April 2, 1946. S. R. KOOLNIS 2,397,549

PORTABLE BOTTLE CARRIER

Filed July 8, 1942

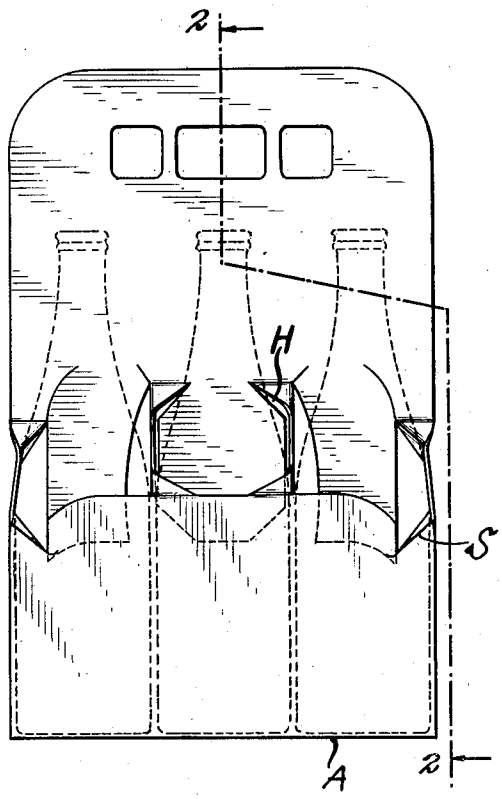


Fig. 1.

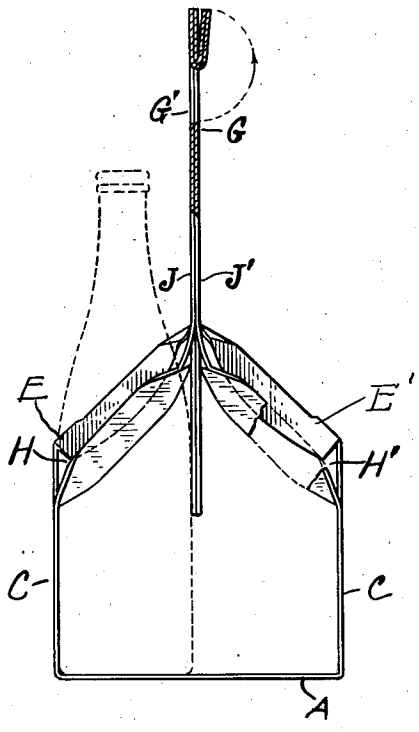


Fig. 2.

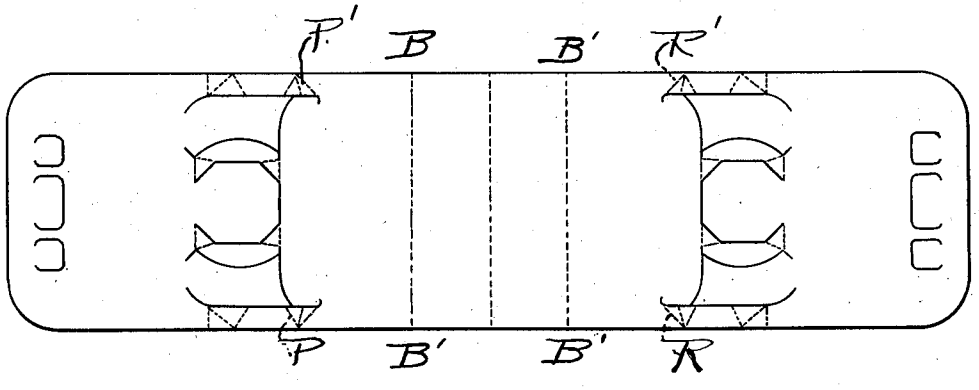


Fig. 3.

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PORTABLE BOTTLE CARRIER

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7 Claims. (Cl. 224—45)

This invention relates to portable bottle carriers more special reference to carriers formed from a single blank.

The object of this invention is to provide a simplified bottle carrier which can be quickly and easily loaded and from which the bottles can be easily removed.

Generally stated, the invention comprises a carrier formed from a single blank which in its assembled form has oppositely disposed sides bent toward each other, the sides including rotated bottle segregating strips with juxtaposed walls rising from the ends of the strips to form a partition between adjacent rows of bottles against which the adjacent rows abut.

More specifically stated, the invention comprises in its assembled form a generally flat bottle supporting bottom or base, side walls rising from the opposite sides of transverse walls having openings formed by rotated strips for engaging the bottles near their lower end, the transverse walls terminating in juxtaposed partition walls rising vertically between the adjacent rows of the bottles and being substantially the width of the row of bottles.

In the drawing accompanying this specification several embodiments of the invention are illustrated, although it is to be understood that such embodiments are merely for the purpose of affording a clear understanding of the underlying principles of the invention so that those skilled in the art may readily understand it without. however, limiting the invention to the specific details shown therein.

In said drawing:

Fig. 1 is a front elevation of the invention showing a loaded carrier.

Fig. 2 is a section of Fig. 1 on the line 2—2 and,

Fig. 3 is a top plan view of the blank from which the container is formed.

Continuing now by way of a more detailed description and referring more particularly to the assembled loaded container as shown in Figs. 1 and 2, the portable bottle carrier which is the subject of the invention has in its erected or assembled position a base or bottle receiving bottom A initially formed from the portion of the blank shown in Fig. 3 intermediate of its ends, by folding the blank along the lines B—B and B'—B' to form oppositely disposed vertical walls C and C' rising therefrom. These relatively low side walls C and C' are again bent or creased laterally to form more inclined intermediate bottle receiving walls projecting toward each other and cutting across the lower portion of the bottle, the inclined portion or wall tending to pull the tops of the vertical walls C and C' toward each other when the carrier is raised from the ground by the vertical portioning strips. The inclined walls E and E' each have a plurality of bottle receiving openings H and H'. From the inner and adjacent ends of these inclined members E and E', juxtaposed carrying walls J and J' rise vertically to form a vertical partition G between the adjacent rows of bottles, these vertical walls terminate at their upper end in registering hand-hold openings G' of any convenient type, and may be glued together if desired although this is not essential.

When the carrier is lifted in use, the weight of the bottles against the base A tends to pull the inclined members E and E' into a more vertical position. This in turn exerts a pulling force upon bottle openings strips E and E' which tend to hold the bottles more securely at their base.

The inclined members at the ends of the carrier are scored at P, P' and R, R' so that the horizontal strips may be rotated to vertical position when the bottles are inserted without tearing. In order to permit this the vertical side walls are cut at S and S' so that the end strips may freely rotate about their longitudinal axis.

As will be seen from Fig. 3 the blank from which to assemble the bottle carrier in accordance with the invention is characterized by a multiple number of cut lines in each bottle receiving section, which lines define strips connecting the handle carrying section and the side wall section. Between the strips there are partly cut out bottle receiving portions. The strips to either side of the inner bottle receiving portion are complementarily curved in substantially coaxial arrangement. Near each end of each strip there is a V-shaped score line arranged with the diverging legs of each V to terminate in the cut-out with the V's of the outer strips apexed at the marginal edge of the blank. The V-shaped score lines of the inner strips form part of the section score between the handle carrying section and the side section on a line substantially parallel to the base line BB'. The outer strips have score lines lower than the score lines of the inner strips, which score lines are not formed by the V-shaped score lines previously mentioned, but form with one of their diverging legs a further V-shaped score line facing in the opposite direction and apexed at the cut-out. The outer cut-out bottle receiving portions taper downwardly at their outer edges. As will be seen from Figs. 1 and 2

when assembling the blank illustrated in Fig. 3, the inner and outer strips formed in the bottle receiving section are turned to act as bottle confining members.

It is claimed:

1. In a portable bottle carrier having score lines and cut lines defining a bottle-supporting section, at least one side section, at least one bottle-receiving section with at least one bottle-receiving opening therein and at least one handle-carrying section, the improvement in blanks for such bottle carrier, which comprises in said bottle-receiving section a multiple number of cut lines defining a multiple number of strips connecting the handle-carrying section and its side section, a score line across each end of at least some of said strips, at least one partly cut-out bottle-receiving section between neighboring strips and a V-shaped score line at each end of at least some end-scored strips with one of the diverging legs of said V being formed by the score line at that end and the other such leg terminating in a marginal edge of a bottle-receiving opening and both such legs of at least one of said V's defining an oblique angle therebetween, all said score lines on a strip including V-scores being angled and positioned to automatically turn such strip to act as bottle-confining member when assembling the carrier.

2. In a portable bottle carrier, the improvement in accordance with claim 1 in which at least one such V-score is further angled and positioned to simultaneously transversely fold-in part of its strip when assembling the carrier, to thereby shorten the distance between strip ends and in which all of said strips are proportioned to define, in the assembled carrier, approximately equidistant spacers between side and handle-carrying sections.

3. In a portable bottle carrier having score lines and cut lines defining a bottle-supporting section, side sections, bottle-receiving sections with at least one bottle-receiving opening in each, and handle-carrying sections, the improvement in blanks for such bottle carrier, which comprises in each bottle-receiving section a multiple number of cut lines defining a multiple number of strips connecting the handle-carrying section and its side section, at least partly cut-out bottle-receiving portions between neighboring strips, a score line across each end of at least some strips, and a V-shaped score line at each end of at least one end-scored strip with one of the diverging legs of each V forming said score line at that end and the other such leg terminating in a marginal edge of a bottle-receiving opening and both such legs of at least one of said V's on a strip together with all other score lines thereon being angled and positioned to automatically turn such strip into a bottle-confining member when assembling the carrier and to simultaneously transversely fold-in part thereof to thereby shorten the distance between strip ends, all of said strips being positioned to define in the assembled carrier approximately equidistant spacers between side and handle-carrying sections.

4. In a portable bottle carrier having score lines and cut lines defining a bottle-supporting section, side sections, bottle-receiving sections with at least one bottle-receiving opening in each, and handle-carrying sections, the improvement in blanks for such bottle carrier, which comprises in each bottle-receiving section a multiple number of cut lines defining a multiple number of first strips and longer second strips connecting the handle-carrying section and its side section, at least partly cut-out bottle-receiving portions between neighboring strips, a score line across each end of each first strip, each said score line forming part of a section score between the bottle-receiving section and the thereto adjacent section, a first V-shaped score line at each end of each first strip with one of the diverging legs of each V being formed by the section score at that end and the other such leg terminating in a marginal edge of a bottle-receiving opening and both such legs defining an oblique angle therebetween, each pair of first V-scores on a first strip being angled and positioned to automatically turn such strip to act as bottle-confining member when assembling the carrier, a score line across each end of each second strip, a second V-shaped score line at least at one end of each second strip with one of the diverging legs of each second V-score forming said score line at that end and the other such leg terminating in a marginal edge of a bottle-receiving opening, all score lines on a second strip, including V-score lines, being angled and positioned to automatically turn such strip into a bottle-confining member when assembling the carrier and to simultaneously transversely fold-in part thereof to thereby shorten the distance between strip ends, all of said first and second strips being positioned to define in the assembled carrier approximately equidistant spacers between side and handle-carrying sections.

5. In a portable bottle carrier, the improvement in accordance with claim 4 in which each of said second strips carries at one end thereof one of said second V-scores and at the other end thereof a reverse-directional third V-score apexed at the cut-out and forming with its outer score line the section score at that end.

6. In a portable bottle carrier the improvement in accordance with claim 4 in which each said second strip carries one of said second V-score lines at each end thereof and in which each second strip carries at the side section end a reverse-directional third V-score line apexed at the cut-out with the outer leg of said third V-score line forming the section score at that end, the inner score line thereof forming the outer leg of the second V at that end.

7. In a portable bottle carrier having score lines and cut lines defining a bottle-supporting section, side sections, bottle-receiving sections with at least one bottle-receiving opening in each, and handle-carrying sections, the improvement in blanks for such bottle carrier, which comprises in each bottle-receiving section a multiple number of cut lines defining a multiple number of inner first strips and two longer outer second strips connecting the handle-carrying section and its side section, at least partly cut-out bottle-receiving portions between neighboring strips, a score line across each end of each first and second strip, forming part of the section score between bottle-receiving section and the thereto adjacent section, a first V-shaped score line at each end of each first strip with one of the diverging legs of each first V being formed by the section score at that end and the other such leg terminating in a marginal edge of a bottle-receiving opening and both such legs defining an oblique angle therebetween, each pair of first V-scores on a first strip being angled and positioned to automatically turn such strip to act as bottle-confining member when assembling the carrier, a second V-shaped score line at the end of each second strip adjacent

a side section with one of the diverging legs of each such second V being formed by the section score at that end and its other leg terminating in a marginal edge of a bottle-receiving opening, a further V-shaped score line at the other end of each second strip adjacent a handle-carrying section and forming with its outer leg a score line at that end, positioned to form with the section score at that end a reverse-directional further V-score apexed at the cut-out, all score lines on a second strip, including V-score lines, being angled and positioned to automatically turn such strip into a bottle-confining member when assembling the carrier and to simultaneously transversely fold-in part thereof to thereby shorten the distance between strip ends, all of said first and second strips being positioned to define in the assembled carrier approximately equidistant spacers between side and handle-carrying section.

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