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T. KARAS

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BOTTLE CARRIERS

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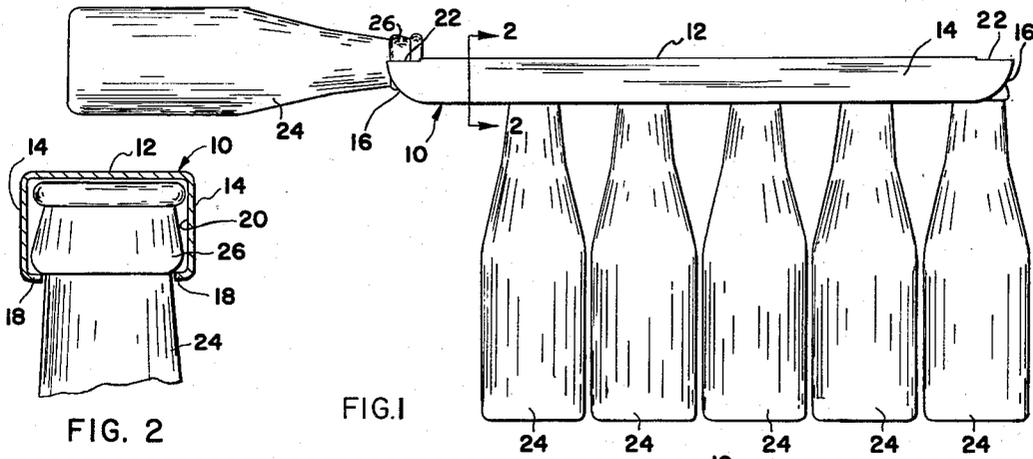


FIG. 2

FIG. 1

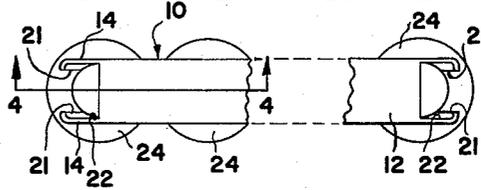


FIG. 3

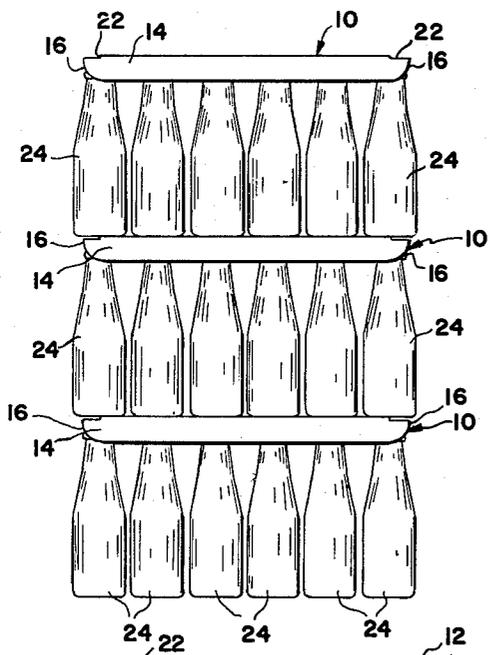


FIG. 5

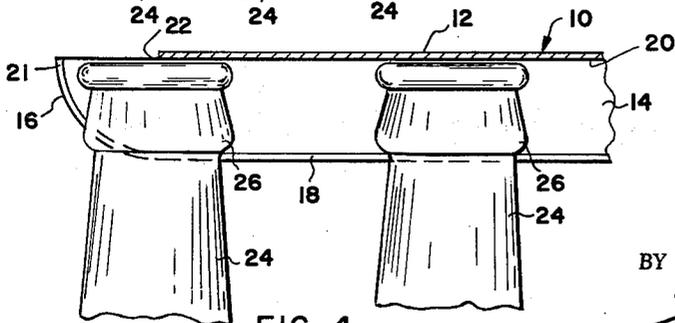


FIG. 4

INVENTOR.
THEODORE KARAS

BY

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1

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BOTTLE CARRIERS

Theodore Karas, 8556 Appoline Ave., Detroit, Mich.
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 3 Claims. (Cl. 294—87.28)

The present invention relates to devices for holding a plurality of bottles such as soda bottles and the like and more particularly to an improved device by which a number of such bottles may be conveniently carried in one hand.

Although many bottle carriers of various types have been heretofore provided these have generally failed to provide an economically constructed carrier which can be readily filled and emptied and yet in which accidental release of the bottles is prevented. Some of the heretofore known bottle carriers have taken a form utilizing means resiliently clamping to a portion of the bottle. If such a carrier is to effectively prevent accidental release then it necessarily will be very difficult to fill and empty.

Other previously known bottle carriers have been provided with flanged means slidably receiving the neck of the bottle. To prevent accidental release of the bottles upon the carrier being tipped slightly some type of locking means must be provided. These have previously been in the form of a movable latch member of some type and although a satisfactory carrier is produced by such a structure the additional mechanism required adds substantial costs to such carriers.

The present invention provides an improved bottle carrier which is constructed of a single piece of material. A pair of spaced opposing flanges are provided to define an elongated channel adapted to receive the necks of the bottles to be carried. The flanges are curved upwardly at each end to prevent accidental release of the bottles. A slot is provided at each end of the carrier adjacent the curved portions of the flanges so that by positioning the bottles substantially parallel to the longitudinal axis of the channel the neck of the bottles can be inserted through the slots and by rotating the bottles slightly they can be moved into the channel to be securely engaged by the opposing flanges. Since to unload the carrier the bottles must be pivoted through the slots defined at each end accidental release of the bottles is substantially eliminated.

It is an object then of the present invention to improve bottle holding and carrying devices by providing such a device which may be readily filled and emptied and yet in which accidental release of the bottles is substantially eliminated.

It is another object of the present invention to reduce the costs of manufacturing bottle holding and carrying devices by providing a new construction permitting such a device to be formed from a single piece of material.

It is a further object of the present invention to provide an economically produced bottle carrying and holding device which may be readily filled and emptied and yet in which accidental release of the bottles is substantially eliminated by providing such a device comprising an elongated flanged member defining a bottle receiving channel and an entrance to the channel which requires pivoting of the bottle before it can be inserted into the channel.

Still further objects and advantages of the present invention will readily occur to one skilled in the art to which the invention pertains upon reference to the following drawings in which like reference characters refer to like parts throughout the several views and in which,

FIG. 1 is a side elevational view of the device of the present invention illustrating several bottles being retained by the device and another bottle being positioned to be inserted into the device,

FIG. 2 is a lateral cross-sectional view taken substan-

2

tially at line 2—2 of FIG. 1 and with a portion of a bottle shown for purposes of clarity.

FIG. 3 is a fragmentary top plan view of the device of the present invention.

FIG. 4 is a fragmentary longitudinal cross-sectional view taken substantially on line 4—4 of FIG. 2, and

FIG. 5 is a side elevational view illustrating the manner in which filled, holding and carrying devices of the present invention can be stacked one above the other.

Now referring to the drawings for a more detailed description of the present invention, a preferred bottle carrier and holding device is therein illustrated as comprising an elongated body member generally indicated at 10. The body member 10 is preferably formed to provide an elongated substantially flat top portion 12 and elongated spaced side portions 14 extending in substantially parallel relationship from the longitudinal edges of the top portion 12 so that the body member 10 is substantially in the form of an elongated channel member.

As can best be seen in FIGS. 1, 4 and 5, each end of the side portions 14 is preferably arcuately formed as at 16. As can best be seen in FIGS. 2 and 4, the longitudinal free edge of each of the side portions 14 is provided with inwardly extending substantially co-planar flange portions 18. The interior surfaces of the top portion 12 and the side portions 14 together with the flange portions 18 define an elongated bottle receiving channel 20. As can best be seen in FIGS. 3 and 4, the flange portions 18 are curved upwardly as at 21 at each end of the side portions 14 to follow the edge of the arcuate portion 16 and to terminate closely adjacent the plane containing the top portion 12.

As can best be seen in FIG. 3, the material forming the top portion 12 is preferably cut away at each end to define slots 22 which communicate with the channel 20.

The carrying and holding device of the present invention is adapted to carry those types of bottles such as soda bottles and the like indicated at 24 which have an outwardly projecting rim portion 26 on the neck of the bottle adjacent the top thereof. It is apparent that the lateral dimension of the channel 20 must be sufficient to permit the rim portion 26 of the bottles 24 to be disposed therein. The distance between the flange portions 18 must be such that when a bottle 24 is inserted into the channel 20 the flange portions 18 will engage beneath the rim portion 26 to securely retain the bottles 24. Further, as will be more apparent as the description proceeds, the slots 22 will preferably have a longitudinal dimension substantially equal to the lateral dimension of the channel 20 and as can best be seen in FIG. 4 will have a longitudinal dimension less than the diameter of the rim portion 26 so that it is not possible to remove the bottles 24 straight upwardly through the slots 22.

When it is desired to fill the bottle carrying and holding device of the present invention a bottle 24 is positioned as shown at the left side of FIG. 1 with its longitudinal axis substantially aligned with the longitudinal axis of the channel 20. The top of the bottle 24 is then inserted through the slot 22 with the rim portion 26 of the bottle positioned interiorly of the curved ends 21 of the flanged portions 18. By pivoting the bottle 24 then it can be moved longitudinally into the channel 20 to be securely retained by the flanged portions 18.

To empty the holding and carrying device of the present invention the above described procedure is reversed with each bottle 24 being moved to one or the other end of the channel 20 and being pivoted upwardly and outwardly through the slot 22.

The carrying and holding device of the present invention is adapted to be held by simply gripping the side portions 14 of the body member 10. It is not necessary

then to provide a separate handle member for the device so that the top portion 12 can be left free of any outward projections. This permits several filled devices to be conveniently stacked one on top of the other as illustrated in FIG. 5 to provide a convenient means of displaying and dispensing bottled goods.

To prevent the bottles 24 from swaying while the holder is being carried, it is desired that the lateral vertical dimension of the slot 20 be quite close to the corresponding dimensions between the ridges 26 and the top of the bottle 24. In this way the top of the bottle 24 engaging the lower surface of the portion 12 will limit any tendency of the bottles to sway during carrying of the holder.

It is apparent that because the bottle carrying and holding device which has been described can be constructed of a single piece of material and can be readily manufactured from relatively inexpensive materials utilizing molding or extrusion processes, manufacturing costs for the disclosed device are substantially less than heretofore known similar devices. Further, although the device of the present invention may be readily filled and emptied, the particular means by which the bottles to be carried are inserted and removed substantially eliminates the possibility of the bottles becoming accidentally disengaged from the holder. Because no projecting handle means is required for the device, several filled holders can be stored in a stacked relationship to aid in conveniently displaying and dispensing bottled goods such as soda pop and the like.

It is further apparent that although I have described but a single embodiment of my invention, many changes and modifications can be made therein without departing from the spirit of the invention as expressed by the scope of the appended claims.

I claim:

1. A device for holding bottles provided with a neck portion and a rim formed on said neck portion, said device comprising

(a) a body member formed to provide an elongated top portion and a pair of side portions extending

- 5 downwardly from said top portion in a spaced substantially parallel relationship,
- (b) said side portions being provided at their free edges with opposing substantially co-planar flange portions extending toward each other to define an elongated channel for receiving said neck portions of said bottles held by said device with said flange portions engaging beneath said rims on said neck portions,
- 10 (c) each of said flanges being formed at each end with an arcuately upwardly extending portion,
- (d) said top portion being provided at each end with a slot providing access to said upwardly extending portions of said flange portions,
- 15 (e) the axial dimension of each of said slots being less than the diameter of said rim and being substantially equal to the distance between said flange portions and said top portion whereby to position a bottle within said channel or to remove a bottle from said channel said bottle must be brought to a position in which the longitudinal axis of said bottle is parallel to the longitudinal axis of said body member.

2. The device as defined in claim 1 and in which said channel is formed with a longitudinal dimension greater than three times the diameter of said rim of said bottles whereby said device can hold at least three bottles.

3. The device as defined in claim 1 and in which the distance between said flange portions and said top portion is substantially equal to the distance between the lower surface of said rim and the upper surface of said bottle.

References Cited by the Examiner

UNITED STATES PATENTS

35	1,597,238	8/1926	Maddox	294—87.28	X
	2,440,902	4/1948	Lutey	294—87.28	X
	2,620,691	12/1952	Gould	211—74	X
	2,703,253	3/1955	Bierderman	294—87.2	

HUGO O. SCHULZ, Primary Examiner.