April 27, 1937. W. H. PETERS 2,078,455

CARTON

Filed Oct. 16, 1935

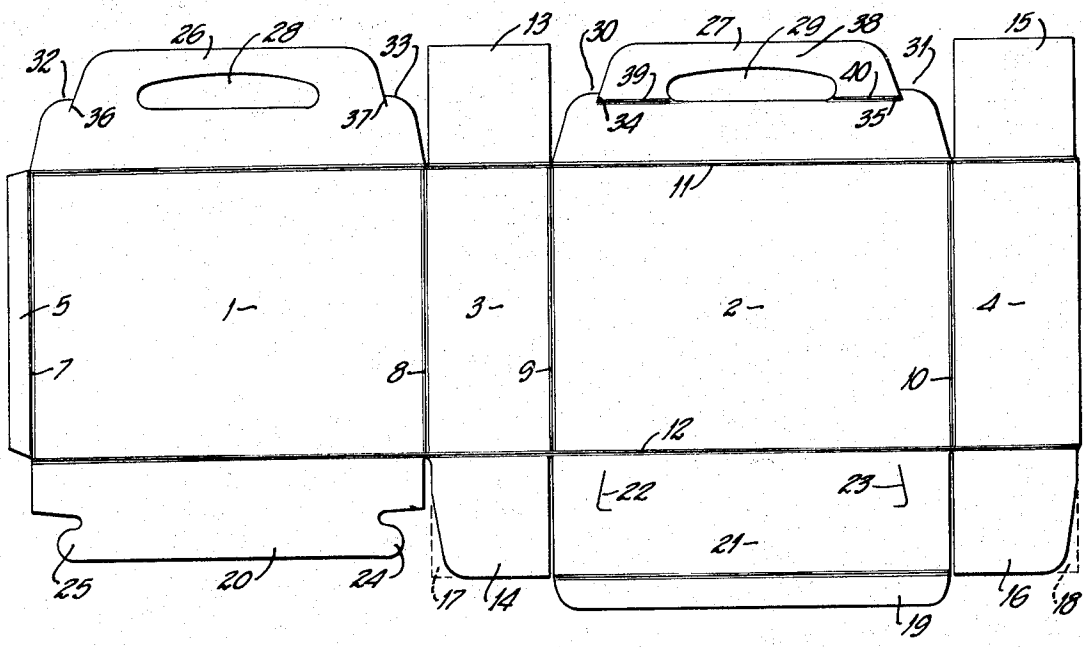


FIG. 1

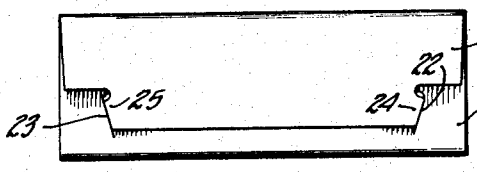


FIG. 2

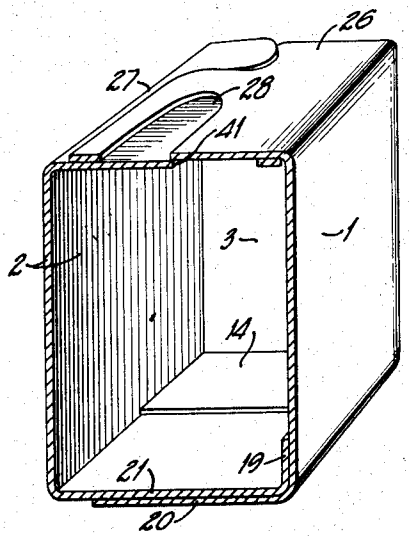


FIG. 3

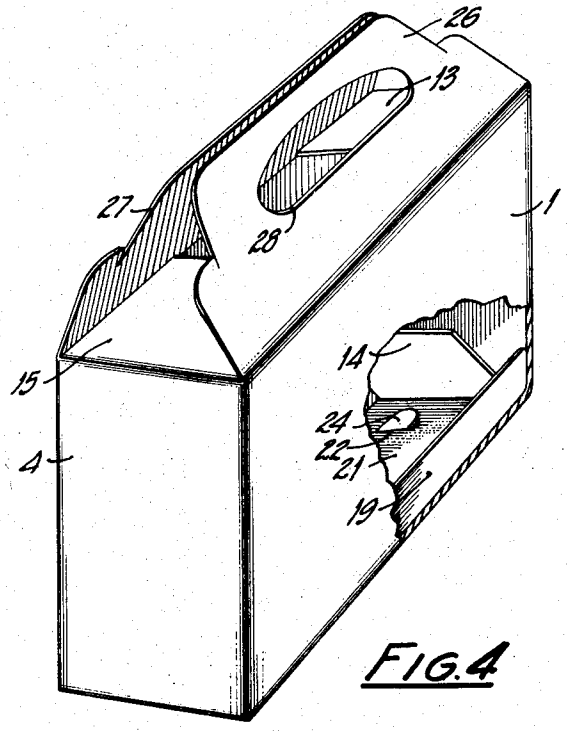


FIG. 4

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CARTON

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3 Claims. (Cl. 229—52)

My invention relates to cartons, and particularly to satchel-like cartons adapted to carry comparatively heavy objects such as bottles or cans. Articles of this character must be supported entirely by the bottom of the container because packages or cartons of this kind are not generally intended to be wrapped or tied by strings extending around the bottom.

The objects of my invention therefore are to provide a cardboard container having a closure for the top consisting of flaps which will entirely seal the top of the container when infolded but which when opened or partially opened will form satchel-like handles for carrying the package. Another object is to provide a container of this character having a closure for the bottom formed by simply infolding or overfolding a plurality of flaps in such a way that it will very strongly resist any tendency to bend or open under a comparatively heavy content load carried thereon; this resistance being developed largely by the design of the bottom of the carton whereby it is stiffened and the parts thereof are folded together in interlocked relation.

With these objects in view my invention comprises the novel blank and the carton formed therefrom described below and illustrated in the accompanying drawing in which—

Fig. 1 is a plan view of the blank from which the carton is formed;

Fig. 2 is an outside bottom view of the carton;

Fig. 3 is a perspective view showing a vertical section through the carton when closed; and

Fig. 4 is a perspective view, with portions broken away to show the interior of the structure of the carton with the top partially opened, and showing how the satchel-like handles for the carton are formed by the top flaps.

Referring to the drawing, my blank comprises a sheet of card, box board or other suitable material having portions 1 and 2 forming the back and front thereof and portions 3 and 4 forming the sides. At one end of the blank is a glue flap 5 adapted to secure the ends of the blank together to form the carton. The blank is scored along the lines 7, 8, 9 and 10 so that it may be folded to form a substantially rectangular box, and is also scored along the top, as at 11, and along the bottom, as at 12, so that the flaps attached to the front, back and side panels may be infolded to form closures for the top and bottom of the carton. Integral with the top and bottom of the side panels 3 and 4 are flaps 13 and 14 and 15 and 16, respectively. These are preferably of the same width as the side panels 3 and 4 although small portions 17 and 18 of the flaps 14 and 16 are cut away to facilitate the insertion of a tuck 19 formed on the bottom flap attached to the panel 2. The flaps 20 and 21 are integral with the bottoms of the panels 1 and 2 forming the front and back of the box and are coextensive in length with these panels. The flap 21 which carries the tuck 19 is provided with slits 22 and 23 adapted to receive tab portions 24 and 25, respectively, formed in flap 20. The flaps 26 and 27 integral with the tops of the panels 1 and 2 are substantially identical and are provided with cut-out portions 28 and 29 adapting them to form satchel-like handles for the container. These cut-out portions are disposed centrally of the flaps and the width of the flaps is reduced about one-half on either side of the handles, as shown at 30, 31, 32 and 33. The flaps 26 and 27 are also provided with marginal slits 34, 35, 36 and 37 which are oppositely disposed in the completed carton and adapt the flaps 26 and 27 to be infolded together when the slits are brought into registration with each other. In order to facilitate the folding of the handle portion 38 on flap 27 beneath flap 26, flap 27 is scored longitudinally from the bottom of the marginal slits 34 and 35 to the cut-out 29, as shown at 39 and 40.

In forming my carton the bottom closure is made by first infolding the flaps 14 and 16 attached to the side panels 3 and 4. The flap 21 is then overfolded the flaps 17 and 18 and the tuck 19 is bent at right-angles to the body of flap 21 and inserted in the box, as shown in Figs. 3 and 4. The flap 20 is then overfolded the flap 21 and the tabs 24 and 25 are inserted in the slits 22 and 23 so that the flap 21 is then in interlocked engagement with the flap 20. By positioning the slits 22 and 23 so that the tabs 24 and 25 when inserted therein will lie between flap 21 and flaps 14 and 16, respectively, the contents of the carton resting directly on the flaps 14 and 16 will hold the tabs 24 and 25 in secure frictional engagement between these flaps and flap 21. This feature combined with the tuck 19 which functions as a beam to stiffen and reinforce flap 21 against flexure form a bottom for my carton which is extremely rigid and which will support a very substantial content load without flexure or opening.

In forming the closure for the top of the box the flaps 13 and 15 attached to the panels 3 and 4 are first infolded. The flap 27 is then slightly bent along the scores 39 and 40 so that it will pass underneath flap 26 and the two flaps may

then be pushed downwardly together until the slits **34** and **35** register with the slits **36** and **37** when, as the pressure is increased, these slits will be pushed together so that portions of flap **28** will both overlie and underlie flap **27**. Preferably, the cut-out portions forming the handles are so disposed that the flaps **26** and **27** slightly overlap as shown at **41** in Fig. 3 thereby to seal the package completely at the top and to prevent the entrance of dust.

From the foregoing it will be apparent that I have provided a simple carton having an extremely stiff and rigid bottom construction which is well adapted to support a plurality of separate cans or bottles resting thereon without tying strings around or otherwise wrapping the package to prevent the bottom from bulging or opening up. This rigid, non-opening bottom is particularly important in a package of this kind which is designed to be carried by means of the satchel-like handles at the top so that the whole content load rests upon the bottom. By simply opening up the overfolded flaps at the top from the position shown in Fig. 3 to the position shown in Fig. 4 two satchel-like handles are available for carrying the package.

While I have described my invention in its preferred embodiment, it is to be understood that the words which I have used are words of description and not of limitation. Hence, changes within the purview of the appended claims may be made without departing from the true scope and spirit of my invention in its broader aspects.

What I claim is:

1. A carton of the character described comprising means forming the front, back and sides thereof, infolded flaps integral therewith forming closures for the top and bottom of said carton; the two last-infolded flaps on the bottom being provided with interlocking means, and one of said last-infolded flaps being provided with a stiffening tuck, whereby the bottom of said carton is adapted to resist flexure and opening due to the contents load thereon when said carton is supported at the top only; the two last-infolded flaps on the top having cut-out portions adapting said flaps to form satchel-like handles for said carton, and having opposed marginal slits adapting the portions of said flaps at either side thereof to cooperate to maintain said flaps infolded.

2. A carton of the character described comprising means forming the front, back and sides thereof, infolded flaps integral therewith forming closures for the top and bottom of said carton; the two last-infolded flaps on the bottom being provided with interlocking means, and one of said last-infolded flaps being provided with a stiffening tuck, whereby the bottom of said carton is adapted to resist flexure and opening due to the contents load thereon when said carton is supported at the top only; the flaps associated with the front and back of the box, respectively, at the top, being provided with cut-out portions adapting said flaps to form satchel-like handles for said carton, and having portions laterally spaced from the cut-out portion on one flap both underlying and overlying portions laterally spaced from the cut-out portion on the other flap to maintain said flaps infolded.

3. In a carton of the character described comprising means forming the front, back and sides thereof, and having flaps integral therewith and infolded to form a closure for the bottom of said carton, infolded flaps integral with the sides of said carton at the top, and flaps integral with the front and back of said carton at the top having centrally disposed cut-out portions adapting said flaps to form a pair of satchel-like handles for said carton, and having oppositely disposed marginal slits at either side of said handle-forming portions adapting said flaps to be infolded together to form a closure for the top of said carton.

WILLIAM H. PETERS.