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CONTAINER PARTITION

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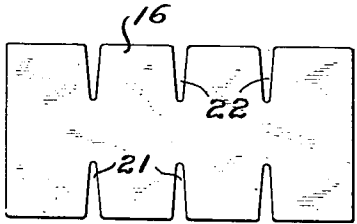
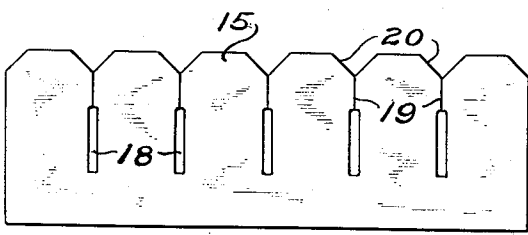
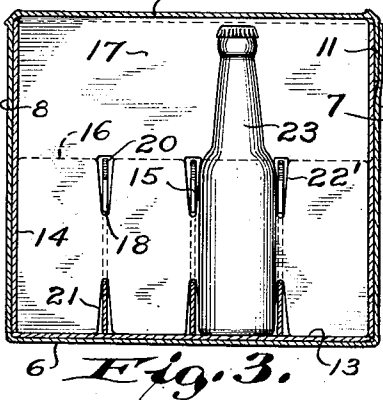
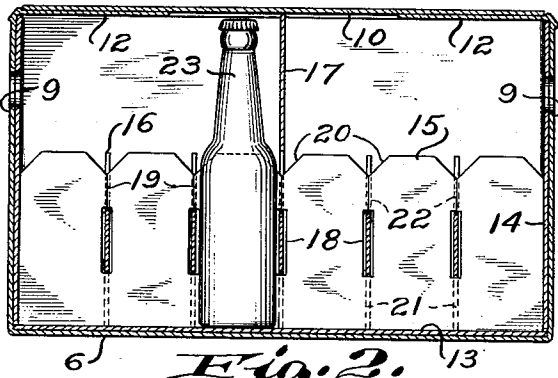
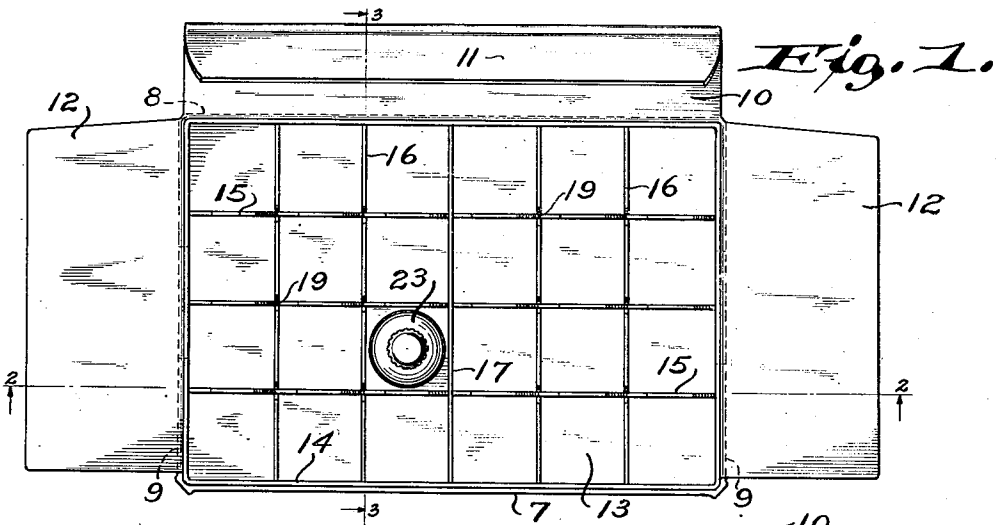


Fig. 4.

Fig. 5.

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CONTAINER PARTITION

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1 Claim. (Cl. 217—30)

The present invention relates to improvements in the construction of partitions for dividing containers or the like into segregated compartments for receiving and positioning objects such as bottles within the container.

An object of the invention is to provide an improved partition structure for containers such as boxes, which is simple in construction and highly effective in use.

Some of the more specific objects of the invention, are as follows:—

To provide a multiple compartment partition structure especially adapted for the reception and positioning of bottles or the like.

To provide a plurality of interlockable partition walls, which may be readily assembled, collapsed as a unit, or dismantled.

To provide an improved partition assembly of less height than the chamber within which it is to be utilized, which may be conveniently inserted into such chamber, and which is held against displacement when the container is inverted or tilted.

To provide an improved container partition which may be manufactured and sold at minimum cost, and which is moreover capable of re-use.

To provide a partition structure especially adapted for bottle holding receptacles, wherein the bottles are easily insertible and removable, and which will tend to protect the bottles against breakage.

To provide an improved partition assemblage which may be formed of paper or fibre stock with the aid of punches and dies, and which is compact but durable in use.

To provide an improved collapsible partition assembly, which may be quickly collapsed into condensed form, or distended for application to a box or container.

These and other objects and advantages will be apparent from the following detailed description.

A clear conception of one embodiment of the invention, and of the mode of construction and utilizing partition assemblages made in accordance therewith, may be had by referring to the drawing accompanying and forming a part of this specification in which like reference characters designate the same or similar parts in the various views.

Fig. 1 is a top view of a paper box or container having the cover thereof open, showing one of the improved partition assemblages applied therein and a bottle inserted in one of the compartments formed by the partition;

Fig. 2 is a longitudinal vertical section through the box and partition assemblage of Fig. 1, taken along the line 2—2, and the cover being closed;

Fig. 3 is a transverse vertical section through the box and partition assemblage, taken along the line 3—3 of Fig. 1, likewise showing the cover closed;

Fig. 4 is a plan view of one of the long partitions comprising the assemblage of Figs. 1, 2 and 3; and

Fig. 5 is a plan view of one of the short partitions comprising the same assembly.

While the improvement has been shown and described herein as being specifically applied to a paper box structure for housing standard beer bottles or the like, it is not intended to thereby limit the scope of the present invention.

Referring to the drawing, the paper or fibre box may be of relatively standard construction comprising a bottom 6; front and rear walls 7, 8 respectively attached to the bottom 6; end walls 9 secured to the bottom 6 and to the walls 7, 8; a cover 10 hingedly connected to the upper edge of the rear wall 8 and having a forward tongue 11; and end flaps 12 hingedly associated with the upper edges of the end walls 9. The box may be provided with a lining of corrugated paper board or the like, consisting of a bottom plate 13, and a side and end liner 14 disposed above the plate 13 and closely adjacent to the walls 7, 8, 9. When the cover 10 is closed, the flaps 12 are folded inwardly beneath the cover, and the tongue 11 is insertible between the front wall 7 and the adjacent portion of the liner 14 as clearly shown in Fig. 3, to completely enclose the receptacle or storage chamber.

The improved partition assemblage specifically illustrated, is made up of a number of long partitions 15 of identical shape and size extending longitudinally of the box, a plurality of short partitions 16 of identical shape and size extending transversely of the box, and a special short but higher partition 17 disposed centrally of the group of short partitions 16 and likewise extending transversely of the box. The partitions 15, 16, 17 may be formed of stiff paper or fibre board and may be produced with the aid of punches and dies, and subsequently readily assembled, and the partitions 15, 16 of each assemblage are of considerably less height than the storage chamber, whereas the central partition 17 is of full height.

As shown in Fig. 4, each long partition 15 is provided with a series of equally spaced parallel upright slots 18, and with slits 19 extending from the upper ends of these slots 18 to the top of the

partition. The corners 20 at the upper ends of the slits 19 may be cut away or chamfered as shown, and the upper end corners may be similarly relieved.

5 As disclosed in Fig. 5, each of the similar short partitions 16 of an assemblage, is provided with a series equally spaced parallel upright lower notches 21, and with a correspondingly spaced and disposed series of upper notches 22. These
10 notches 21, 22 may be slightly tapered as shown, and the height of the stock between the upper ends of the notches 21 and the lower ends of the notches 22, is approximately equal to the height of the slots 18 in the partitions 15.

15 As illustrated in Figs. 2 and 3, the special short partition 17 of each assemblage, is also provided with a series of lower notches 21, and with a corresponding series of upper slots or notches 22', but the upper portion of this partition 17 is
20 imperforate and extends the full height of the container chamber, or substantially the height of a bottle 23 confined within this chamber. It will be understood that one or more of these special partitions 17 may be utilized in a parti-
25 tion assembly or unit, as these partitions 17 are interchangeable with the standard short partitions 16.

In order to assemble a set or group of the partitions 15, 16, 17 into a unit, it is only necessary
30 to dispose a set of the short partitions 16, 17 with the upper ends of the lower notches 21 thereof within the detents formed by the chamfered corners 20, and to subsequently push the short
35 partitions 16, 17 downwardly through the slits 19 into horizontal alinement with the partitions 15. As soon as the solid necked portions of the partitions 16, 17 connecting the notches 21, 22
40 pass downwardly through the slits 19 and into the slots 18, these slits will spring shut to provide an inter-lock between the assembled parti-
45 tions 15, 16, 17. This inter-lock may, however, be broken by merely bending the stock at the edges of the slits 19 so as to permit upward removal of the partitions 16, 17 from within the slots 18,
but under ordinary conditions, the partition structure will remain assembled even when it is inverted.

The assembled partition structure may be readily inserted in or removed from a box such
50 as illustrated in Figs. 1, 2 and 3, by merely swinging the cover 10 and end flaps 12 out of the way and vertically displacing the distended partition assemblage as a unit. When the partitions are
55 within the container the bottles 23 are readily insertible within and removable from the segregated square compartments formed thereby, due to the fact that the partitions 15, 16 do not extend the full height of the bottles. When the cover
60 10 is closed, the central high partition 17 coacts with the cover to prevent the partition assem-

blage from moving any appreciable distance away from the container bottom 6 and liner plate 13, when the container is tilted or inverted. The bodies of the bottles 23 rather snugly fit within the compartments formed by the partitions 15, 16, 17, and by utilizing relatively porous stock in the formation of these partitions, the bottles are cushioned and thereby protected against break-
5 age.

The detents formed by the chamfered corners 10 20 of the long partitions, facilitate assembly of the improved partition structure, and the slots 18 are intentionally formed of sufficient width to permit the assemblage to be folded into flatwise condition for transportation in knocked-down
15 condition, when removed from the container. Such collapse of the structure does not release the inter-lock between the several partitions 15, 16, 17, and this inter-lock is effective regardless of whether the unit is collapsed or distended.
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From the foregoing description it will be apparent that the invention provides a partition as-
25 semblage which is simple and compact in construction, and which is moreover highly effective in use. The structure may be readily assembled, inserted within or removed from a con-
30 tainer, distended or collapsed, and re-utilized if desired. The partition unit may also be produced at minimum cost, and is effectively prevented from becoming displaced within a box to which
35 it has been applied. The improvement has proven highly successful in actual commercial use, especially in connection with the storage of standard beer bottles and the like, due to its simplicity, flexibility and efficiency.
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It should be understood that it is not desired to limit the invention to the exact details of construction herein shown and described, for various modifications within the scope of the claim may occur to persons skilled in the art.
45

It is claimed and desired to secure by Letters Patent:

A partition assemblage comprising, a set of parallel vertical partitions having vertical medial slots and upper V-shaped recesses in vertical
45 alinement with said slots and a vertical slit connecting the central portion of the upper end of each slot with the lower end of the corresponding upper recess, and a second set of parallel vertical partitions having upper and lower vertical-
50 ally alined elongated tapered notches providing central necked portions insertible in said slots through said slits, said slits normally being closed and of less width than the thickness of the partitions of said second set, and said slots and
55 notches being of considerably greater width than the notched and slotted partitions respectively to permit collapse of the unit into substantially flatwise condition.

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