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2,397,716

BOTTLE CARRIER

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Fig. 1.

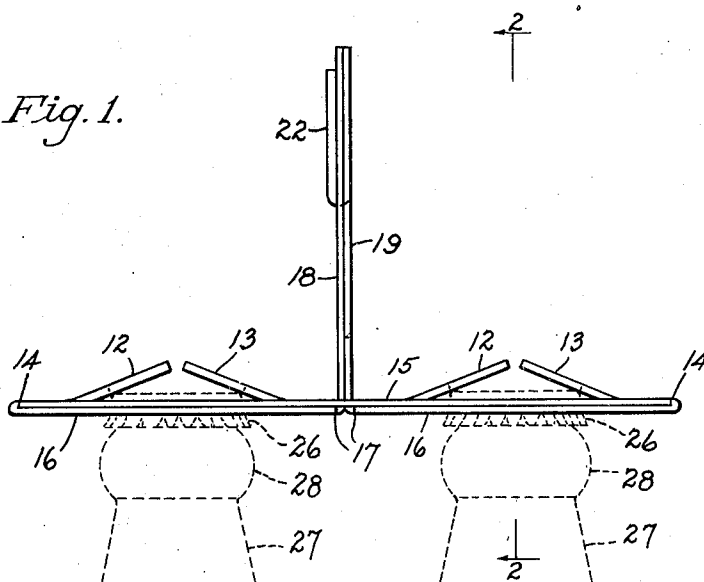


Fig. 2.

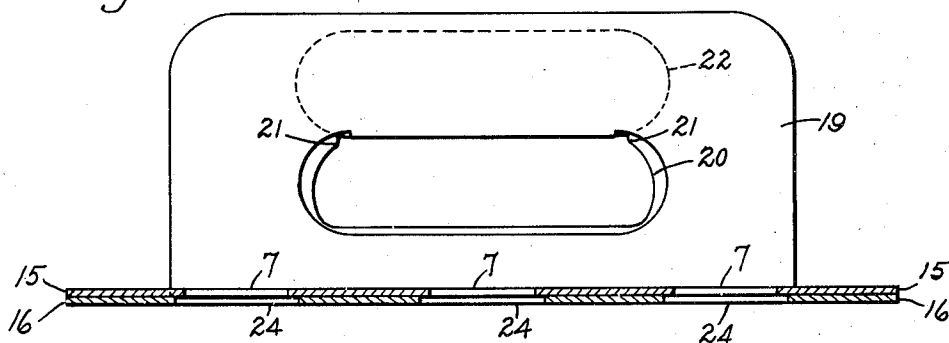


Fig. 3.

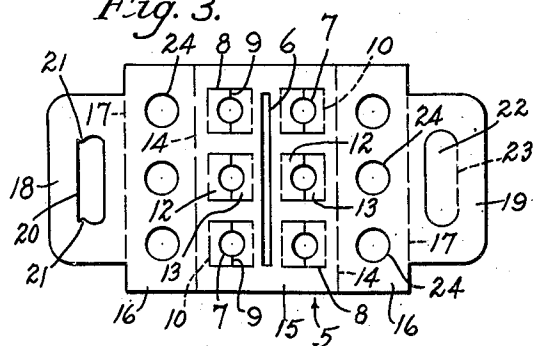
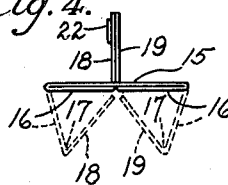


Fig. 4.



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BOTTLE CARRIER

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4 Claims. (Cl. 294—87)

My invention relates to a bottle carrier, and more particularly to a carrier that grips the necks of bottles.

An important object of the invention is to provide a carrier that can be quickly placed upon a group of bottles and easily removed therefrom.

Another object of the invention is to provide a carrier that will not have to support the bottles underneath same.

Still another object is to provide a bottle carrier that can be manufactured and shipped flat and quickly folded into an operative arrangement for use.

My invention also has for its objects to provide such means that are positive in operation, convenient in use, easily installed in a working position and easily disconnected therefrom, economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawing merely shows and the following description merely describes one embodiment of the present invention, which is given by way of illustration or example only.

In the drawing, like reference characters designate similar parts in the several views.

Fig. 1 is a side elevation of a bottle carrier embodying the foregoing objects;

Fig. 2 is a section taken on the line 2—2 of Fig. 1;

Fig. 3 is a reduced plan view of my carrier laid out flat, in the form that it may be manufactured and shipped;

Fig. 4 is a side elevation on the scale of Fig. 3, illustrating the method of assembly.

Referring more in detail to the drawing, the reference number 5 generally designates the body of my bottle carrier. The body 5 is slit at 6 along the transverse center line. Rows of openings 7 extend along parallel with, and at either side of, the slit 6.

Within the borders of the body in Fig. 3, the full lines indicate cuts in the body 5, while the broken lines indicate scored lines. It will be noted that cuts 8, extending lengthwise of the body 5, are arranged on opposite sides of each of the openings 7, and that cuts 9, radial of the openings 7, connect the openings with the cuts 8. Scored lines 10 connect the ends of the cuts 8, forming a rectangle around each opening 7. By this means, resilient, flexible flaps 12 and 13 are disposed to be bent around the lines 10 as axes.

Transverse scored lines 14 extend from side to side of the body 5, providing a central portion 15 of the body 5, between the scored lines 14. Flaps 16 are end portions of the body 5 between the scored lines 14 and scored lines 17, defining the ends of the body 5. The end portions 16 have series of openings 24 alined with each other on the end portions, and alined lengthwise on the body 5 with the openings 7. It is to be noted, however, that the openings 24 are of slightly larger diameter than the openings 7, as perhaps best shown in Fig. 2.

Handles 18 and 19 are provided integrally with the body 5 and extend from the end portions thereof, when the body 5 is flat, and are upstanding when the carrier is folded to an operative arrangement. The handle 18 has an opening 20 provided with inwardly projecting lips 21, while the handle 19 has a bendable tongue 22 that is cut from the handle means 19, except for one side, which is scored, as indicated at 23. The flap 22 is a little larger, in length and width, than the opening 20. (Note comparative sizes of the openings in the two handles in Fig. 2.) The lips 21 and the difference in size of the openings provides locking means for holding the tongue in a handle-locking position, after it has been inserted into the opening 20 past the lips 21.

In practice, my bottle carrier may be manufactured flat, as shown in Fig. 3, and shipped in this condition, which is a very compact method of shipping. In folding this carrier for use, the flaps 16 are folded down around the scored lines 14 as axes. Then the handles 18 and 19 are folded upward about the scored lines 17 and inserted edgewise through the slit 6 as suggested by the broken lines in Fig. 4.

The handles are thereby disposed flat against each other, as shown in Figs. 1 and 4. Thereupon, the tongue 22 is bent into the opening 20 of the handle 18. Due to the somewhat smaller size of the opening 20 than the tongue 22, the tongue is flexed sufficiently to pass same through the opening 20 and past the lips 21, affording locking means for holding the handles together.

In use, the handles are gripped by the user and the carrier is forced down upon the bottles that have been arranged in rows (the carrier shown will carry six bottles in two rows of three each). This downward movement of the carrier causes the holes 24 to pass over the caps 26 and over the thickened portions 28 of the necks of the bottles 27. Thus, the caps raise the flaps 12 and 13, as shown in Fig. 1, permitting the caps 26 and the thickened portion 28 to pass through both open-

ings 24 and 7. The flaps 12 and 13, due to the weight of the bottles, when lifted, resume their flat position around the narrower portion of the necks of the bottles thereby acting as a lock to hold the bottles in the holder.

When it is desired to remove the bottles, the carrier is pushed down upon the shoulders (not shown) of the bottles, to raise the flaps 12 and 13, and the carrier may then be easily lifted off.

Satisfactory material for my bottle carrier has been found to be fibreboard or cardboard having sufficient strength to support the number of filled bottles for which flap openings are provided.

While I have illustrated and described what I now regard as the preferred embodiment of my invention, the construction is, of course, subject to modifications without departing from the spirit and scope of my invention. I, therefore, do not wish to restrict myself to the particular form of construction illustrated and described, but desire to avail myself of all modifications that may fall within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A foldable blank for a bottle holder, comprising a centrally slit body member having scored and cut lines forming flexible flaps which define circular openings, the flaps being flexible about the scored lines and the body member having apertured portions at the ends of the body member, there being scored lines between the apertured end portions and the main portion of the body member about which scored lines the end portions are foldable, the apertures of the end portions being diametrically greater than the openings in said flaps and substantially aligned with the flaps normal to the latter scored lines to limit the movement of and reinforce said flaps and handle means at opposite sides of the end portions arranged to be folded and inserted through the central slit in the body member to an upstanding position.

2. In a device of the character referred to, a substantially flat body having a central slot transversely thereof and scored handle-forming portions at each end of said body, said body having an intermediate flat portion divided by said central slot and provided with opposing transversely hinging members coinciding at a transverse cen-

tral line and defining in cooperation circular openings, movable in one direction by a bottle top and in another direction to grip a bottle at or below the bead thereof; said intermediate portion having sections at the sides thereof foldable in parallel relation with the bottom of said intermediate portion, said sections having openings therethrough of larger diameter than and coinciding with the normal openings through said intermediate portion, thereby to limit the downward movement of said hinging members and reinforce same, and said handle portions being extended through said central transverse slot, and when sustaining the weight of bottles causing said underlying section to engage said intermediate flat portion.

3. In a device of the character referred to, a planar body having a transverse slot therein, a pair of plates opposite said slot and each provided with a handle portion extending upward and vertically through said slot in said planar body, said plates having openings therein of greater diameter in all directions than that of a bottle top and bead and said planar body having cut-outs overlying at least a part of the underlying openings in said plates thereby to reduce the area of the openings in said plates to a diameter less than that of the bottle top and bead and cause the edges of the cut-outs in said planar body to grip the tops or heads of bottles when said body and plates are moved into contacting relation in a direction to lift the bottles.

4. In a device of the character referred to, a planar body having intermediate the sides thereof a transverse slot and at each side of said slot a series of curvi-form cut-outs, a series of plates beneath said body and opposite said slot, each plate provided with a handle portion extending upwardly thru the slot in said planar body and having circular openings to admit of the free passage of bottlenecks therethrough, the curvi-form cut-outs in said planar body overlying at least a portion, and reducing the area of the circular openings in said plates to a diameter less than that of the bottle top and bead to cause the cut-outs in said planar body to grip and hold the tops or beads of bottles, when said body and plates are lifted against the weight of said bottles.

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