A paperboard container and blank for making same which can be used for carrying bottles or cans, having a carrier handle formed in the blank without die-cutting, which, when folded, is on the outside of the sealed container. To a typical rectangular container are added the features of one of the first-folded top flaps having formed in it a line-cut oval handhold and a fold line between the handhold and the fold line connecting the flap to the container so that after the first-folded flaps are folded down over the end of the container the handle portion of the flap is bent back and upwards away from the container. The top or covering flaps are formed with slots so they can be folded down and glued to the first-folded flaps with the handle protruding through the slots, held in place by the covering flaps on both sides.

4 Claims, 4 Drawing Figures
1 PAPERBOARD CONTAINER WITH INTEGRAL CARRYING MEANS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to containers for bottles or cans made of foldable paperboard, and, more particularly, to a container having one of the first-folded flaps formed with a fold line so a portion of the flap may be folded back up away from the end of the container, and top flaps with slots therein which may be folded down against the first-folded flaps leaving the upward reaching portion of the first flap extending through the slots for use as a carrier-handle, a handheld having been cut therein.

2. Description of Prior Art

Corrugated paperboard containers are commonly used as shipping containers for bottles or cans, and particularly in the beverage industry these same containers may be used as the retail package purchased and carried by the consumer. Packages with handles are desirable for their obvious convenience and sales appeal, yet it is undesirable to merely cut handholds in the container because the sealed contents are then exposed to the environment and, as in the case of beer bottles, light may be admitted which can lead to spoilage. For these and other reasons, it has been sought to devise a container with a handle other than one cut into the walls of the container. Designs have featured multiple unit assemblies as shown in U.S. Pat. No. 3,416,719, featuring a separate carrier envelope; or as shown in U.S. Pat. No. 3,087,667, involving an adhesive, slotted sealing strip. The manufacturing and assembly costs of such composites are, of course, high. Other designs have featured exterior handles, as in U.S. Pat. No. 2,596,087 and U.S. Pat. No. 3,096,012, but these designs require die-cutting of the blank as an added expense to the manufacture of the container. The present design utilizes a one-piece blank not requiring die-cutting, yet foldable into a sealed container with a handle completely exterior from the container walls.

SUMMARY OF THE INVENTION

An integral closure for a typical rectangular corrugated container, and blank for making sure, comprising two opposing first-folded flaps, one of which is formed with an oval line-cut handle and a reverse fold line between the handle and the fold line connecting the flap to the container, said first-folded flaps covered by two flaps each formed with a slot therein to allow the portion of the first-folded flap formed with an oval handle to be reversibly folded and protrude there-through to form a handle. The handle thus formed is obtained without creating any openings in the structure of the container which might admit light from a one-piece blank which does not require die-cutting.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of the blank from which the container in the present invention is formed;
FIG. 2 is a perspective view of the blank of FIG. 1 assembled into a container, but with the top flaps not in closed position;
FIG. 3 is a perspective view of the container of FIG. 2 with the top only partially closed; and
FIG. 4 is a perspective view of the container of FIG. 2 with the top closed and handle ready for carrying.

As shown in the drawings, the container and blank include a front panel 10, a rear panel 11, and sidewall panels 12 and 13. A manufacturer's glue flap 14 extends from the side of the sidewall panel 13, and is used in assembly of the four panels into a tubular box with opposed walls. Four flaps 15, 16, 17 and 18 extend from the bottom of the blank and upon assembly of the container are folded to meet in substantially end-abutting relation forming the bottom of the container. The top of the container includes a flap 19 extending from the top of the front flap 10 joined along fold line 20. Flap 21 extends from rear panel 11 and is also connected to rear panel 11 by fold line 20. A line cut handhold 23 is formed in the top portion of flap 21 with a fold line 22 formed therein and spaced between fold line 20 and handhold 23. The spacing may be varied within reason to suit the particular proportions of a given design.

The position of the fold line 22 in flap 21 determines the height and location of the carrying handle in the assembled carton. In the preferred embodiment, the flaps 19 and 21 are shown equal in height to each other and greater in height than the other top flaps, but it should be noted that other dimensional relationships are possible as would be obvious to one skilled in the art and that this embodiment is intended to be merely explanatory and not limiting to the scope of the invention.

Two top closure flaps 24 and 25 extend from sidewall panel 12, and two top closure flaps 26 and 27 extend from sidewall panel 13. These flaps 24, 25, 26 and 27 are foldably connected to their respective sidewall panels by fold line 20, and are formed in height so that when folded, they meet in substantially end-abutting relation. The width of flaps 25 and 26 must be essentially equal to the spacing of fold line 22 on flap 21 from fold line 20.

The assembly of the container is accomplished by first folding the sidewall panels into a tubular configuration and fastening the manufacturer's tab 14 to the adjacent sidewall panel 10 by gluing or some other appropriate means. The bottom flaps are folded and glued as shown in FIG. 2. The flap 21 is then folded downward along fold line 20 and then reversely folded upward along fold line 22 so that part of the flap 21 covers the opening in the top of the container along with the folded flap 19, as shown in FIG. 3. The remaining top flaps 24, 25, 26 and 27 are then folded and glued to the tops of flaps 21 and 19 with that portion of flap 21 having been reversely folded protruding between the flaps as shown in FIG. 4. The handle portion of flap 21 can be folded down against the top of the container for easy storage.

1 claim:
1. In a tubular box blank having front, rear and sidewall panels adapted to be folded relative to one another to establish an open-ended tube with opposed, mutually facing spaced walls, a combined closure and handle structure for an end of said tubular box, comprising a first flap extending from a first of said panels forming one of said opposed walls, said first flap being located at said end, a second flap extending from a second of said panels forming the other of said opposed walls, said second flap having formed therein carrier handle means and a reverse fold line extending between the lateral edges of said second flap and spaced between said handle means and the top edge of said second panel, said second flap being located at said end, a third
3. flap extending from a third of said panels forming one of the remaining said opposed walls, said third flap having a slot formed therein nearest to the lateral edge of said third flap which, when folded, will be in juxtaposition with the top edge of said second panel, said slot spaced from said lateral edge of said third flap a distance essentially equal to the spacing of the reverse fold line in said second flap from the top edge of said second panel, said third flap being located at said end, and a fourth flap extending from the fourth said panel forming the other said opposed wall with said third panel, said fourth flap having a slot formed therein nearest to the lateral edge of said fourth flap, which, when folded, will be in juxtaposition with the top edge of said second panel, said slot spaced from said lateral edge of said fourth flap a distance essentially equal to the spacing of the reverse fold line in said second flap from the top edge of said second panel, and said fourth flap being located at said end.

2. The blank recited in claim 1, wherein said carrier handle means comprises a line-cut oval handhold formed in said second flap.

3. In a tubular box having rectangularly arranged and mutually facing front and rear walls, and sidewalls interconnecting said front and rear walls, a combined closure and handle structure at one end comprising a first flap extending from said front wall, said first flap folded down over said end toward said rear wall, a second flap extending from said rear wall, said second flap having formed therein carrier handle means and a reverse fold line extending between the lateral edges of said second flap, said reverse fold line spaced between said carrier handle means and said rear wall, said second flap folded down over said end toward said front wall, that portion of said second flap formed with said carrier handle means formed therein folded backward away from said end along said reverse fold line, third and fourth flaps extending respectively from said sidewalls, each said flap being formed with a slot therein, said slot in each said flap spaced inward from that lateral edge of each said flap which, in closed position, is in juxtaposition with the top edge of said rear wall a distance essentially equal to the spacing of said reverse fold line in said second flap from the top edge of said rear wall, said third and fourth flaps being folded down with said carrier handle means protruding through said slots, said third and fourth flaps glued to the tops of said first and second flaps, and said third and fourth flaps substantially meeting in end-abutting relation over said end.

4. The box recited in claim 3, wherein said carrier handle means comprises a line-cut oval handhold formed in said second flap.

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