Other objects and advantages of the invention, relating to the particular arrangement and construction of the various parts, will become apparent as the description proceeds.

Referring to the drawing:

Fig. 1 is an elevational view of a bottle carrier embodying my invention and partly filled with bottles.

Fig. 2 is an end elevational view of the carrier shown in Fig. 1.

Fig. 3 is a transverse sectional view on the line III—III of Fig. 1, in the direction of the arrows.

Fig. 4 is a horizontal sectional view on the line IV—IV of Fig. 1, in the direction of the arrows.

Fig. 5 is a fragmentary end perspective view of the carrier during the operation of setting it up.

Fig. 6 is a fragmentary vertical longitudinal sectional view of the carrier on the line VI—VI of Fig. 2, in the direction of the arrows.

Fig. 7 is a perspective view of the set-up carrier with the bottles removed.

Fig. 8 is a plan of the wrapper blank from which the carrier is made.

Fig. 9 is an enlarged sectional view on the line IX—IX of Fig. 8, in the direction of the arrows.

Fig. 10 is a plan of the partition blank used in making the carrier.

Fig. 11 is a view corresponding to Fig. 5, with the bottles removed and showing a modification.

Fig. 12 is a view corresponding to Fig. 11 but showing an additional modification.

Fig. 13 is a fragmentary view corresponding to Fig. 1, but showing a modified form of handle and its connection with a carrier.

The wrapper blank 11, illustrated in Fig. 8 and which is the main part from which the carrier 12 is made, which carrier, as illustrated in Figs. 1 to 10, inclusive, represents only one embodiment of my invention, is desirably die cut from suitable resilient material such as paper board, preferably foil-covered and having the required strength and stiffness. At the same time, it is creased for folding into its set-up condition so as to define a bottom panel 13, side panels 14 on either side thereof and connected thereto at creases 15 and 16. The outer ends of said side panels 14, in the present embodiment, are extended to form handle portions 17 and 18, separated therefrom by creases 19 and 21.

The ends of the bottom panel are formed with bottom stiffening tabs 22 and 23, connected thereto at creases 24 and 25. The bottom panel is also creased for its full length along the line 26 to allow for doubling the wrapper blank on itself for shipping purposes, apertures 27 being

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desirably provided to allow for cleaning after the carrier is set up. Each side panel 14 is desirably creased along lines 28 to allow for bending into a lower normally vertical imperforate side portion 29 and an upper normally sloping apertured side portion 31. The lower portions 29 are each provided with lower end panels 32, each of which has its outer edge portion cut, as illustrated, to form a locking tongue 33.

The upper side panels 31 are each formed with upper end panels 34, the outer edges of which are cut, as illustrated, to form overlapping extensions providing abutments 35 for engaging corresponding portions of a partition member 36. These upper side panels are, in the embodiment illustrated, each provided with three bottle-receiving apertures or access openings 37.

In cutting the material to form such openings 37, flaps are left on the edges of the separator struts to provide partitions between the bottles, as well as for gripping them in place and preventing undesired loss. In the specific embodiment illustrated, the struts 38 between the access openings 37 are each provided with stiffening flaps 39, thereby not only making them of increased strength but forming means to grip the sides of the bottles after insertion. In a similar way, the upper edges of the openings 37 have depending therefrom flaps or tabs 41 which, when in use, lie between the bottles and engage the partition member 36, thereby not only tending to grip the bottles adjacent their neck portions, but providing additional packing between said bottles. For appearance, the flaps 41 and the adjacent portions of the upper side panels 31 may be cut out, as indicated at 42.

The partition blank, illustrated in Fig. 10, is formed generally rectangular, except where it is rounded at the handle portion 43, which is cut out like the corresponding handle portions 17 and 18 of the wrapper blank to provide a hand aperture 44. Each side edge of the partition blank 36 is provided with an extension 45, slotted as indicated at 46 to form locking ears, adapted when set up to receive the corresponding locking tongues 33 on the lower end panels 32 of the wrapper member 11.

To set up the carrier from the flat condition illustrated in Figs. 8 and 10, or that in which the blank may be bent about the median fold line 26, I may proceed as follows:

The partition blank 36 is laid on one of the side panels of the wrapper blank 11, so that the handle portions register and the other portion of the wrapper blank is bent thereover, as about the median fold line 26. All three handle portions are secured together as by adhesive, rivets or other suitable fastening means 47. The bottom panel is then straightened and bent with respect to the side panels 14, and the upper and lower side panels 29 and 31 bent with respect to one another about the creases 28, so that said lower side panels are approximately vertical. The upper end panels 34 are then bent in to overlapping relationship and so that their abutments 35 overlie the slotted ears 45 of the partition 36. The bottom stiffener tabs 22 and 23 are then bent up about the fold lines 24 and 25, respectively, and held in normally vertical stiffening relation with respect to the bottom panel, by bending in the lower end panels 32 and consecutively engaging the respective locking tabs 33 in the slots 46 of the ears 45 and in overlapping relationship.

This procedure is represented in Fig. 5 and it

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will be seen that the lower end panels thereby, not only serve to hold the upper end panels in place against the corresponding edges of the partition 36, but hold the bottom stiffening tabs 22 and 23 against the same partition beneath the ears 45. The ears, as will be seen, serve to limit downward movement of the upper end panels by this engagement of the abutments 35 therewith, and also provide stops against which the upper edges of the bottom tabs engage.

This construction, therefore, serves to hold the parts of the carrier in the proper relationship, maintaining the lower side panels in approximately normal vertical positions. The carrier is then in completely set-up position and the bottles may be inserted in place, to positions as illustrated in Figs. 1, 2 and 3. From the foregoing disclosure, it will be seen that I have devised a bottle carrier formed of two pieces of material; that is, a wrapper member and a partition member.

It will, however, be understood that, if desired, I may cut both members as a single sheet of material. That is, the partition 36 may be connected to the wrapper 11 along a crease at a place corresponding with the illustrated edge 48 of the wrapper 11 and the corresponding edge 49 of the partition 36. In which event, the partition portion is folded flat down over the connected portion of the wrapper 11, and the wrapper is then bent up, as about the fold line 26, to overlie the partition portion, whereupon the carrier may be set up as previously described. When set up, the bottles, when in place, are separated by the depending tabs 41, the partition 36, and the stiffening flaps 39 on the struts 38.

Referring now to the embodiment of my invention illustrated in Fig. 11, there is shown a carrier 12^a which may be identical with the carrier 12 of the preceding embodiment, except that the upper side panels 31^a, 59 and 61 are sloping on different inclines, presenting a curved top appearance and formed with corresponding end panels 34^a, 62 and 63, the adjacent edges of which overlap, as illustrated, in a manner similar to the corresponding edges of the panels 32 and 34 of the first embodiment. That is, the upper end panels are successively held in position, when the carrier is set up, by being overlapped by the end panels immediately therebeneath, the lower end panels 32^a, by means of locking tongues 33^a receivable in corresponding slots in extensions 46^a of partition 36^a, thereby holding all end panels in place. Except as specifically described in connection with the present embodiment, the same may correspond with the preceding embodiment.

Referring now to the embodiment of my invention illustrated in Fig. 12, there is shown a carrier 12^b identical with that of the first embodiment except that each side panel 14^b is formed in one plane, rather than involving vertical and sloping portions as in the first embodiment, so that in an end view the body of the carrier is an isosceles triangle, as illustrated. The end panels 32^b are, in this embodiment, formed continuous from top to bottom; that is, there is no separation between the lower and upper portions thereof, as in the first embodiment. The locking tongues 33^b are formed on said continuous end panels, as illustrated, and engage in slots in ears 45^b as in the first embodiment. Except as specifically described in connection with the present embodiment, the same may correspond with the first embodiment.

Referring now to the embodiment of my inven-

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tion illustrated in Fig. 13, there is shown a carrier 12° which may be identical with one of the carriers, 12, 12° and 12°, previously described, except that the terminal tabs 17°, 18° and 43° are abbreviated and unprovided with hand openings. Instead, they are desirably secured together with hollow rivets or grommets 54, through which the wire 55 of a handle passes and is bent to provide relatively large and freely swinging hooks 56 and 57, at the ends of said wire, the intermediate portion of which carries a desirably wooden hand grip member 58. By reason of the loose fit between the hooks and the rivets or grommets, the handle may swing to and from its upright position illustrated, with respect to a collapsed position where it lies on one side or the other of the central plane of the carrier.

Although preferred embodiments of my invention have been disclosed, it will be understood that modifications may be made within the spirit and scope of the appended claims.

I claim:

1. A bottle carrier formed from a wrapper blank of resilient sheet material shaped and creased to provide side panels, a bottom panel intermediate the same, the ends of said bottom panel being each provided with a bottom tab, each side panel carrying end panels; a flat partition the lower edge of which normally engages the bottom panel and the sides of which are formed with slotted ears extending when set up beyond the outer surfaces of the end panels, the end panels each carrying a locking tongue, whereby the carrier may be set up by bending the side panels up from the bottom panel about the partition portion and creases therebetween, bending the bottom tabs up from the bottom panel, bending the end panels in toward one another over the bottom tabs, and inserting the end panel locking tongues in the ear slots of the partition.

2. A bottle carrier formed from a wrapper blank of resilient sheet material, shaped and creased to provide side panels, a bottom panel intermediate the same, the ends of said bottom panel being each provided with a bottom tab, each side panel carrying upper and lower end panels, a flat partition the lower end of which normally engages the bottom panel and the sides of which are formed with slotted ears extending, when set up, beyond the outer surfaces of the end panels, the upper end panels having abutments adapted to overlie said ears and the lower end panels each carrying a locking tongue, whereby the carrier may be set up by bending the side panels up from the bottom panel about the partition portion and creases therebetween, bending the adjacent upper end panels so that they overlie and their abutments are disposed upon the partition ears, bending the bottom tabs up from the bottom panel, bending the adjacent lower end panels in toward one another over the bottom tabs and upper end panels, and inserting the end panel locking tongues in the ear slots of the partition.

3. A bottle carrier formed from a wrapper blank of resilient sheet material, shaped and creased to provide upper side panels, lower side panels, a bottom panel intermediate said lower side panels, the ends of said bottom panel being each provided with a bottom stiffening tab, each upper side panel carrying upper end panels, each lower side panel carrying lower end panels, a flat partition portion, the lower edge of which normally engages the bottom panel and the sides of which are formed with slotted ears extending, when the carrier is set up, beyond the outer

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surfaces of the end panels, the upper end panels having abutments resting on said ears and the lower end panels each carrying a locking tongue, whereby the carrier may be set up by bending the side panels up from the bottom panel and the upper and lower side panels with respect to one another, bending the adjacent upper end panels so that their abutments rest on the partition ears, bending the bottom tabs up from the bottom panel, bending the adjacent lower end panels in toward one another over the bottom tabs and upper end panels, and inserting the lower end panel locking tongues in the ear slots of the partition.

4. A bottle carrier formed from a wrapper blank of resilient sheet material shaped and creased to provide side panels, each formed with access openings separated by partition struts carrying stiffening flaps, each side panel being creased below said access openings so that the bottom portion thereof may stand vertically while the upper portion is inclined, a bottom panel intermediate said side panels, the ends of said bottom panel being each provided with a bottom tab, each side panel carrying upper and lower end panels respectively hinged to the apertured and normally vertical portions thereof, a flat partition portion the lower edge of which normally engages the bottom panel and the sides of which are formed with slotted ears extending, when set up, beyond the outer surfaces of the end panels, the upper end panels having overlapping portions forming abutments to rest on said ears, and the lower end panels each formed to interlock with said ears, whereby the carrier may be set up by bending the side panels up from the bottom panel about the partition portion and creases therebetween, bending the side panel portions with respect to one another so that the lower portions extend vertically and the upper portions are inclined, bending the adjacent upper end panels into overlapping relation, bending the bottom tabs up from the bottom panel, bending the adjacent lower end panels in toward one another over the bottom tabs and upper end panels, and inserting the lower end panel locking tongues in the ear slots of the partition, whereby bottles inserted in said upper side panel access openings are resiliently gripped at the sides by the stiffening flaps, at the outer surface by the vertical side panel portions, and inside by the partition at their lower portions.

5. A bottle carrier formed from a wrapper blank of resilient sheet material shaped and creased to provide side panels, a bottom panel intermediate the same, handle portions at the edges of said side panels opposite their connections with the bottom panel, the ends of said bottom panel being each provided with a bottom tab, each side panel carrying end panels, a flat partition the lower edge of which normally engages the bottom panel and the sides of which are formed with slotted ears extending, when set up, beyond the outer surfaces of the end panels, the end panels each carrying a locking tongue, whereby the carrier may be set up by bending the side panels up from the bottom panel about the partition portion, connecting the corresponding handle portions together, bending the bottom tabs up from the bottom panel, bending the end panels in toward one another over the bottom tabs, and inserting the end panel locking tongues in the ear slots of the partition.

6. A bottle carrier formed from a wrapper

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blank of resilient sheet material shaped and creased to provide side panels, a bottom panel intermediate the same, the ends of said bottom panel being each provided with a bottom tab, each side panel carrying upper, lower and intermediate end panels, a flat partition the lower edge of which normally overlies the bottom panel and the sides of which are formed with slotted ears extending, when set up, beyond the outer surfaces of the end panels, the upper end panels having abutments adapted to overlie said ears when the carrier is set up, the upper and intermediate end panels having edge portions at varying inclinations where they connect with said side panels, and being hinged thereto at said edge portions, upper portions of said lower and intermediate end panels respectively overlying lower portions of end panels thereabove, and said lower end panels each carrying a locking tongue, whereby the carrier may be set up by bending the side panels up from the bottom panel about the partition portion, bending the adjacent upper end panels so that their abutments rest on the partition ears, bending the bottom tabs up from the bottom panel, bending the adjacent intermediate and lower end panels in toward one another over the bottom tabs and upper end panels, and inserting the end panel locking tongues in the ear slots of the partition.

7. A bottle carrier formed from a wrapper

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blank of resilient sheet material, shaped and creased to provide side panels, a bottom panel intermediate the same, the ends of said bottom panel being each provided with a bottom tab, each side panel carrying a single unitary end panel formed at each end thereof, a flat partition the lower edge of which normally engages the bottom panel and the sides of which are formed with slotted ears extending, when set up, beyond the outer surfaces of the end panels, the end panels each carrying a locking tongue, whereby the carrier may be set up by bending the side panels to slope straight up at uniform inclination from the bottom panel on either side of the partition portion, bending the bottom tabs up from the bottom panel, bending the end panels in toward one another over the bottom tabs, and inserting the end panel locking tongues in the ear slots of the partition.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,957,755	Bourque	May 8, 1934
2,134,627	Turner	Oct. 25, 1938
2,390,020	Wesselman	Nov. 27, 1945