

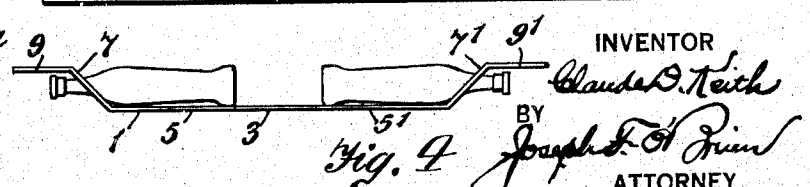
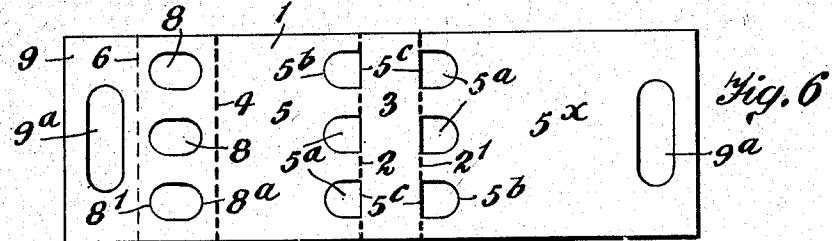
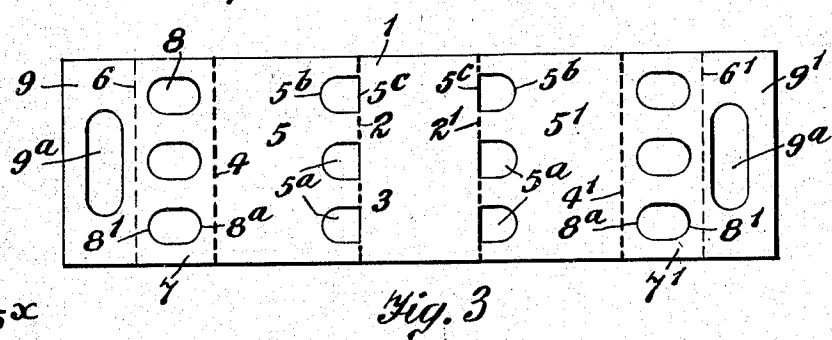
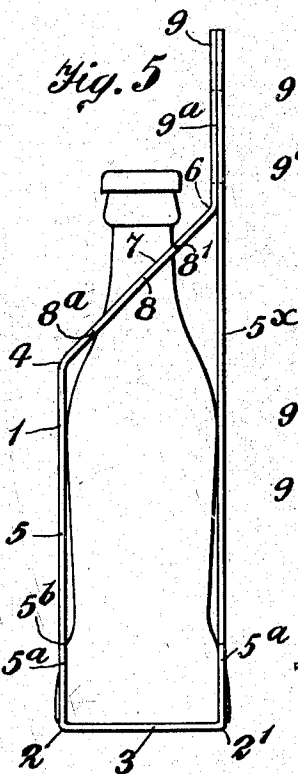
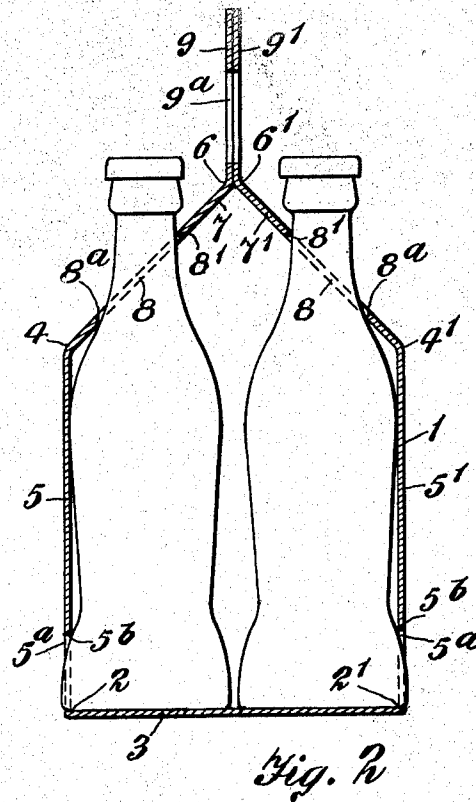
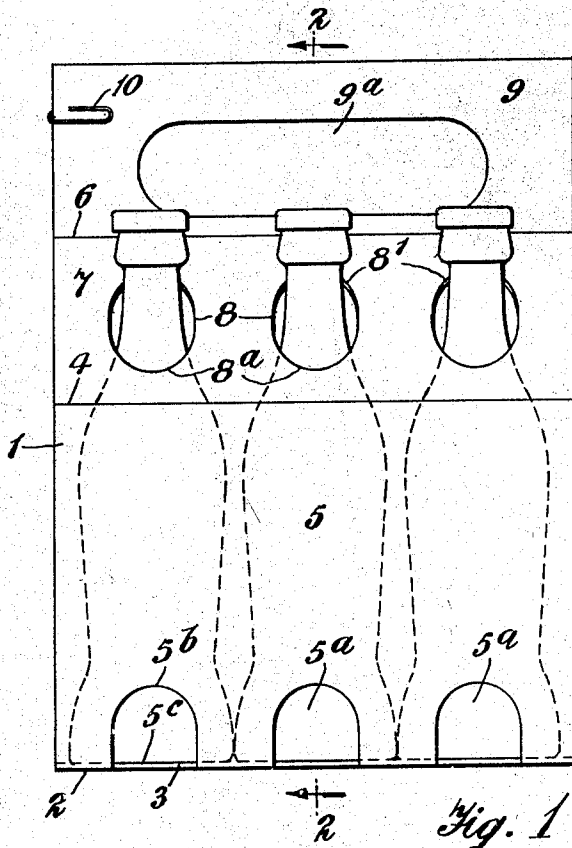
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BOTTLE CARRIER

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BOTTLE CARRIER

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3 Claims. (Cl. 224—45)

This invention relates to improvements in bottle-carriers.

One of the objects of this invention is to provide a bottle-carrier in which the lifting and carrying strain of the load is partially taken up at the neck of the bottle or bottles carried and a portion of the weight of the load is carried by the upper part of the carrier adjacent to the handle portion.

Another object of my invention is to produce a carrier in which the strain due to lifting and carrying the load will cause a movable member, preferably comprising an integral hinged portion of a bottle-carrying carton, to engage and grip the neck or necks of the bottle or bottles carried, relieving stress on the bottom of the carrier or carton and enabling a carton having walls of a given strength to carry relatively greater weight.

Another object of my invention is to arrange at the upper portion of a carrier or carton, a tiltable member, or members, operable by the lifting and carrying strain of the load, and preferably comprising an integral member having a hinged connection with the carrier carton body, and provided with means engageable upon such movement with the opposite sides of the neck of the bottle.

Another object of my invention is to provide a bottle-carrier or carton which will permit the display of the bottled goods carried thereby.

Another object of my invention is to utilize as the bottle engaging or gripping means the edges of an aperture or apertures, preferably of elongated elliptical shape, formed in the tiltable member or members to permit insertion and projection of the neck of the bottle therethrough, preferably when the carrier or carton is in substantially flat position and being thereafter movable by tilting of the tiltable member into engagement with the neck of the bottle upon the lifting of the carrier or carton.

Another object of my invention is to provide handle portions for the carrier or carton and to position such handle portions so as to prevent contact and grinding between edges of bottles within the carton when two rows are carried therein.

Still another object of my invention is to provide in a carton construction a carrying handle comprising a pair of integral abutting and vertically-disposed flange portions having a hinged connection with the sides of the carton and provided with registering hand apertures, said flanges being arranged to transmit the strain of

lifting and carrying the load to the said tiltable members.

Still another object of my invention is to provide a carton of the character described which will be formed from a single strip of flexible material such as paper or pasteboard having internal parallel creases suitably spaced apart to provide hinged connections between a carton-bottom and side walls, an additional internal parallel crease or parallel creases at the neck of the bottle to provide a hinged connection or connections for an integral neck-gripping member or members, and an external parallel crease spaced from the neck crease or creases to provide a connection or connections for a carrying flange or flanges.

With these and other objects in view, the invention comprises the combination of members and arrangement of parts so combined as to co-act and co-operate with each other in the performance of the functions and the accomplishment of the results herein contemplated, and comprises in one of its adaptations the species or preferred form illustrated in the accompanying drawing, in which:—

Fig. 1 is a side elevation of a carton completely erected embodying my invention;

Fig. 2 is a section on the line 2—2 of Fig. 1 looking in the direction of the arrows;

Fig. 3 is a view in plan of a strip of paper cut and creased to form a double row carton shown in Figs. 1 and 2;

Fig. 4 is an end elevation showing the carton in loading position and having the end flanges bent up to receive the necks of the bottles;

Fig. 5 is an end elevation of a single row carton embodying my invention;

Fig. 6 is a strip of paper creased and apertured to permit erection of the carton shown in Fig. 5.

Referring now to Figs. 1 to 3 of the drawing, which illustrates a preferred embodiment of my invention, 1 indicates a strip of relatively rigid and creasable material suitable for erection into a bottle carrier or carton for double rows of bottles and preferably is composed of pasteboard or reinforced paper. This strip is provided at its middle portion and on its inner surface with parallel creases 2—2' adapted, when the material is bent at right angles along the same, to provide a bottom 3 for the carton, and side-wall sections 5—5' having hinge or foldable connections therewith and bendable at right angles to the bottom section, thus jointly forming, what I shall term, the body of the carton.

The said strip 1 is, in the form illustrated, provided at opposite sides of the bottom creases 2—2' and also on the inner surface, with parallel creases 4—4'. These creases are positioned to limit the length of the wall sections 5—5' to a height less than the length of the bottle to be carried and preferably to a height extending to a point below the neck of the bottle, and also to provide a hinged or foldable connection between the walls or body of the carton and neck-engaging members or sections 7—7', bendable again in the same direction and in the form illustrated being bent in an inclined plane relatively to the wall sections. The widths of the members or sections 7—7' will be determined by parallel creases 6—6' depressed in the opposite or external surface. The neck-engaging members 7—7' each have elliptical longitudinal-extending bottle-insertion apertures 8 through which the top of the bottle is adapted to be projected and the upper and lower edges 8'—8a of which are adapted to abut against opposite sides of the bottle. It will be noted that the said members 7—7', having a hinged connection with the carton body are, when the carton is lifted, tilted or swung about the hinged connection and in such tilting, the inner surface of the lower portion 8' of the rim of the aperture abuts against the outer surface of the bottle to be carried, and the outer surface of the upper portion 8a of said aperture will engage the opposite side of the bottle and the stress of lifting and carrying the load will cause a pinching, gripping or clamping pressure to be applied at opposite sides of the neck of the bottle, thus greatly assisting in carrying the load, relieving the stress of the weight of the load on the bottom of the carton, and holding the bottle in place in the carton.

Any suitable handle may be applied to the top of the neck-engaging sections 7—7' and in the preferred embodiment of my invention shown, I utilize an integrally-formed handle comprising terminal sections 9—9', each of which is provided with a hand aperture 9a, and these flanges are connected to said members by providing external creases 6—6' in the strip. These handle sections 9—9' abut against each other and the apertures 9a therein register with each other to provide a hand-hold or handle for carrying the carton.

In the preferred embodiments of my invention illustrated, the lower edges of the wall sections 5—5' are provided with apertures 5a having upper rounded top portions 5b and flat base portions 5c registering with the creases 2. An aperture or window is thus provided which is adapted to permit projection therethrough of a portion or segment of the base of the bottle, so that when the carton is lifted and carried, the bases of the bottles will be held against outward shifting. These apertures or windows 5a thus cooperate with the neck apertures in aligning and locking the bottles in fixed position within the carton so as to eliminate the necessity of providing end walls for the carton, it being understood that even when the carton in carrying is raised and turned on its end, the bottles will be securely retained in place within the same.

In Figs. 5 and 6 of the drawing, I have shown a modified form of my invention in which instead of providing a carton capable of carrying two rows of bottles, I have shown a carton for carrying a single row of bottles. This modified form of my invention is in all respects similar at one side or wall to the carton described herein-

above, being provided with similar creases and sections which are indicated in the drawing by similar reference characters, the bottom creases however being closer together. The opposite wall 5x is straight and vertical, the member 7' being omitted, and is preferably provided at its lower end with base-engaging apertures 5a, and at the upper end said wall is provided with a hand aperture 9a registering with the similar hand aperture in the abutting flange or handle section. In operation, the last mentioned carton will carry bottles in substantially the same manner as the double-row carton hereinabove specified.

It will be seen from the above that I have provided a carton in which the neck of the bottle is engaged with a clamping grip by the opposite surfaces of the neck engaging member or section, and that in view of this fact, the bottles are not only carried with less stress on the bottom portion of the carton than has heretofore been the case, but the carton may be filled and opened up expeditiously. In loading the carton, the bottom portions 3 and the wall portions 5—5' of the carton are permitted to lie flat and the creases 4—4' which are preferably blunt creases are first formed in the carton and the upper sections 7 are bent at an incline to the balance of the wall and bottom section. The two rows of bottles are then passed through the neck apertures and the handles of the carton are then raised and brought together which causes the bottles to be moved into upright position and to be held in that position. A release of the double handle and outward movement thereof will cause a lying down of the bottles. In other words, the carton is opened and closed like the leaves of a book and in case of a double row carton, when opened, three bottles will rest on one side wall in horizontal position and the other three bottles will rest on the wall section at the opposite side of the bottom portion, the creases 2—2' during this opening and closing movement performing the function of hinges. If desired the flat handle sections may be provided with a fastening clip 10 or the like to retain the same in closely abutting position and thus add to the neatness of the carton though such a clip is not otherwise necessary because the bottles will retain the side walls in vertical position and also hold the carrying flanges in loose contact.

Having described my invention, I claim:—

1. A bottle-carrier embodying, in combination, a carton comprising a strip of flexible material creased to provide a carton body having a middle part forming the bottom of the carton and side members extending oppositely from said middle part and foldable upwardly to form side-walls of the carton at the lower portions of said side members and upper portions at least one of which forms a bottle neck-engaging section bendable into inclined relationship with said side-wall parts and in erected position extending across the necks and meeting the opposite side member along a line below the tops of the bottles carried in the carton, said neck-engaging section having neck-gripping apertures the entire area of which is positioned below said meeting line and is spaced from the bottom of the carton a distance less than the height of the bottles to be carried, said neck-gripping apertures in carrying condition of the carton having top and bottom edges engaging opposite surfaces of the necks of the bottles below the tops thereof, while the carton bottom abuts against the bottle bottoms, said engagement of the apertures providing a gripping contact of

the said edges of the neck-gripping apertures with necks of the bottles to cause a part of the weight of the bottles to be carried by said neck-engaging member, and said strip also having its free ends provided with hand-engageable means for carrying the carton.

2. A bottle-carrier embodying, in combination, a carton comprising a strip of flexible material creased to provide a carton body having a bottom part for engaging the bottoms of two rows of bottles and side members extending oppositely from said middle part and foldable upwardly to form side-walls of the carton at the lower portions of said side members and the upper portions of both of said side members being creased to provide bottle neck-engaging sections extending in erected position of the carton toward each other across the necks of the rows of bottles being carried and having meeting edges disposed between the rows of bottles at a position below the tops of said bottles, while the bottle bottoms about the carton bottom, said neck-engaging sections having neck-insertion apertures the entire areas of which are spaced from the bottom of the carton a distance below said meeting edges, said neck-insertion apertures in bottle-carrying condition of the carton having top and bottom edges engaging the necks of the bottles at opposite sides thereof and being arranged in erected condition of the carton to cause a gripping engagement by said top and bottom edges of the neck-insertion apertures with necks of the bottles and a supporting of part of the weight of the bottles, and said strip being also provided with abutting flaps connected to said meeting edges of said neck-engaging sections and having base portions positioned between and below the tops of said two rows of bottles, said flaps having registering apertures and serving as a carrying handle for the carton.

3. A bottle-carrier embodying, in combination, a carton comprising a strip of flexible material creased to provide a carton body open at opposite ends and having a middle bottom part of less width between such creases than the bottoms of two rows of bottles and side members extending oppositely from said middle part and foldable upwardly to form side-walls of the carton at the lower portions of said side members, said side-walls having, in their lower end portions, openings extending from said bottom part upwardly for the reception and locking into the carton of the lower-end portions of the bottle sides, the upper portions of both of said side members being creased to provide bottle neck-engaging sections having at their lower ends hinged connections with the side-walls, extending in erected position of the carton toward each other across the necks of the rows of bottles being carried, and provided at their upper ends with meeting edges disposed between the rows of bottles at a position below the tops of said bottles, said neck-engaging sections being tiltable about said hinged connections upon a lifting of the carton and having neck-insertion apertures the entire areas of which are positioned below said meeting edges, said neck-insertion apertures in bottle-carrying condition of the carton having top and bottom edges movable, upon a lifting of the carton and a tilting of the neck-engaging sections, into tightened engagement with opposite sides of upper portions of the bottles, and said strip being also provided with abutting flaps connected at their base portions to said meeting edges of said neck-engaging sections at a plane below the tops of said two rows of bottles, said flaps having registering apertures and serving as a carrying handle for the carton.

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