L. P. HAZEN.

BOTTLE CARRYING AND HOLDING CASE.

APPLICATION FILED JUNE 28, 1909.

1,027,049. Patented May 21, 1912.

Fig. 2

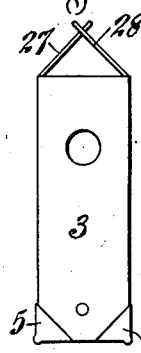


Fig. 1

Fig. 9

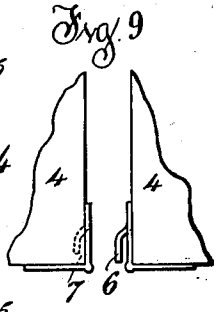


Fig. 4

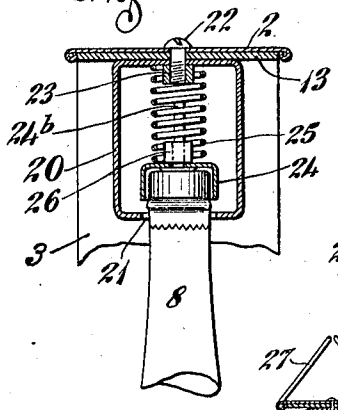


Fig. 3

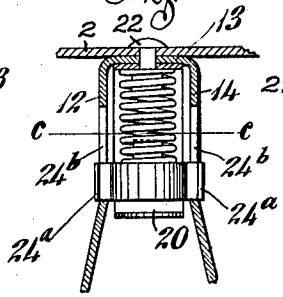


Fig. 5

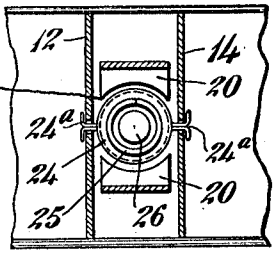


Fig. 6

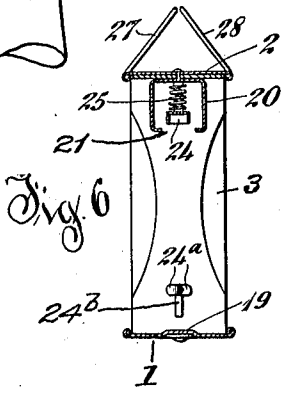


Fig. 7

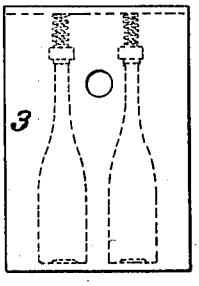
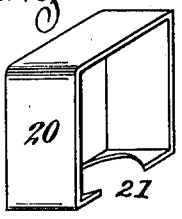


Fig. 8



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BOTTLE CARRYING AND HOLDING CASE.

1,027,049. Specification of Letters Patent. Patented May 21, 1912.

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To all whom it may concern:

Be it known that I, LEVI P. HAZEN, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Bottle Carrying and Holding Cases, of which the following is a specification.

This invention relates to bottle carrying and holding cases or boxes, or, more particularly speaking, to compartment-packages containing bottles of beer or other beverages in convenient holding and handling condition.

The object of the invention is to provide an open-sided box or casing in which the bottles are vertically supported free from tilting or rattling and easily put into and taken from place sidewise for use.

Another object of the invention is to provide an open-sided casing or holder for the bottles, whereby such bottles are exposed to view and their contents as well as labels, readily seen and determined, both for inspection and for advertising purposes.

The invention consists in certain novel features of arrangement and construction of parts of an open-sided compartment-box, whereby said above-named objects may be practically carried out in use.

The details of construction of the invention are hereinafter fully described in connection with the accompanying sheet of drawings, in which—

Figure 1 is a longitudinal elevation of my invention, showing several bottles in place, but with the remaining compartments vacant; Fig. 2, an end view; Fig. 3, a fragmentary, axial section taken on dotted-line *a*, *a* of Fig. 1, but on a somewhat larger scale and at right-angles; Fig. 4, a fragmentary, transverse section taken on the dotted-line *b*, *b* of Fig. 1, but on a somewhat larger scale; Fig. 5, a fragmentary, sectional plan taken on the dotted-line *c*, *c* of Fig. 3, transversely across the package; Fig. 6, a transverse section taken on the dotted-line *d*, *d* of Fig. 1; Fig. 7, an end elevation of the invention showing in dotted-lines the manner in which a double row of bottles is provided for, thus making the capacity of the package double that of the package seen in Fig. 6; Fig. 8, a detail, perspective view of the bottle-neck engaging-yoke forming a part of the device that supports the bottle in the package against accidental release, tilting and rattling; and Fig. 9, a fragmentary elevation showing adjacent lower corners of several boxes and the peculiar form of device used for interlocking boxes broadside for packing and handling.

In these views, an open rectangular frame, of an elongated form, is provided to form the body of the package. This frame is intended to stand on one of its longitudinal sides in use and the bottles are inserted from either side thereof. Such frame is composed of the longitudinal bottom-member 1, longitudinal top-member 2 and opposite vertical end-members 3 and 4, reinforcing corner-irons 5 being duly applied at the joints of the several members 1, 2, 3 and 4, as best seen in Fig. 1.

6 indicates a pendent or downwardly-turned hook adapted to engage a socket 7 in adjacent lower ends or corner-irons of adjacent packages, when it is intended to couple two or more of such packages broadside for handling or other desired purpose.

A narrow strip of sheet-metal is bent into partitions to form a series of compartments along the frame, each compartment being intended for use in containing a bottle. One end of the narrow strip is riveted within the lower part of the end-member 3 and then extends upward at an angle part way and then perpendicularly the remainder of the way to the top-member 2 where it is bent horizontally and thence continued downward perpendicularly to correspond to the other perpendicular bend adjacent thereto but with a suitable space intervening, and thence at an angle downward to a perpendicular portion that extends to the bottom-member 1, and thence horizontally in contact with the bottom-member 1 to another perpendicular portion, whence it extends again at an angle similar to the first mentioned angle, and so on until a series of compartments is so formed along the interior of the casing or frame to suit the number of bottles it is desired to inclose within the frame. The frame shown in Fig. 1 is adapted to contain nine bottles, two of such bottles being indicated at 8 and 9 in said Fig. 1, the bottle 9 being an inverted one

and each alternate bottle along the series in the frame being likewise inverted when in place therein.

In designating the parts or compartment formations of the narrow strip hereinbefore mentioned, 10 indicates the initial lower fastened-end; 11 the inclined member extending from the portion 10 upward; 12 the short perpendicular extension of the member 11 that extends from the latter up to the underside of the top-member 2 of the frame; 13 the short horizontal member extending from said perpendicular member 12; 14 another perpendicular member corresponding to member 12; 15 an inclined member extending downward from member 14 and corresponding to the member 11 but at a reverse inclination; 16 a perpendicular member extending from said member 15 down to the inner face of the bottom-member 1 of the frame; 17 a short horizontal member extending from member 16 in contact with the inner face of said base-member 1; and 18 another perpendicular member corresponding to member 16 and extending upward from member 17 to another inclined member 11 and progressing onward through the frame or casing to form compartments of inverted V-shape and V-shape alternately to accommodate bottles in upright and in inverted positions within said frame.

19 indicates each one of a series of depressions made in the bottom-member 1 and top-member 2 of the main-frame and designed for use in engagement with the customary socketed bottoms of the bottles and to hold the bottoms of the bottles free from shifting when in place within the frame.

20 indicates a vertical rectangular frame having an opening 21 in its lower cross-bar and attached to the top-member 2 of the main-frame by means of a screw 22, the shank of the latter passing downward through holes made in the top-member 2 and member 13 and thence into a tubing 23 in the upper cross-bar of said frame 20. These frames 20 are arranged alternately in connection with top-member 2 and bottom-member 1 of the main-frame and are adapted for use in connection with the spring-member inclosed within the short vertical members 12 and 14 and their counterparts in the series along the main-frame, at top and bottom thereof, which spring-member I will now describe.

The spring-member is composed of an inclosing cap 24 within which the upper end of the bottle freely fits, a spiral-spring 25 surmounting said cap and engaging the tubing 23 and the extension 26, the latter being centrally provided on the back of cap 24, as best seen in Fig. 4. The tubing 23 and extension 26 prevent the spring 25 becoming displaced and said spring exerts its expansive-pressure on cap 24 when the upper end of the bottle is in place within said cap and prevents any shifting or lateral movement of the bottle within the main frame or casing, or any accidental displacement. The cap 24 is made up of two semi-circular parts having extensions 24^a, 24^a that pass outwardly through the vertical slots 24^b in the perpendicular sides of the members 12 and 14 and 16 and 18 of the main partition-frame and with their ends clenched in place in said slots so as to properly hold the cap in relation to the spring 25 and allow said cap to ride freely in said slots which form guideways therefor in putting the bottles into place and taking them from place within the main-frame.

To put a bottle in place within the main-frame, its upper end is inserted in the opening 21 and then pressed into the hollow of the cap 24 against the tension of the spring 25, and then the concave bottom of the bottle is brought into engagement with the inwardly-projecting part of the metal resulting from making the depression 19 in the members 1 and 2 of the main-frame, all as best seen in Fig. 1. The bottle can be readily removed by taking hold of its lower body portion and raising it against the pressure of spring 25, sufficient to clear the elevation caused by the depression 19 and then drawing it outwardly toward the person, it readily releasing itself from its cap 24, the latter then assuming normal position within its casing 20 out of sight and, also, out of striking contact or becoming displaced.

The top-member 2 of the main casing or frame is provided midlength with a pair of handles 27, 28, both of which handles are rectangular and pivotally-connected at their lower ends to said top-member 2, the handle 27 being shorter than that 28 and adapted to pass within the handle 28 so that they can both be flatly rested on the top of said member 2 of the main-frame when not in use for carrying the device. This manner of forming and attaching the handles is of some importance for the reason that they can be folded down and out of the way of contact and at the same time permit the ready support of a number of bottle-holding devices of the same character one on the other, both in stock and in transportation.

The bottles can be arranged in single rank or double array within the main frame or casing so as to contain half-dozen or dozen lots, to suit the desired purchase, or the sizes of the bottles used. I have shown in Fig. 1 two of the compartments (to the left) as being in use containing bottles, one bottle in an upright position and the other bottle in an inverted position, and the spring-members exposed to view. The spring-members can be coupled with the outer casing or shield 20 or not, as desired, but it is pre-

ferred to use said casing 20 for the reasons hereinbefore stated when first referred to. The double row or array of bottles is shown in dotted-lines in Fig. 7, which is an end view of the device.

It will be observed that in the use of such a device as this invention supplies, the bottles are exposed to broadside view and the labels as well as contents are not hidden such as they are when in the ordinary boxes that have closed sides and compartments that conceal the labels and practically all of the contents. The condition of the contents and of the labels is readily seen at all times and the user of the contents of the bottles can readily determine what bottles he has full and which are empty, the ordinary cases having the closed sides not permitting any such ready view and inspection of the bottles and their conditions, either of contents or of labels, all of which is important and exceedingly convenient to the bottler of the goods and those that use them. The device can be readily cleaned and there are no parts thereof to become foul on account of not being readily reached at all times, and it being made entirely of metal, it is not easily worn out or broken.

I claim:

A compartment-box for holding and carrying bottles, comprising an open rectangular frame having reinforced corners, a strip of sheet-metal bent to form V-shape and inverted V-shape compartments along the interior of said open rectangular frame and attached at its opposite ends to the end walls of said frame, a spring-pressure cap mounted in the narrow portion of each compartment, a closure-frame or shield for said spring-pressure cap and inwardly-disposed projections provided in the top and bottom members of said open rectangular frame in the bottom of the broad parts of said V-shape and inverted V-shape compartments.

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