

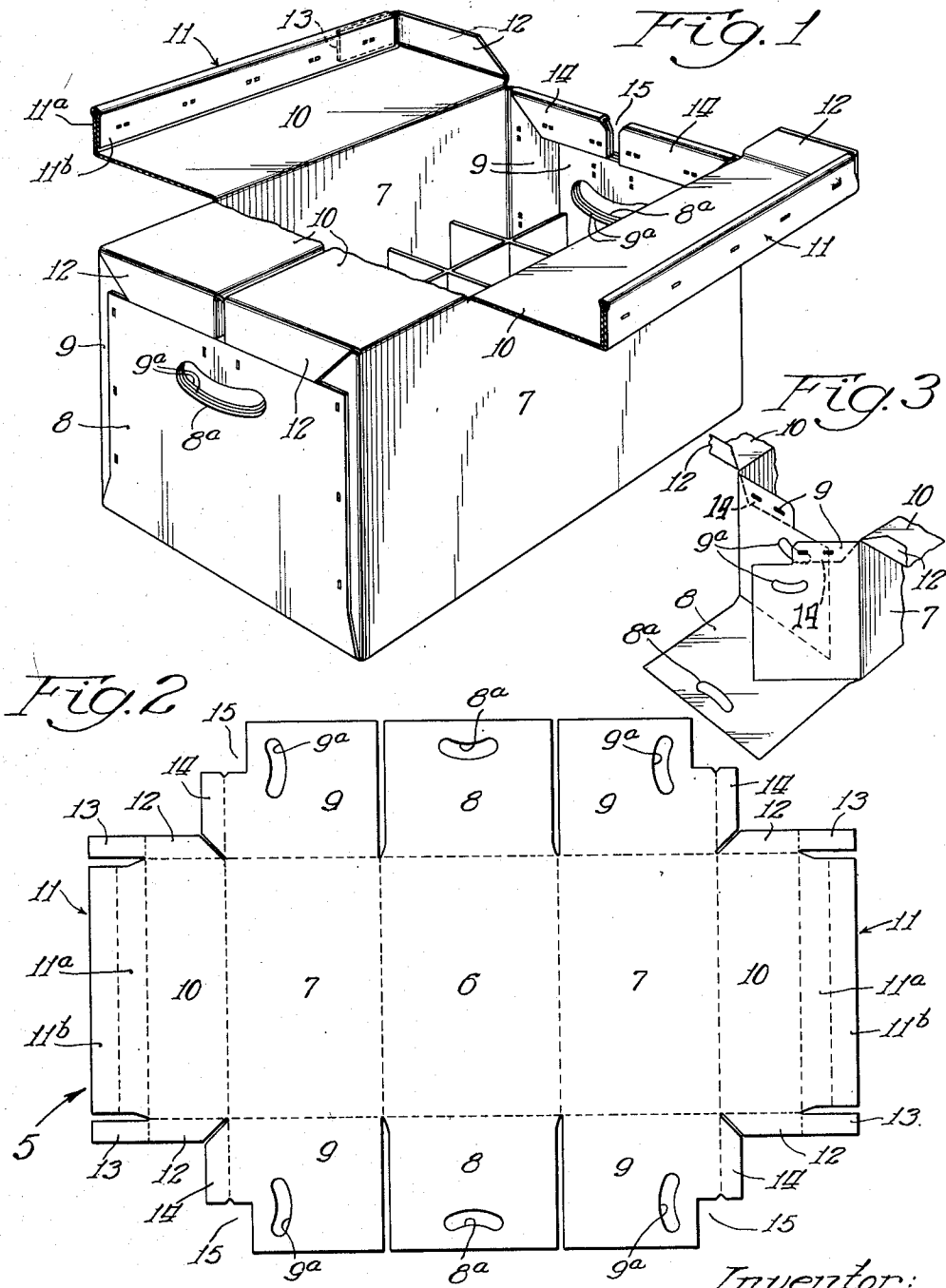
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CONTAINER

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CONTAINER

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6 Claims. (Cl. 229—33)

The present invention relates to shipping containers and more particularly to a returnable type of container for the transportation of bottled goods and the like.

5 One object of the invention is to provide a double-cover, reinforced container of a simple, sturdy form, adapted to withstand the relatively hard usage imposed thereon by the handling of bottled beverages so as to enable the container to be reused a large number of times.

10 Another object of the invention is to provide a container of this type formed of a single blank of material and having an end wall construction, the substantial portion of which is of triple thickness, whereby a very strong end wall construction is afforded.

15 Another object of the invention is to provide handle openings in the end walls, such handle openings being disposed at points of maximum thickness in the end walls whereby an ample gripping surface is provided for the hands of the carrier.

20 Another object of the invention is to provide a double-cover container having flanges at the ends of the cover members and providing an outer panel member on the end wall, the upper edge of which is spaced down from the top of the container a distance approximately equal to the width of the flanges whereby the flanges will come to rest, when the container is closed, with their lower edges contacting or in registration with the upper edges of such end wall panel, thus forming a container in which the parts of the cover flanges and the end walls of the body of the container will lie in approximately the same plane.

25 Another object of the invention is to provide a container of a double-cover type in which flaps on the ends of the side walls are provided, such flaps being cut away adjacent their upper edges whereby the adjacent portions of the flaps are out of contact with each other, leaving a space into which flanges on the cover sections can be received.

30 Another object of the invention is the elimination of the raw edges along the upper edges of the side walls, this being effected by turning down a narrow flap extension on the upper edges of the flaps on the ends of the side walls, these turned-down flaps also serving to reinforce the end walls of the container.

35 Other objects of the invention will be made apparent as the description proceeds.

40 In the drawing:

Fig. 1 is a perspective view of a container made in accordance with the present invention;

Fig. 2 is a view of the blank of the container laid out flat; and

Fig. 3 is a fragmentary perspective view of one end of the container illustrating the end flaps prior to complete assembly.

Similar references to numerals throughout the various views indicate the same parts.

45 The present invention, as herein disclosed, comprise a container made from a single blank of paperboard, such as corrugated or solid fibre board, the parts being so related to each other as to provide adequate reinforcement of the container where additional strength is necessary and, at the same time, the blank of the container is so formed as to minimize waste in forming the container from sheet material. The blank for the container is indicated at 5, and is suitably cut, slotted and scored to provide a bottom panel 6, side wall panels 7, 7, end wall panels 8, 8, formed as flap extensions on the ends of the bottom panel 6 and supplementary flaps 9, 9, at the ends of the side walls adapted to cooperate with the main end wall panels 8 to form the completed end wall.

50 The blank also provides cover panels 10, 10, each having flaps thereon adapted to form longitudinal flanges 11 and end flanges 12. The longitudinal flanges 11 are made up of a flap extension having sections 11a, 11b, which are folded upon each other and secured by staples or the like. The flaps or flanges 12 each have a flap extension 13 thereon serving to connect the flanges 11 and 12 at the corners of the cover panels. The flap extension 13 is in effect a part of the flange which surrounds the cover panels on three sides.

55 The side wall flaps 9, 9 each has a flap extension 14 thereon adapted to be folded down and secured against the face of its attached flap to eliminate raw edges along the ends of the container.

In order to accommodate the flanges on the cover panels the end flaps 9, 9 are suitably cut away at their upper corners as indicated at 15 so that when they are in assembled relation a narrow space will be provided into which the meeting portions of the flanges 11 and 12 will be snugly received when the cover sections are closed.

The flaps 8 and 9 are each formed with finger openings 8a and 9a, respectively, these openings being in such position as to register with each other when the container is set up.

A convenient method for setting up the container is to form the cover flanges 11 and 12 with attaching flap 13 disposed in between the flange sections 11a and 11b, as above described. The flap extensions 14, 14 may then be folded down against their respective flaps 9, 9, preferably to lie toward the inside of the container, as indicated in Fig. 1. The side walls 7, 7 are then raised upwardly and the flaps 9, 9, folded inwardly to lie one against the other after which the main end wall panel flap is folded upwardly to lie against the assembled flaps 9, 9. The flaps 9, 9, will then be secured to the main panel flap 8, as by means of staples, thus completing the container for use.

It is to be noted that the flanges 12, 12 will lie immediately against the upper portions of the flaps 9, 9 and, since the main panel flap 8 is secured on the outside of the flaps 9, 9, a relatively smooth end construction is provided when the container is in closed condition, this being due to the fact that the flaps 12, 12 will lie approximately in the plane of the panel 8.

It is also to be observed that since the flaps 9, 9 each extend over a major portion of the end panel 8, an end wall construction is provided, a large portion of which is made up of three thicknesses of material. Since the finger openings are well within the extremities of the flaps 9, 9, there will be no appreciable weakening of the end walls due to the presence of these openings, and there will be provided within the opening, a sufficiently large gripping surface to make the container relatively easy to lift.

The returned flaps 14, 14 at the top edges of the flaps 9, 9, viewing them in the set-up condition of the container, tend to prolong the life of the container by reason of the elimination of raw edges which might become frayed or torn due to handling of the container.

From the foregoing it is apparent that the present invention provides an economical container which may be formed of a single blank sheet of material and which is sufficiently reinforced to withstand a relatively large number of trips. The relation of the construction of the flaps 8 and 9 in the ends of the container is such that these various flaps supplement each other in forming an end wall of at least double thickness throughout its area, and having a substantial area thereof at the central portion being comprised of triple thickness where additional reinforcement is most needed. These additional reinforcements are obtained in a blank in which economy of forming has not in any way been sacrificed.

While the present description sets forth a preferred embodiment of the invention, certain changes may be made in the construction without departing from the spirit of the invention, and it is therefore desired that the present embodiment be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

I claim:

1. A paperboard shipping container comprising a bottom, side walls and end walls, said end walls comprising a main end wall panel extending upwardly from the bottom and terminating short of the upper edges of the side walls, flaps on the ends of the side walls substantially equal in height thereto, said flaps each extending inwardly and overlapping each other centrally of the

main end wall panel and being cut away at their inner upper corners to form a narrow opening extending from the top edges of such flaps downwardly to the upper edge of the main end wall panel, cover panels hinged to the upper edges of the side walls and adapted to swing down to substantially meet at the central longitudinal line of the container, said cover panels having flanges around the free edges thereof, and said flanges, at the corners of the cover panels, being adapted to enter said openings.

2. A paperboard shipping container comprising a bottom, side walls and end walls, said end walls comprising a main end wall panel extending upwardly from the bottom and terminating short of the upper edges of the side walls, flaps on the ends of the side walls substantially equal in height thereto, said flaps each extending inwardly and overlapping each other centrally of the main end wall panel, said flaps being cut away at their inner upper corners to form a narrow opening extending from the top edges of such flaps downwardly to the upper edge of the main end wall panel, cover panels hinged to the upper edges of the side walls and adapted to swing down to substantially meet at the central longitudinal line of the container, said cover panels having flanges around the free edges thereof, and said flanges, at the corners of the cover panels being adapted to enter said openings, the main end wall panel being positioned to lie on the outside of the attached side wall flaps and the end flaps on the cover panels being of such width that they rest upon the upper edge of the main end wall panel.

3. A shipping container formed from a single blank of paperboard, said container comprising a bottom and two side walls, flaps at the ends of the bottom and side walls adapted to provide end walls when said flaps are assembled together, flaps at the outer edges of each side wall providing cover panels, each adapted to cover substantially one-half of the top of the container, narrow flap extensions on the cover panel flaps adapted to provide flanges on the cover panels, the flaps on the ends of the side walls being cut away at their upper edges so that when said flaps are assembled the edges of the cut-away part of these flaps will be separated from each other to provide a narrow opening at each end of the container into which the flanges on the cover panels can be received.

4. A shipping container formed from a single blank of paperboard, said container comprising a bottom and two side walls, end walls for the container formed by providing flaps on the ends of the bottom and on the ends of the side walls which are folded in and secured together, cover panels hinged to the upper edges of the side walls, each adapted to close substantially one-half of the top of the container, flanges on the outer longitudinal edges of each cover panel, the flaps on the ends of the side walls being cut away at their corners to provide a narrow opening between them at each end of the container for the reception of the flaps on the cover panels.

5. A blank for a shipping container comprising a bottom panel centrally disposed therein, side wall panels on each side of the bottom wall panel, cover panels at the other sides of the side wall panels, extension flaps on three sides of the cover panels adapted to be joined together to form flanges on said panels, end wall panels located at the ends of the bottom panel, said end wall panels being of less height than the height of the end walls of the set-up container, supplemental flaps

adapted to form part of each end wall of the container, said flaps being cut away at their upper edges whereby, when they are brought together, an opening is left between them for the reception of the flanges on the cover panels.

6. A paper board shipping container comprising a bottom, side and end walls, said end walls each comprising a main end wall panel extending upwardly from the bottom and terminating short of the upper edges of the side walls, flaps on the

ends of the side walls substantially equal in height thereto, said flaps each extending inwardly and overlapping each other centrally of the main end wall panel, narrow flap extensions on the upper edges of the side wall flaps, said flap extensions being adapted to be folded downwardly and secured to their attached side wall flaps whereby a folded edge will be provided at the top of each end wall.

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