Sept. 2, 1947. R. M. ULRICH 2,426,756

BOTTLE CARRIER

Filed June 16, 1945

Fig. 1.

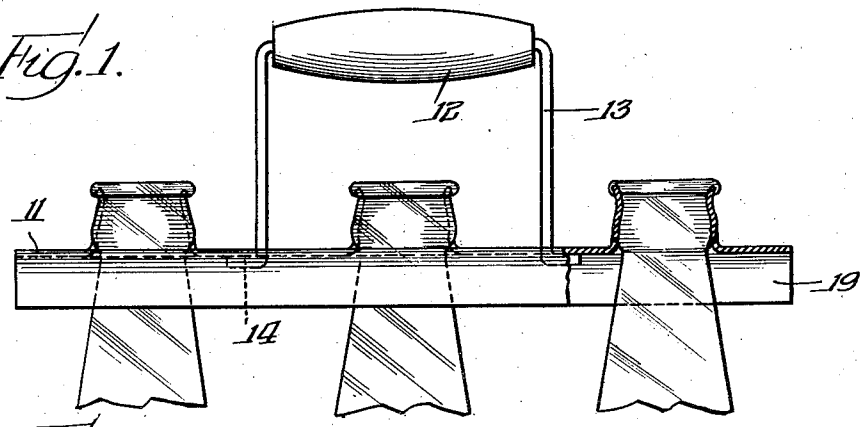


Fig. 2.

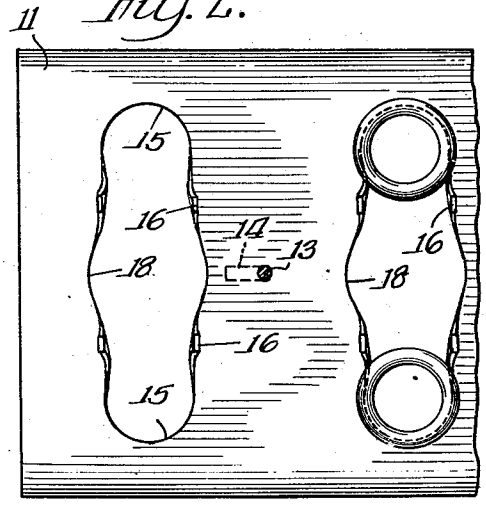


Fig. 4.

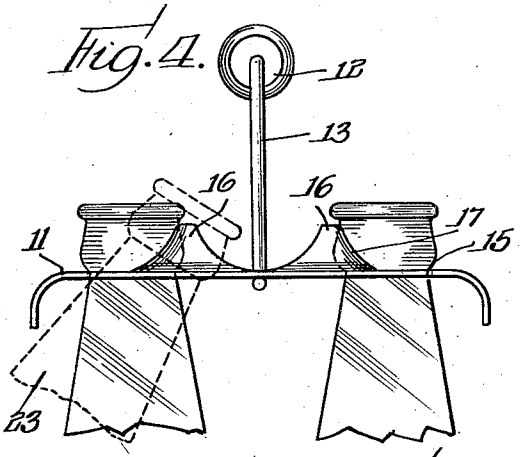


Fig. 5.

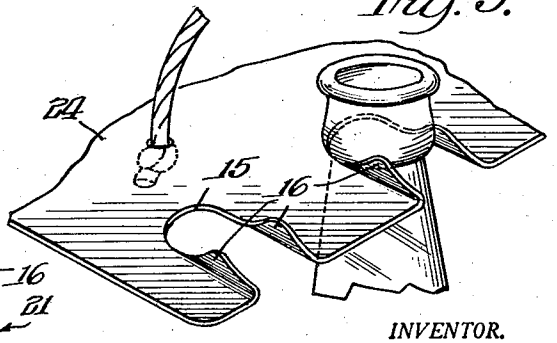
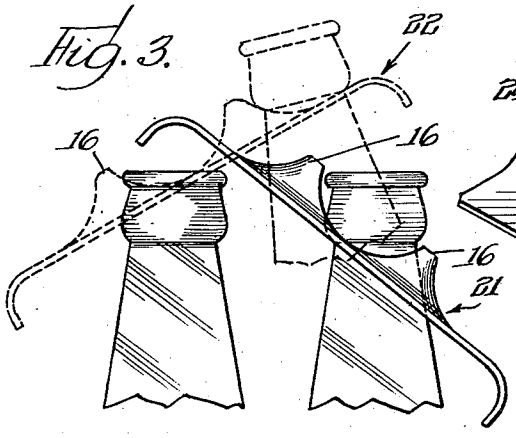


Fig. 3.



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Patented Sept. 2, 1947

2,426,756

UNITED STATES PATENT OFFICE

2,426,756

BOTTLE CARRIER

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Application June 16, 1945, Serial No. 599,787

4 Claims. (Cl. 224—45)

1

The present invention relates to a bottle carrier, and more particularly to a bottle carrying device for carrying a number of beverage bottles.

In the merchandising of bottled beverages, the beverage companies have introduced the six-bottle unit sale particularly for home consumption. In the past this six-bottle unit has been prepared for convenient delivery to and carrying by the customer by the use of a paperboard carton. In other instances a paper sack having handles thereon has been used to hold six bottles of beverage. Generally such cartons or sacks have had a number of disadvantages. The bottoms of such cartons or sacks readily become unsanitary because not infrequently these cartons of bottles are stored on the floor of the store so as to come in direct contact with dirt and oil from the floor. When such cartons are stored in the home, further dirt may be accumulated and oftentimes the bottom of the carton may become damp and weakened so as to give way when the empty bottles are returned to the store.

The six-bottle carton provided by the beverage companies also has the disadvantage of requiring special carriers which completely enclose these packages. Since the container or carton for the six-bottle package generally has a portion thereof extending above the tops of the bottles, the delivery cases are of increasing height as compared to the conventional carrying device or shell loaded with bottles. Thus the delivery truck is not able to carry as many bottles when a large proportion of them are packaged in cartons as is the case where all of the bottles are delivered in carrying devices or shells. Thus the truck capacity is reduced requiring more trips of the truck and more time for the delivery of the beverage.

In the past where paper cartons have been used, they generally have become so soiled that they have been usable only for one or two sales whereupon they must be replaced by a new carton. At times the supply of such cartons has not been adequate for the demand with the result that the sale of the six-bottle unit to the consumer has suffered.

It is therefore recognized that some other means for carrying the six-bottle unit is highly desirable. Where a relatively permanent carrying device is provided, the device may be used for a great many deliveries thus reducing the cost per delivery for the six-bottle unit. In the past, however, such devices have been relatively complicated and consequently quite expensive so that beverage companies have been reluctant to purchase sufficient carriers for proper distribution of the six-bottle unit.

2

In accordance with the present invention a unit package bottled beverage carrying device is provided which supports two rows of bottles just below the rim of the head of the bottle. The device is constructed as simply as possible with a minimum number of parts so that the carrier may be provided in much larger numbers than has heretofore been possible.

It is, therefore, an object of the present invention to provide a new and improved bottle carrier for bottled beverages.

It is another object of the present invention to provide an improved bottled beverage carrier which is relatively simple to manufacture.

Still another object of the present invention is to provide an improved bottle carrier which will overcome many of the above mentioned disadvantages of the devices of the prior art and which will be simple to operate by the user.

Other and further objects of the present invention will become more readily apparent by reference to the following descriptions taken in connection with the accompanying drawing wherein

Figure 1 is a side view of a bottle carrier constructed in accordance with the present invention;

Figure 2 is a partial top view of the carrier shown in Figure 1;

Figure 3 illustrates the manner in which the carrier is applied to a plurality of bottles;

Figure 4 illustrates the manner in which individual bottles may be removed from the carrier; and

Figure 5 shows a variation of the carrier shown in the preceding figures.

Referring to Figures 1 and 2 of the drawing there is shown a bottle carrier having a base 11 formed of a single sheet of stamped material, preferably of metal such as steel or aluminum. The base 10 is supported by a handle comprising a hand grip 12 and a wire bale 13. The wire bale 13 terminates in oppositely extending end portions 14 arranged beneath the surface of the base 11. The base 11 is suitably apertured for receiving the bale 13.

The carrier illustrated carries two rows of bottles, three bottles being arranged in each row. Each row of bottles is supported by a portion formed by an aperture 15 having a configuration substantially conforming to one-half of a neck of a bottle immediately beneath the head thereof. This portion 15 is joined by side portions 16 which are integrally formed and extend up-

wardly from the plane of the top of the member 11. The members 16 are up-struck from the body adjacent the neck portion 15 for engaging the head of the bottle and for tending to force each bottle into the neck engaging portion when the carrier is lifted.

Thus adjacent the portion 15 the member 16 has a curved edge portion 17 and the member 16 extends upwardly into a vicinity of the position normally occupied by the crown of a bottle cap. If desired the several rows of bottle supporting members 15 may be arranged oppositely as shown in Figure 2 and joined by an interconnecting aperture 18 which preferably is a little wider than the distance between the member 16 or the diameter of the neck engaging portion 15. This additional space is provided to permit ready placement of the carrier upon the bottles and also to permit removal of the bottles therefrom. The base 11 may be suitably reinforced by corrugations not shown and also by a drop side 19.

Since the bottles are delivered to the retail establishment in shells containing twenty-four bottles each, it is convenient to apply the carrier to the bottles while they still are retained in position by the shells. The carrier is tilted relative to the plane upon which the bottles rest so that the enlarged opening 18 is slipped over the cap bottles in a manner illustrated at 21 in solid lines in Figure 3.

With the carrier in the position shown at 21, an upward movement of the carrier will cause the bottles to move beyond the members 16 and into the apertures 15. The bottoms of the bottles are retained sufficiently by the shell as to permit a slightly forward thrust on the carrier thereby to engage at one time three of the bottles. When three of the bottles have been positioned in a row in the carrier, the bottles are lifted slightly from the bottom of the shell, and the carrier itself is tilted at an angle opposite to the angle heretofore shown. This angle is shown in dotted lines at 22 in Figure 3. By slightly lifting the bottles engaged by the carrier and moving them closer to the three bottles remaining in the shell, those three bottles may then be positioned so that the heads will be in alignment with the openings 18. Thereupon the carrier is lowered upon those three bottles, and the first three bottles are returned to the shell. This operation then causes the other row of members 16 to tend to move the bottles into the neck engaging portions 15. If with this operation the latter engaged bottles do not completely seat within the apertures 15, complete seating will be brought about when the carrier is lifted by the handle 12 for delivery to the customer. Thus four such carriers may be applied to each group of six bottles in a shell. Since the handle 12 will rest between the heads of the bottles, subsequent shells may be stacked directly thereon to conserve space.

The bottles may readily be removed by a tilting action such as illustrated by the tilted bottle 23 in Figure 4. The bottle is tilted forwardly toward the upstanding member 16 which will permit the head of the bottle to pass thereover through the aperture 18 for removal. Preferably the upstanding members 16 are slightly resilient so as to give sufficiently to facilitate easy removal of the bottles.

The several rows of apertures 15 together with cooperating upstanding guide portions 16 may also be arranged adjacent the exterior edge of a carrier as is illustrated by the partial view in Figure 5. Here the base of the carrier has been given the reference character 24 since the rows of bottle carrying devices are reversed relative to the position shown in Figures 1 and 2. The neck engaging apertures and the upstanding portions have been given similar reference characters, however, since these parts are of identical configuration to those illustrated in the preceding figures.

A carrier is illustrated having the surprising characteristic of positively maintaining the bottles in secure support with the neck engaging apertures 15 which are arranged in the manner shown in Figure 2 or in the manner shown in Figure 5. This characteristic is attributed to the cam surfaces of the upstanding guide members 16 adjacent the neck engaging apertures 15 and the head or rim of the bottle. This same characteristic may be obtained by cam surfaces formed in other manners than that shown in the drawing by forming such surfaces so that they extend upwardly from the plane of the carrier adjacent the neck engaging apertures.

The present carrier is economical to manufacture yet substantial in structure since it will not be weakened by moisture and the bottles are positively carried so as to avoid any possibility of bottles dropping and breaking.

While for the purpose of illustration and description of the present invention, certain embodiments have been shown in the drawing, it is to be understood that such variations thereof are contemplated as may be made without departing from the spirit and scope of the invention set forth in the following claims.

This invention is hereby claimed as follows:

1. A bottle carrier comprising a body member formed of a stamped sheet of metal having two rows of bottle carrying devices, each device comprising an aperture portion having a configuration substantially conforming to one-half of the neck of a bottle immediately beneath the head thereof and two up-struck members adjacent said neck engaging portion arranged at slight angles converging toward said neck engaging portion and having curved cam surfaces extending downwardly toward said neck engaging portion, pairs of said devices being interconnected by elongated apertures arranged transversely of said body member, and a handle connected to said body member between said rows of bottle supporting devices.

2. A bottle carrier comprising a body member formed of a stamped sheet of metal for carrying two rows of bottles by their necks, said body member having two rows of oppositely arranged bottle neck engaging devices integrally formed therein, each device comprising an aperture having a configuration substantially conforming o one-half of the neck of the bottle immediately beneath the head thereof, and resilient up-struck means adjacent said neck engaging configuration for engaging the head of the bottle to tend to force a bottle into said neck engaging configuration whenever said carrier is lifted, said up-struck means for each device being arranged in pairs convergingly toward said neck engaging configuration and being provided with curved cam surfaces adapted to be engaged by the head of the bottle, and a handle secured to said body member along the longitudinal axis thereof.

3. A bottle carrier for carrying two rows of bottles by their necks comprising a body member formed of a stamped sheet of material having two rows of bottle engaging and retaining portions integrally formed therein, each portion com-

prising an aperture having a configuration substantially conforming to one-half of the neck of a bottle immediately beneath the head thereof and up-struck members adjacent said neck engaging portion arranged with slight convergence toward said neck engaging portion and having cam surfaces so as to engage the head of the bottle and tend to force a bottle into said neck engaging portion whenever said carrier is lifted, said portions being arranged opposite each other and pairs of said oppositely arranged portions being interconnected by enlarged apertures of such dimensions as to permit the passage of the head of a bottle therethrough, and a handle connected to said body member.

4. A bottle carrier for carrying pairs of bottles by their necks comprising a body member formed of a stamped sheet of metal having pairs of bottle engaging and supporting portions interconnected by an enlarged aperture, each portion having a configuration substantially conforming to one half of the neck of the bottle immediately

beneath the head thereof, and cam acting means extending upwardly from the plate of the body adjacent the neck engaging configuration for engaging the head of the bottle substantially at the sides thereof to force a bottle outwardly from the center of said carrier into its neck engaging configuration whenever said carrier is lifted.

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