

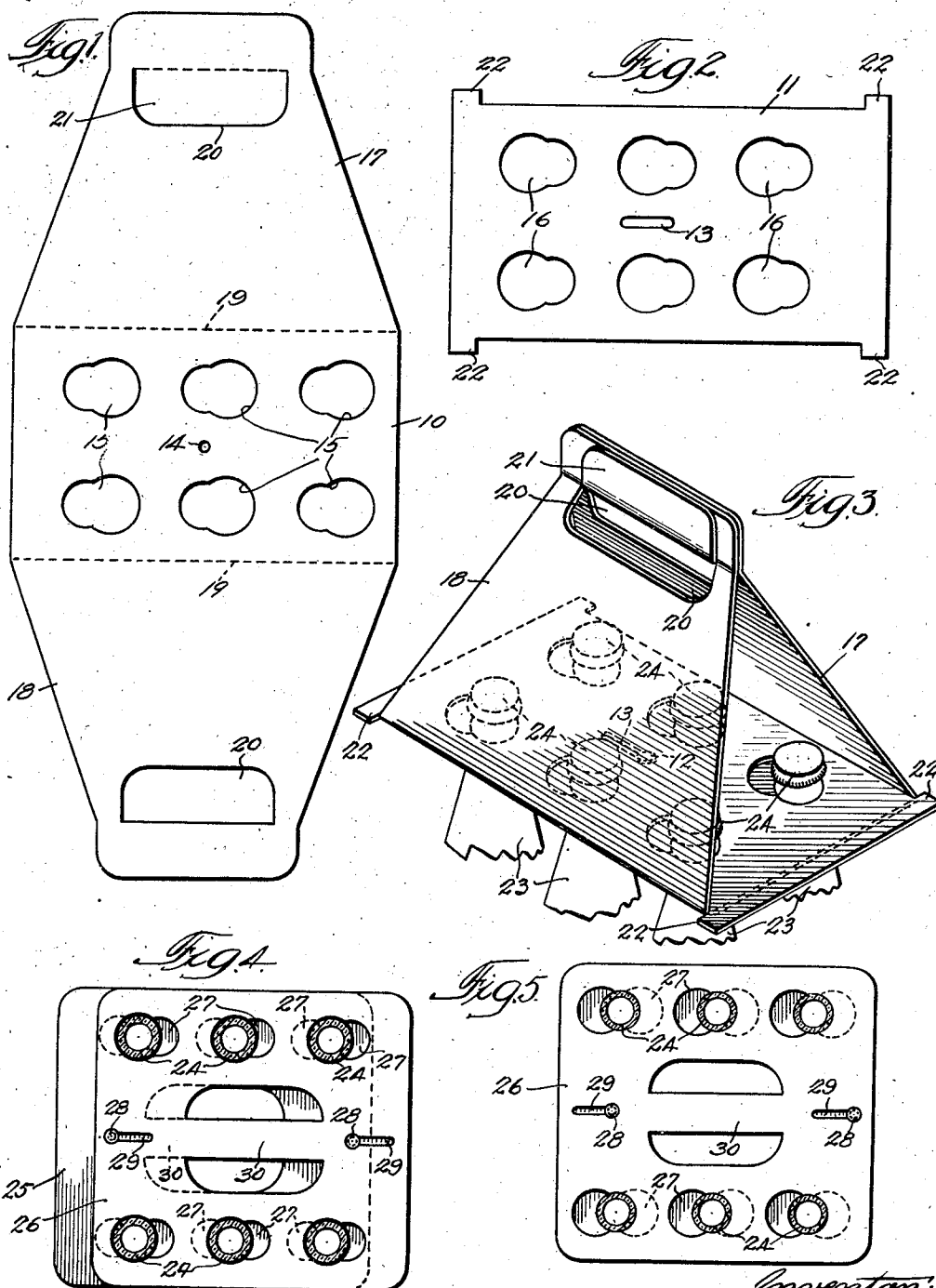
Sept. 10, 1946.

W. A. BERTRAM

2,407,529

BOTTLE HOLDER AND CARRIER

Filed March 31, 1945



Inventor:
 William A. Bertram.
 By: Thies, Olson & Mackelburg
 Attys.

UNITED STATES PATENT OFFICE

2,407,529

BOTTLE HOLDER AND CARRIER

William A. Bertram, Chicago, Ill.

Original application March 15, 1944, Serial No. 526,519. Divided and this application March 31, 1945, Serial No. 585,939

5 Claims. (Cl. 224—45)

1

This is a division of application Serial No. 526,519, filed March 15, 1944, and relates to bottle holders and carriers for beverage bottles or the like, which shall be strong and safe, of convenient and ready application, which packs or folds into a small flat space when not in use, is simple to manufacture and of low cost, and in which the holder when loaded may be locked in carrying position so that the package, if desired, may be set down or set aside without becoming unlocked or loosened as to the bottles and when picked up again the package is ready to be carried as in the first instance.

Further objects and advantages will appear from the description and claims to follow and the accompanying drawing, in which—

Fig. 1 is a plan view of the bottom member or sheet of one form of the device;

Fig. 2 is a similar view of the top plate or sheet of the same;

Fig. 3 is a perspective view of the device assembled and in bottle-carrying position on a set of bottles;

Fig. 4 is a plan view of another form of the device in bottle-loading position; and

Fig. 5 is a similar view of the device in bottle-loaded condition.

Referring to this drawing and first to the form shown in Figs. 1, 2 and 3, the body portion or bottle-receiving portion comprises two sheets or plates 10 and 11 shown, respectively, in plan in Figs. 1 and 2, of heavy cardboard, thin metal or other suitable material, which are placed face to face on each other and preferably slidably connected for limited relative movement, as by means of one or more pins or rivets, hole and slot connection 12, 13 and 14 as indicated, the hole and pin in this instance being shown in the lower plate 10 and the slot through which the rivet or pin 12 projects and is slidable being shown in the upper plate 11 and located centrally of the plates. If two such connections were used, for instance, they would preferably be located near the ends, as in Figs. 4 and 5. In this way the plates do not become separated or out of place and the relative sliding movement is guided and limited to that required for the satisfactory operation of the device.

These plates 10 and 11 are provided, respectively, with co-operating bottle-neck receiving apertures 15 and 16 in any desired number, arrangement and form capable of performing their desired functions, but preferably, as indicated, wherein six bottles may be accommodated, this being the most usual and convenient commercial

2

package, the holes being symmetrically arranged in two rows of three each, each hole being larger at one end than the other and oppositely placed in the two plates for fully opening and closing with limited relative sliding movement of the plates on each other, and the holes being of a general key-slot or keyhole formation, the better to grip the necks of the bottles for carrying purposes and substantially avoiding the tendency of the bottles to slide the plates back to open position because the side or transverse thrust due to the weight of the bottles is taken up in the plates themselves and does not tend to separate and slide them back to open position.

The handle formation for carrying the loaded carrier comprises the extensions 17 and 18 of the lower plate 10 which may be bent up or hinged along the dotted lines 19 and brought together over the top plate 11 as indicated in Fig. 3, where they are provided with suitable hand holes 20 for the passage of the fingers of the hand to enable the extensions 17 and 18 to be suitably grasped for carrying purposes. Means are preferably provided also for locking together the contacting ends of these extensions 17 and 18 whereby the loaded package may be set down or temporarily released without the bottles or carrier becoming loosened or released and remains ready to be picked up again and carried without attention being paid to the safe carrying condition of the carrier and bottles. This is of special convenience and importance to the dealers and shoppers. This is conveniently and preferably provided for in this instance by leaving the tab 21 intact with one of the ends, such for instance as the end 17, and when the two ends are brought together, as in Fig. 3, by bending or pushing the tab through the opening 20 of the other end and up against the side thereof, as shown in Fig. 3. This not only locks the two ends together but affords a rounded and smoother lower edge of the cross bars, which is easier on the fingers and hand in carrying the package.

The upper plate 11 is preferably a little longer than the body portion of plate 10 and a little wider at the ends whereby to provide the locking lugs 22 at the four corners thereof when the ends 17 and 18 of the other plate 10 are brought up to carrying position. These lugs ensure the plates 10 and 11 being in bottle-carrying position when the carrier is loaded and maintain and lock the same in that condition until the ends 17 and 18 are again opened.

The operation will be obvious. With the plate 11 shifted endwise to the open position, that is,

3

with the larger ends of the holes in line, the device is slipped down over the heads and necks of the upright bottles. The upper plate 10 is then shifted to bring the narrower parts of the combined openings together beneath the bottle heads but engaging the necks thereof, in which condition the heads cannot pass when the device is lifted and the bottles may be carried thereby. The ends 17 and 18 of the lower plate are then brought up together as indicated in Fig. 3, and the tab 21 passed through the corresponding opening in the other and bent up to lock the two ends together. The locking lugs 22 at the corners of the upper plate are engaged by the edges of the bent-up ends 17 and 18 and lock the plates together during carrying and whenever the ends 17 and 18 are together. In this Figure 3 the bottles are indicated at 23 and their heads at 24.

In this condition the bottles may be carried securely, safely and conveniently, and there is no danger of losing the same, as frequently happens when paper bags or boxes are used for carrying the bottles and become weakened by dampness from the bottles or from the outside. Also, the carrier and package remain locked in their carrying position and condition, so that it may be set down without becoming loosened, and picked up again without readjustment of the carrier or bottles or thought or attention thereto.

When it is desired to release the carrier from the bottles the handle is unlocked, the ends 17 and 18 opened and the plate 11 shifted back to opening position, when the device may be lifted from the bottles or the bottles dropped therefrom.

The manufacture of the device is comparatively simple, since it is mainly a punching or stamping operation in the flat, the completed article is shipped in the flat and does not take up much room and is not liable to injury, and may be used over and over again if desired. The rivet and slot connection of the plates, or its equivalent, prevents them from becoming separated, avoids the necessity on the part of the dealer of selecting and assembling the plates perhaps from different packages, keeps them together and prevents the loss of one or the other plate in case the device is laid aside for further use, holds the plates together in proper position while applying the device to the bottles in case of a tendency to catch on some of the bottles or at some points while slipping it into position over the heads of the bottles, and assists in limiting the sliding movement of the plates on each other and particularly to open them properly for application to the bottles without requiring special attention thereto on the part of the operator.

The carrier when applied as shown in Fig. 3 presents a package at once pleasing in appearance and confidence-inspiring in its sturdiness.

In the form of the invention shown in Figs. 4 and 5, two flat plates 25 and 26, face to face and slidable on each other, are provided, bottle head and neck receiving holes 27, preferably of key slot form, co-operating as in the first form described to permit the passage of the heads and necks of bottles 23 when slid into the position shown in Fig. 4, and to grip the necks 24 thereof beneath their enlarged heads when the plates are shifted back to the position of Fig. 5.

The plates 25 and 26 are connected together while permitting their slidable shifting back and forth preferably by rivet or pin and slot connection 28 and 29 similar to that of Figs. 1, 2 and 3, and are located preferably near each end as indicated.

4

The handle formation for carrying the loaded carrier in this instance comprises the integral central bars 30 formed by cutting out the material of the plates 25 and 26 on either side thereof to provide room for grasping the same by the fingers and hand of the person carrying the package.

In use, the plates are slipped to their open position, being guided and limited in such movement by the rivet and slot connection, so that especial attention does not have to be given thereto by the operator to align the holes in bottle-head receiving position. They are then slipped down over the heads and necks of the bottles and the plates slipped or squeezed back into bottle-neck gripping position. This latter may be accomplished without special manipulation or attention to the details by merely pressing on the ends of the two plates, since they are preferably constructed to align their end edges when in such gripping carrying position. The two handle portions 30 are likewise brought into alignment by the shifting of the plates to gripping position and together form a strong and convenient handle for carrying the loaded carrier. The handle portions 30 alone may be used for shifting the plates into gripping or closed position, since the two are offset when opening or loading, as indicated in dotted lines in Fig. 4, and superposed, as shown in Fig. 5, when closed or in bottle-gripping and carrying position. And in the latter the two-part handle gripped by the hand while carrying the package keeps the plates in carrying position against any tendency to slide them apart by the bottles while being so carried. The latter effect is, of course, greatly reduced by the gripping of the bottle necks on the sides transversely as well as longitudinally of the holes, the side thrusts being taken up by the plates and not tending to slide the plates longitudinally apart.

In this form of the invention the two plates 25 and 26 are merely flat plates and preferably identical, so that manufacturing and handling costs are reduced, the plates when assembled being merely reversed so that the slots point in opposite directions; they remain flat at all times and do not take up much room for packing, shipping or storing, and are sturdy, safe, reliable and convenient for carrying.

In both forms the carrying plates are similarly constructed with the carrying holes, which are expansible and contractible by merely sliding one upon the other, and with the two plates connected together to prevent separation, to guide and limit their movement and to aid in applying same to the bottles, and with a handle formation from the plates themselves. In both, the handle formation keeps the plates gripped upon the bottles while carrying the load. They are convenient and efficient, are cheap to manufacture, prevent any possibility of the bottles drooping and breaking, and do not gather moisture and become weak. Various changes and alterations may be made without departing from the principle and scope of the invention as set forth or intended to be set forth in the appended claims, as follows.

I claim:

1. A bottle holder and carrier comprising two juxtaposed face-to-face sheets slightly shiftable on each other, said sheets having overlapping openings forming passages therethrough expansible when the sheets are shifted into one position to enable a bottle head and neck to pass through the passage and contractible when the

5

sheets are shifted into another position to grip the neck and prevent withdrawal of the bottle, the lower of said sheets having its ends extended and bent up and over the other to form, when brought together, a handle for carrying the loaded carrier, and the other sheet having end notches to engage the said raised ends when in carrying position, whereby to put and keep the sheets in carrying position when the device is loaded and being carried.

2. A bottle holder and carrier comprising two juxtaposed sheets face to face and laterally shiftable, said sheets having overlapping openings providing passages through the sheets which may be expanded or contracted by the shifting of the sheets, said passages when expanded enabling the heads and necks of bottles to be passed therethrough and when contracted enabling the sheets to engage the neck and prevent withdrawal of the bottles, and a handle for the carrier consisting of integral bars of the sheets overlying each other in the loaded position of the sheets and maintaining the sheets in bottle-carrying position when the load is being carried.

3. A bottle holder and carrier comprising two flat sheets placed face to face and relatively shiftable in their planes, said sheets having overlapping holes which may be expanded or contracted by the shifting of the sheets, said holes when expanded permitting the heads and necks of bottles to be passed therethrough and when contracted preventing withdrawal of the heads thereof, and a handle for the carrier centrally of the sheets consisting of integral bars of the sheets formed by finger passages therethrough on either side of the bars and overlying each other in the loaded position of the sheets.

6

4. A bottle holder and carrier comprising two juxtaposed face-to-face sheets slightly shiftable on each other, said sheets having overlapping openings forming passages therethrough expandible when the sheets are shifted into one position to enable a bottle head and neck to pass through the passage and contractible when the sheets are shifted into another position to grip the neck and prevent withdrawal of the bottle, and a pin and slot connection between the two sheets to secure them together and to limit their shifting movements, the lower of said sheets having its ends extended and bent up and over the other to form, when brought together, a handle for carrying the loaded carrier, and the other sheet having end notches to engage the said raised ends when in carrying position, whereby to put and keep the sheets in carrying position when the device is loaded and being carried.

5. A bottle holder and carrier comprising two juxtaposed face-to-face sheets slightly shiftable on each other, said sheets having overlapping openings forming passages therethrough expandible when the sheets are shifted into one position to enable a bottle head and neck to pass through the passage and contractible when the sheets are shifted into another position to grip the neck and prevent withdrawal of the bottle, the lower of said sheets having its ends extended and bent up and over the other to form, when brought together, a handle for carrying the loaded carrier, and the two sheets co-operatively engaging when the handle is so formed to lock the sheets in carrying position when the device is loaded and being carried.

WILLIAM A. BERTRAM.