March 26, 1946. H. C. SINGER 2,397,376

BOTTLE CARRIER

Filed Oct. 27, 1944

Fig. 5

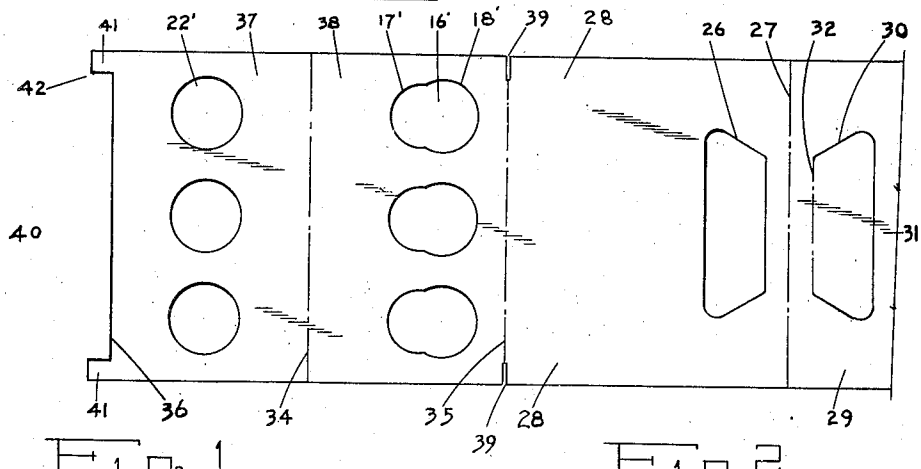


Fig. 1

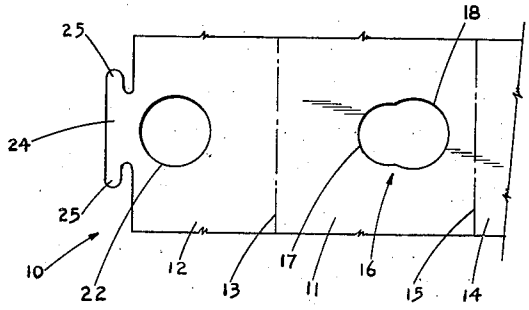


Fig. 2

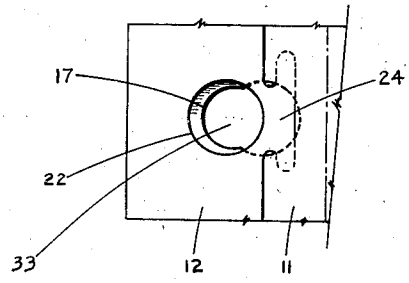


Fig. 3

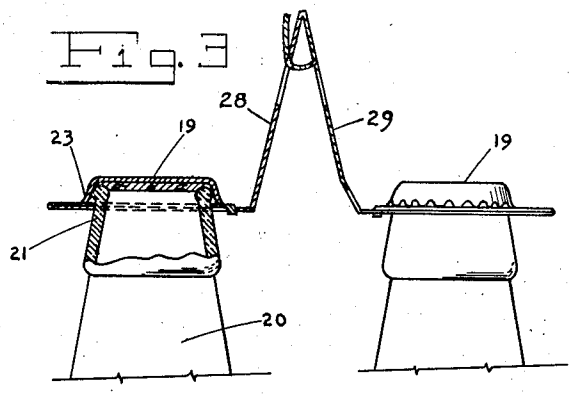
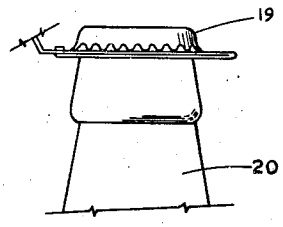


Fig. 4



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BOTTLE CARRIER

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1 Claim. (Cl. 224—45)

This invention relates to bottle carrying devices or devices to support bottles of various kinds, shapes and sizes.

Broadly, it is an object of my invention to provide an improved bottle carrying device for bottles having removable closure caps.

More particularly, it is my object to provide a bottle carrying device that may be made from heavy paper, light cardboard or flexible plastic material which can be easily die cut, printed, lithographed or otherwise finished, and then folded to form a device for carrying, handling, or assembling bottled goods either singly or in groups to aid in handling, packaging and delivering such bottled goods.

The instant invention is an improvement upon U. S. Letters Patent No. 2,252,235, owned by the assignee of this application and all the advantages set forth in the said patent apply to the present application. I have found that by extending the outer locking flanges and making a circular opening instead of a semi-circular notch that I obtain better locking results at the neck of the bottle. In addition, I have provided locking tabs that may easily be slipped into the space provided in the large opening when the bottle neck is moved towards the smaller opening and locked by the outer flange. By making the outer locking flange larger ample room is provided for stapling the outer locking flange to the bottle supporting flange if so desired.

For a fuller understanding of the nature and objects of this invention, reference is had to the following detailed description in connection with the accompanying drawing in which:

Fig. 1 is a plan view of part of a blank for my bottle carrier.

Fig. 2 is a plan view of part of the bottle carrier showing the locking flange folded over the bottle carrying flange.

Fig. 3 is a side view showing the position of the bottle carrier in position upon the bottles, the locking flange being folded over upon the bottle carrying flange, portions of the bottles being broken away.

Fig. 4 is a side view of one section of the bottle carrier showing the locking flange folded under the bottle carrying flange.

Fig. 5 is a plan view of a blank of a modified bottle carrier partly broken away.

Referring to the drawing, Figs. 1 to 4, inclusive, numeral 10 represents a portion of a blank of a rectangular strip of material, such as heavy paper or cardboard showing a bottle carrying supporting section 11 and a locking supporting section 12 divided by a fold line 13. A portion of part of a supporting section 14 is shown on Fig. 1. This supporting section is divided from the bottle carrying supporting section 11 by a fold line 15. The bottle carrying supporting sections 11 are provided with a series of semi-keyhole apertures 16 consisting of a small radius 17 and a larger radius 18, the latter forming an aperture sufficient to pass over the usual closure caps 19 such as crown caps as applied to bottles 20 of various kinds, classes and description. The diameter of the portion 17 conforms with the reduced neck 21 of the bottle 20 beneath the cap 19 as will appear in a consideration of the sectional view in Fig. 3 of the drawing.

The locking supporting sections 12 are provided with circular openings 22 of the same radius as the larger radius 18 of section 11 so that when the locking supporting section 12 is folded over the end of the surface of the carrying supporting section 11, the circular openings 22 will pass over the closure caps 19 and drop below the closure cap flanges 23 and are then moved back to the position shown in Fig. 2 so that the opening formed between the circular openings 22 and the smaller radius 17 will form a constricted opening 33 to enclose the reduced neck 21 of the bottle forming a support at the closure cap flanges 23 preventing accidental displacement of the bottles from the sections 11 and 12. A tab 24, having tongues 25—25 extends from section 12 and when section 12 is folded over or under section 11 and the sections take the position shown in Fig. 2 the tab 24 is inserted through the space left in the larger opening when the section 12 takes the position shown in Fig. 2. The supporting section 14 (which is not shown in its extended form) has a cut-out 26 on supporting section 28 like that shown in Fig. 5, forming a large elongated aperture for receiving the fingers of a hand, while the other supporting section 29 on the other side of center fold line 27 is cut similarly along lines 30, while the flap 31 is retained and folded on line 32 so as to extend through opening 26 in forming a reinforced finger grip as well as a non-cutting handle support for the device, as shown in Fig. 3 of the drawing.

It is understood that in using the bottle carrier shown in the drawing, the caps of the bottles are first passed through the large radius 18; the supporting sections 12 are then folded over so that the circular openings 22 pass over the flanges 23 of caps 19 to bring the bottles within the restricted opening 33 (shown in Fig. 2). This operation firmly moves the bottles or the necks of the bot-

tles into the restricted opening 33 formed by the large openings 22 and the small radius 17 thus locking the bottles into position. When thus assembled, a number of bottles (generally six) may be carried collectively as is well known in the soft drink field. The carrier may be placed in a shipping case or carton, as indicated in Fig. 1 of the patent hereinbefore mentioned, with the supported bottles arranged in separating compartments formed by the crossed partitions within the shipping case. It is understood that the mounting of the bottles in connection with the supporting device is such as to compensate for the partitions employed in the packing and shipping of the bottles. When arranged in the shipping case or carton, the parts 28 and 29 are folded downwardly upon the top of the bottles, as shown in the aforementioned patent, so that the carriers do not occupy any appreciable amount of space. The complete case may be shipped with the supporting or carrying device attached to each six bottles, and in this way the bottles may be collectively removed from the shipping case by the retailer.

When the group of six bottles are carried, they will assume a position substantially similar to that illustrated in Fig. 3 as viewed from the end of the holder. No striking of the bottles will take place in that the bottles lean toward each other when carried. It will, of course, be understood that the holder may be constructed to support two, four, or any series of bottles disposed at opposite sides of the holder. It is also possible to arrange one, two or three bottles on a holder which would consist of just half of the complete device, illustrated in Figs. 1 and 5.

In Fig. 5 I have illustrated another adaptation of the present invention which consists in providing a blank having score or fold lines 34, 35 and 36 to divide the blank into locking supporting section 37, bottle carrying section 38 and supporting section 28. At each end of the fold line 35 there are notches 39—39. On the side opposite supporting section 37 and each end of edge 36 there are tabs 41—41; the tabs 41—41 being adapted to lie within the notches 39—39 when supporting section 37 is folded at fold line 34 over or under the bottle carrying section 38, thus locking sections 37 and 38 together. I have found that when the bottle carrier lies loosely upon the necks of the bottles that by keeping sections 37 and 38 together it presents a better appearance upon the necks of the bottles at the same time assuring the locking of the necks of the bottles within the openings provided by the sections 37 and 38. Circular openings 22' upon supporting section 37 and openings 16' formed by small radius 17' and larger radius 18' on supporting section 38 are placed in position upon the said sections in the same manner as described for Figs. 1 to 4, inclusive.

It is understood that section 37 may be folded over or under each bottle carrying section 38. If section 37 is to be folded over section 38, section 38 is first placed upon the necks of the bottles and then section 37 is folded over section 38 with the bottle necks passing through openings 22'. However, if section 37 is to be folded under section 38, section 37 is folded under, and the necks of the bottles are placed through the openings 22' and then section 38 is lowered so that the necks of the bottles pass through the larger radius 18' and then moved toward the smaller radius 17'. The same procedure is used for the blank in Fig. 1, except that the tabs 24 are the reverse of the position shown in Fig. 2.

In the event it is desirable, staples may be added to lock sections 37 and 38 or sections 11 to 12.

It is to be understood that bottles of various kinds and classes as well as various sizes may be merchandised and deposited or carried in the manner as hereinbefore set forth. When small sample bottles are employed, the suspension or carrying means will be proportionately constricted. However, this invention lends itself effectively to the distribution and sale and carrying of such bottled goods as beer, soft drinks usually sold in bottles, as well as in the sale of cream, milk, alcoholic liquors and other types of bottled goods. It is also understood that this invention is applicable for use in the sale of handling other types of bottled goods, especially when distributed as samples or when sold in groups of two or more. In all cases, the advertising or display matter may be directly applied to one or both surfaces of the device by printing, lithographing, or otherwise, as will be apparent.

A system of continuously applying the holding or carrying device to a successive series of bottles has been described in the patent aforementioned and the same method of applying may be used in my immediate carrier which is the subject of the instant application.

This immediate invention has all the advantages set forth in the aforementioned patent in addition to the additional advantages enumerated hereinbefore.

It should be noted that the key-hole apertures 16 and 16' have the smaller radius toward the fold lines 13 and 34, respectively, as shown in Figs. 1 and 5.

It is obvious that various changes and modifications may be made in the details of construction without departing from the general spirit of the invention, as set forth in the appended claim.

I claim:

A bottle carrying device for supporting capped bottles, said caps having extending flanges, said device comprising a blank cut and scored from sheet material forming a suspending part and a bottle engaging part with a fold line therebetween, said bottle engaging part comprising one member extending integrally from the suspending part and foldable with respect thereto, and a second part foldable over or under said first named member, the free end of said second part having a tab and tongues extending therefrom, the first named member having key-hole openings, said openings having a larger portion adapted to pass over the flange of said caps and a reduced portion adapted to fit beneath the flanges of said caps, said reduced portion facing towards said second part, said second part having openings of substantially the size of the larger portion of said key-hole openings, said last named openings serving to urge said bottles towards said reduced portion of said key-hole openings providing a space between the larger portion of said key-hole opening and said openings of said second part to permit interlocking of said tongues within said space, said reduced portion and said openings of said second part cooperating to enclose the bottle neck beneath said flange of said caps to suspend said bottles from said first and second named members.

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