Dec. 21, 1948. W. A. BERTRAM 2,457,027

BOTTLE HOLDER AND CARRIER

Filed June 29, 1945 3 Sheets-Sheet 1

Fig. 1.

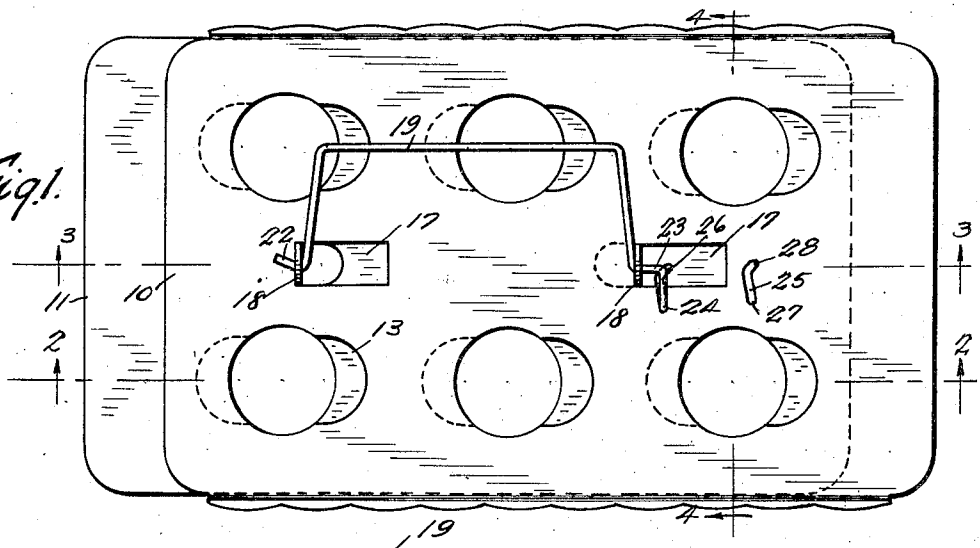


Fig. 2.

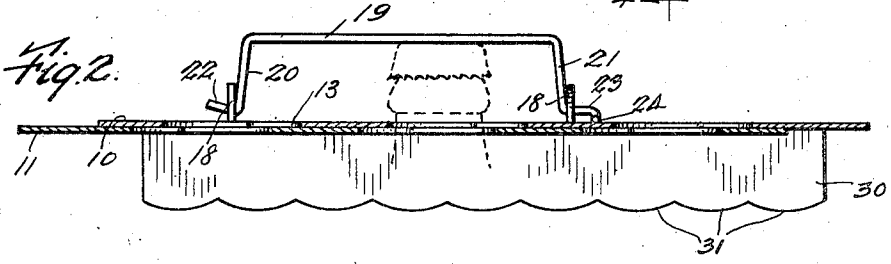


Fig. 3.

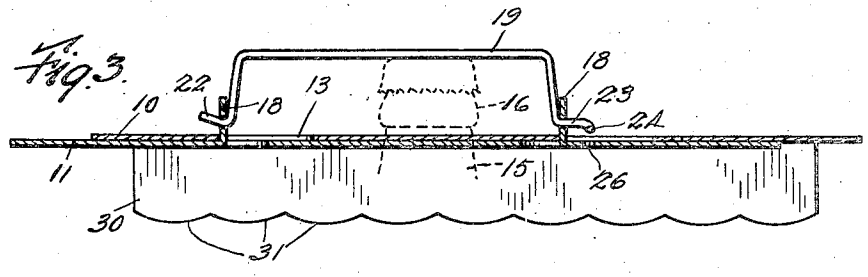
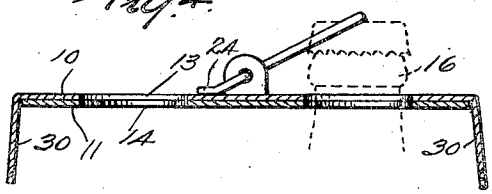


Fig. 4.



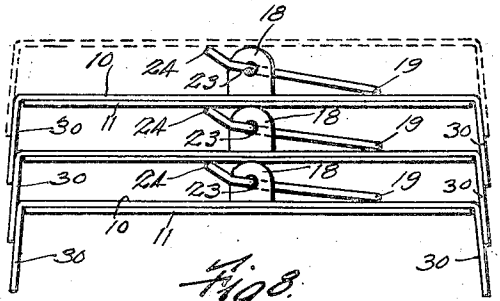


Fig. 8.

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BOTTLE HOLDER AND CARRIER

Filed June 29, 1945 3 Sheets-Sheet 2

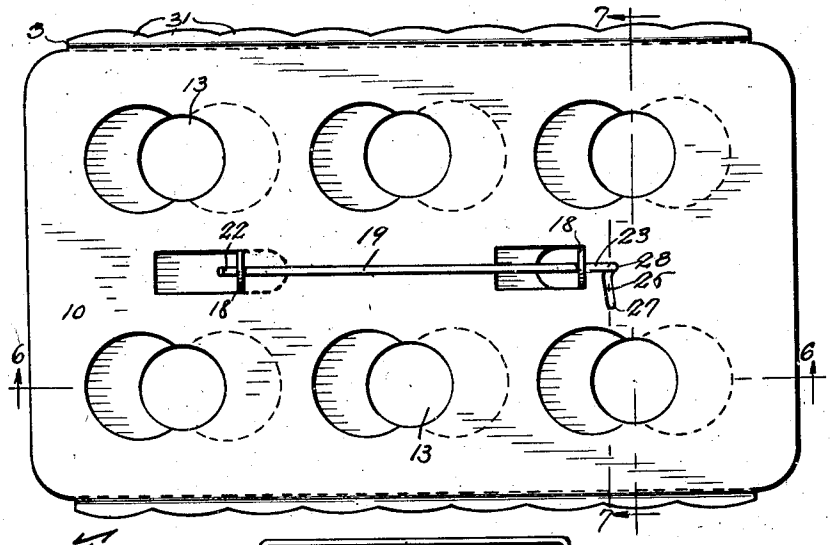


Fig. 5.

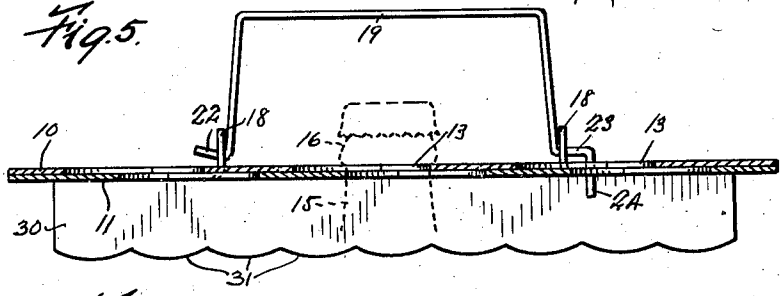


Fig. 6.

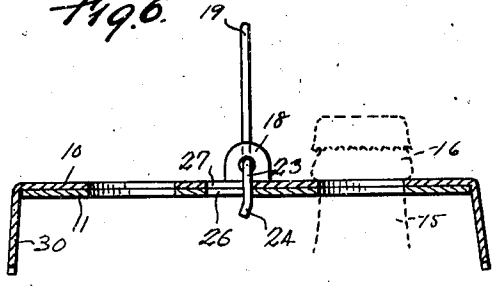


Fig. 7.

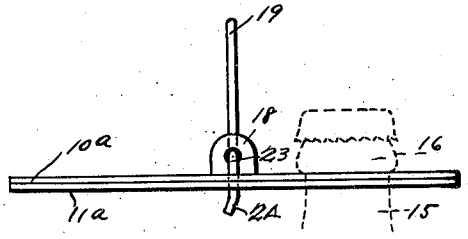


Fig. 9.

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BOTTLE HOLDER AND CARRIER

Filed June 29, 1945 3 Sheets-Sheet 3

Fig. 10.

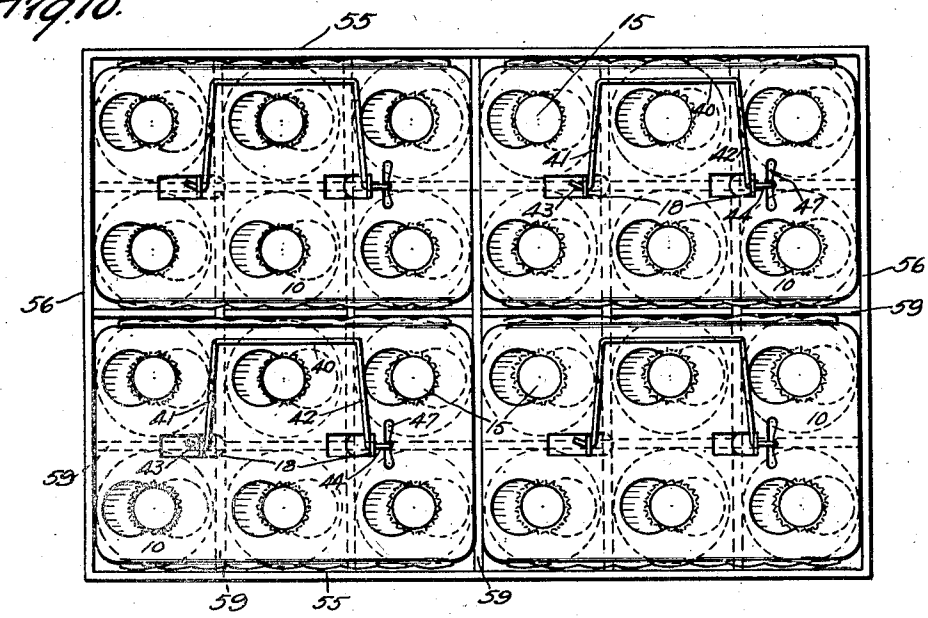


Fig. 12.

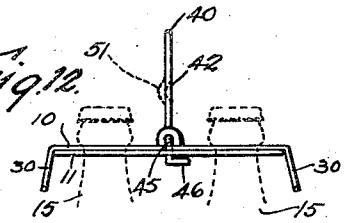


Fig. 13.

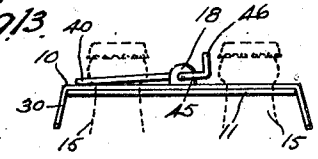


Fig. 11.

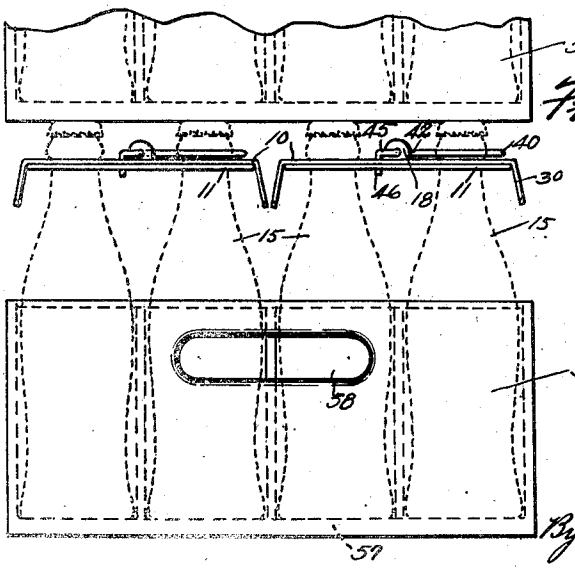
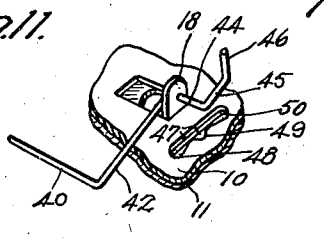


Fig. 14.



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UNITED STATES PATENT OFFICE

2,457,027

BOTTLE HOLDER AND CARRIER

William A. Bertram, Chicago, Ill.

Application June 29, 1945, Serial No. 602,349

16 Claims. (Cl. 224—45)

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This invention relates to bottle carriers used principally in the merchandising of bottled beverages, particularly for home consumption, and preferably in the six-bottle unit size.

Bottle carriers of this general type have been proposed, but are usually too complicated and expensive for general adoption or have other disadvantages. In some, the weight of the load on the carrying handle is relied on to keep the bottles and carrier plate or plates in proper carrying position, but if the package is set down for any reason, as while the customer is making other purchases, or by children, who are frequently called upon to carry the same, the plates may be loosened and are liable to be displaced or disarranged on the bottles or some of them, so that when the package is picked up again everything may not be in ship-shape condition and accidents may happen. Such bottles are usually charged with gas and breakages may be attended by more or less serious consequences. In other devices, locks have been provided for the plates in carrying position, but the construction was too complicated and expensive and other disadvantages were present.

In bottle carriers of this type there may be a body portion for supporting the bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying postions, and a handle attached to the body to carry the same with the bottles suspended therefrom.

In the present invention, an object is to provide a carrier of the type described which is simple and of low cost, which can be readily folded and packed in small space for storage and shipment, which is convenient of application to the bottles, safe in handling and carrying the same, and is rugged, clean and of good appearance, and long life for repeated use.

A further object of the invention is the provision of a carrier of this type in which, when the same is placed on the bottles, the carrier does not tend to slip down over the necks of the bottles so far that it must be raised back into the carrying position before it can be clamped upon the bottles and the handle operated for carrying purposes.

A further object of the invention is the provision of a foldable handle for the carrier that is automatically raised from its folded position against the body into a readily hand-grasping position by the bottles as they are loaded in the carrier, whereby to facilitate the operation of

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grasping and raising the handle into package-carrying position.

A still further object is to provide a construction in which the handle when so automatically raised into finger-grasping position by the bottles shall control the descent of the carrier on the necks of the bottles and render unnecessary the subsequent raising of the carrier into bottle-gripping position, which may be the cause of the improper gripping of some of the bottles or improper closing of the gripping plates and the falling out and breakage of some of the bottles.

An additional object is the provision of a lock for the body plates in their bottle-carrying position which is so related to the movement of the handle and carrying plates that it cannot be applied until the bottles and plates are in their proper carrying positions.

Another object is the provision in such a device of an interlock between handle and plates whereby the latter are limited in their descent over the bottle necks by the handle, but when slid into carrying position thereon the handle is freed for raising to carrying position and automatically locks the plates in such carrying position.

Another object is the provision of a simple carrier of the type described in which handle-attaching lugs or ears on the lower plate or member extend up through slots in the upper member whereby the weight is carried by the under plate and the ears or lugs and the slots may guide and limit the relative sliding movements of the plates, and a simple, preferably wire, more or less springy handle is pivoted to said ears above the upper plate which may be folded down against the plate for storage, packing and shipping purposes, said handle preventing the plates from complete separation transversely to their planes or otherwise.

A still further object of the invention is to provide the upper plate in such a carrier with depending side flanges which are preferably slightly slanting outwardly and deep enough to facilitate stacking the plates together in a substantially self-supporting nested pile for storage and shipment with the folded handles, lugs, etc., in protected position, said flanges, if desired, having more or less ornamental lower edges for appearance' sake, and serving to conceal the edges of the plates from view and, if desired, to guide or additionally to guide the two plates in their relative sliding movements, and affording convenient room on their outer faces for advertising, identification matter, or the like.

Another object is a carrier which may be ap-

plied to the bottles in cases by the bottler of the product for storage or shipment to the dealer, who has merely to lift the package up out of the case by the handle of the carrier and hand it over to the customer.

Another object is to provide a carrier having a handle which is foldable down on either side of its pivots, the carrier being locked in bottle-carrying position when the handle is folded down on one side and when in carrying position and unlocked when folded down on the other side.

A further object is the provision of a sliding plate bottle carrier with a three-position pivoted carrying handle on top of the plates adapted to be turned down on either side of the pivots or to be raised into carrying position between the two down positions, said handle locking the plates in bottle-carrying position except when turned down on one side, in which position the plates are unlocked and may be slid into bottle-receiving or discharging position.

Still further objects and advantages will appear from the description and claims to follow in connection with the accompanying drawings, which show an embodiment of the invention by way of illustration and not of limitation, and in which—

Figure 1 is a plan view of the device with the sheets or plates in their bottle-receiving or loading position just before being applied to the bottles, the handle lying down against the top of the upper sheet as it would be apt to be when the carrier is picked up to be applied and plates have been slid apart or endwise by the hand or hands to their bottle-receiving positions;

Fig. 2 is a vertical section of the carrier on the line 2—2 of Fig. 1, but showing the handle raised by the head of a bottle protruding therethrough and holding the sheets or plates from descending further on the bottles;

Fig. 3 is a similar section on the line 3—3 of Fig. 1, showing the same position of the parts as in Fig. 2;

Fig. 4 is a vertical cross section of the device on a plane indicated by the line 4—4 of Fig. 1, but with the handle in the position of Figs. 2 and 3;

Fig. 5 is a plan view similar to Fig. 1, but with the plates or sheets pressed or slid together endwise into bottle-carrying position and with the handle raised or swung up into the carrying and plate-locking position;

Fig. 6 is a vertical longitudinal section on the line 6—6 of Fig. 5 and showing the carrying position of bottles within the sheets or plates, and a face view of one of the flanges on the top sheet of the carrier;

Fig. 7 is a vertical cross section on the line 7—7 of Fig. 5 showing in dotted lines a bottle in carrying position therein;

Fig. 8 is an end view of a nested pile of the carriers as they may be conveniently stacked for storage or shipment;

Fig. 9 is an end view of the carrier with the side flanges of the upper sheet omitted;

Fig. 10 is a plan view showing the carrier applied to the bottles in a case of usual construction;

Fig. 11 is an end view of the same looking in the direction of the arrows at the right end of Fig. 10 and showing in addition the lower part of another case on top of the first in stacked relation;

Fig. 12 is an end view of the carrier with the members and handle in bottle-carrying positions, the bottles being indicated in dotted lines;

Fig. 13 is a similar view but with the handle shown swung over to the other side and the members unlocked; and

Fig. 14 is a perspective detail view of the handle and its extensions and the locking slots in the members.

As shown in these drawings, the bottle carrier comprises two flat sheets 10 and 11, of any suitable material but preferably metal, such as aluminum for strength, ruggedness, long life, cleanliness, lightness, appearance, and general satisfaction in operation and use, said sheets having overlapping apertures 13 and 14 therein which may be of substantially keyhole formation for the reception of the necks of bottles 15 therein, such holes being reversed end for end in the two sheets so that when the sheets are slid on and relative to each other, as in Fig. 1, into bottle-receiving position, the combined holes through the two sheets or plates are expanded or larger to receive the heads and necks of the bottles therethrough and when slid in the other direction, as seen in Fig. 5, into bottle-carrying position, the holes are smaller and grip more or less tightly the necks of the bottles below the head or rim 16 thereof, whereby they may be safely carried thereby. The upper plate 10 is provided with other openings, preferably in the form of slots 17, through which project the ears or lugs 18 from the lower plate 11, to which the handle 19 is pivoted. While the openings or slots 17 may be otherwise shaped so long as the sheets are permitted sufficient relative sliding movement for their two positions, it is preferred that the handle ears or lugs 18 engage the edges or walls of the openings, or that one of the ears or lugs so engages, to act as limit stops for the plates or sheets in their end positions, that is, in their bottle-receiving and bottle-clamping and carrying positions, or at least in their open or receiving position. This renders unnecessary the provision of other forms of stops, such as rivets and slots, flanges, etc., which are not only added expense but are the source of more or less trouble, are dirt catchers and tend to interfere with the free and satisfactory sliding operation of the sheets. It is also preferred that these handle pivot openings be in the form of slots, as shown, to slidingly engage along their side edges with the said ears or lugs of the handle pivots to act as guides in the relative sliding movements of the plates. Where side flanges are used on the upper plate, as in the preferred form of the invention, as depicted in Figs. 1 to 8, incl., they may serve as guides to the relative sliding movement of the sheets, in which case the guiding function of the slots 17 may not be required, though their function as stops to limit the extent of the sliding is retained, but in the form of Fig. 9, where such side flanges are omitted, the side guiding of the slots and lugs comes into full play and renders unnecessary other provision therefor. It is deemed preferable also to make all upper plates or sheets with the slot form of opening for the sake of uniformity, for cleanliness, as this form of opening is of minimum size, and for strength, as the slots remove less material from the sheet than larger openings, and for other reasons.

The pivot lugs or ears 18 may be strongly secured to the lower sheet in any desired and suitable way, since they carry the entire load, but are preferably formed by striking them up from the material of the sheet itself, as shown.

The handle 19 is preferably of strong, stiff, heavy metal wire, so that it may carry the load safely and with sufficient resiliency so that its ends may be sprung slightly toward each other in

assembly and in the locking operation hereinafter described. It has its ends 20 and 21 bent outwardly, as at 22 and 23, to pass through and operate in suitable apertures in the lugs 18, the end 23 having an extension 24 bent to extend generally in line with the end 21, but oppositely from the pivot portion 23, for a purpose that will be explained. This handle is readily assembled in the lugs 18 by first swinging it around so that the extension 24 is inserted through the hinge aperture in the lug 18 and then swinging the handle back substantially to its desired position with the pivot part 23 threading through the lug 18. The pivot end 22 at the opposite end 20 of the handle is then sprung into its lug aperture, and the handle is ready for operation. The end 22 is preferably bent up a little as indicated to insure its not being inadvertently pressed out of the hinge lug in the use of the carrier, or it may be upset at the extreme end, or bent slightly after its original assembly to make the pivotal connection permanent, since no reason is contemplated for the disassembly of the device after once made.

The pivoting of the handle so that it may be turned down toward the body of the carrier out of the way is of great convenience and from a practical standpoint necessary in the storage, packing and shipping and in the handling of the devices generally. The handle is therefore usually in this folded position when the carrier is applied to the bottles; that is, the bottles may be arranged on the counter or some support, the plates or sheets slid to the bottle-receiving position, and the carrier is then let down over the heads and necks of the bottles. In some carriers, the handle is necessarily in this position, and to avoid contact with the heads of the bottles when loading the handle is bent so as to pass around the holes in the plates when in the folded position. But the handle cannot be raised to swing it into carrying position without striking the bottles unless and until the carrier itself is lifted up substantially to its carrying position on the necks of the bottles. The holes in the carrier must be large enough to readily pass down over the capped heads of the bottles and since the necks are smaller and only gradually enlarged below, the carrier tends to pass down over the necks considerably below the carrying position which is just below the rims or heads. In any event, it is more or less difficult to pick the handle up from its folded position against the plate and the trouble is enhanced if the carrier must be lifted and held up in the carrying position on the necks while fumbling for the handle. It is worse if gloves or mittens are being worn.

In the present invention, however, all such difficulty is overcome. The handle is of natural form and size for its purpose. The hand-grasping portion 19 overlies at least one of the bottle holes in the sheets, to-wit, the center one in the row on that side, when the handle is folded down into non-carrying position. When the sheets are slid relatively into the bottle-receiving position and placed over and let or pushed down over the heads and necks of a set of bottles, the head or heads of the bottles protruding through the holes underneath the handle strike the handle and lift it up into a readily graspable position above the carrier sheets, as seen in Figs. 2, 3 and 4. In this raised position, therefore, no fumbling is required to enable the handle to be readily grasped by the hand.

In addition, this feature of lifting the handle by the bottle when projected through the carrying sheets is made use of to limit the descent of the carrier itself on the bottle necks to substantially the bottle-carrying position. That is done in this instance by limiting the extent to which the handle can be raised by the head of the bottle, and is conveniently and simply accomplished by the extension 24 before described of the end of the handle so that it bears on the top of the upper sheet 10 when the handle and sheets are in the desired position. This would be when the sheets are at or slightly below the carrying position just below the rims or heads 16 of the bottles. By making it slightly below, allowance is made for slight differences of the bottles, caps, unevenness of the supporting surface for the bottles while loading, and the like. While the extension 24 in this instance is shown slightly curved or bent at the end, it will be understood that this is made to conform to the requirements for the action intended, both as to its length and angle with respect to the handle positions on the other side of the pivot fulcrum. Also, while the opposite side of the carrier may tend to drop slightly further down on the other row of bottles if the carrier be entirely released at this time, the carrier as a whole will be held substantially at the carrying position and normally would not be released until the two plates had been pressed together into carrying position.

The bottles are secured in the carrier by sliding the two plates or sheets together upon the bottles, which is most conveniently done merely by pressing the two ends of the carrier sheets toward each other, and this is naturally done before releasing the hands from the carrier after placing it on the bottles. It is practically one act. The sheets are preferably of the same length and their ends substantially meet when the openings in the sheets are in bottle-gripping position, as in Figs. 5 and 6. It is not necessary, in order to do this, to lift the carrier from a depressed position further down on the necks of the bottles to a carefully inspected and located position just below the rims, to be sure that it is in the right position and that some of the bottles have not stuck in the carrier and are being lifted with it, particularly if the end pressure of the hands on the plates be applied too soon, or to pay attention to the various things that may happen to prevent or interfere with a proper closing of the plates upon the bottles for carrying the package safely and without danger of breakage. A simple pressure of the hands on the ends of the carrier plates when the carrier stops going down over the bottles is all that is necessary, without further thought or attention being given to placing the plates in the proper bottle-carrying position upon the bottles. Should one side sag a trifle, a natural righting movement by the fingers as the plates are pressed together would suffice.

It is most desirable also to lock the plates in the carrying position, so that if the package is released for any reason and the pull on the handle relieved, the plates may not slide or work to the open position, as may be the case where the weight of the bottles on the handle is relied on to hold the plates in carrying position. If the customer is carrying other packages and hurriedly picks up such a bottled package, say with one hand, the plates or the handle, or both, may not work into proper carrying position to form a solid package and trouble results. But if the plates and handle are locked in carrying position, no such trouble is encountered.

In the present invention, such locking may be readily accomplished by providing a suitable slot 25 in the top plate 10 into which the extension 24 of the handle may enter when the plates have been slid to the bottle-carrying position and the handle 19 is raised or swung from its plate limiting position toward or into its upright carrying position. Thus, as seen in Fig. 1, the slot is to the right and out from under the extension 24 of the handle when the plates 10 and 11 are slid into their bottle-receiving position. But when the plates are slid together into bottle-carrying position, as in Fig. 5, the slot 25 in the plate 10 is below the end of extension 24 and, as soon as the handle is raised, the extension enters the slot and the two plates are locked upon the bottles in carrying position.

It is desirable, too, to have this locking take place immediately upon the raising of the handle from the bottle top, as shown, so that even though a child when carrying the package were to attempt swinging the package violently on the handle, the presence of his fingers or hand on the handle would hold it sufficiently above the bottle caps as to prevent the extension 24 of the handle from coming out of the locking slot 25, and plates could not open from their locked position and the bottles be thrown out.

Due to the length of the extension 24, with the proportions shown in the drawings, the lower plate 11 is provided with an opening or slot 26 into which the said extension may swing when the handle 19 is raised. This of course performs no necessary locking function as between the plates 10 and 11, since the handle is sufficiently strong to prevent any relative sliding movement of the plates outwardly when the extension 24 is in the slot 25, but by making the slot 26 conform to the slot 25 it provides a support for the end of the extension 24 and a lock between the plates by the extension itself. It is preferred, therefore, to make the slot 26 conform to the slot 25.

In order that the handle 19 may be held normally upright in the carrying position when used for carrying purposes and except when forcibly and intentionally swung down to its folded position when not in use for carrying purposes, the slot 25 is preferably not a straight transverse slot but slants inwardly toward the handle from its end 27 to a point where if the extension were in it the handle would be in a plane substantially perpendicular to the plane of the sheets, that is, in carrying position, and there the slot terminates or is provided with an abrupt outward recess 28. When, therefore, the handle is raised or swung to the carrying position the extension enters the slot at the point 27 and slides along the inclined portion, compressing the stiff spring handle to the extent necessary and then snaps into the recess 28 when the handle reaches the carrying position which is substantially perpendicular to the sheets. In this way the handle is retained in the upright position for all normal carrying purposes, prevents swinging of the package relatively to the handle, but may be forcibly yet readily turned down to the folded or bottle head position to unlock the plates to free the bottles.

The upper plate or sheet 10 is preferably provided with depending side flanges or extensions 30 which may be slightly sloping as indicated and of a depth greater than the height of the lugs 18 and the folded handle or other parts above the plate, whereby they may be nested as indicated in Fig. 8 in substantially self-supporting even piles when in storage or for packing for shipment, or the like. The flanges preferably so engage each other that the carriers do not tip when so stacked but remain in proper positions. The upper carrier in each stack may be covered by a similarly formed plate or cover or by one of the top plates alone. If desired, one carrier of each pile may be disassembled, the upper plate being placed on top of the pile and the lower plate and handle being placed within the lower carrier of the pile. Such flanges may be readily formed by bending down the edges of the sheet or plate and may have an ornamental lower edge of any form, if desired, as indicated in this instance by the scallops 31.

Such flanges may act as guides for the relative sliding movement of the plates on each other into their bottle-receiving and bottle-carrying positions. They conceal more or less the lower plate and any depending parts, particularly when on a load of bottles which is apt to be viewed from the side or edge. They enclose and protect the handle plates and lugs when stacked, enable such stacking to be done, and what is most important afford an unbroken, smooth and ample space on their exposed outer faces where names, slogans and advertising or other matter may be prominently displayed in the places most apt to be seen.

Fig. 9 shows the same form of carrier as in the other figures with the exception that the side flanges are omitted on the upper sheet or plate which is here indicated by the reference character 10a. In this instance the slots 17 and lugs 18 are depended upon as guides for the two plates or sheets in their relative sliding movements into bottle-receiving or loading positions and bottle-carrying positions. Otherwise the construction and operation are the same in the two forms of carriers.

The foregoing description and explanation is thought to make it unnecessary to repeat in detail the operation of each constituent part. However, the means to limit the descent of the carrier—the handle in this embodiment—when applying it to the group of bottles is a source of great satisfaction to the dealer who in his haste in waiting on customers has only to drop the carrier down over the bottles as far as it will naturally go, press the ends of the plates together, swing the already conveniently raised handle to the upright locking position, and the package is ready for the customer in a form that the dealer knows cannot be inadvertently loosened, undone or the bottles dropped out or broken. This is all done practically with one motion without taking his hands off the carrier except to raise the handle as he hands the package over to the customer. It is not necessary to inspect and place the carrier at the exact right height on the bottles. The device may be readily and cheaply manufactured. With proper tools and dies there may be but four operations involved in the making of the device, one to each plate, one to the handle, and another to the assembly. The latter consists merely in placing the two sheets together and threading and springing the handle into the lugs. The manufacturer, shipper and dealer are all benefited by the compactness, safety and satisfaction of the nested self-supporting pile arrangement of the carriers. The advertiser profits and the customer feels that the device is safe for himself or his children to carry.

The device is simple, durable, and may be used over and over again.

Figs. 10 to 14 show the carrier applied to the bottles in their cases. In this way of doing, the bottle-carriers are applied by the manufacturer or bottler of the beverages or product when the filled and capped bottles are put in their carrying cases ready for storage, shipment, handling generally and delivery to the retail dealer. If the dealer is provided with a refrigerator, he usually takes the bottles out of their cases and stores them in it until he makes up a package for a customer. This involves handling the bottles individually each time and the trouble of making up a package, usually of six bottles, when he sells the customer. But with the carriers applied to the bottles in their cases when he receives them, all he has to do is to lift the bottles out of their cases by the carriers, using the handles of the carriers therefor, place the packages in the refrigerator in that condition, and then when waiting on a customer, hand him a package directly from the refrigerator, all ready to be carried away. If the dealer sells directly from the cases, the same convenience applies, the handle is raised, the group of bottles is lifted out of the case by the carrier, and the complete package is handed directly over to the customer.

For this method of handling, the handle bar preferably does not engage the tops of the bottles when the carrier members are in bottle-carrying position, but lies against the top member or at least below the bottle tops, so that in piling the cases on top of each other neither the handles nor the bottle caps may be injured. Also, it is preferred that the members of the carrier be locked in their carrying position while on the bottles in their cases and in the handling thereafter by the dealer and customer. In order to accomplish this in a simple and convenient manner in this instance, the handle extension and co-operating locking slots in the members are constructed and arranged so that when the handle lies flatly on one side of its pivots the members are unlocked and may be slid to bottle-receiving and discharging position, but when the handle is swung to the other side of its pivots the members are locked in their bottle-carrying position, and this is the position in which the members and handle are placed when the carrier has been first applied to the bottles in the case by the manufacturer or bottler. This locked condition of the members on the bottles is also maintained when the handle is raised from the down position to the raised carrying position, so that the members and bottles do not become unlocked in the usual handling, and not until and unless it is desired to do so, when the handle is positively swung down to its other position adjacent the members. This, as before said, unlocks the members and they may be slid to the open or bottle-receiving and discharging position.

The location of the bottle holes in the carrier members corresponds to the positions of the bottles in their case, so that the carrier may be passed down over the bottle heads onto their necks without disturbing or dislodging the bottles in the case, or it may be applied first and used for putting the bottles in the case. When in locked position thereon the carrier tends to protect and hold the bottles more steady and securely in the case. Such cases commonly accommodate twenty-four bottles in four rows of six bottles each, each bottle in its own compartment formed by light material subdividers or partitions running across and lengthwise of the case between the rows of bottles. The bottle carriers usually accommodate six bottles, that being the common retail merchandising package, and are preferably of a rectangular size to cover the area of the six bottles standing in the case, with a suitable clearance at the edges so as not to interfere with each other when applied to all the bottles, there being four such carriers to each case under the conditions named. In the ordinary bottle case the sides and ends do not come up to the tops of the bottles but their upper edges are considerably below, so that when the cases are stacked on each other the bottom of a case rests on the tops of the bottles in the case below. The presence of the locked carriers gripping the bottles just below their heads, therefore, steadies them considerably and makes a sturdier pile of the stacked cases, with less liability to damage.

Since the construction of the carrier illustrated in Figs. 10 to 14 is substantially the same as in the previously described form except in the respects noted, it will suffice for a full understanding of the construction and operation thereof to refer merely to such differences, the corresponding parts being designated by the same reference characters in both forms. Thus, as shown in Fig. 10, the handle **40**, preferably of the same stiff spring wire as in the handle **19**, has its ends **41** and **42** long or deep enough for the handle bar part **40** to pass over the capped ends of the bottles **15** without engaging the same when swung down toward the member **10** on either side of the pivots **18**. The same result might be achieved by bending the handle part **40**, or in other ways, but the way shown is preferred, the object being to avoid the ends of the bottles when in the cases.

As before, the ends of the handle are bent horizontally as at **43** and **44** to extend through the pivot ears or lugs **18**, and the part **44** is bent as at **45**, similar to the end **24** in the first instance, to extend generally in the plane of the handle as a whole, and is provided with an extension **46** which may be substantially at right angles to the part **45** (see Fig. 14).

This handle may be assembled in the pivot ears **18**, as before described, by first threading these bent end portions through the pivot ear **18** at the right, as viewed in the drawings, and then springing the end **43** into its ear **18**.

The cooperating slots **47** in the two members **10** and **11**, corresponding to slots **25** and **26** in the first form, to receive the parts **45** and **46** of the handle in its operation, are formed preferably with three recesses or seats **48**, **49**, **50** (Fig. 14), one at each end and one midway between, the latter being substantially in a longitudinal line with the pivots of the handle.

With this arrangement and assuming the members **10** and **11** to be in bottle-carrying or gripping position so that the slots **47** are coincident, when the handle **40** is raised or swung vertically to the bottle-carrying position the portion **45** which has entered the slots is sprung into the central seat, recess or notch **49**, and the two members **10** and **11** are locked in their bottle-carrying position. The handle, by its resiliency, is held in that position. This position is shown in Fig. 12.

When the carriers have been applied to the bottles in their cases, it is desired that the members be locked and the handle be turned down out of the way. Accordingly, when the handle is turned down to the position indicated in Fig. 10 while the part **45** has wholly or partially been raised out of the slots **47**, the tail or part **46** still

remains therein and locks the members 10 and 11 in the desired position. Likewise, the end 46 springs into its notch or seat 48 and resiliently locks the handle in its turned-down position.

Thus the members and handle remain in locking engagement and the members locked on the bottles while in the case and while the handle is being raised to carrying position and in the carrying position itself. This includes all necessary handling by the dealer and customer, until it is desired to free the carrier from the bottles, or vice versa.

When it is desired either to apply the carrier to the bottles or to discharge or unload them, the handle is turned to the other side of its pivots, as indicated in Fig. 13. In this position the handle extensions 45 and 46 are both turned up out of the slots 47 and the members 10 and 11 are unlocked and free to be slid endwise by the hands, as indicated in Fig. 1. This is the bottle-receiving and discharging position of the members, in which the apertures are expanded sufficiently to permit the capped heads of the bottles freely to pass therethrough.

It will be noted, as shown in Fig. 11, that the handle 40 in its turned-down position rests slightly above the top face of the member 10, which may be anywhere up to the level of the tops of the bottles, so that it may be the more easily engaged by the fingers to raise the handle to the upright carrying position. This is due to the striking of the end 46 of the handle against the end of the slots 47 in the members 10 and 11, and of course such engagement may be adjusted by varying the position of the end of the slots or bending the end 46 at a greater angle, or otherwise, the important thing being to stop the handle slightly above the member so that it may be readily picked up from its down position, as in the Fig. 1 down position. On the other side of the pivots it does not make so much difference, since the workmen in applying the carrier are more familiar with it, and turning it to the locked position is part of the job of attaching the carrier in place. Besides, a slight pressure on the exposed end 46 at this time flips the handle part up sufficiently to be easily grasped, and if desired, a slight bend 51, shown in dotted lines in Fig. 12, in one of the ends 41 or 42 suffices, by striking the face of member 10, to raise the handle bar slightly above the member when the handle is turned down on that side so long as the arm 45 is raised out of the slot 47. In fact, such a slight bend as 51 in both ends 41 and 42 of the handle, one turned one way and the other the other, may act as stops to raise the handle slightly above the member 10 when in the down position on both sides of the pivot.

As shown in Figs. 10, 11 and 12, the bottle case, as is usual, may comprise the shallow, rectangular, open-top box, frame or crate having sides 55, ends 56 and bottom 57, the ends having handholds 58 therein by which the case is lifted and carried about. Suitable division strips 59 are secured within the case to divide the same into separate compartments for the individual bottles which may fit therein more or less snugly.

Fig. 10 shows a plan view of a case of usual size with the carriers applied to the bottles therein, there being four of the carriers to the case. The apertures in the carriers correspond to the normal positions of the bottles in the case, so that the same may be placed over the heads and necks of the bottles and be closed and locked thereon without displacement or disturbance of the bottles in their natural and normal positions in the case. The bottles in the case are thus steadied and relatively supported by the carriers. The carriers, while preferably of a size to permit a small clearance from each other at their edges, substantially cover the area of the case, and in the event of side thrusts may engage and support each other and thus tend to distribute the effect thereof over all instead of a few bottles.

In stacking the cases on each other, as in Fig. 11, the bottoms of the cases rest on the tops of bottles in the cases below. For this reason it is desirable that the handles do not rest on the caps, which might be dented or otherwise injured thereby. In this arrangement, that is avoided by permitting the handles to be turned down without resting on the tops of the bottles. But the carriers do steady the bottles in their cases and add to the stacking quality thereof.

Further description of the operation of this form of the invention is thought unnecessary. The construction and operation is the same as described for the first form except in the respects noted, and need not be repeated.

While as shown and illustrated the carrier is adapted to handle only six bottles, it will be understood that the number may be varied as desired, suitable provision being made therefor. Various other 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 foregoing and the appended claims.

I claim:

1. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, the upper member having handle hinge lug openings therein, handle hinge lugs on the lower member projecting through said openings and cooperating therewith to limit the members in their relative sliding movements, and a handle bail hingedly secured to said lugs for carrying the body and its load and preventing disassociation of the members.

2. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, the upper member having guide and stop slots therein, hinge lugs on the lower member projecting through said slots and cooperating therewith to guide and limit the members in their relative sliding movements, and a handle bail hingedly secured to said lugs and preventing separation of the lugs and slots and affording means for carrying the body and its load.

3. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, the upper member having other openings therein, hinge lugs on the lower member projecting through said openings and cooperating therewith to limit the members in their relative sliding movements, and a handle bail pivoted to said lugs outside the upper plate and extending outwardly therefrom in carrying position and swingable down alongside the plate out of carrying position, said handle preventing

separation of the lugs and openings and displacement of the members.

4. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, the upper member having other openings therein, hinge lugs on the lower member projecting through said openings and cooperating therewith to limit the members in their relative sliding movements, and a bail handle pivoted to said lugs outside the upper plate and extending outwardly therefrom in carrying position and swingable down alongside the plate out of carrying position, said handle having an extension engaging the upper member when in carrying position to lock the members in carrying position.

5. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, and a handle hingedly secured by pivots to said body and extending outwardly therefrom into carrying position and swingable down into folded position alongside the sheet and out of carrying position, said handle having a portion overlying a bottle-opening in the sheets when in such folded position and a portion engaging the body to limit the swinging of the handle toward the open carrying position, whereby in loading a bottle engages the handle and causes it to engage the body which is thereby prevented from dropping too far down on the necks of the bottles.

6. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, the upper member having other openings therein, lugs on the lower member projecting through said openings, a handle pivoted to said lugs outside the upper plate and extending outwardly therefrom into carrying position and foldable down alongside the plate out of carrying position, said handle having a portion overlying a bottle-opening through the members when folded and an extension beyond the pivot engaging the face of the upper member when the handle is slightly moved toward the carrying position, whereby the descent of the members on the necks of the bottles when loading the same is limited by the handle, and means for unblocking the outward swing of the handle to carrying position when it is desired to carry the loaded package.

7. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, a handle pivoted to said members and extending outwardly therefrom into carrying position and swingable down alongside the members out of carrying position, said handle having a portion overlying one of the bottle-openings in the members when in non-carrying position, and interlocking means between the body members and handle to limit the movement of the handle toward open position when the members are in loading position and to unlock the handle when the plates are moved to carrying position and to lock the members in carrying position when the handle is swung to carrying position.

8. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, the upper member having other openings therein, lugs on the lower member projecting through said openings, and a handle pivoted to said lugs outside the upper member and extending outwardly therefrom into carrying position and foldable down alongside the member out of carrying position, said handle having its hand-gripping portion overlying one of the bottle-openings in the members when in folded position and an extension beyond one of its pivots over the face of the upper member and engaging the same when the members are in bottle-receiving position and the handle is slightly raised toward the carrying position by a bottle extending through said opening, whereby the descent of the body on the necks of the bottles is limited in loading, said upper member having an opening to receive said extension when the members are slid into carrying position to thereby unlock the handle so that it may be swung into carrying position, said extension and opening simultaneously locking the members in carrying position.

9. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, and a handle pivoted to said members and extending outwardly therefrom into carrying position and foldable down alongside the members out of carrying position, said handle having its hand-gripping portion overlying one of the bottle-openings in the members when in folded position and an extension beyond one of its pivots for engaging one of the members when in bottle-receiving position and the handle is slightly raised toward the carrying position by a bottle extending through said opening, whereby the handle is raised to convenient gripping position and the descent of the members on the necks of the bottles is limited in loading, said member having an opening to receive said extension when the members are slid into bottle-carrying position to thereby unlock the handle to enable it to be swung into full carrying position and locking the members in carrying position, the engagement of the extension in the locking slot becoming effective susbtantially upon the said unlocking and further raising of the handle, whereby the accidental unlocking of the members by the intentional swinging of the package on the handle while being carried is prevented.

10. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, and a handle pivoted to said members and extending outwardly therefrom into carrying position and foldable down alongside the members out of carrying position, said handle having its hand-gripping portion overlying one of the bottle-openings in the members when in folded position and an extension beyond one of its pivots for engaging one of the members when in bottle-receiving position and

the handle is slightly raised toward the carrying position by a bottle extending through said opening, whereby the handle is raised to convenient gripping position and the descent of the members on the necks of the bottles is limited in loading, said member having an opening to receive said extension when the members are slid into bottle-carrying position to thereby unlock the handle to enable it to be swung into full carrying position and locking the members in carrying position, said opening for said extension having a locking seat therefor to tend to hold the handle in an upright position.

11. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, a carrying handle pivoted to said body and foldable down on top of the members, and depending sloping side edge flanges of one of said members of greater depth than the height of the folded handle and associated parts above the members, whereby the carriers may be stacked in substantially self-supporting nested piles.

12. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving and bottle-carrying positions, a carrying handle pivoted to said body and foldable down alongside the upper member, and depending sloping side edge flanges on the upper member, said flanges being of greater depth than the height of the folded handle and pivot parts above the upper member, whereby the carriers may be stacked in substantially self-supported nested piles.

13. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving or discharging position and bottle-carrying position, a handle pivotally connected to said body portion and swingable upwardly transversely of the members into carrying position and downwardly on both sides of the connection out of carrying position, and means controlled by the handle for locking said members in the bottle-carrying position when the handle is in the carrying position and in one non-carrying position and for unlocking the same when in the other non-carrying position.

14. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving or discharging position and bottle-carrying position, and a handle pivotally connected to said body portion and swingable upwardly transversely of the members into carrying position and downwardly on both sides of the connection out of carrying position, said handle having a portion engaging said members to lock them in bottle-carrying position when the handle is in the carrying position and when swung down into one of its non-carrying positions and unlocking said members when swung down into its other non-carrying position.

15. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving or discharging position and bottle-carrying position, a handle pivotally connected to said body portion and swingable upwardly transversely of the members into carrying position and downwardly on both sides of the connection out of carrying position, and an extension on the handle, said members having connected locking apertures therein engaged by the said extension when the members are in bottle-carrying position and the handle is out of one of its non-carrying positions, whereby to lock the members in bottle-carrying position except when the handle is in the said non-carrying position.

16. A bottle carrier comprising a body portion for supporting bottles by their necks or rims, the body portion including apertured upper and lower members of sheet material slidably adjustable one relative to the other into bottle-receiving or discharging position and bottle-carrying position, a handle pivotally connected to said body portion and swingable upwardly of the members into carrying position and downwardly adjacent the members out of the carrying position, the bottle apertures in said members corresponding to the location of the bottles in their handling case and the members being limited in size substantially to the area covered by the group of bottles to be carried thereby, whereby the carrier may be applied to the bottles in the case, and a lock for the members operated by the handle to lock said members in carrying position on the bottles when the handle is swung down on one side and also when swung upward to the carrying position, whereby the carrier may be locked on the bottles in the case and while carrying the same thereafter.

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