

Oct. 3, 1944.

E. DECHAR

2,359,539

BOTTLE CARRIER

Filed Jan. 10, 1942

2 Sheets-Sheet 1

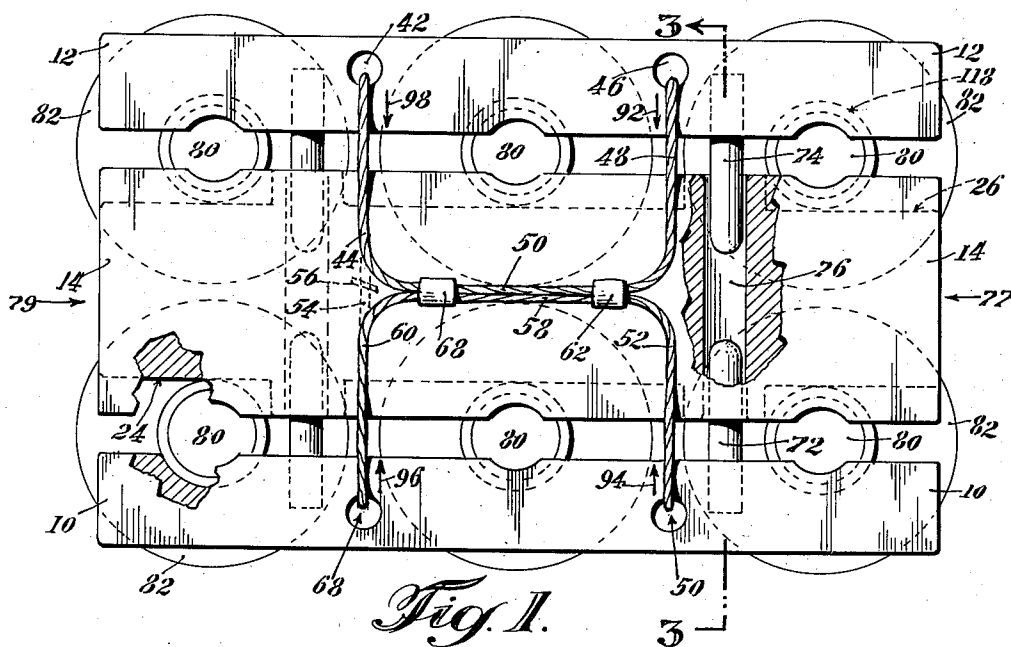
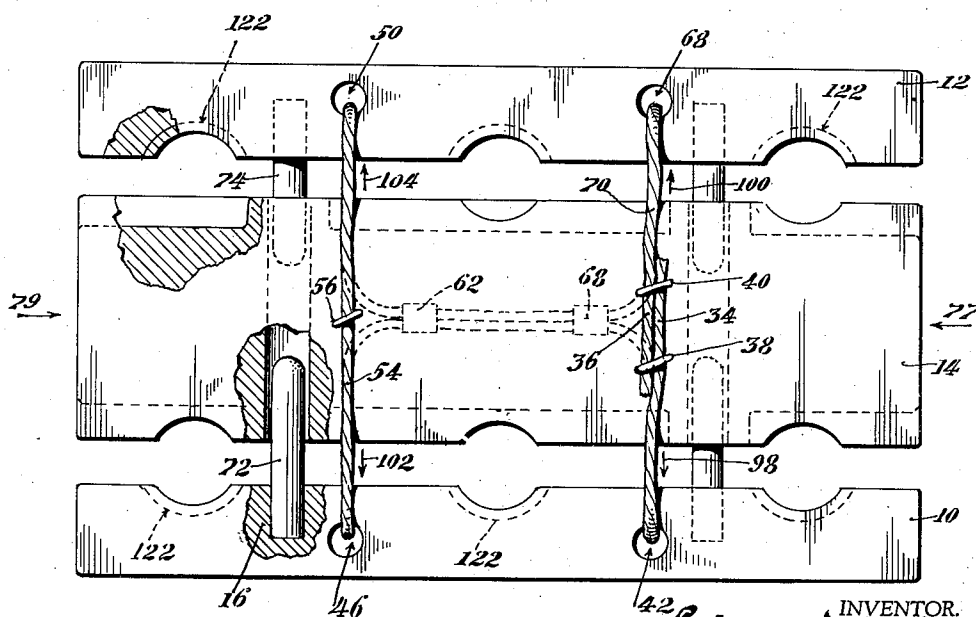


Fig. 2.

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Fig. 3.

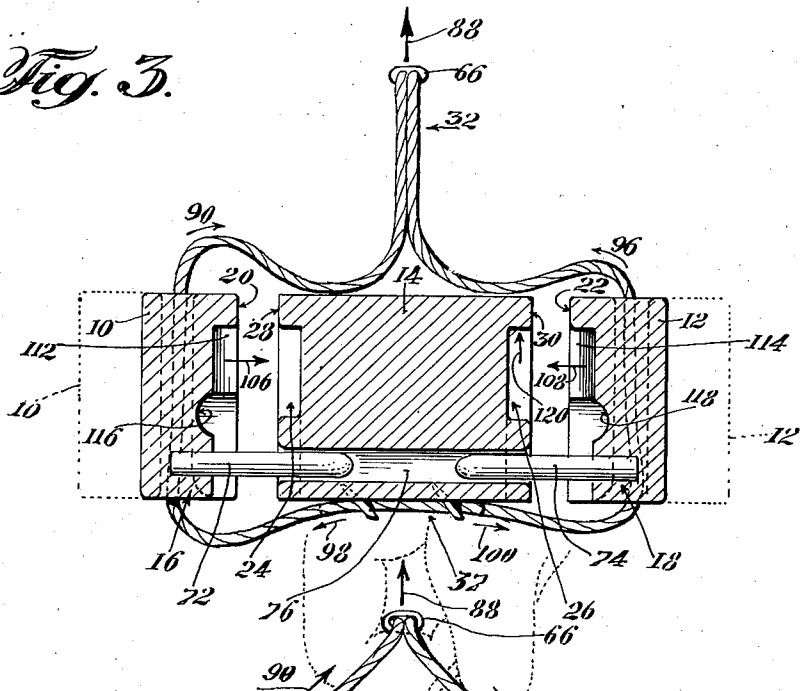
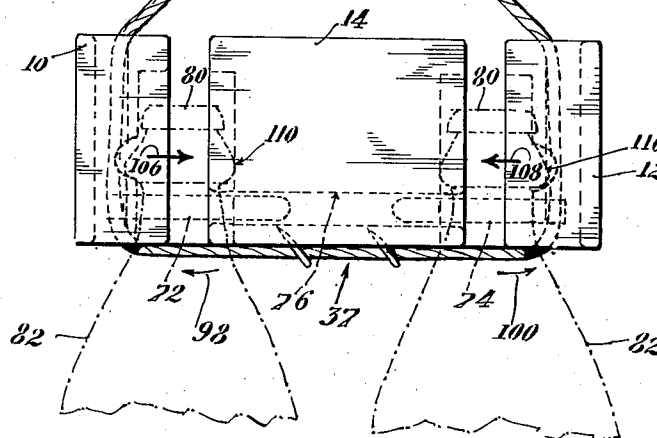


Fig. 4.



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BOTTLE CARRIER

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12 Claims. (Cl. 294—87)

This invention relates to a carrier for a plurality of bottles.

The invention contemplates the provision of a carrier for a selected number of bottles which is of relatively simple and inexpensive construction. The "soft drink" industry has heretofore sought to provide an inexpensive carrier for a plurality of bottles containing the bottled beverage. Carriers of the kind heretofore provided, however, have not been entirely satisfactory for many reasons among which are that, when filled with bottles, the carriers of the prior art have not readily lent themselves to stacking, one upon the other. Moreover, because of their construction their life time of use is relatively limited, particularly since they are not inherently of a character durable enough for repeated reuse.

Further, special handling machinery is required to fill these prior art carriers with the bottled beverage.

In my co-pending application, Ser. No. 423,029, filed December 15, 1941, I have described a bottle carrier designed to replace the carriers of the prior art and which may be used with conventional bottled "soft drinks," the bottles of which have tapered neck portions, each of which neck portions may be provided with an annular collar thereabout.

My said prior co-pending application was concerned with a bottle carrier having two members, namely a support member, and a second member having openings each of which was designed to receive the neck of a bottle and which members were so connected, that upon lifting the carrier the two members thereof clamped the bottles between them.

The present invention is likewise concerned with the provision of a carrier for bottles of this kind and which carrier is provided with a pair of relatively movable members which are secured together so that upon lifting the carrier the members are moved toward each other to securely grasp the bottles received therebetween, for example by the necks thereof, and to thereby clamp the bottles between the members of the carrier.

Bottled "soft drinks" are conventionally supplied to the retail vendor in cases which customarily have filled therein twenty-four bottles of the drink, the bottles being separately or individually sold.

Where, however, the vendor desired to sell the "soft drink" in sets of six bottle each, special bottle carriers were used with which it was nec-

essary for the bottler to use special machinery to pack the six bottles in the special carriers.

The present invention on the other hand is designed to permit the bottler to pack the bottles in cases containing twenty-four or any lesser or greater number thereof, as heretofore, while yet permitting the use of my bottle carrier without the requirement of special machinery, it being necessary only to arrange one of my carriers over the necks of each set of six bottles in the case, after they have been packed therein.

The carrier of the present invention is therefore designed so that it will in no way interfere with heretofore conventional bottling operations and so that they may be relatively quickly and easily arranged upon the necks of the bottles in the case.

Further, when so arranged on the bottles, the carriers cooperate to constitute a platform across the top of the case, which adds to the ability to stack one such case upon another.

In operation, each carrier need only be grasped by its handle to lift the selected number of bottles, the necks of which are gripped by the carrier when the bottles are lifted thereby from the case in which they have been packed or from any other support on which they are positioned.

The present invention further contemplates the provision of such a bottle carrier which is comprised of relatively few parts and which is comparatively ruggedly made so that it will have a longer life, free from mechanical operating breakdowns.

The invention still further contemplates the provision of cooperating collar members which, upon lifting the carrier by the handle provided therein, are spontaneously moved toward one another to grip the bottles therebetween and which carrier is so designed that the bottles gripped therebetween are rigidly held so that they will not strike against one another when carried.

To enable those skilled in the art so fully to comprehend the underlying features of my invention and other and further objects thereof so that they may embody the same in any modification in the structure and relative arrangement of the parts thereof contemplated by my invention, as a part of this disclosure, drawings depicting certain forms of my invention have been annexed hereto, in which drawings

Fig. 1 is a top plan view of a bottle carrier according to my invention.

Fig. 2 is a bottom plan view thereof.

Fig. 3 is a section along the line 3—3 of Fig. 1,

partially broken away to disclose the arrangement of a connecting dowel pin.

Fig. 4 is an end elevation thereof, showing a plurality of bottles held in the carrier.

Referring now more particularly to Figs. 1 to 4 inclusive, the bottle carrier comprises the two side members 10 and 12 which are preferably separated from each other by the intermediate member 14.

Each side member 10 and 12 has arranged therein a plurality of semi-circular recesses 16 and 18 extending inwardly from the inner edges 20 and 22 of each side member and the intermediate member 14 is provided with a plurality of semi-circular recesses 24 and 26 extending inwardly from each of the edges 28 and 30 thereof and each corresponding to an aligned adjacent recess 16 and 18 on the side members 10 and 12.

As will be hereinafter described, upon bringing the two side members toward each other against the intermediate member, each recess 16 and 24 and each recess 18 and 26 serve to form a circular opening for receiving the top of a bottle held by my carrier in the pocket formed thereby.

The side and intermediate members may be made of any material suitable for the purposes, such as a light wood or plastic.

Connecting the side members together for the purposes and in the manner which I will further describe in detail, I provide means 32, preferably made of a flexible material, such as the rope, cord or string.

As illustrated, I preferably use a continuous rope 32 which, as will be described, is operatively threaded through the side members, one end 34 of the rope 32 and the other end 36 thereof being secured to the underside 37 of the intermediate member 14, as by staples 38 and 40.

The connecting means 32 passes from the end 34 thereof through the opening 42, provided in the side member 10, to be disposed thereabove to form a handle connecting portion 44 of the rope.

The connecting means continues thence to the opening 46 to pass therethrough again to the underside of the carrier and constitutes above the carrier the other handle connecting portion 48 with an intermediate handle portion 50.

From the opening 46, the connecting means passes thence along the underside of the carrier through the opening 50 in the side member 12 to another handle connecting portion 52 arranged above the carrier.

The portion 54 between the openings 46 and 50 at the underside of the carrier is likewise preferably secured to the underside 37 of the intermediate member 14, as by a staple 56.

The handle portion 58 intermediate the handle connecting portions 52 and 60 is preferably secured to the other handle portion 50 as by means of the clips 62 and 64.

The portions 50 and 58 of the connecting means together form the carrying handle 66.

The portion 60 of the connecting means 32 passes from the handle 66 through the opening 68, provided in the side member 12, to the under side of the carrier, the other end 36, as stated, being secured to the intermediate member 14 by the staples 38 and 40 to complete the continuous rope like connecting means 32.

The openings through which the connecting means 32 are threaded are uniformly spaced about the carrier so that the weight of the carrier will be evenly distributed about the centre of gravity.

It will, also, be understood that two separate

ropes, each suitably secured to the intermediate member and looped through the holes in the side members to form connected or unconnected handle portions above the carrier may be provided.

It will further be understood that the rope means may be provided to form only one loop through a single opening in each side member, it being necessary only to arrange the rope to pull or force the side members together upon lifting the handle portion embodied in the rope means.

I prefer to provide the dowel pins 72 and 74, each secured to a side member 10 and 12 as by a press fit, toward each end 77 and 79 of the carrier.

An end of each dowel pin 72 and 74 is inserted in a corresponding opening 76 and 78 extending from each side 28 and 30 of the intermediate member 14 and loosely fits therein.

It will become apparent that the dowel pins and recesses serve to guide operative movement of the side members toward each other and the intermediate member under the influence of the connecting means 32 upon lifting the carrier thereby.

In operation, the bottle carrier is placed over the tops 80 of the bottles 82 so that each annular pocket 84 formed by corresponding semi-circular recesses receives therein the neck 86 of a bottle.

To accomplish this operation, the side members 10 and 12 are manually pulled away from each other and the intermediate member 14 to assume a position, such as illustrated in Fig. 3, the continuous connecting means 32 being pulled taut to limit the separating movement of the side members.

In this position, the pockets 84 are widened so that the bottle carrier will readily fit over and receive the necks 86 of the bottles.

Upon lifting the carrier, the handle portion 66 is grasped and pulled upwardly in the direction of the arrow 88.

Since the ends 34 and 36 and the portion 54 are secured to the intermediate member 14, that member will remain stationary with respect to the side members 10 and 12.

The handle portion therefore pulls the portions 44 and 48 in the direction of the arrows 90 and 92 and the portions 52 and 60 in the direction of the arrows 94 and 96, the portions 34 and 36 at the underside of the carrier being pulled in the direction of the arrows 98 and 100, with the portion 54 being under tension in the direction of the arrows 102 and 104.

It will at once become apparent that the connecting means 32 will thereupon force or pull the member 10 toward the intermediate member 14 in the direction of the arrow 106 and concurrently the end member 12 toward the intermediate member 14 in the direction of the arrow 108 to grip the bottle necks therebetween, the dowel pins serving to guide the movement of the side members toward each other and the intermediate member, and to prevent canting thereof with respect thereto.

The necks 86 of bottles of this kind are customarily provided with an annular collar 110, of which my bottle carrier is designed to take advantage.

Extending inwardly along the wall 112 and 114 of each recess 16 and 18 provided in the side members 10 and 12 about the periphery thereof, I provide the groove 116 and 118, each of which is designed to receive the collar 110 of a bottle 82 lying in the corresponding pocket 84.

In order to enable the bottle necks to be more readily received in the pockets 84, I preferably provide the grooves 116 and 118 solely in the wall of a semi-circular recess in each side member 10 and 12.

By reason of this construction, the collar will more readily find itself in the corresponding groove and the members will also more readily be rigidly clamped together.

In order to provide an upper substantially platform like surface 119, I preferably countersink the pockets 84 in the carrier to form the upper shoulders 120 against which the bottle tops 80 are held.

This also enables the grooves 116 and 118 to be positioned at the proper distances therebelow to correspond to the position of the collar 110 on the neck 86 of the bottle 82 for which my carrier is designed.

In order to provide a ready means for ascertaining whether a bottle has been received in any pocket 84, I preferably provide in the upper face of each member, which together constitute the upper surface 119 of the carrier, semi-circular openings which together constitute the circular opening 112, when the members are brought together.

It will be understood that the intermediate member 14 may be eliminated to provide a carrier which is comprised of only the side members which are connected together by similar rope like means so that, upon lifting the carrier, the side members will be likewise moved toward each other to grasp and securely hold the neck of a bottle positioned therebetween.

It will be further understood, that a portion of the rope like connecting means 32 may itself serve as one of the side members 10 or 12 so that, upon lifting my carrier, that portion of the connecting means will be tightly held across the side of a recess 16 or 18 to clamp a bottle arranged therein and securely hold it therein against the one side member, an example of which is illustrated in Figs. 8 to 10.

While I have described in specific detail certain embodiments of my invention, I do not intend to be limited thereto but intend to claim the invention as broadly as the following claims and the state of the prior art will permit, since further modifications will now readily occur to those skilled in the art.

I claim:

1. A portable article carrier comprising a pair of side members, a central member and rope like means for loosely connecting the said members together, said connecting means constituting a handle disposed on the exterior of the carrier above the central member and loosely threaded through the members in engagement therewith to pull the said members together for carrying articles upon lifting the carrier by the handle.

2. A portable carrier for an article, said carrier comprising a pair of side members and a central member, each having an aligned recess on an edge thereof, said recesses together constituting vise like jaws for gripping the article therebetween and means for separably connecting the members together, said connecting means, on the exterior of the carrier, constituting a handle and arranged in engagement with the said side members to force the side members together against the central member for carrying articles upon lifting the carrier by means of the handle.

3. A carrier for an article, said carrier including a pair of separable members and a central member for gripping an article between the central member and a separate member to hold the article in the carrier and means for loosely connecting the members together, said connecting means constituting, above the carrier, a handle portion and extending into connecting portions each engaging a separable member to pull the members together to grip an article therebetween, upon lifting the carrier by means of the handle.

4. The carrier of claim 2, said recesses being countersunk in the members.

5. An article carrier comprising a pair of side members, an intermediate member and means for connecting the said members together, said connecting means constituting a handle portion on the exterior of the carrier and threaded through the side members to form loop portions thereabout connected to the intermediate member and the handle portion to bring the members together by means of the movement of the handle.

6. The article carrier of claim 5, each side member having a recess extending therein from an inner edge thereof, said intermediate member on each edge thereof adjacent a side member having a recess aligned with the recess on the adjacent side member to form therewith upon bringing the members together, a pocket for receiving therein an article.

7. The article carrier of claim 5, each side member having a countersunk recess extending therein from an inner edge thereof, said intermediate member on each edge thereof adjacent a side member having a countersunk recess aligned with the recess on the adjacent side member to form therewith, upon bringing the members together, a countersunk pocket for receiving therein an article.

8. The article carrier of claim 5, each side member having a recess extending therein from an inner edge thereof, said intermediate member on each edge thereof adjacent a side member having a recess aligned with the recess on the adjacent side member to form therewith, upon bringing the members together, a pocket for receiving therein an article, the walls of the recesses on the side members or on the intermediate member being provided with a groove.

9. A bottle carrier comprising a body block, a pair of additional blocks at opposite sides of said body block and movably held thereto, cooperative openings in said body block and said additional blocks adapted to surround the neck of a bottle therebetween, said openings passing only part of the distance through said body block and said additional blocks, and means for holding said additional blocks against said body block to grip said bottles.

10. A bottle carrier comprising a body block, a pair of additional blocks at opposite sides of said body block and movably held thereto, cooperative openings in said body block and said additional blocks adapted to surround the neck of a bottle therebetween, the distance between adjacent openings being sufficiently great to space said bottles apart to prevent contact therebetween, and means for holding said additional blocks against said body block to grip said bottles.

11. A bottle carrier comprising a body block, a pair of additional blocks at opposite sides of said body block and movably held thereto, cooperative openings in said body block and said ad-

ditional blocks, each of said openings being semi-circular in cross section, the corresponding openings of body block and said additional blocks when in contact providing cylindrical openings which are adapted to surround the neck of a bottle therebetween, and means for holding said additional blocks against said body block to grip said bottles.

12. A bottle carrier comprising a body block, a pair of additional blocks at opposite sides of said body block and movably held thereto, coop-

erative openings in said body block and said additional blocks adapted to surround the neck of a bottle therebetween, and means for holding said additional blocks against said body block to grip said bottles, said openings having shoulder portions at their lower ends adapted to contact with corresponding shoulders on said bottles to prevent the same from becoming accidentally disengaged.

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