July 4, 1950 L. W. DEERWESTER 2,513,715

BOTTLE CARRIER

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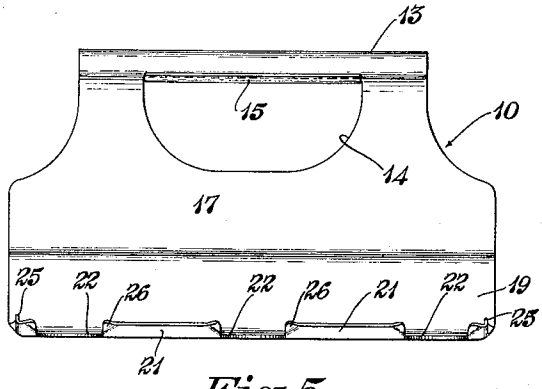


Fig. 5

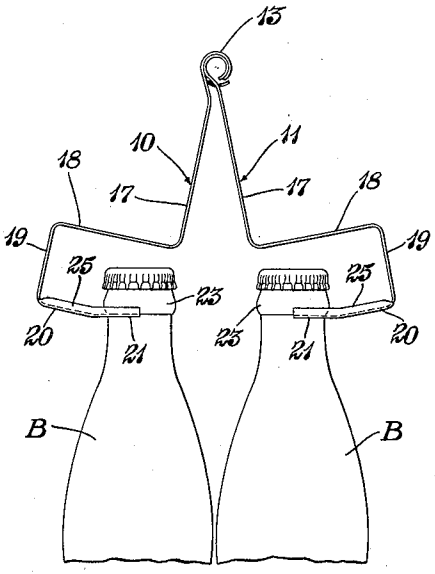


Fig. 1

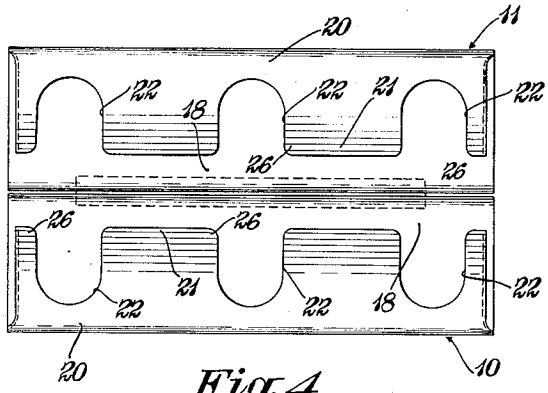


Fig. 4

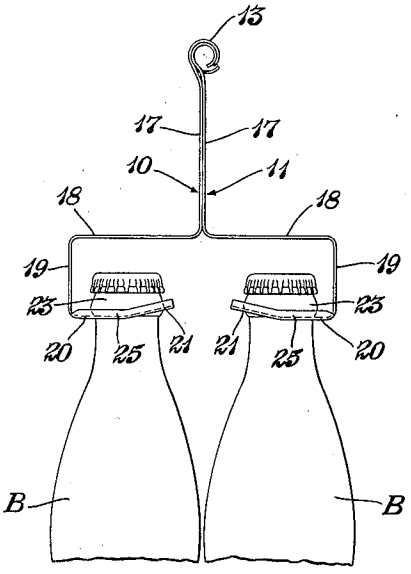


Fig. 2

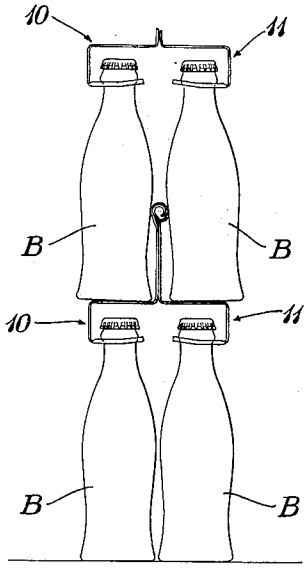


Fig. 6

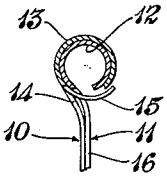


Fig. 3

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BOTTLE CARRIER

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6 Claims. (Cl. 294—87.28)

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The invention relates generally to cartons or containers for supporting a plurality of beverage bottles, and more particularly to a holder for quickly picking up and conveniently carrying a plurality of such bottles. Prior carriers for beverage bottles have included sheet metal or paper cartons with handles at the top, and have required placing the bottles in the carton one at a time and removing them the same way, which operations consume a considerable amount of time. Moreover, such cartons require a substantial amount of material which increases the cost of the carton, especially where it is made of sheet metal. Another disadvantage of such cartons is that when filled with bottles they cannot be stacked very easily or securely, and when empty they cannot be nested satisfactorily so as to occupy a minimum amount of space during shipment.

It is an object of the present invention to provide a novel and improved bottle carrier which is adapted for quickly picking up a plurality of bottles simultaneously out of a case, for carrying the bottles about from place to place.

Another object is to provide a novel carrier consisting of two complementary parts, normally detachably hinged together and easily disengageable and nested for shipment.

Another object is to provide a novel carrier consisting of two complementary parts which are quickly assembled in operating position without tools or fastening means.

A further object is to provide a novel carrier which is adapted when filled with bottles to be easily and securely stacked with a plurality of like carriers.

Another object is to provide a novel carrier consisting of two hinged parts adapted when opened to engage a plurality of bottle necks, and when lifted to close around the necks and lift the bottles.

A further object is to provide a novel bottle carrier which is adapted to pick up and carry different numbers of bottles and which can be released with the fingers of the hand grasping the carrier.

A still further object is to provide a novel bottle carrier which is simple and inexpensive to manufacture, and which requires a minimum amount of material.

These and other objects are accomplished by the parts, constructions and arrangements which comprises the present invention, the nature of which is set forth in the following general statement, and a preferred embodiment of which is

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set forth in the following description and illustrated in the accompanying drawings, and which is particularly and distinctly pointed out in the appended claims forming part hereof.

In general terms, the bottle carrier comprising the present invention includes two complementary L-shaped halves or portions formed of sheet metal normally in back-to-back position with their vertical legs in abutment and hinged together at the top, the complementary portions having downwardly spaced inturned bottom flanges with opposed notches in their inner edge portions for engaging a plurality of bottle necks, there being registering hand holes in the abutting legs for grasping and lifting the carrier, and the weight of the bottles acting to hold the complementary portions together with their vertical legs in abutment as the bottles are lifted.

Referring to the drawing forming part hereof, in which a preferred embodiment of the invention in shown by way of example;

Figure 1 is an end elevational view of the novel carrier in partly open position for engaging around the necks of a plurality of bottles;

Fig. 2 is a similar view showing the carrier in closed position for lifting the bottles;

Fig. 3 is an enlarged transverse sectional view through the interfitting hinged portions in the closed position of Fig. 2;

Fig. 4 is a detached bottom plan view of the carrier in closed position;

Fig. 5 is a detached side elevation of one of the complementary carrier portions, looking toward the inside thereof; and

Fig. 6 is an end elevational view on a reduced scale, showing the method of stacking the novel carriers filled with bottles one upon the other.

The novel bottle carrier consists of two complementary halves or portions preferably of sheet metal hinged back-to-back and indicated generally at 10 and 11. The two portions 10 and 11 are identical except for the hinged portions at the top which are slightly different as best shown in Fig. 3. The hinge of the complementary portion 11 is curled on a smaller radius to form a smaller sleeve 12 which fit slidably within the sleeve 13 of the portion 10, and within the hand hole 14 of the portion 10, the sleeve 13 terminates in a flap 15 which extends through the registering hand holes 14 and 16 and overlaps the opposite edge of the hinge sleeve 13, thus providing a smooth handle surface on the underside of the hinge. The hinge sleeve 12 can be slidably engaged with or disengaged from the sleeve 13 by swinging the portions 10 and 11

apart to an open position where the sleeve 12 will clear the flap 15, and then sliding the sleeve 12 longitudinally out of the sleeve 13.

Each of the L-shaped complementary portions 10 and 11 has a normally vertical leg 17 and a normally horizontal leg 18. At the outer edge of each leg 18 a flange 19 extends downwardly and has an inturned angular flange 20 extending from its bottom edge. The inturned bottom flanges 20 are preferably upwardly inclined at their inner edge portions, as indicated at 21, and terminate in spaced-apart relation when the carrier is in closed position, as shown in Fig. 2.

The bottom flanges 20 are provided with a plurality of opposed U-shaped notches 22 open at their inner edges, as best shown in Fig. 4, and six of such notches may be provided for lifting and carrying six beverage bottles, but it will be understood that the number of notches may be varied as desired to carry various numbers of bottles, as for example, four, eight, or twelve.

As indicated in the drawing, the notches 22 are of such dimensions as to engage around the neck of a standard beverage bottle just below the usual bulge 23 formed at the top portion of the neck of the bottle. The upwardly inclined edge portions 21 of the bottom flanges 20 serve to tightly engage and grip the bulged portions 23 of the bottle necks, as the notches 22 are moved inwardly around the bottle necks when the carrier is lifted by grasping the hinge portions at the hand holes.

Moreover, when the carrier is forced downwardly over a plurality of the bottles B standing in a case or shipping carton, the engagement of the inclined portions 21 with the bottle tops serves to spread the complementary portions 10 and 11, as indicated in Fig. 1, so that the open inner ends of the notches 22 slip downwardly below the bulged portions 23 of the bottles in readiness to engage under the same. When the carrier is then lifted, the weight of the bottles bearing on the inclined portions 21 at the edges of the notches will pull the complementary portions 10 and 11 together to the position of Fig. 2, thus engaging the notches securely around and under the bulges 23 of the bottle necks.

As shown in the drawing, the ends of the bottom flanges 20 are preferably bent upwardly to form end flanges 25 for reinforcing the narrow strips of the bottom wall adjacent the end notches. As shown in Figs. 4 and 5, the inner corners 26 of the notches are bent slightly upwardly and rounded to facilitate engaging the notches around the bottle necks.

The novel bottle carrier is adapted for quickly picking up and carrying a plurality of beverage bottles out of a case, merely by forcing the carrier held in one hand downwardly over the bottles to engage the notches around the necks and then lifting the carrier upwardly. Moreover, when it is desired to release the bottles, this can be done by placing the bottles on a supporting surface, lowering the carrier and spreading the complementary portions thereof with the fingers of the supporting hand, to disengage the notches from the bottle necks.

The two complementary parts of the novel carrier are quickly assembled and disassembled without the use of tools or fastening means merely by sliding the hinge sleeve of one part longitudinally into or out of the hinge sleeve of the other. When disassembled the two parts can be nested for shipping by reversing the position of one part.

As shown in Fig. 6, when the novel carrier is filled with bottles and the bottles resting on the floor or other support, other like carriers filled with bottles can be easily and securely stacked on the top thereof. Obviously, the construction of the novel carrier represents a substantial saving in material as compared with a carrier having walls extending under the bottles for supporting them from the bottom.

In the foregoing description, certain terms have been used for brevity, clearness and understanding, but no unnecessary limitations are to be implied therefrom beyond the requirements of the prior art, because such words are used for descriptive purposes herein and are intended to be broadly construed.

Moreover, the embodiment of the improved construction illustrated and described herein is by way of example, and the scope of the present invention is not limited to the exact details of construction.

Having now described the invention, the construction, the operation and use of a preferred embodiment thereof, and the advantageous new and useful results obtained thereby; the new and useful constructions, and reasonable mechanical equivalents thereof obvious to those skilled in the art, are set forth in the appended claims.

I claim:

1. A bottle carrier including two complementary L-shaped portions formed of sheet material with their vertical legs hinged together at their top edges and normally abutting each other in closed position, said legs having registering hand holes therein, the horizontal legs having annular flanges extending downwardly and inwardly from their outer edges, said inturned bottom flanges having opposed notches at their inner edges for engaging around the necks of a plurality of bottles for lifting the same.

2. A bottle carrier including two complementary L-shaped portions formed of sheet material with their vertical legs hinged together at their top edges and normally abutting each other in closed position, said legs having registering hand holes therein, the horizontal legs having angular flanges extending downwardly and inwardly from their outer edges, said inturned bottom flanges having opposed notches in their inner edges for being engaged around the necks of a plurality of bottles when said L-shaped portions are in open position, said bottom flanges closing around said bottle necks to lift the same when the carrier is lifted by grasping the hinged top edges.

3. A bottle carrier including two complementary L-shaped portions formed of sheet material with their vertical legs hinged together at their top edges and normally abutting each other in closed position, said legs having registering hand holes therein, the horizontal legs having angular flanges extending downwardly and inwardly from their outer edges, said inturned flanges having upwardly inclined inner edge portions provided with opposed notches for engaging around the necks of a plurality of bottles for lifting the same.

4. A bottle carrier including two complementary L-shaped portions formed of sheet material and positioned back-to-back, the vertical legs of said portions having interfitting longitudinally disengageable hinged portions at their top edges for permitting swinging the complementary por-

tions apart, said legs having registering hand holes therein, the horizontal legs having angular flanges extending downwardly and inwardly from their outer edges, said inturned bottom flanges having opposed notches at their inner edges for engaging around the necks of a plurality of bottles for lifting the same.

5. A bottle carrier including two complementary L-shaped portions formed of sheet material and positioned back-to-back, the vertical legs of said portions having interfitting longitudinally disengageable hinged portions at their top edges for permitting swinging the complementary portions apart, said legs having registering hand holes therein, the horizontal legs having angular flanges extending downwardly and inwardly from their outer edges, said inturned bottom flanges having opposed notches in their inner edges for being engaged around the necks of a plurality of bottles when said L-shaped portions are in open position, said bottom flanges closing around said bottle necks to lift the same when the carrier is lifted by grasping the hinged top edges.

6. A bottle carrier including two complementary L-shaped portions formed of sheet material and positioned back-to-back, the vertical legs of said portions having interfitting longitudinally disengageable hinged portions at their top edges for permitting swinging the complementary portions apart, said legs having registering hand holes therein, the horizontal legs having angular flanges extending downwardly and inwardly from their outer edges, said inturned flanges having upwardly inclined inner edge portions provided with opposed notches for engaging around the necks of a plurality of bottles for lifting the same.

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