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WEB-CORNER CARTON WITH INTEGRAL COVER

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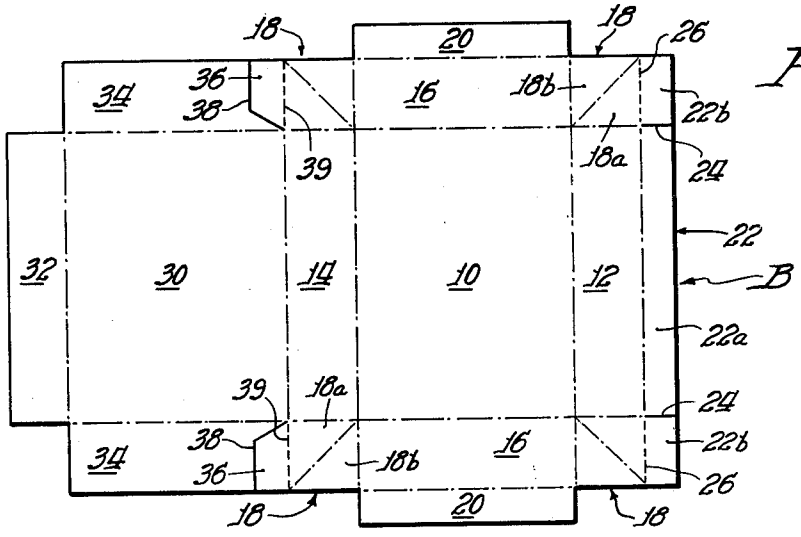


Fig. 2

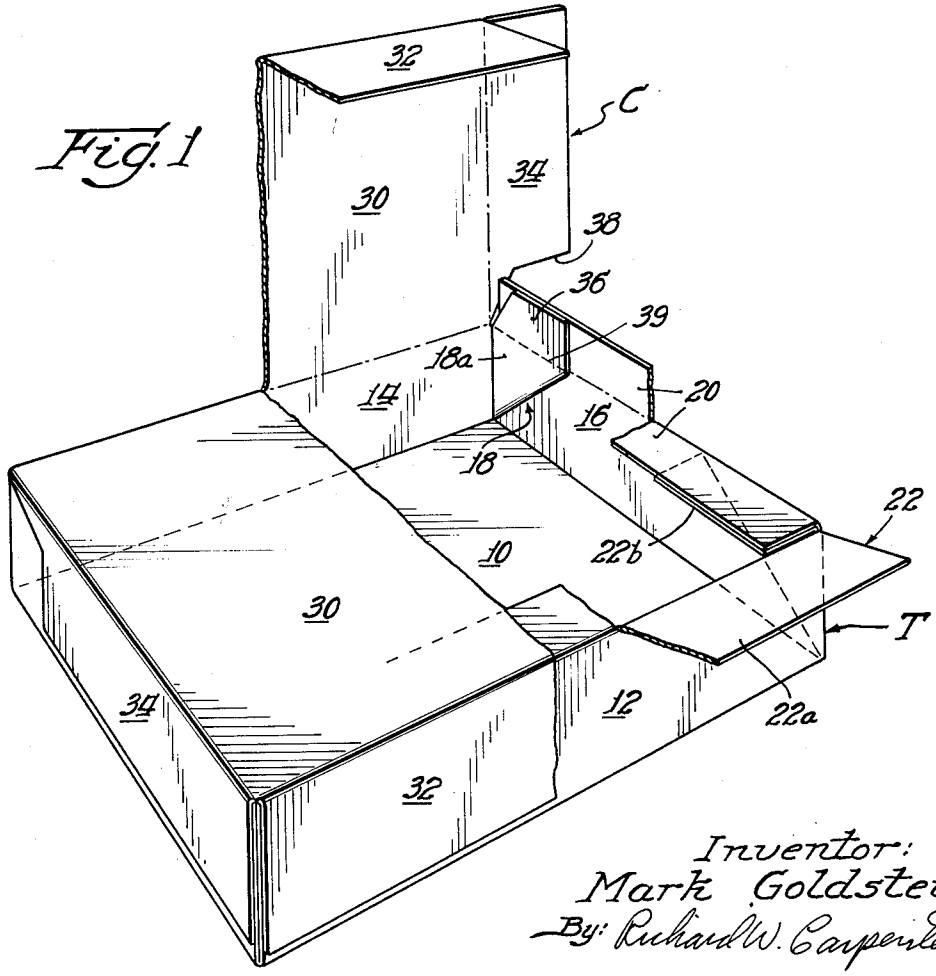


Fig. 1

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WEB-CORNER CARTON WITH INTEGRAL COVER

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1 Claim. (Cl. 229—31)

This invention relates to paperboard cartons, and more particularly to a web-corner, tray-style carton of the type employed in the packaging of frozen foods and other products.

The invention comprehends an improvement in a liquid tight corner construction for a hinged-cover, web-corner carton.

It is an object of the invention to provide, in a paperboard tray-type carton, a corner construction including a web or bellows fold between adjacent walls interconnecting the walls for their entire height.

A more specific object of the invention is the provision, in a hinge-top, web-corner tray, of a corner construction wherein the webs connecting adjacent end and side walls have at their upper edges tabs, cut from flaps of the tray cover and tray front wall, which tabs overlie and are secured to flaps at the upper edges of the tray side walls.

These and other objects of the invention will be apparent from an examination of the following description and drawings wherein:

FIGURE 1 is a perspective view of a carton embodying features of the invention, with a portion of the cover shown broken away and in an open position; and

FIGURE 2 is a plan view of a blank from which the carton of FIGURE 1 may be formed.

It will be understood that, for purposes of clarity, certain elements have been intentionally omitted from certain views where they are believed to be illustrated to better advantage in other views.

Referring now to the drawing for a better understanding of the invention, it will be seen that the carton illustrated in FIGURE 1 includes a body or tray portion indicated generally at T, having hingedly attached thereto a lid or cover portion, indicated generally at C.

The entire tray may be formed from the single or unitary blank of suitable sheet material, such as foldable paperboard, indicated generally at B in FIGURE 2 of the drawing.

As this invention is directed primarily toward providing a liquid-tight carton for use in packaging of such commodities as frozen foods it is desirable that the inner surface of the blank be coated with a water or moisture resistant material such as wax, polyethylene, or other appropriate material.

The tray portion of the carton includes a central, generally rectangular, bottom wall panel **10** having hingedly attached to and upstanding from its front and rear side edges a pair of opposed front and rear side wall panels **12** and **14**, respectively, and having attached to its end edges a pair of opposed end wall panels **16**.

At the corners of the tray the end and side walls are connected to each other by a square bellows or web fold member **18** which includes a pair of generally triangular web sections or gussets **18***a* and **18***b*, hingedly attached to each other and to a side wall panel and end wall panel respectively. When the tray is set up, as shown in FIGURE 1, the respective sections of each web **18** are folded back so as to overlie each other as well as an end portion of a related end wall panel.

At its upper edge each end wall **16** has hingedly attached thereto and extending inwardly therefrom a relatively narrow elongated dust or closure flap **20**. Likewise, front wall panel **12** has hingedly attached to its upper edge an inwardly extending dust or closure flap **22**. As best seen in FIGURE 2, flap **22** has a central portion **22***a*, hinged directly to and co-extensive with the upper edge of front side wall panel **12**, and a pair of end sections **22***b*, cut from the main flap **22** along cut lines **24** and hingedly attached to the related front wall panel web sections **18***a* along score lines **26**. When the carton is in erected condition the end sections **22***b* of flap **22** serve as connecting tabs and are disposed to overlie an end portion of flap **20** and may be adhesively secured thereto to effect a permanent connection between the end and side walls of the tray.

Again referring to FIGURE 2 of the drawing it will be seen that the cover portion of the tray includes a generally rectangular top wall panel **30** hingedly attached at its rear edge to the upper edge of the tray rear side wall panel **14**.

The cover top wall panel **30** has hingedly attached to its forward edge and to its end edges a cover front flap **32** and a pair of cover end flaps **34** which extend downwardly from the forward and end edges of the cover top wall in overlying relation with the tray front wall and tray end walls, respectively. The cover flaps may be adhesively secured to the tray front and end walls in any desired manner when the package is closed and sealed.

It will be seen that the cover end flaps **34** have cut therefrom, along cut lines **38**, a pair of rear connecting tabs **36** hingedly attached to the rear side wall web sections **18***a* along hinge lines **39** and which, like tabs **22***b*, are secured to end wall flaps **20** to effect a permanent connection between the tray rear side wall and the end walls of the tray.

In this construction the corners of the tray are the same height as the side and end walls of the tray, because the connecting tabs **22***b* and **36** are cut from flaps **22** and **34**, respectively rather than from the web sections **18***a*, as has been done in prior art cartons. Thus, the liquid tight corner construction extends for the full depth of the tray and at the same time the blank is used in the most efficient manner with no paperboard being wasted. This provides a liquid tight web-corner tray with hinge cover which is efficient and economical to produce.

I claim:

A web-corner, liquid-tight, tray-type carton, with an integral cover, formed from a unitary blank of foldable paperboard, comprising:

(*a*) a tray having a bottom wall, with opposed pairs of upstanding front and rear side walls and end walls hinged to the side and end edges, respectively, of said bottom wall and connected to each other;

(*b*) a cover having a top wall hinged at its rear edge to the upper edge of the tray rear side wall and having depending front and end closure flaps hinged to its forward and end edges and disposed to overlie the front side wall and end walls, respectively, of the tray;

(*c*) said front side wall and end walls having normally inwardly extending closure flaps hinged to their upper edges;

(*d*) said end walls being connected to said side walls at the corners of the tray by web members each of which includes a pair of triangular web sections hinged to end edges of related end and side walls and to each other;

(*e*) the web sections attached to the rear side wall having inwardly extending tabs of a length substantially equal to the width of the related cover end flaps and being cut therefrom;

(*f*) the web sections attached to the front side wall having inwardly extending tabs of a width substantially equal to the width of the tray front side wall flap and being cut therefrom;

(*g*) the web sections of each web member being folded to overlie each other and an end portion of a related end wall, with the web section tabs overlying and being adhesively secured to the related end wall flaps.

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