

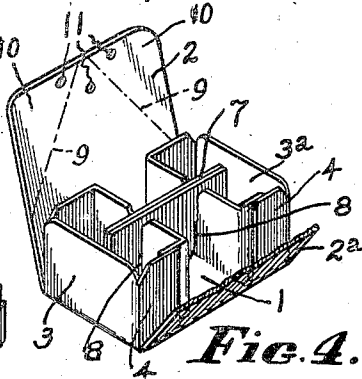
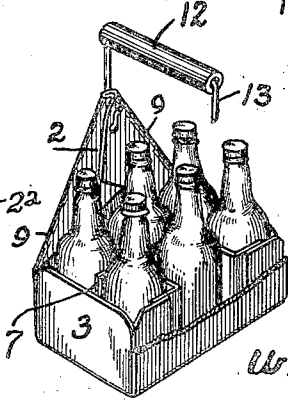
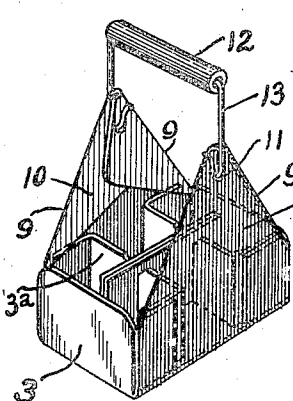
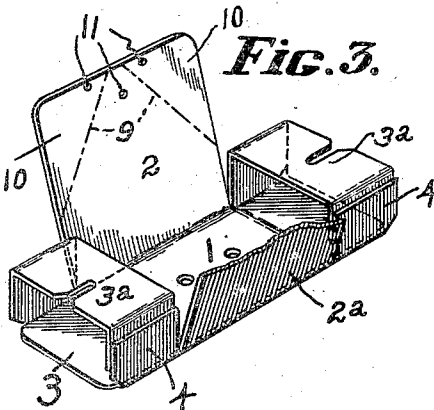
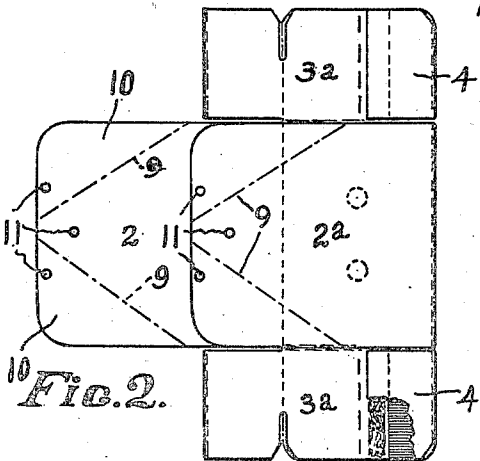
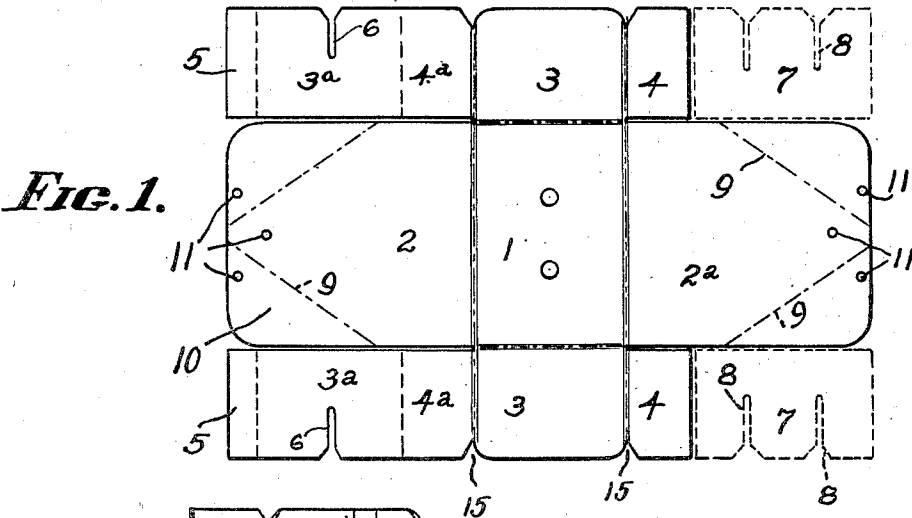
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W. A. RINGLER

2,407,798

BOTTLE CARRIER

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UNITED STATES PATENT OFFICE

2,407,798

BOTTLE CARRIER

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1 Claim. (Cl. 229—28)

1

My invention relates to bottle carriers made from paperboard and arranged more particularly to carry six bottles, with each bottle, or at least each pair of bottles provided with a pocket into which they are inserted.

It is my object to provide a carrier made of a single sheet of paperboard which can be folded and glued on high speed folding and gluing machines, such as are used for forming the ordinary carton. It is my object to provide a carrier which is made up in flat form for rapid gluing and subsequent compact shipment, which carrier has a pair of enclosures or pockets, one at each end thereof, and sidewalls independent of the pockets which are folded upwardly and equipped to receive a simple handle.

Another object is to form the structure in such a way that it can be cut from a rectangular blank, the excess in cutting out the pocket forming flaps being employed in forming partition pieces which may be inserted lengthwise of the base of the structure by notching them so as to engage the inside walls of the pockets, thus forming a central bottle spacer, as will be described.

A structure typifying the invention will be described in detail, and the novelty of the invention set forth in the appended claim, to which reference is hereby made.

In the drawing:

Figure 1 is a plan view of the cut and scored blank.

Fig. 2 is a view of the folded and glued structure in flat or knockdown form as produced.

Fig. 3 is a perspective (one sidewall broken away) of the carrier with the pockets erected but not turned in over the base.

Fig. 4 is a companion perspective to Fig. 3 with the pockets turned in over the base and the partition pieces in place.

Fig. 5 is a perspective of the carrier with the flaps of the side walls folded and the handle in place.

Fig. 6 is a perspective like Fig. 5, with bottles in the carrier and the front broken away.

The blank as shown has panels as follows: A base 1, and articulated to it by defined scores two sides 2, 2a. Articulated to the base but separated from the sides are the pocket forming panels comprising sides 3, 3a, end walls 4, 4a, and glue flaps 5. The sides 3a are notched as at 6. In cutting out the blank the remaining portions, forming extensions from the pocket forming panels, are cut away from the blank so as to provide a pair of partitions 7, 7, each having two notches 8, 8, spaced so as to bridge the space

2

between the inner walls of the two pockets when finally erected.

The blank, constructed as described, may be formed up on a folder and gluer by moving it in a direction at right angles to its length as illustrated. One way of accomplishing the folding and gluing is to depress the side panels 2, 2a, then to fold over the panels 3a and 5 on the score line defining the boundary between panels 3a and 4a, then by a spot gluer to apply glue to the flaps 5, then to fold over the panel 4, and by rollers press it against the glue surfaced panel 5. The panels 2 and 2a can then be released from depressed position and the panel 2a folded over on its score line.

The result is the flat folded structure as shown in Fig. 2. Other automatic folding and gluing sequences may be adopted.

The proportions of the structure are such that the base is the width of three bottles, the pocket walls 4 and 4a, the width of one bottle, and the spacing of the partition notches the width of one bottle.

To set up the structure, the preferred practice is to square up the pockets as shown in Fig. 3, and turn up the side walls. Score lines 9 are formed in the sidewall panels of the blank in an angle, tapering to the margins of said panels to provide two triangular portions 10 for each panel; and registering holes 11 in the triangular panels and in the margin of the main side panel portion will register when folding is accomplished as the next operation in setting up the carrier.

The handle 12 having a wire bail 13 is then mounted by inserting the ends of the bail in the holes 11. Thereupon the notched partitions are set in place with their notches engaging in the notches in the pocket walls 3a, and the structure is complete and ready for insertion of the bottles 14. The bottles may be set in place before mounting the wire bail if desired, but this is not required.

A special feature of the construction results in an interlock of the structure when erected. The pocket forming panels may be notched at 15, 15, and the diagonal score lines 9 arranged to start at the side edges of panels 2 and 2a at a distance from the bottom of these panels less than the depth of the pocket forming wall members. When the pockets are erected to the position shown in Fig. 5, the act of turning in the triangular portions 10 is to engage them over parts of walls 4 and 4a, the notches 15, at the corners of each pocket, permitting this engagement. When the handle is in place, it holds the entire structure

in locked position. This is illustrated in Fig. 5, and while not absolutely necessary, is a highly advantageous feature of my structure.

The completed carrier is strong, economical in use of paperboard, and provides six pockets, one for each bottle. The bottles are spaced from each other by the partitions which divide each pocket into two pockets, and the space between the pockets into two pockets.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

A blank for a bottle carrier formed of bendable sheet material such as boxboard, said blank having a bottom panel, end wall panels articulated thereto, said end wall panels being of sufficient depth to retain bottles against toppling, partial side wall panels articulated to each side of each of said end wall panels, a partition panel articulated to one of said partial side wall panels of each end wall panel, and an attachment flap articulated to each of said partition panels, said end wall panels together with said partial side wall panels and partition panels adapted to form a tubular structure at each end of said bottom panel when said attachment flaps are fastened

to the respective opposite partial side wall panels, said partial side wall panels being less in width than half the length of the bottom wall panel, and main side wall panels articulated to the sides of the bottom panel, and when erected with respect to the bottom panel adapted to form partial carrying elements, said tubular structures being capable of erection with respect to the bottom panel to form upwardly open pockets lying within said partial carrying elements, said pockets being closed on the bottom by said bottom panel, the depth of said side wall panels being substantially equal to the combined width of a partial side wall panel, a partition panel, and an attachment flap, so that when said blank is cut from a substantially rectangular piece of sheet material, there remain two rectangular pieces equal in depth to the partition panels and in length to a combined partition panel and attachment flap, said partition panels having inwardly extending slots, and said rectangular pieces having mating slots whereby said rectangular pieces may serve as longitudinal partition panels.

WILLIAM A. RINGLER.