Jan. 1, 1952

C. G. BUTLER

2,580,995

BOTTLE CARRIER

Filed Nov. 4, 1948

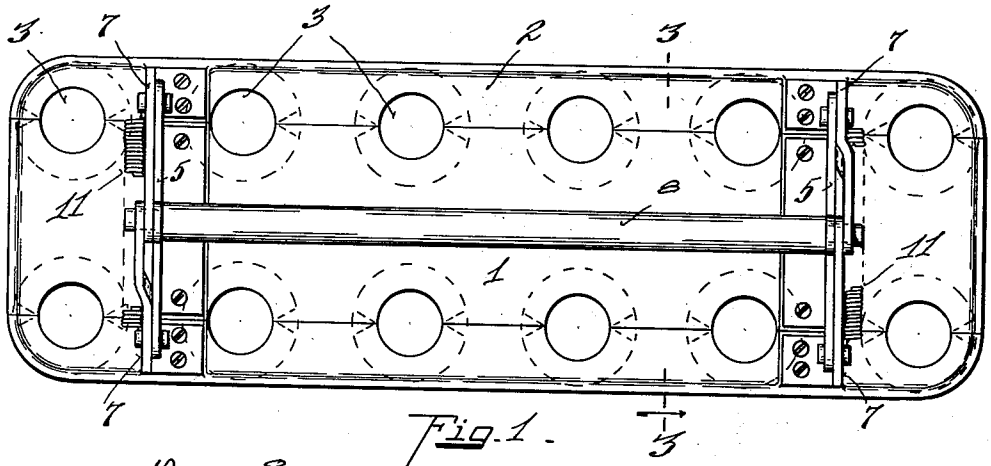

Fig. 1.

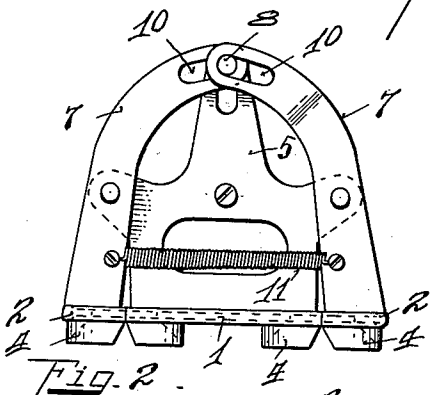

Fig. 2.

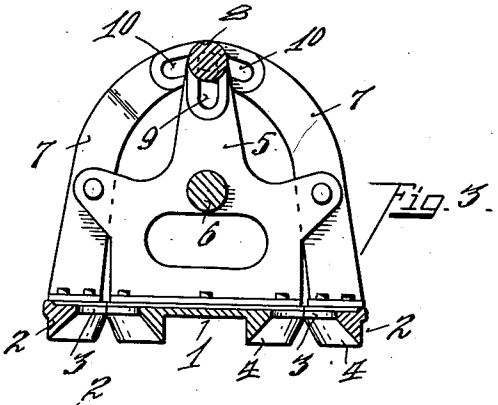

Fig. 3.

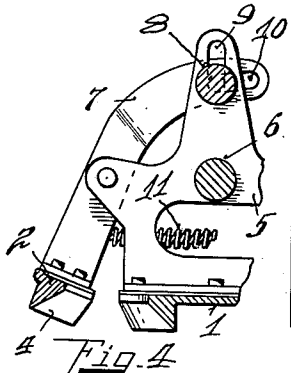

Fig. 4.

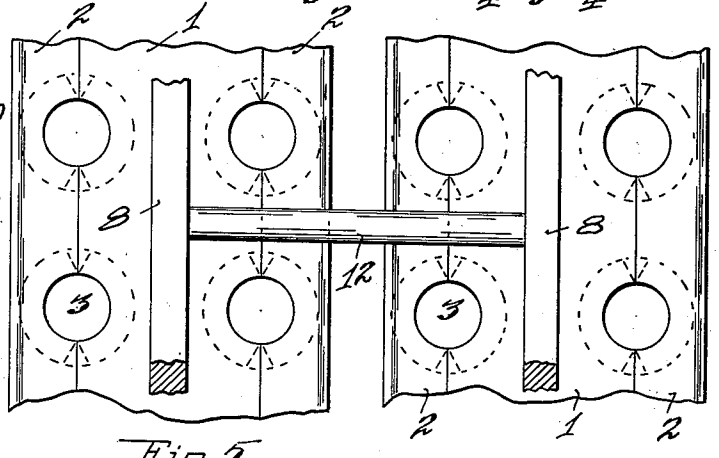

Fig. 5.

INVENTOR.

Clyde G. Butler, Deceased
Della Fay Butler, Administratrix.
By Glenn B. Kaiser
Atty.

Patented Jan. 1, 1952

2,580,995

UNITED STATES PATENT OFFICE

2,580,995

BOTTLE CARRIER

Clyde G. Butler, deceased, late of Madeira, Ohio, by Della Fay Butler, administratrix, Madeira, Ohio, assignor to Philip J. Schneider, Cincinnati, Ohio, as trustee

Application November 4, 1948, Serial No. 58,188

1 Claim. (Cl. 294—87.24)

1

This invention relates to a bottle carrier primarily adapted for lifting a group of bottles as from a conventional bottle merchandising or shipping case in which they are spacedly stationed in an upright position and carriage as for unitary transfer of the same from the case to bottle cleansing and filling apparatus or therefrom for quick and proper deposit into the case.

An object of the invention is to provide a bottle carrier whereby upon a compressive action upon the hand hold of the carrier the carrier can be manipulated for engagement about the neck of each of a series of bottles arranged in one or several parallel rows, to obtain a grasping hold upon all thereof and upon release of the pressure upon the hand hold are held against displacement from the carrier and correspondingly can be manipulated for an instant release of all of the bottles.

Another object is to provide a bottle carrier of simple and durable construction which can be readily engaged about the necks of each of a series or plurality of bottles for either their combined withdrawal from a case and carriage or for redeposit in a case, so that all of the bottles for a number contained in the case can be simultaneously handled.

Various other features and advantages of the invention are more fully set forth in and apparent from the following description of the preferred embodiment, as illustrated by the drawings accompanied herewith and forming a part of this specification, in which:

Figure 1 is a top plan view of the carrier.

Figure 2 is an end elevation thereof.

Figure 3 is a section on line 3, 3, Figure 1.

Figure 4 is a section similar to Figure 3 illustrating the handle bar depressed for making a clasping connection of the carrier with the necks of the bottles or to release the same therefrom.

Figure 5 is a top plan view of the intermediate portion of a pair of carriers adjoiningly coupled together for capacity increase.

Referring to the drawings, Figures 1 to 4 inclusive, the carrier comprises a longitudinal sectional platen, providing an intermediate stationary section 1 and a pair of hingedly mounted or laterally movable sections or jaws 2, 2, of duplicate form, respectively relatively disposed at opposite sides of the stationary section 1. The sections are combined to normally lie in the same plane.

The sections along their longitudinal line of division, are each provided with a plurality or

2

series of semi-circular recesses or cavities which for the adjoining sections coincide and are in registry to form circular apertures or openings 3, each for the reception of the neck of a bottle and to obtain a clasping hold thereon and an abutting engagement with the beaded head of the bottles to sustain the same for carriage. A semi-circular flange 4, extends or projects from the lower side of the sections, respectively for each cavity, to envelop the same, preferably of tapering form for the interior side, so that the adjoining flanges provide an annular guide to direct a bottle head end centrally thereof to project the same through the opening.

The apertures 3 are spaced and for each row, in number to correspond to the compartment arrangement of a conventional beverage bottle holding case, usually of a capacity for two dozen bottles, and the bottle carrier provides either for handling one-half or all of the number of bottles. The bottles being socketed in the case in an erect position, the carrier can be disposed thereover and easily gripped to the bottles for withdrawal from the case or alternately to deposit them within the case.

The central platen section 1, toward each of its opposite ends and cross-wise thereof has a pair of brackets 5, 5, rigidly extending laterally from the upper side thereof and interveningly are connected by a cross rod 6, extending longitudinally and centrally of the unit. The movable sections or jaws 2, 2, of the platen each has a pair of links or levers 7, 7, extending laterally therefrom, each intermediate of its length is pivotally mounted to a relative bracket 5. The levers each, are of arc-form longitudinally to terminate centrally of the unit for a coupling connection of the levers and brackets with a movable cross-rod 8, superposed and in parallelism with the stationary cross-rod 6. The movable cross-rod 8 has its opposite ends in sliding connection with the brackets 5, 5, each having an elongated perpendicular slot 9, through which a pintle formed end of the rod 8 traverses and correspondingly through an elongated slot 10, respectively in each of the opposing and overlapping ends of the levers 7, 7, operatively connecting the platen sections or jaws 2, 2.

An operator by a hand grip hold, jointly about both the stationary rod 6 and movable rod 8, upon instituting a compressive force of the hand, can shift the movable rod 8 toward the stationary rod 6, thereby simultaneously actuating the levers 7, swinging both of the jaws 2, 2, outwardly from the central section 1, a sufficient or limited

degree, to what may be termed an open or bottle head end receiving or unlatching position. As soon as the hand grip compressive force is released the movable parts are automatically returned to their normal position by a pair of springs 11, 11, each respectively having its opposite ends connected with a relative pair of opposite levers 7. Upon relieving or releasing the finger hold from the stationary rod 6 and consuming the lifting or carriage load upon the movable rod 8, the parts are securely maintained in their closed or normal position by the weight of the load so that the bottles cannot be dislodged from the carrier.

Referring to Figure 5, which illustrates the intermediate portion of a pair of carriers, each of a structure as heretofore described, combined as a unit for increased capacity. The carriers are joined or coupled together by connecting the stationary rods 6 of both carriers with a coupling bar and correspondingly by connecting the movable rods 8 with a coupling bar 12, which substitutes as hand holds for the unit for manual carriage and to actuate the movable sections or jaws of both carriers simultaneously. This compounds the number of bottles which can be gripped for carriage, as example all of the bottles of the number as packaged in a standard size of beverage bottle case. The hand hold is centralized for the carriers as a unit to provide a balanced condition.

What is claimed is:

A bottle carrier, comprising a plurality of jaws of longitudinal platen form providing a pair of outer jaws, one respectively at each of the opposite sides of an intermediate jaw common to both of said outer jaws, a pair of brackets extending perpendicular from the upper side of

said intermediate jaw joined by hand hold rod intermediate of the height of the brackets and longitudinally centrally of the intermediate jaw, a pair of of levers respectively for each outer jaw each pivotally mounted upon a relative bracket of the intermediate jaw with the free ends of the levers of both outer jaws extended inwardly for a conjoint connection with a second hand hold rod and a second hand hold rod in parallelism with said bracket connecting hand hold rod, guidingly traversing an elongated perpendicular aperture, in each of said brackets and in slidable coupling connection with free ends of said levers for unitary actuation thereof, whereupon by a single hand grasp upon both handles and compressive force thereof, the levers are actuated to simultaneously swing the outer jaws to an open position from the intermediate jaw for the reception or release of the bottles, and to obtain a clamping hold on bottles when the compressive force is released and adapting the jaws to be sustained in their closed position by a suspending hand hold upon said second hand hold rod.

DELLA FAY BUTLER,
Administratrix of the Estate of Clyde G. Butler, Deceased.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,338,652	Halvorsen	Apr. 27, 1920
1,943,004	Coppage	Jan. 9, 1934
1,974,255	Behrendt	Sept. 18, 1934
2,386,859	Hutaff, Jr.	Oct. 16, 1945