

June 6, 1950

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2,510,591

BOTTLE CARRIER

Filed June 14, 1949

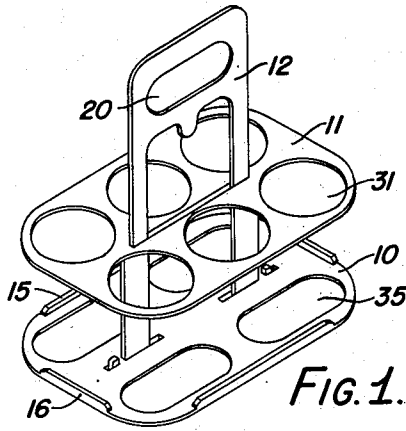


FIG. 1.

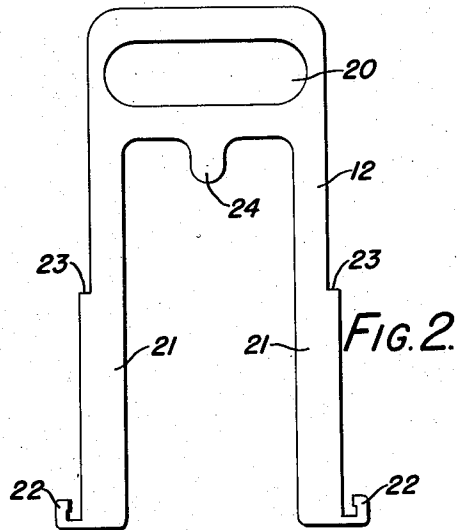


FIG. 2.

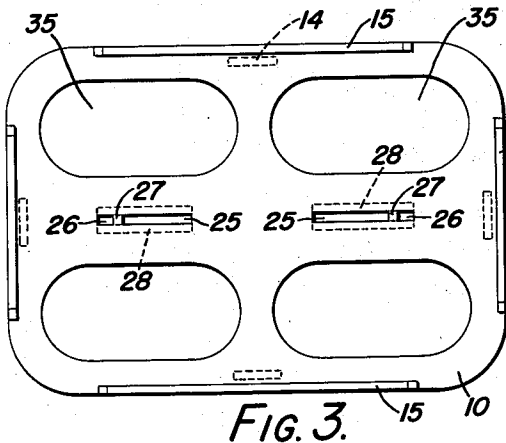


FIG. 3.

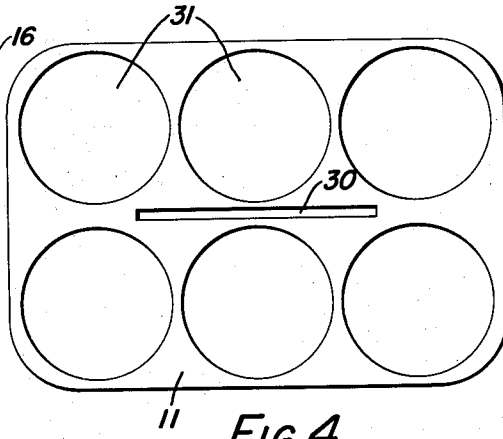


FIG. 4.

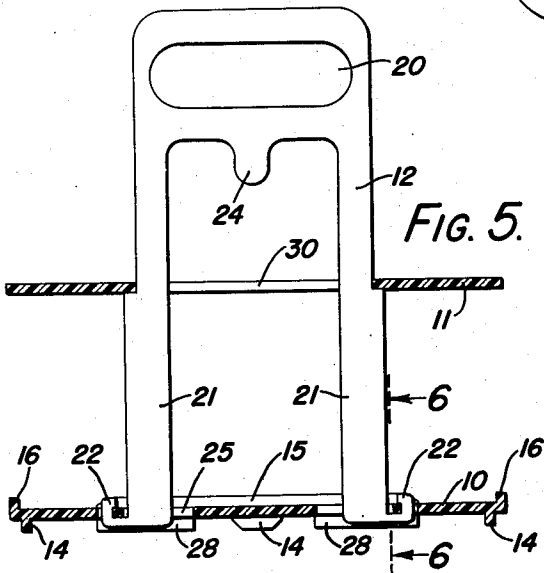


FIG. 5.

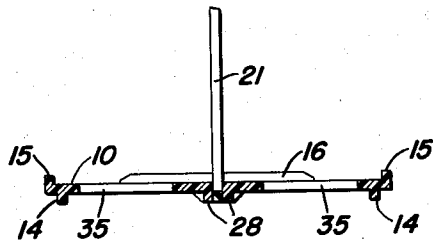


FIG. 6.

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2,510,591

BOTTLE CARRIER

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Application June 14, 1949, Serial No. 99,010

3 Claims. (Cl. 224-45)

1

The present invention relates to a bottle carrier and particularly to a knock-down type of bottle carrier.

The bottle carriers in ordinary use are made of cardboard. They are intended to be used only once and discarded. Because of the nature of the material from which they are made they will not stand rough handling. Moreover, while they may be shipped folded and flat, they have to be bent up into shape for use. It is normally the job of the delivery man to take the folded carriers, bend them up into operative shape, and then place the bottles in them. This all takes considerable time, and, while the material, from which these carriers are made, is cheap, there is considerable cost entailed in getting them ready for use and in placing bottles in them; and this cost usually more than offsets the cheapness of the carrier.

One object of the present invention is to provide a knock-down type of bottle carrier which may be made of plastic or similar material and which can be used repeatedly, in fact, indefinitely.

Another object of the invention is to provide a bottle carrier that can be very quickly assembled for use and will save much assembly time as compared with conventional types of bottle carriers.

A further object of the invention is to provide a bottle carrier which may be supplied to the ultimate consumer for repeated use, and which will therefore eliminate the present-day requirements for the deliveryman to assemble the carrier and place the bottles therein. With my new carrier the customer will do these things himself or herself.

A still further object of the invention is to provide a bottle carrier which will be attractive in appearance, economical to use, and durable.

Other objects of the invention will be apparent hereinafter from the specification and from the recital of the appended claims.

In the drawings:

Fig. 1 is a perspective view of an assembled bottle carrier made according to one embodiment of this invention;

Fig. 2 is a side elevational view of the handle of the carrier;

Fig. 3 is a plan view of the base plate of the carrier;

Fig. 4 is a plan view of the retainer part of the carrier;

Fig. 5 is a vertical longitudinal sectional view through the assembled carrier; and

Fig. 6 is a fragmentary sectional view on the line 6-6 of Fig. 5.

The carrier illustrated in the drawings comprises a base portion 10, a retainer portion 11, 60

2

and a carrying handle 12. Each of these parts is preferably made of plastic material.

The base is in the form of a generally rectangular-shaped flat piece of plastic material which is formed with depending portions 14 that serve as feet or rests for supporting the carrier when it is placed upon any horizontal surface. The base is also formed along its longitudinal sides with upwardly projecting walls or ridges 15 and along its ends with upwardly projecting walls or ridges 16. The walls or ridges 15 and 16 serve to strengthen the base and also as limit stops against movement of the bottles in the carrier.

The handle 12 of the carrier is of generally inverted U-shape. At its upper end it is provided with a finger receiving slot 20 to facilitate carrying the device. The legs 21 of the handle terminate at their lower ends in hook portions 22. They are also formed intermediate their ends with shoulders 23.

The base 10 is provided with two sets of rectangular slots. Each set comprises an elongated rectangular slot 25 and a short rectangular slot 26 arranged in tandem with the slot 25 and separated from the slot 25 by a narrow strip 27 of plastic integral with the base. Each slot 25 is long enough to have a leg 21 of handle 12 passed therethrough including the hooked portion 22 of the leg. Each slot 26 is long enough to have a hooked portion 22 of the leg passed therethrough.

The legs 21 of the handle 12 being made of plastic material are sufficiently flexible that by squeezing them together by hand, they may be bowed or sprung inwardly toward one another sufficiently to pass the lower ends of the legs, including the hooked portions 22, through the elongated slots 25 of base 10. After passage downwardly of the legs and hook portions 22 through the slots 25, the legs can be bowed or sprung outwardly slightly to permit passage of the hook portions 22 of the legs upwardly through the slots 26 of the base. Then the handle is released permitting the legs 21 to snap back to normal position and causing the hook portions 22 to engage over the bridging parts 27 of the base thus securely locking the handle 12 to the base. The base is preferably provided with depending ridges 28 extending alongside of each pair of slots 25 and 26 at both sides thereof. These strengthen the base and serve to prevent canting of the handle after it has been secured in the base.

The retainer 11 is a flat piece of plastic having an elongated central slot 30 formed therein. This slot is adapted to receive the handle 12 so that the retainer 11 may be pressed down over the handle to seat against the shoulders 23, formed on the handle. The dimensions of the slot 30 are such as to provide a snug tight fit of

3

the retainer 11 on the handle. The retainer is provided with a plurality, six in the embodiment shown, of holes 31 through which the upper ends of the bottles that are carried by the device may project. The bases of the bottles are adapted to rest upon the base portion 10 of the carrier.

The base portion 10 of the carrier may be cut out as denoted at 35 to lighten the weight of the carrier.

To disassemble the carrier, the retainer 11 is first slipped up over the top of the handle 12. The legs 21 of the handle are then pressed slightly outwardly and downwardly to disengage the hook portions 22 of the legs from the slots 26. Then the legs 21 are sprung inwardly toward one another so that the bottoms of the legs including the hook portions 22 may be drawn upwardly through the slots 25.

The retainer 11 and the handle 12 are flat strips of plastic and the base 10 is also substantially flat. When the carrier is disassembled, as described, it can be shipped or carried flat by placing the three parts one above the other.

For use, the carrier can quickly be assembled by hooking the leg portions in the base, as already described, and shoving the retainer down on the handle. The bottles may be placed on the base 10 before the retainer 11 is shoved down on the handle, in which case the retainer will be shoved over the necks of the bottles, or the carrier may be assembled and then the bottles placed in it by passing them down through the holes 31 in the retainer.

For strength the handle may be provided, as shown, with a depending teat 24.

Being made of plastic, the carrier is durable and may be used repeatedly. Due to the inherent characteristics of the plastic material, the carrier will be attractive in appearance over its whole life. The plastic material may be made in different colors, and each soft drink manufacturer may employ a different color or different combination of colors to designate his product. Thus, the handle may be made of one color and the base and retainer of a different color, or handle, base and retainer may be made of three different colors, if desired.

While the invention has been described in connection with a particular embodiment thereof and a particular use therefor, it will be understood that it is capable of various modifications, and uses, and this application is intended to cover any variations, uses, or adaptations of the invention following, in general, the principles of the invention and including such departures from the present disclosure as come within known or customary practice in the art to which the invention pertains and as may be applied to the essential features hereinbefore set forth and as fall within the scope of the invention or the limits of the appended claims.

Having thus described my invention, what I claim is:

1. A carrier comprising a base portion consisting of one piece of material, a retainer portion consisting of one flat piece of material, and a handle member consisting of one flat piece of material, said handle member being of general inverted U-shape and slightly resilient and having hook portions at the lower ends of its legs and shoulders formed intermediate the ends of the legs, said base portion having slots through which the lower ends of the legs including the hook portions may be passed when the legs are flexed and

4

other slots through which the hooks may be passed to lock the handle releasably to the base portion, and said retainer portion has a central slot therein to permit it to be slipped over the handle member and seated against the shoulders of the handle member.

2. A carrier comprising a base portion consisting of one piece of material, a retainer portion consisting of one flat piece of material, and a handle member consisting of one flat piece of material, said handle member being of generally inverted U-shape and slightly resilient and having hooks at the lower ends of its legs and shoulders formed intermediate the ends of the legs, said hooks projecting laterally away from the outside of the legs and said shoulders being formed at the outsides of the legs, said base portion having two pairs of longitudinally aligned slots, the two slots of each pair being arranged in tandem, the adjacent slots of the two pairs being long enough to have the lower ends of the legs of the handle portion, including the hooks thereof, passed therethrough when the legs are flexed toward one another, the outside slots of the two pairs being long enough to have the hooks passed therethrough when the legs are flexed apart, said hooks being adapted to engage releasably over the base portion to secure the handle to the base portion, and said retainer having a central longitudinal slot therein to permit it to be slipped over the handle member and seated against said shoulders.

3. A carrier comprising a base portion consisting of one piece of material, a retainer portion consisting of one flat piece of material, and a handle member consisting of one flat piece of material, said handle member being of generally inverted U-shape and slightly resilient and having hooks at the lower ends of its legs and shoulders formed intermediate the ends of the legs, said hooks projecting laterally away from the outsides of the legs and said shoulders being formed at the outsides of the legs, said base portion having two pairs of longitudinally aligned slots, the two slots of each pair being arranged in tandem, the adjacent slots of the two pairs being long enough to have the lower ends of the legs of the handle portion, including the hooks thereof, passed therethrough when the legs are flexed toward one another, the outside slots of the two pairs being long enough to have the hooks passed therethrough when the legs are flexed apart, said hooks being adapted to engage releasably over the base portion to secure the handle to the base portion, and said retainer having a central longitudinal slot therein to permit it to be slipped over the handle member and seated against said shoulders, said base portion having feet formed on the underside thereof and ridges also formed on the underside thereof alongside the slots therein to prevent canting of the handle after it has been secured to the base portion.

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