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W. V. CROOK  
BOTTLE DISPLAY CARRIER

2,225,822

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Fig. 1.

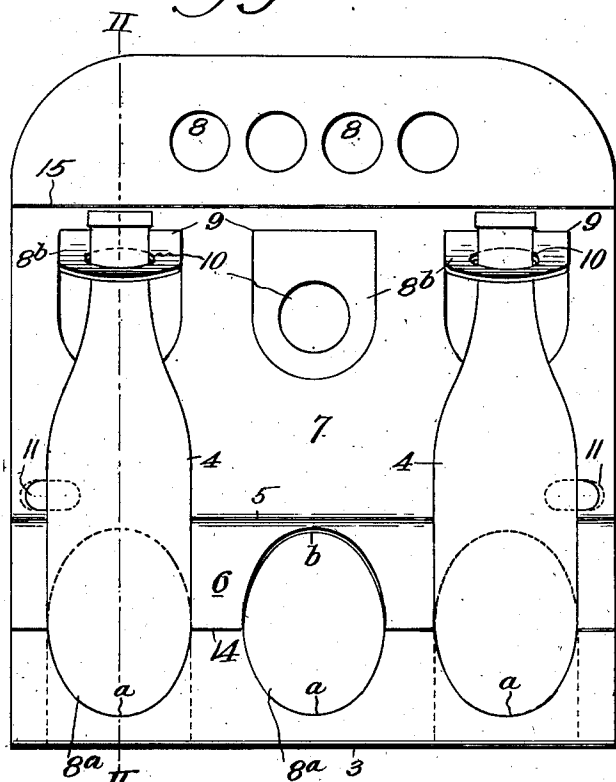


Fig. 2.

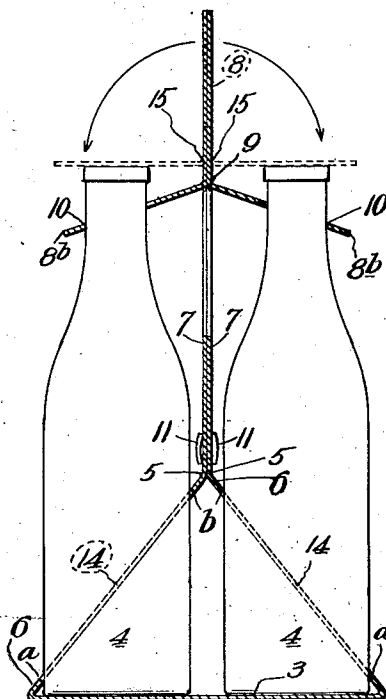


Fig. 3.

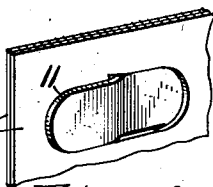
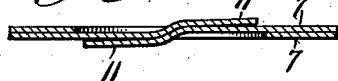


Fig. 4.

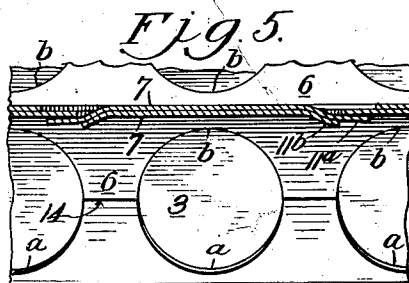


Fig. 7.

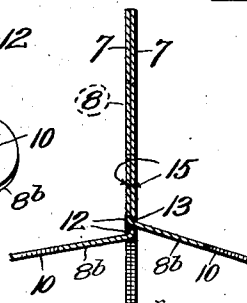
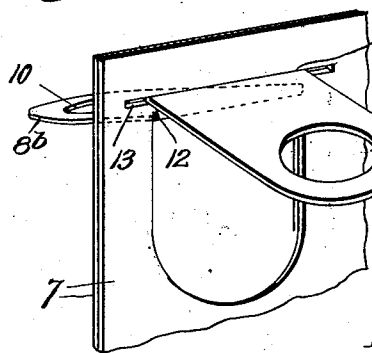
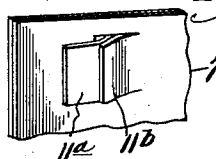


Fig. 8.

Fig. 6.



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## UNITED STATES PATENT OFFICE

2,225,822

## BOTTLE DISPLAY CARRIER

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Application July 27, 1938, Serial No. 221,489

1 Claim. (Cl. 224—45)

This invention relates to bottle carriers comprising a single piece of more or less flexible cardboard or similar material, folded to support two parallel rows of bottles, one of the objects of the invention being to produce a carrier of this kind in which the front or label side of a bottle is exposed for view, thus avoiding the necessity of printing the carrier with the name or trade-mark of the goods for which the carrier is intended.

Another object of the invention is to provide a carrier of the general type outlined in which the individual bottles of each row are held against contact with the adjacent bottles of the same row, as well as out of contact with the adjacent bottles of the companion row.

A further object of the invention is to provide a carrier of the type described in which locking means are provided to prevent the accidental separation of the two halves or partitions of the carrier which would permit the two rows of bottles to fall away from each other if accidentally struck a fairly forceful blow.

Another object of the invention is to provide a carrier in which each bottle sets in an individual compartment or opening at its lower end, the upper end of each bottle being engaged by flaps or extensions integral with the carrier to hold said bottles against being overturned.

A still further object of the invention is to produce a carrier of the general character described, which is provided with score lines whereby it may be folded to very compact compass and in addition one in which the carrier handles may be folded down so that the loaded carriers may be stacked one on top of another for display purposes in a store.

With the general objects named in view and others as will hereinafter appear, the invention consists in certain novel and useful features of construction and organization of parts as hereinafter described and claimed; and in order that it may be fully understood, reference is to be had to the accompanying drawing, in which:

Figure 1 is a side view of a carrier for six bottles, the center bottle of the row shown being removed from position.

Figure 2 is a section on the line II—II of Figure 1.

Figure 3 is a horizontal fragmental section taken through the preferred form of interlock between the partition or center members of the carrier, as shown in Figures 1 and 2.

Figure 4 is a fragmental perspective view of the interlock shown in Figure 3.

Figure 5 is a fragmental horizontal sectional

view with the bottles removed and showing a modification of the interlock securing the partitions together.

Figure 6 is a fragmental perspective of the lock as shown in Figure 5.

Figure 7 is a fragmental perspective view of a third form of interlocking connection to hold the partitions against separating movement.

Figure 8 is a section through the lock as shown in Figure 7.

In the said drawing, where like reference characters identify corresponding parts in all of the figures, a rectangular blank of suitable cardboard or the like is folded at equal distances from its transverse center line to form a bottom 3 of such area as to receive a pair of parallel rows of bottles 4. In the drawing, each row is shown as comprising three bottles, but each row could comprise one or any other number.

At suitable distances from the fold lines 2, a second pair of parallel fold lines 5 are formed in the blank, to provide a pair of converging side members 6. The two portions of the blank beyond the fold lines 5 continue vertically upward and constitute partitions 7 between the rows of bottles, said partition members at their upper ends being formed with registering openings 8 constituting convenient suspension handles.

The side members 6 are formed with spaced elliptical cut-outs or bottle receiving openings 8a. Each bottle of a row is set in its individual pocket thus formed, and when the loaded carrier is elevated by the handles 8, it will be found that the weight tends to swing the partitions 7 and the side members 6 into a straight line extending from the handle to the fold lines 2. Therefore, unless means is provided, as herein-after mentioned, to prevent separating movement of the portions under load, it will be found that the separating tendency under load is resisted by contact at a and b between the bottles and the edges of the bottle openings 8a which force tends to tilt or tip each bottle outwardly from the vertical.

In order to overcome the tipping tendency of the bottles, it has been found desirable to provide means securing them, at their upper ends, to the adjacent partition members 7, such as by means of flaps 8b integrally hinged to the partitions along the score lines 9. The flaps are provided with apertures 10 to receive the bottle necks, and preferably the parts are so proportioned that the flaps may be hingedly swung to and from encircling engagement with the bottle necks. This arrangement makes it possible to

insert a bottle into its bottom pocket, either before or after the neck of such bottle has been engaged with its individual flap. When the bottle necks are so held, the tendency of the bottles to fall out of their compartments or to be tilted materially from the vertical when the carrier is lifted, is entirely avoided.

In addition to the tipping of the bottles, a further condition may be encountered, namely, the accidental overturning of an entire row of bottles when they are on display in a store. To guard against this eventuality, it is desirable to provide means locking the partitions against separating movement. The locking of the partitions also has the advantage of tending to overcome the straightening out of the partitions and sides, as previously mentioned, when the carrier is suspended from its handle. In the drawing, three different methods of integrally locking the partitions are shown. Figures 1 to 4 inclusive show the preferred form, in which a pair of oppositely facing tongues 11 are cut out of each partition 7 in juxtaposition to each other, so that the tongues of each partition may be swung into overlapping relation with the other partition. By preference, this type of interlock is provided in duplicate at the opposite ends of the carrier just above the fold lines 5 as indicated in Figure 1. A similar arrangement of interlocking tongues and slots 11a and 11b, adjacent the center of the carrier, is illustrated in Figures 5 and 6, as a modified form of locking means. The third form of interlock, in which the bottles function to hold the partitions against separating movement is shown in Figures 7 and 8. In this third construction, at least one of the bottle engaging tongues of each partition is formed with a hinge line 12 in a slightly different horizontal plane than the other tongues of the same partition, and one of said partitions is also formed with a slit or slot 3 overlying the hinge line of the tongue. By thrusting the tongue of one partition through the slot 13 of the other partition, and then swinging the tongue of said second partition inwardly through the cut-out or opening left by its companion tongue, it will be noted that the tongues respectively may encircle the necks of bottles of the other row, as indicated in Figure 8.

For convenience of the user and to enable the carriers to be folded to small compass, it has been found desirable to provide scores 14 through the center line of the openings 8a in the side walls 6. Also, it has been found that in drug stores and the like, it is desired that the bottle carriers shall be so made that the loaded carriers can be stacked one on another for display purposes. To allow of such stacking, the partitions in about the plane of the tops of the bottles, are formed with score lines 15, whereby the handle portions of the partitions may be folded down to horizontalism and rest on the bottle tops of the adjacent row as shown in Figure 2.

From the above description it will be apparent that I have described and illustrated the preferred embodiment of the invention, but it is to be understood that I reserve the right to all changes within the spirit of the invention and without the ambit of the prior art.

I claim:

A collapsible bottle carrier comprising a one-piece folded blank having a bottom adapted to receive two rows of bottles, a pair of side members converging upwardly from the bottom and each having an opening to receive the lower end of a bottle, a pair of partitions in flatwise abutment extending vertically upward from the upper edges of the converging members to prevent contact between the upper portions of the bottles and to provide a carrying handle, and apertured hinged flaps struck from each partition, the hinge lines of said flaps being offset vertically, a slot in one partition above the hinge line of the flap in such partition and in the plane of the hinge line of the flap in the other partition, the flap from the slotted partition extending through the opening formed by the flap in the non-slotted partition, and the flap in the non-slotted partition projecting through the slot in the slotted partition, each of said flaps engaging over the necks of bottles of the opposite row to hold the bottles against movement outwardly away from the partitions and thus maintain the partitions against separating movement.

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