Nov. 9, 1948. W. VON CLEMM 2,453,286

BOTTLE CONTAINER

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Fig. 3.

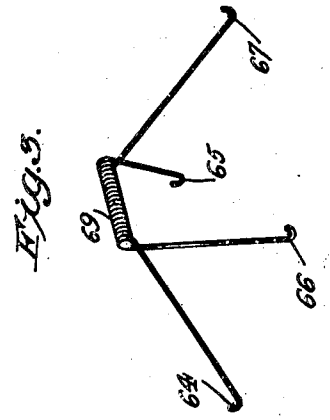


Fig. 1.

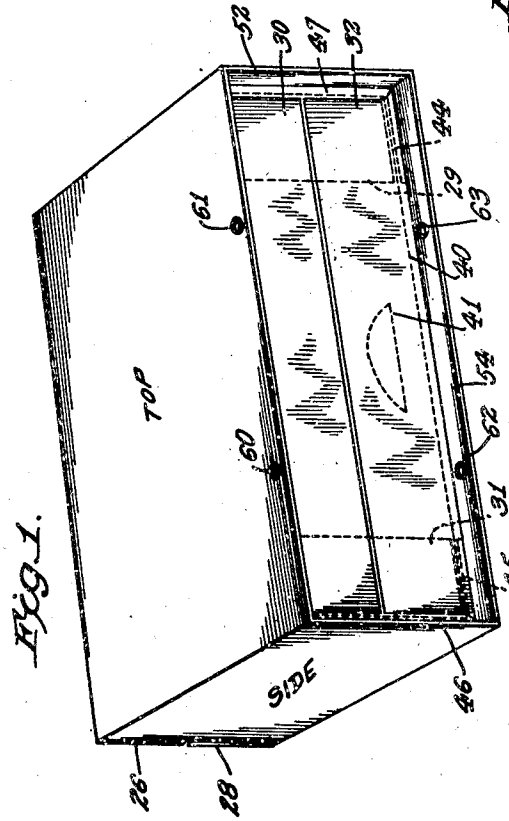
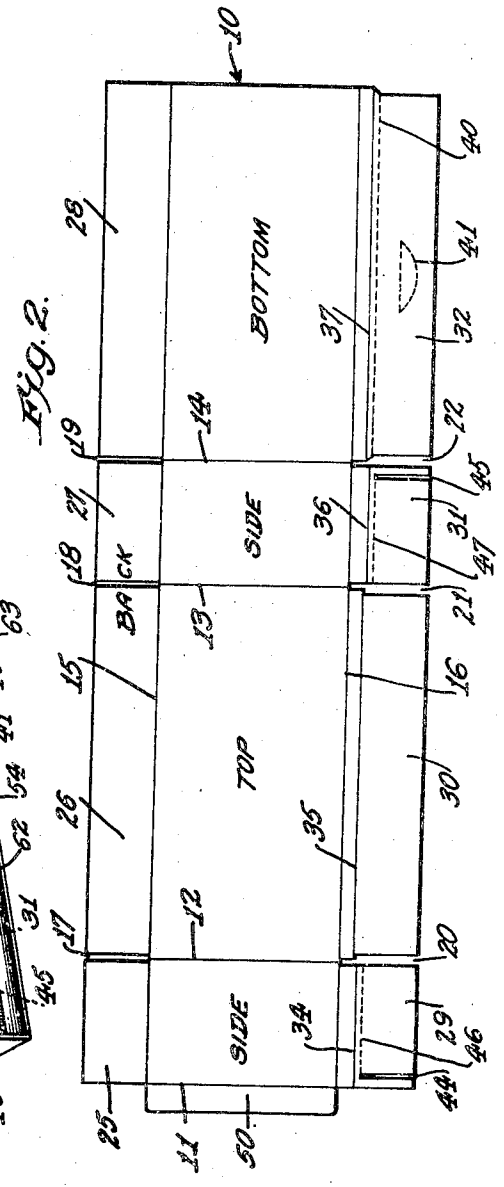


Fig. 2.



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BOTTLE CONTAINER

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2 Claims. (Cl. 229—17)

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This invention relates to bottle cartons, and more particularly to shipping cases of that character for the packing, transportation, storage and display of wines and spirits.

When wine bottles are packed in wooden boxes, they are generally laid flat in layers with straw or paper packing therebetween, and a flat cover nailed down thereover, which must be pried off to unpack the bottles. When paper cartons of the corrugated paper type are employed, the bottles are generally inverted vertically, and the four flaps extended from the four sides are folded down over the bottle tops and glued together, or strips of adhesive are applied over the seams. In either case it is difficult, if not impossible, to pull the bottles out individually when the containers are stacked.

For the storage of wine, particularly from the point of view of the individual consumer, it is desirable to have the bottles lie flat on their sides, and for this purpose wine bin facilities are required. Such facilities are expensive, and furthermore, with the wooden cases or paper cartons above described, the bottles must be unpacked and individually placed in the wine bin.

Objects of the present invention, are therefore, to eliminate the difficulties referred to above, to provide a bottle carton from which the bottles can be removed through the front end of the carton individually while the carton is lying flat on its side, to permit the stacking of the cartons one above the other without preventing the individual removal of the bottles while the cartons are stacked so that the stacked cartons may serve as a wine bin, to provide a carton which is sufficiently rigid when empty or partly so to preclude collapsing under the weight of several other cartons stacked thereon, and to provide a carton which furnishes a recessed cushioned bottom precluding breakage of bottles dropped into the carton during packing.

Other objects and features of this invention will be apparent from the following description taken in connection with the accompanying drawings in which:

Figure 1 shows a perspective view of the carton;

Fig. 2 shows a blank from which the carton is formed; and

Fig. 3 shows in perspective a form of handle for carrying the carton when used as a beverage carrier.

As shown in Fig. 2, the carton comprises a single strip of sheet material or blank 10, pressed or scored along transverse lines 11, 12, 13, and 14, so that it may be folded into a rectangular tube,

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forming the sides, top and bottom of the carton shown in Fig. 1.

The strip of sheet material 10 is also pressed or scored along longitudinal lines 15 and 16, providing front end and rear end flap material, and is provided with transverse slits 17, 18, 19, 20, 21 and 22 in alignment with the transverse scored or pressed lines 12, 13 and 14 extending from the scored lines 15 and 16 to the side edges of the sheet, providing rear end flaps 25, 26, 27 and 28 and front end flaps 29, 30, 31 and 32.

The front end flaps 29 and 30, 31 and 32 are also provided with pressed or scored lines 34, 35, 36 and 37, close to the scored line 16, to provide for rim reinforcing material in the finished carton. The scored lines 35 and 37 are located closer to the scored line 16 then are the scored lines 34 and 36 by an amount equal to the thickness of the sheet for purposes which will appear later.

The front end bottom flap 32 is provided with a line of perforations 40 adjacent to the scored line 37 for a purpose later apparent and with a closed line of perforations 41 in the shape of a hand hole.

The top and bottom front end flaps 30 and 32 are made narrower from the scored lines 35 and 37 to their free ends for purposes which will appear later. The front end side flaps 29 and 31 are provided with slits 44 and 45 which, when the carton is folded and set up are in alignment with the line of perforations 40 in the front end bottom flap 32. The front end side flaps 29 and 31 are also provided with lines of perforations 46 and 47 extending from the slits 44 and 45 to the remote sides of the flaps.

The carton is set up by bending the sheet of material along the transverse lines 12, 13 and 14 into the form of a rectangular tube, and, if the scored line 11 is provided, then along this line, and then the flap 50 is folded against the bottom panel of the carton and secured thereto. Flap 50 may be omitted and the abutting edges taped together.

Preferably the front end of the carton is closed and sealed first, by folding side flaps 29 and 31 about the line 16, and then they are reversely folded on the lines 34 and 36 to provide the rigid reinforcing and cushioning rim sections for the front ends of the side walls of the carton as indicated at 52 at the right hand side of Figure 1.

The top and bottom front end flaps 30 and 32 are similarly folded along the scored lines 16 and 35 and 37 providing the rigid reinforcing and cushioning rim sections at the front ends of the

top and bottom panels of the carton, the latter rim section being shown at 54, Figure 1.

Any suitable kind of a filler or honeycomb partition structure providing one or more tiers of horizontal pockets for the bottles or the like may now be placed within the partly formed carton. The bottles or other receptacles or the like may now be placed in the carton, preferably with their bases resting on the reinforced front end formed by parts 29—32, and then the rear end flaps 25, 26, 27 and 28 may be folded upon each other about the scored line 15 and secured together in any well-known manner to form the conventional closed end of the carton.

The order in which the front and rear ends of the carton are formed may be changed and the rear end may be formed first by a suitable apparatus, or both ends may be formed at the same time.

The flaps may be secured together in any suitable manner and the folded rim sections, of which 52 and 54 are examples, may be secured upon their respective panels by glueing, stitching, riveting, or the like. The rim sections reinforce the front end of the carton not only during handling and stacking but also after the carton has been opened for displaying or removing the contents, and serve as a cushion against breakage of the bases of the bottles resting against the adjacent front end panel.

In the finished carton the slits 44 and 45 are aligned with the perforations or cutting lines 40 in the front end bottom flap 32, so that it will not be necessary to sever a double thickness of material when severing along the line of perforations 40 to provide the front edge of a door for access to the contents in the carton.

The cutting lines or perforations 46 and 47 in the front end side flaps extend adjacent to the side edges of the top and bottom front end flaps 30 and 32 along which a knife may be passed to provide the sides of a door hinged at its upper end, which may be swung out to provide access to the contents of the carton. The rim sections serve as a sturdy frame for the door.

A hand hole is provided for manipulating the door by cutting along the line of perforations 41 in the lower front end flap 32.

It will be observed that the flanged rim remains around the open end of the carton, so that it remains a rigid structure requiring no support from the bottles contained therein and hence precludes collapse even when a heavy load of other cartons is stacked thereon.

If the carton is to be used as a beverage carrier, then the rim sections and overlapped portions of the panels may be perforated and secured together with metal eyelets to provide eyes as at 60, 61, 62 and 63, Figure 1, for the reception of the hooked ends of the springy prongs 64, 65, 66 and 67 of the handle 69, Figure 3, which includes a hand hold or grasping portion 69. These eyelets further reinforce the front end of the carton and eliminate other fastening means.

While I have illustrated, for purposes of disclosure, a preferred embodiment of my invention, it is to be understood that I reserve the right to all such changes and modifications as fall within the principles of this invention and the scope of the appended claims.

I claim:

1. A horizontal carton comprising integrally connected top, bottom and side panels each provided with a flap at its front end, said flaps extending transversely of said panels in face to face contact and constituting an end of said carton, the bottom flap being provided with a line of perforations extending parallel and close to its base end and the side flaps being provided with cut-outs in alinement with said line of perforations extending from a point adjacent their bases through their ends, and said top and bottom flaps being of less width than the interior of said carton with their edges located on lines intersecting the ends of said cut-outs adjacent the bases of said side flaps, and said side flaps being further provided with lines of perforations paralleling the side edges of said top and bottom flaps and located laterally of said side edges.

2. A horizontal carton comprising integrally connected top, bottom and side panels each provided with a flap at its front end, said flaps extending transversely of said panels in face to face contact and constituting an end of said carton, the bottom flap being provided with a line of perforations extending parallel and close to its base end and the side flaps being provided with cut-outs in alinement with said line of perforations extending from a point adjacent their bases through their ends, and said top and bottom flaps being of less width than the interior of said carton with their edges located on lines intersecting the ends of said cut-outs adjacent the bases of said side flaps, and said side flaps being further exposed at opposite ends of said top and bottom flaps to provide a single layer at each end of said top and bottom flaps, whereby said single layers may be cut to free the opposite ends of said top and bottom flaps.

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