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2,329,800

PORTABLE CARRIER

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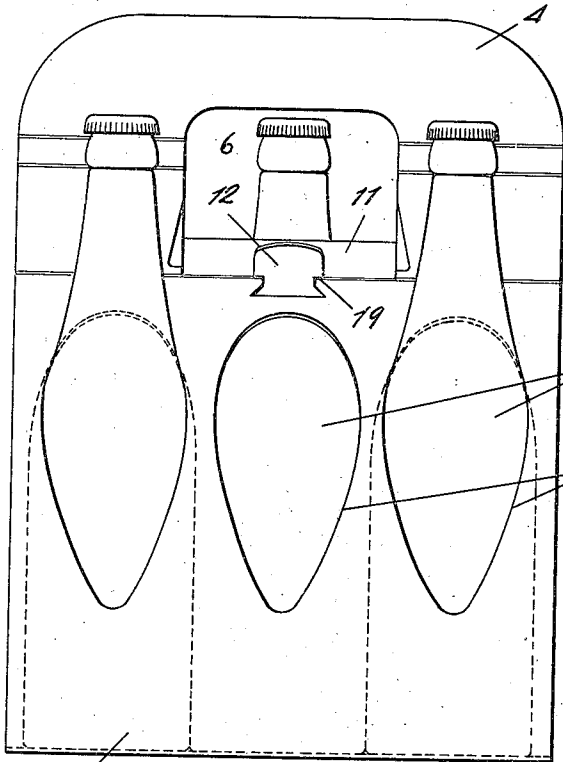


Fig. 1.

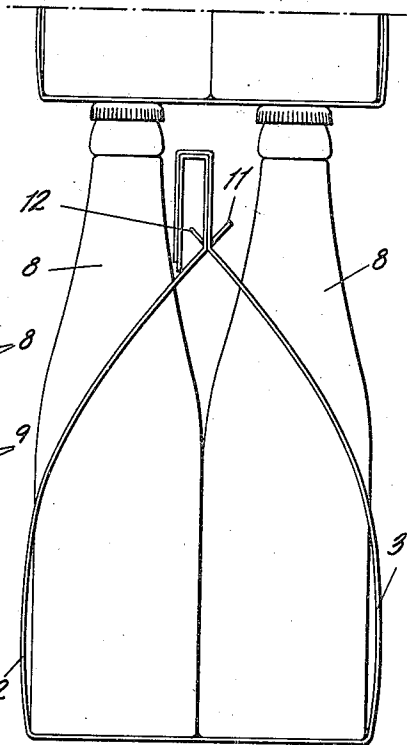


Fig. 3.

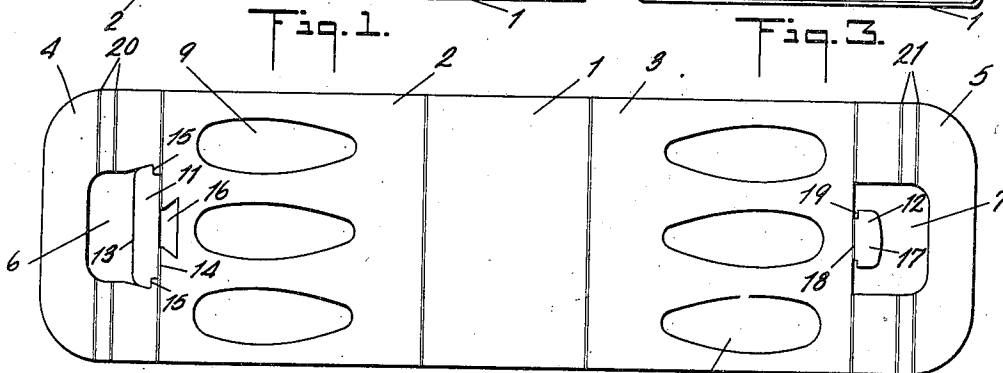


Fig. 4.

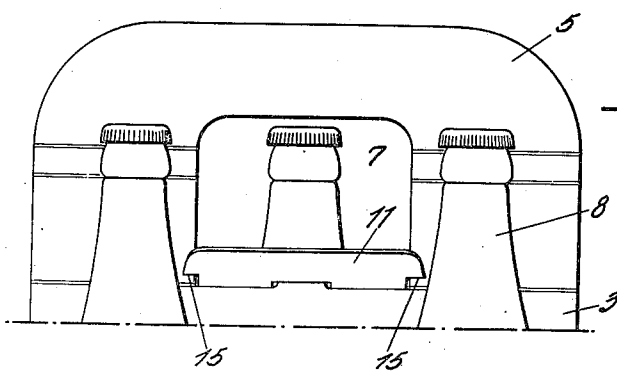


Fig. 2.

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2,329,800

PORTABLE CARRIER

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Application January 6, 1940, Serial No. 312,657

1 Claim. (Cl. 224-45)

This application is a continuation in part of my prior application filed April 15, 1937, Serial No. 136,966 issued May 14, 1940, as Patent No. 2,200,813 and relating to Containers.

The invention relates to containers and more especially to open ended portable bottle carriers for conveniently and securely carrying a plurality of bottles.

Comprehensively stated, the invention is directed to a carrier adapted to receive a plurality of bottles, the carrier comprising a pair of upstanding walls adapted to retain the bottles in closed position of the carrier and secured against relative movement by easily manipulated latching or locking means.

It is an object of the present invention to provide an improved container of this type which lends itself to rapid loading.

Another object of this invention is to provide a simplified latching means for the carrier.

Another object is the provision of a latching means which is positive in functioning and at the same time can be easily and quickly latched in setting up the carrier at the time of packaging the bottles.

A further object of the invention is the provision of a handle hold for the carrier that may be folded over in such a manner as to lie below the plane of the bottle tops, so that the carriers may be stacked upon one another with the bottle tops of one carrier supporting the weight of the carrier placed thereon.

In the drawing accompanying the specification, an embodiment of the invention is illustrated, although it is understood that such embodiment is merely for the purpose of affording a clear understanding of the underlying principles of the invention so that those skilled in the art may readily understand it without, however, limiting the invention to the specific details shown therein.

In the said drawing:

Fig. 1 is a side elevation of a carrier embodying the invention;

Fig. 2 is an elevation showing the upper part of the other side of the carrier;

Fig. 3 is an end view with the hand hold folded over to permit stacking of the carriers; and

Fig. 4 is a top plan view of the blank from which the container is formed.

Continuing now by way of a more detailed description, and referring more particularly to the assembled containers shown in Figs. 1 to 3, a blank of foldable material, such as cardboard or the like, is suitably scored to provide a base hav-

ing upstanding side walls 2 and 3 rising from opposite edges of the base. Each of the side walls terminate at their upper end in vertically disposed juxtaposed flaps 4 and 5, the latter having registering openings 6 and 7 respectively, to afford a hand hold for the carrier. In erected position of the carton the side walls 2 and 3 intersect the bottles 8 and have bottle receiving openings 9, conforming in shape substantially to the inserted bottle section in the region of the neck so that the side walls overlie the bottle shoulder, lock the bottles against the base to securely hold the bottles in place and prevent them from falling from the open end while exposing them to view. The diameter of the opening 9 is of less width than the width of the body of the bottle so that when the bottles are thrust neck first into the openings 9 when the carton is in unfolded position as shown in Fig. 4, the bottles are held in gripped position so that when the side wall is brought to erected or closed position of the carrier, the bottles are carried to upright position on the base by the relative movement of the base and side wall.

The vertical upstanding flaps 4 and 5 rising from the upper edges of the side walls 2 and 3, as above indicated, are locked together by latching members 11 and 12 formed integrally with the upstanding flaps 4 and 5, respectively. The latch member 11 comprises a stubby or relatively wide T-shaped tongue or tenon 13 having a connecting portion 14 foldable along a score line transverse of the flap 4, and when so folded defining the base of the opening 6. The side walls of the tenon 13 slant outwardly and downwardly so as to produce a cut-out portion in the base of the opening 6 of greater width than the width of the opening 7. This makes it possible to undercut the base of the tenon 13 to form shoulders 15 at the junction of the connecting portion 14. The construction thus provides the tenon 13 having shoulders 15 adapted to engage the side edges of the opening 7 in such a manner as to constitute a tenon and mortise joint between the elements.

The latch member 12 comprises a smaller T-shaped tongue or tenon 17, somewhat similarly shaped to the tenon 13 and having a connecting portion 18 provided with shoulders 19. Centrally located immediately below the tenon 13 is a substantially frusto-conical shaped keeper opening or mortise 16, the slant thereof being in the direction of the hand hold 6.

It will be noted that this construction of the latching members 11 and 12 form an interlocking relation providing each of the side walls with

a tenon and mortise element, the tenon element of one wall being adapted to engage the mortise element of the juxtaposed wall. That is to say, in the one instance, one of the openings for the hand hold serves as a mortise, and in the other instance a special cut-out mortise is provided, the characteristic feature of the construction being that each wall has the component elements to complete the interlocking arrangement therebetween.

By reason of the comparatively large openings 9, the bottles may be inserted expeditiously, the lower end of the bottle being stopped against the lower end of the openings 9. When the side walls 3 and 4 are drawn together and locked in position, they are arched as shown in Fig. 3. When the assembled carrier is suspended by grasping the hand hold openings 6 and 7, the side walls tend to straighten out so as to also bring the upper end of the openings 9 into engagement with the necks of the bottles, thereby affording a stop against movement of the tops of the bottles.

In assembling the structure shown in Figs. 1 and 2 from the blank shown in Fig. 4, the bottles are first thrust neck first into the openings 9 while the side walls 2 and 3 are in extended position as shown in Fig. 4. The blank is then bent along the scored lines defining the base 1 and the side walls 2 and 3 by either swinging the base relatively to the one side wall or swinging the side wall relatively to the base. In locking the container, the latch member 12 is folded over so that the tenon 17 is inserted in the keeper or mortise 16 which may be rapidly done by making the insertion at the base of the mortise 16 and when the tenon fully projects there-through, the indentations forming the shoulders 19 permit the upward movement of the latch member. When the tenon 17 has reached the limit of its upward travel, the shoulders 19 engage the adjacent edges of the keeper opening constituting the mortise which retains the locking member 12 in locked position. As part of the same operation, the latching member 11 is folded along the scored lines defining the connection 14 and as the folding movement continues, the base of the tenon 13 becomes folded over the edge of the hand hold, the shoulders coming to rest or abutting against the base thereof (see Fig. 2). With the two latching members 11 and 12 thus engaged, they constitute a double mortise connection or fastening means, thus affording a very substantial and at the same time simple construction of lock-

ing the flaps 4 and 5 in engagement with each other.

If it is desired to stack the carriers after the assembly just described, the flaps 4 and 5 may be folded along scored lines 20 and 21 respectively. It will be noted that these lines of each of the flaps are spaced apart sufficiently to form a section, thus permitting a double fold as indicated in Fig. 3. By thus turning down the flaps 4 and 5, they are folded substantially back upon themselves so as to clear or be beneath the plane of the tops of the bottles as supports for the carrier placed immediately thereon. When it is desired to transport the carrier, the flaps 4 and 5 can be very conveniently unfolded and the hand hold thus made available for carrying purposes.

In my Patent No. 2,182,065 I have shown a carrier blank having two openings for each bottle formed from oppositely disposed flaps meeting at median lines. In the present invention, however, the bottle opening is not divided and the neck of the bottle is adapted to be thrust neck first into the opening while the carrier strip is in unfolded position.

I claim:

A portable bottle carton for shouldered bottles comprising a bottom, flexible side walls hinged to the bottom and having bottle receiving openings into which the bottles are adapted to be thrust neck first when the carton is open, hand holds at the free ends of the side walls having registering hand hold openings and adapted to be brought together in abutting position, a hinged latch member having oppositely disposed indentations substantially the width of the opposed hand hold opening at the end of one side wall and adapted to be swung about a crease line along the bottom of the hand hold opening so that the indentations lock with the wall of its opposed hand hold opening, a keeper opening in the form of a trapezium narrower in width than the latch member and located in the side wall in close proximity to the latch member and a second latch member formed with the opposite side walls and having oppositely disposed indentations adapted to be directed into the keeper opening in the form of a trapezium by flexing the side wall so that the indentations lock with the wall of the opening when the flexed side wall is permitted to spring back, the top edge of the keeper opening being coincident with the crease line of the latch member.

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