Dec. 5, 1950 J. K. LAIER 2,532,725

BOTTLE CARRIER

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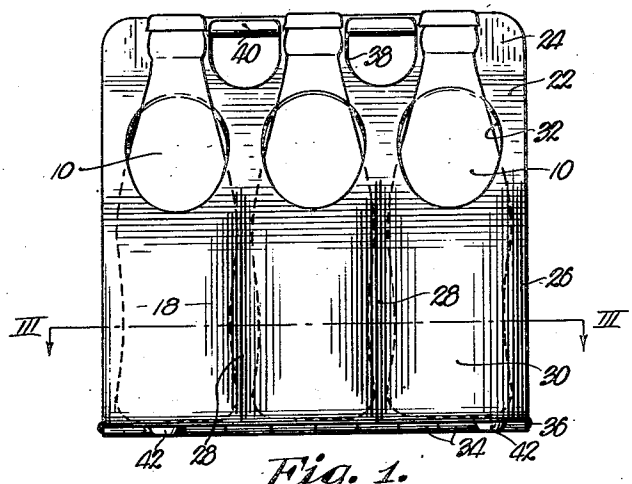


Fig. 1.

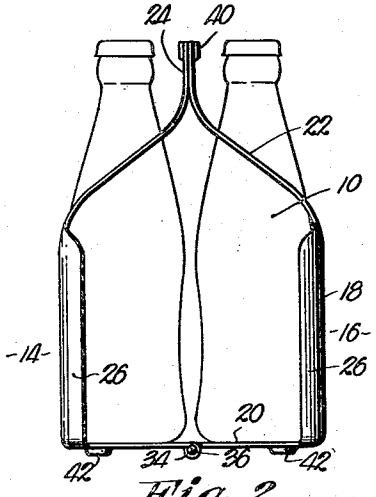


Fig. 2.

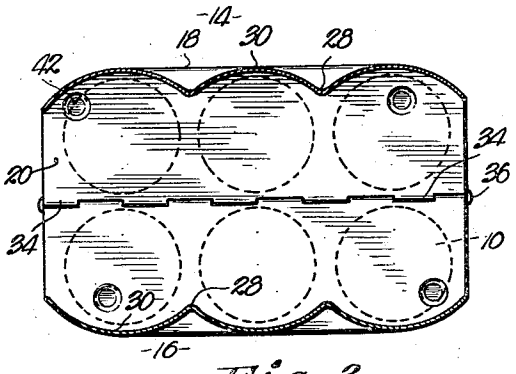


Fig. 3.

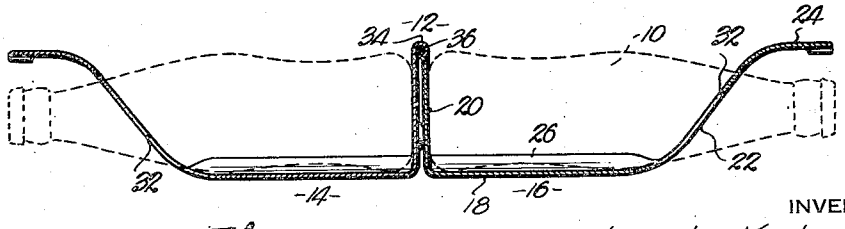


Fig. 4.

INVENTOR.

Joseph K. Laier

BY

ATTORNEY.

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BOTTLE CARRIER

Joseph K. Laier, Kansas City, Mo.

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1 Claim. (Cl. 224—45)

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The subject matter of this invention is bottle carriers and the primary object is to provide such carrying means having a pair of sections movable to and from an open condition for reception of the bottles and capable of remaining closed through the inherent nature of its formation when disposed in a normally upright position.

The most important object of this invention is the provision of a bottle carrier having a pair of identical, interchangeable sections, each having a bottom, a side, an inclined top, and a handle forming portion, the bottom walls of the sections being hinged together to permit opening of the carrier in book-like fashion.

Another important object of this invention lies in the way the same is made to permit opening thereof to a position where the opposed bottle-holding side walls thereof are in substantially the same plane when opened.

Other objects include the way offset feet are formed on the bottom, said feet serving to hold the bottom walls of the sections parallel and the side walls thereof in the same plane when the carrier is open; the manner in which the sections are balanced to meet at their tops on a median plane through the hinge; and the way in which the inclined portions of the side walls receive the necks of the bottles as they stand upright on the bottom of the carrier.

Other objects will be made clear as the following specification progresses, when taken with the accompanying drawing, wherein:

Fig. 1 is a side elevational view of a bottle carrier made in accordance with my present invention.

Fig. 2 is an end elevational view thereof.

Fig. 3 is a cross sectional view taken on line III—III of Fig. 1; and

Fig. 4 is a cross sectional view taken transversely through the bottle carrier, showing the same in the open condition.

In the drawing, the carrier illustrated will accommodate six bottles designated by the numeral 10, of the kind conventionally employed to contain soft drinks and like beverages. Obviously, the principle involved may well be utilized to form a carrier capable of receiving a greater or lesser number of bottles and with slight changes would be adaptable to carry bottles or other containers having differing sizes, forms and shapes from the bottles 10 herein chosen for illustration.

The bottle carrier per se is broadly designated by the numeral 12 and constitutes a pair of sections 14 and 16 that are identical in every way to eliminate "lefts" and "rights" in manufacture,

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therefore, but one of the sections 14 and 16 will hereinafter be described in detail. The material from which sections 14 and 16 are made is preferably chosen from relatively stiff, sheet stock such as one of many light, strong metals, plastic or other substances capable of withstanding wear and adaptable for mounting thereon a hinge assembly, as hereinafter set forth.

A side wall 18 has extending laterally from one edge thereof, a wall 20, which, when placed in use, constitutes a part of the bottom of the carrier 12. Extending laterally from side wall 18 in opposed relation to wall 20 and at an incline outwardly from wall 20 is a top wall 22. At a point substantially equal in distance from wall 18 as the outermost free edge of wall 20 is spaced from wall 18, this inclined top 22 is again bent laterally to present an outermost free marginal edge 24 that is substantially parallel to side wall 18.

Each of the side edges of the wall 18 has a relatively narrow flap 26 that is slightly curved in cross section, to conform to the contour of the proximal bottle 10 when the latter is placed in carrier 12. As clearly shown in Figs. 1 and 3, side wall 18 is pressed inwardly as at 28 between pairs of bottles 10 to present arcuate portions 30 that conform to the bottles 10. These inwardly pressed portions 28 extend at their maximum substantially midway between wall 20 and the lowermost edge of the inclined wall 22. From said point of maximum projection inwardly, the portions 28 each taper outwardly in opposite directions as the normally uppermost and lowermost edges respectively of wall 18 are approached.

A plurality of oblong openings 32 are formed in the inclined top wall 22 for receiving the necks of bottles 10 as the same rest on the innermost face of the wall 20. The outermost free edge of the bottom wall 20 has a number of spaced hinge barrels 34 formed thereof, and when these edges of the bottom walls 20 of sections 14 and 16 are brought together in relative abutting relation with their barrels 34 alternately disposed, a hinge pin 36 is passed therethrough and the ends thereof riveted or otherwise formed to hold pin 36 in place.

When the sections 14 and 16 are swung on hinge pin 36 to the closed position shown in Figs. 1 to 3 inclusive, the portions 24 of the sections 14 and 16 will lie flatly together on a central plane between the two rows of bottles 10 and through the hinge pin 36. Two pairs of aligned openings 38 are stamped in the portions 24 of each section 14 and 16 to present a handle for the hand of the operator of carrier 12. A por-

tion 40 of the material stamped from portions 24 to form openings 38 is bent upwardly upon itself to present a smooth, rounded surface at the uppermost edge of the openings 38.

A pair of feet 42 are stamped outwardly in the wall 20 of each section 14 and 16, their length being at least as great as the distance which the hinge barrels 34 extend below walls 20. Thus when the carrier 12 is standing upright as shown in Figs. 1 and 2, feet 42 will rigidly support the same without interference by the hinge barrels 34.

Also, when the sections 14 and 16 are swung outwardly from each other to the open position shown in Fig. 4, these feet 42 will hold the sections 14 and 16 in a position where their walls 20 are spaced apart and substantially parallel, and their side walls 18 in substantially the same plane. In this position the bottles 10 are easily inserted or removed from the openings 38, and when in the upright position the weight of the bottles 10 will hold the sections 14 and 16 closed and their portions 24 together.

The feet 42 of section 14 are offset with respect to feet 42 of the section 16, to the end that all these feet 42 will contact a flat surface of the opposing wall 20 when the carrier 12 is open. The relative positions of the feet 42 are inversely the same however on each section 14 and 16 to the end that these sections remain identical.

It will now be seen that in addition to producing a very strong and durable bottle carrier, I have also produced a device that may be conveniently and easily used, yet inexpensive to manufacture.

While I have described the preferred combination and construction of parts deemed necessary in materializing my invention, I wish to comprehend all substantial equivalents and substitutes which may be considered as fairly falling within the scope of my invention.

Having thus described the invention, what I

claim as new and desire to be secured by Letters Patent is:

A sheet metal bottle carrier comprising a pair of opposed, identical sections, each including a bottom wall, a side wall perpendicular to the bottom wall, a top wall extending inwardly and upwardly at an angle from the uppermost edge of the side wall in overlying relationship to said bottom wall, and a partition wall extending upwardly from the uppermost edge of the top wall and disposed within a plane parallel with the side wall and passing through that edge of the bottom wall opposite to the side wall, said walls all being integral, said side wall being undulated to present a number of elongated, side-by-side, concavo-convex bottle-receiving portions, coextensive in length with the height of the side wall; a bottle-receiving opening formed in said top wall for each of said portions respectively; a hinge joining said edges of the bottom walls of the sections, said partition walls being normally in face-to-face engagement and having aligned, hand opening formed therein; and feet on said bottom walls, cooperable with said hinge in supporting the carrier, the feet of one bottom wall being offset with respect to the feet of the other bottom wall whereby said sections are swingable to and from a position with said bottom walls parallel.

JOSEPH K. LAIER.

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