April 27, 1954 W. RAPHAEL 2,676,836

BOTTLE CARRIER

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Fig. 1.

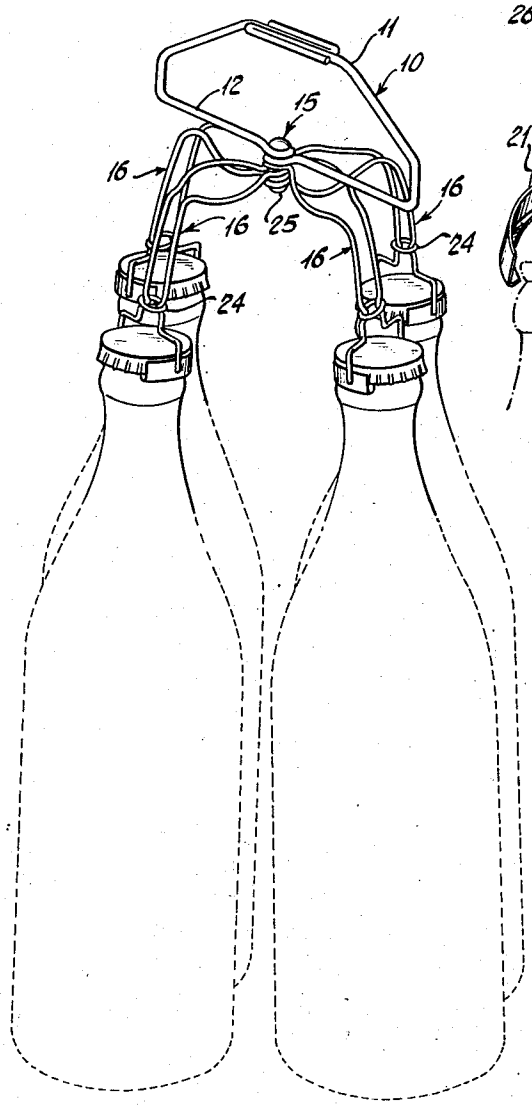


Fig. 2.

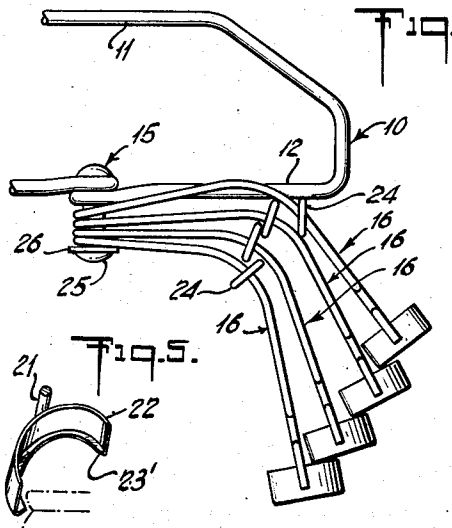


Fig. 5.

Fig. 3.

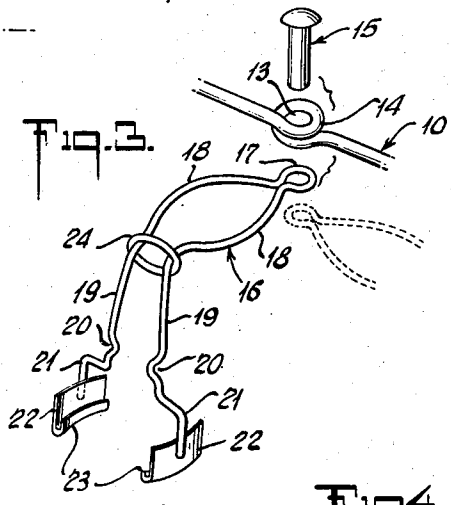
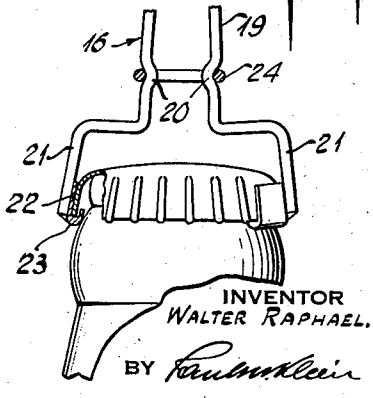


Fig. 4.



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BOTTLE CARRIER

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6 Claims. (Cl. 294—87.24)

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This invention relates broadly to carrying devices and particularly pertains to bottle carriers, and is especially adapted for carrying bottles provided with bottle caps.

The principal object of this invention is to provide an effective, simple, inexpensive device of this kind which will permit a quick and simple association with the neck portions of several bottles when so desired to permit their carrying, the device being so arranged that when not in use for carrying bottles it may be collapsed in nested position to be placed in a pocket or the like.

Another object of this invention is to provide a bottle carrier made substantially completely from wire formed in a simple, inexpensive manner, and wherein the handle-accommodating structure of the carrier constitutes what may be termed a flattened loop having upper and lower portions, and with which lower portion are rotatably associated individual bottle-engaging elements made of resilient wire, and which elements are so arranged that they are superimposed upon one another, that they may be placed to any desired position in respect to one another and that they may be nested one on top of another in one plane, in which latter also the hand-accommodating structure lies so that the entire device may be collapsed to a compact form to be placed into a pocket or the like when not in use.

A further object of this invention is the provision of a bottle carrier having a looped hand-accommodating structure composed of upper and lower portions, and wherein the lower portion is provided with an aperture for accommodating a suspension member, with which latter are rotatably associated a plurality of individual bottle-engaging elements in such a manner that they may be angularly positioned relative to one another and that they can be nested in a single plane, and wherein each of the elements comprises an independent unit made of resilient wire, each unit being provided at one end with a loop for accommodating said suspension member, while at its other end are provided bottle gripping jaws, these elements having two symmetrical legs which are normally adapted to spread from one another, and wherein means are provided to draw these legs together for gripping the neck end of a bottle.

The foregoing and other important objects and advantages of the present invention will become more fully apparent from the ensuing description, in conjunction with the accompanying drawing, wherein:

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Fig. 1 is a perspective view of a bottle carrier in accordance with the present invention, and shown in a position of suspending four bottles;

Fig. 2 is a side view of the device with portions of the handle broken off but with the individual bottle carrying elements shown in nested relation to one another;

Fig. 3 is a diagrammatical perspective view of the principal constituents of the bottle carrier;

Fig. 4 is a fragmental detail view showing one form of the gripping jaws of the bottle-engaging element in a position suspending a bottle by the bottle cap; and

Fig. 5 is a fragmental detail view of another modified form of the gripping jaws of a bottle-engaging element with the bottle-engaging ledge formed differently from that shown in Fig. 4.

In the drawings numeral 10 denotes the handle or the hand-accommodating structure of the device, which constitutes a substantially loop shaped, one-piece member having an upper flattened hand grip portion 11 and a lower portion 12. In the lower portion there is provided an aperture 13, see Fig. 3, which aperture is formed, when the handle is made from wire, by a simple full loop 14. Through this loop or aperture 13 passes a pin 15, preferably in the form of a rivet, or may be substituted by a screw or any other suitable instrumentality, not shown, the latter constituting the suspension member for the individual bottle-engaging elements indicated at 16.

These elements, an example of which is clearly seen in Fig. 3, are preferably made of resilient wire. At one end of the wire structure there is provided a loop 17 for accommodating suspension member 16, and from that loop extend two symmetrically arranged bowed portions 18, normally assuming, as shown in Figs. 1, 2 and 3, a substantially horizontal position. From these bowed-out portions 18 there extend downwardly and angularly two substantially straight leg portions 19, at the ends of which are provided oppositely disposed indentations 20, and depending from these indentations extend downwardly gripping arms 21 provided with bottle gripping jaws 22. These gripping jaws preferably comprise curved, substantially vertical strips, the curvature of which corresponds to that of the usual bottle cap. The lower edges 23 of the gripping jaws are directed inwardly and may either assume channel-shaped forms, as seen in Figs. 3 and 4, for engaging the edge of a bottle cap, or they may assume a knife-like formation 23' as shown in Fig. 5, which latter formation adapts itself to gripping either the edge of the bottle cap

or any indented portion of the bottle proper, as indicated in that figure.

In Figs. 1, 2, 3 and 4 the gripping jaws illustrated are relatively short, however, the gripping jaw seen in Fig. 5 is much longer and is intended to encircle a major portion of the bottle crown or bottle neck, and therefore the structure shown in Fig. 5 represents a preferred form of the jaw.

Operative over the straight leg portions 19 of the bottle-engaging elements is a jaw-tightening ring 24, which, when the jaws are to engage the narrow portion of a bottle or the bottle top, is brought downwardly to an interlocking position with indentations 23, whereby jaws 22 are firmly held against the bottle neck body.

When all of the individual bottle-engaging clips or elements are passed by way of their loops 17 over suspension member 15, the lower end of the latter is either formed into a head, as indicated at 25 in Figs. 1 and 2, after a washer 26 is placed under the lowermost bottle-engaging member, or, when a screw is used a nut may be secured to the lower end of suspension member 15. At any rate the ends of the suspension member must be broad enough to afford secure suspension of the individual bottle-engaging elements.

As may be observed from Fig. 1, the bottle-engaging elements may be placed in any desired position relative to one another to engage individual bottles to be carried. Obviously each of the individual bottle-engaging members is rotatably suspended from suspension member 15 and thus is rotatably suspended in respect to handle 10.

When the device is not in use it may be collapsed with the clips nested, as shown in Fig. 2, so that all of the bottle-engaging members become disposed within a single plane, which plane preferably coincides with the longitudinal center plane of handle 10.

While in the foregoing a specific structure of the instant device has been described in conjunction with the drawings, it is to be understood that changes and improvements may be incorporated therein, without departing from the broad scope thereof. Thus, for instance, the number of individual bottle-engaging elements may be increased or decreased, and the specific structure shown may be altered to facilitate more efficient production. Similar modifications may be made in the handle, which, if desired, may be produced from other material than wire, in which case loop 14 may be replaced by a simple aperture.

Changes and modifications as indicated above may be considered residing within the scope of the present invention as covered by the annexed claims.

What is claimed as new is:

1. In a bottle carrier, a one-piece, substantially loop-shaped handle having a flattened upper hand grip portion and a full loop beneath the latter, a suspension member lodged in and depending from said full loop, a plurality of individual bottle-engaging elements arranged one above the other, each of said elements having superimposed like portions formed for the passage therethrough of said suspension member so that they are rendered individually rotatable about said suspension member.

2. In a bottle carrier according to claim 1, and wherein said bottle-engaging elements comprise resilient jaw structures having a substantially horizontally disposed loop formation constituting the juncture of two cooperating jaws, said suspension member passing through the loop formation of all jaw structures so that the latter depend from said member, each of said cooperating jaws comprising a pair of substantially horizontal, bowed-out portions extending from said loop formation and substantially vertically disposed straight leg portions forming continuations of the bowed-out portions, indentations at the lower ends of said straight leg portions, and gripping arms extending from these indentations and terminating in bottle-gripping members.

3. In a bottle carrier according to claim 1, and wherein said bottle-engaging elements comprise resilient jaw structures having a substantially horizontally disposed loop formation constituting the juncture of two cooperating jaws, said suspension member passing through the loop formation of all jaw structures so that the latter depend from said member, each of said cooperating jaws comprising a pair of substantially horizontal, bowed-out portions extending from said loop formation and substantially vertically disposed straight leg portions forming continuations of the bowed-out portions, indentations at the lower ends of said straight leg portions, and gripping arms extending from the indentations and terminating in bottle-gripping members, and wherein the latter consist of curved, substantially vertical strips with inwardly and upwardly directed lower edges.

4. In a bottle carrier according to claim 1, and wherein said bottle-engaging elements comprise resilient jaw structures having a substantially horizontally disposed loop formation constituting the juncture of two cooperating jaws, said suspension member passing through the loop formation of all jaw structures so that the latter depend from said member, each of said cooperating jaws comprising a pair of substantially horizontal, bowed-out portions extending from said loop formation and substantially vertically disposed straight leg portions forming continuations of the bowed-out portions, indentations at the lower ends of said straight leg portions, and gripping arms extending from the indentations and terminating in bottle-gripping members, and wherein the latter consist of curved, substantially vertical strips with inwardly and upwardly directed lower edges, and wherein said inwardly directed lower edges of the bottle-gripping members form channels with upwardly directed inner edges.

5. In a bottle carrier according to claim 1, and wherein said bottle-engaging elements comprise resilient jaw structures having a substantially horizontally disposed loop formation constituting the juncture of two cooperatng jaws, said suspension member passing through the loop formation of all jaw structures so that the latter depend from said member, each of said cooperating jaws comprising a pair of substantially horizontal, bowed-out portions extending from said loop formation and substantially vertically disposed straight leg portions forming continuations of the bowed-out portions, indentations at the lower ends of said straight leg portions, and gripping arms extending from the indentations and terminating in bottle-gripping members, and wherein the latter consist of curved, substantially vertical strips with inwardly and upwardly directed lower edges, and wherein said inwardly directed lower edges of the bottle-gripping members form knife-like formations with upwardly directed inner edges.

6. In a bottle carrier according to claim 1, and wherein said bottle-engaging elements comprise resilient jaw structures having a substantially horizontally disposed loop formation constituting the juncture of two cooperating jaws, said suspension member passing through the loop formation of all jaw structures so that the latter depend from said member, each of said cooperating jaws comprising a pair of substantially horizontal, bowed-out portions extending from said loop formation and substantially vertically disposed straight leg portions forming continuations of the bowed-out portions, indentations at the lower ends of said straight leg portions, and gripping arms extending from the indentations and terminating in bottle-gripping members, and wherein

the latter consist of curved, substantially vertical strips with inwardly and upwardly directed lower edges, and wherein jaw-adjusting rings embrace the said straight leg portions and are adapted to engage said indentations to hold said bottle-gripping members in bottle-engaging position.

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