Aug. 31, 1948. C. W. ANDERSON 2,448,204

BOTTLE CARRIER

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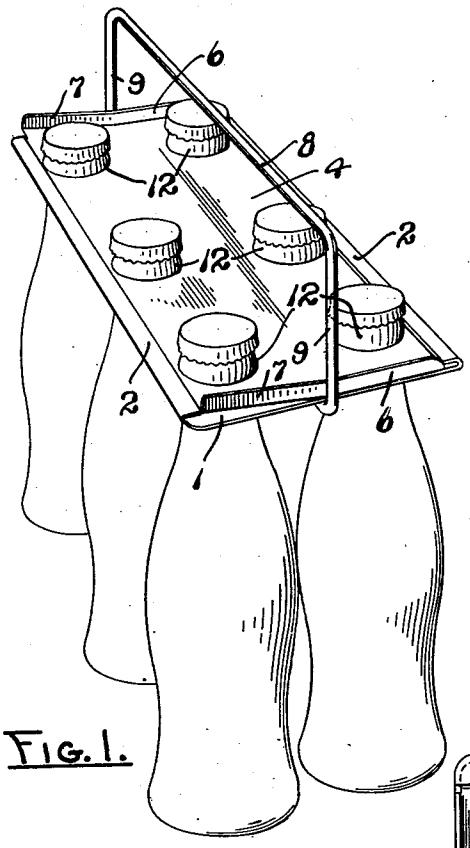


FIG. 1.

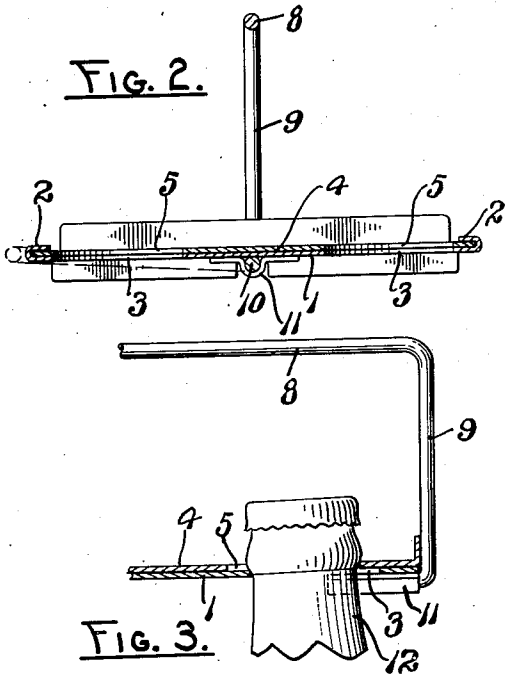


FIG. 2.

FIG. 3.

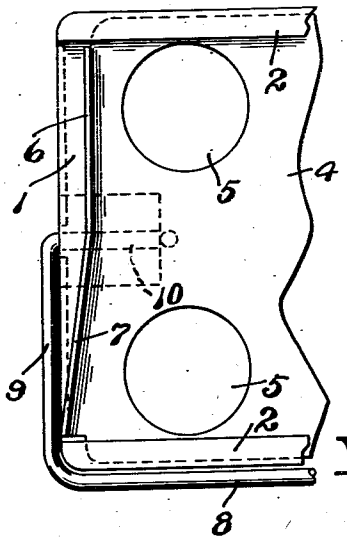


FIG. 5.

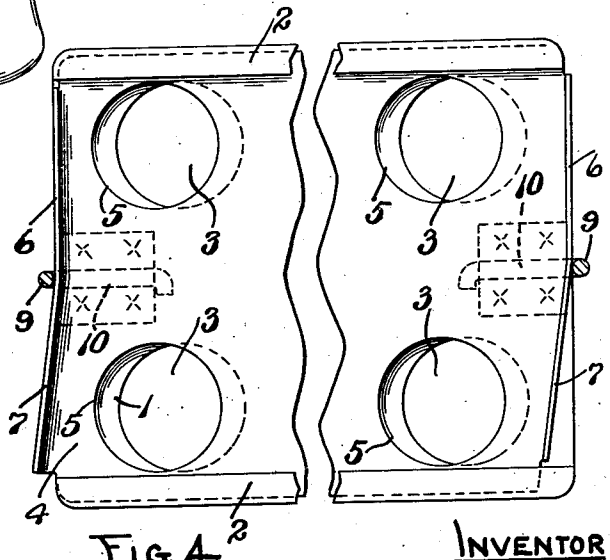


FIG. 4.

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BOTTLE CARRIER

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1 Claim. (Cl. 224—45)

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The present invention relates to a novel, small space occupying and economically produced bottle carrier, with which a plurality of bottles may be carried, being easily applied to and released therefrom.

Soft drinks are contained in bottles, the necks and top closures of which are generally of a standard dimension. They are many times purchased in numbers, and with my invention, a number of them may be detachably connected to the carrier and, suspended therefrom, transported from the place of purchase to the home or other place of consumption where they may be readily released; and the bottles may be returned after their contents have been drunk by carrying them in the same manner. With my invention, and as one of its objects and purposes, a practical, serviceable and sturdy bottle carrier made of metal is produced having a bail-like handle by means of which it is carried, the handle being movable between a substantially horizontal position to a substantially vertical position, said handle automatically operating the carrier to connect it with the necks of bottles when it is turned from its horizontal to vertical position, the bottles being held against detachment at all times that the handle is in vertical position, which position it occupies while the bottles are being carried. On turning the handle down to horizontal position, the carrier is released from all of the bottles simultaneously.

A preferable structural embodiment of the invention is described in the following specification, taken in connection with the accompanying drawing, in which,

Fig. 1 is a perspective view of the bottle carrier of my invention having a plurality of bottles detachably connected therewith.

Fig. 2 is a transverse vertical section through the carrier between its ends.

Fig. 3 is a fragmentary longitudinal section taken at one end of the carrier in its operative position.

Fig. 4 is a plan view of the carrier, the bail-like handle being shown in section, and with the carrier in bottle engaging and holding position, and

Fig. 5 is a fragmentary plan view of an end portion of the carrier with the bail in horizontal position and the parts of the carrier as they are located when it may be applied to bottles or they have been released therefrom.

Like reference characters refer to like parts in the different figures of the drawing.

In the construction, a flat metal plate 1 of a

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generally rectangular form, at its longitudinal side edges is turned back upon itself in U-shape bends to provide longitudinal guides 2 which extend substantially the full length of the plate. Said plate has a plurality of circular openings 3 therethrough properly spaced from each other and of a diameter slightly greater than the diameter of bottle caps and of the necks of bottles which are to be inserted therethrough.

A second plate 4 of sheet metal, also generally rectangular in form, is located over the first plate, having its longitudinal edge portions received within and held by the guides 2 so that the two plates may have a longitudinal movement relative to each other. Said plate 4 likewise is provided with circular openings 5 of the same diameter as the openings 3 in the plate 1, which openings in one position of the plates are in conjunction, as in Figs. 2 and 5, so that a bottle cap and the adjacent portion of the neck of a bottle may pass through both of said openings. At each end of the upper plate 4, flanges are turned to extend upward, each having a section 6 which is substantially perpendicular to a longitudinal edge of the plate 4 and extends from one of the guides 2 substantially to the median longitudinal line of the plate 4, and is then extended in a section 7. The sections 6 of the two end flanges and the sections 7 thereof, are respectively parallel to each other, as shown in Fig. 4.

The carrying handle for the structure is made from a single length of wire rod, having an intermediate, horizontal hand engaging portion 8, from each end of which a leg 9 is bent at right angles, said legs extending in the same direction. Each of the legs 9 at its free end portion terminates in a horizontal pintle 10. The two pintles extend toward each other and are parallel to the hand engaging portion 8. Said pintles are received in journals or bearings 11 therefor, likewise made from sheet metal connected to the under plate 1 at each end, substantially midway between the longitudinal side edges of said under plate.

The offset of inclined sections 7 provide cams to be engaged by the legs 9 of the handle for moving the upper plate 4 longitudinally with respect to the under plate 1 in one direction when the bail-like handle is turned from vertical to horizontal position, such horizontal position being indicated in dash lines in Fig. 2; and moving the upper plate in reverse longitudinal direction to its initial position when the handle is turned from horizontal to vertical. As shown in Fig. 5, the handle being disposed horizontally, the openings

3 and 5 in the plates 1 and 4 are directly alined.

A plurality of bottles having necks 12, the upper ends of which are closed by the usual bottle caps may be inserted through said openings. For example, a number of bottles corresponding to the number of openings 3 or 5 properly located with respect to each other, may have the carrier structure applied downwardly simultaneously thereover, the caps and upper ends of the necks of the bottles, projecting above the upper side of the upper plate 4. This is done with the handle in its horizontal position. By moving the handle to a vertical position, the plate 4 is moved longitudinally from the position shown in Fig. 5 to that shown in Fig. 4. The leg 9 at the right hand end (Fig. 4), in the movement of the bail-like handle from horizontal to vertical, rides against the adjacent cam section 7, thereby moving the plate 4 so that the openings 5 are moved a short distance while the openings 3 associated therewith remain stationary, and the outward bead near the upper end of the bottle neck is gripped underneath by opposing edges of the plates 1 and 4 at the openings 3 and 5 therein, as shown in Fig. 3. As long as the handle is in its vertical carrying position, the bottles are held securely and may be carried by grasping the handle.

To release the bottles, the bail-like handle is simply moved from vertical to horizontal, whereupon the opposite leg 9 at the left hand end of the upper plate 4 (Fig. 4) will ride against the adjacent inclined cam section 7 and move the upper plate back to its initial position wherein the openings 3 and 5 are in conjunction. The necks of the bottles are simultaneously released so that the carrier may be detached from all of them at the same time. The structure is shown adapted to connect with the necks of six bottles, which in general, is the standard number which a carrier of the structure described is designed to engage.

Of course, a lesser number than six may have the necks thereof inserted through selected openings of the plates so that any number from one to six may be carried; and if a larger number is purchased, it merely requires more than one of the bottle carrier structures. The upper surface of the plate 4 may have advertising or other material appear thereon which will be always readily seen.

The structure is very practical and useful. The space occupied by it when the carrying handle is disposed in horizontal position, is reduced to a minimum so that a large number of them, stacked one on the other, may be shipped with the least space occupied. The lower plate may be strengthened and reinforced at its ends by down turned reinforcing flanges, as shown in Fig. 2.

The invention is defined in the appended claims and is to be considered comprehensive of all forms of structure coming within their scope.

I claim:

A bottle carrier comprising two superimposed plates slidably mounted relative to each other, each plate having bottle neck receiving openings adapted to be brought into alinement with each other, a carrier bail having parallel portions pivoted to the lower plate and cams formed on the respective ends of the upper plate, said cams being engageable with the parallel portions of the bail and shaped to slide the upper plate relative to the lower plate to position to aline the bottle receiving openings in respective plates when the bail is in lower non-carrying position and to move the openings out of full alinement when the bail is raised to carrying position.

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