

May 9, 1944.

C. H. GOODYEAR

2,348,377

CARTON

Filed May 24, 1940

Fig. 1

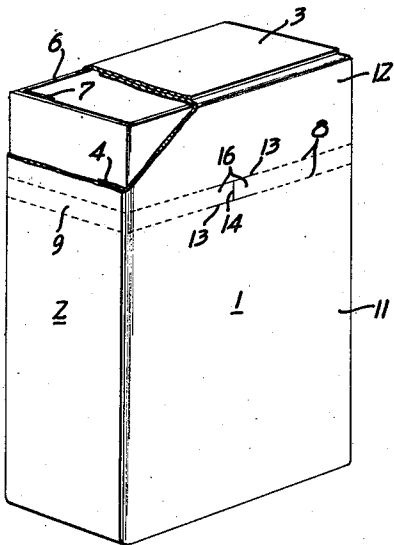


Fig. 2

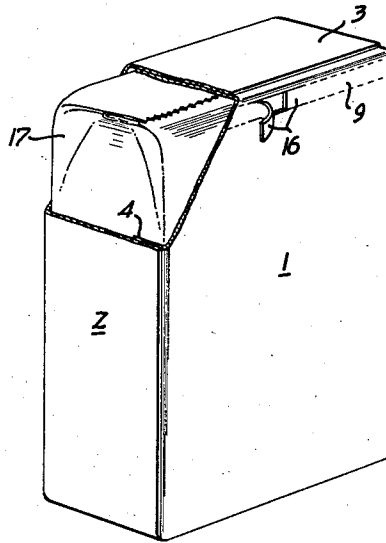


Fig. 3

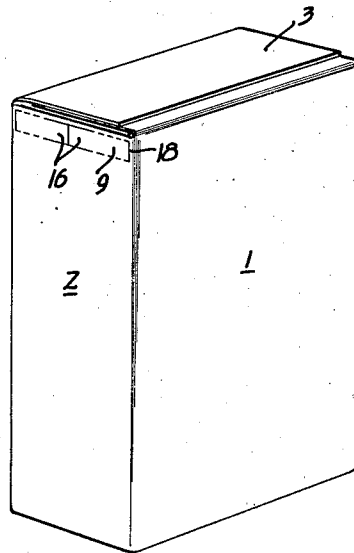
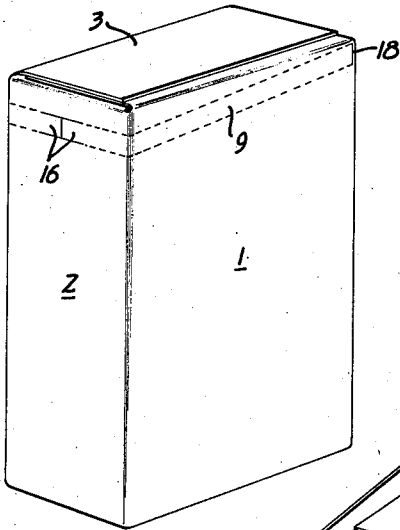


Fig. 4

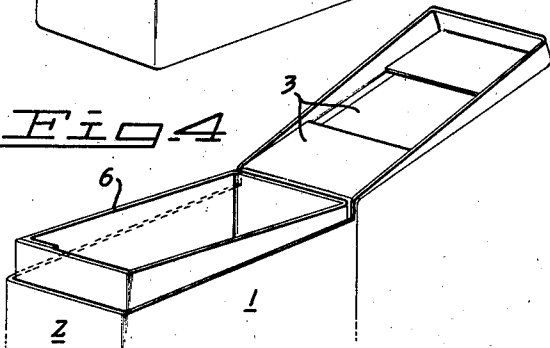


Fig. 5

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2,348,377

CARTON

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Application May 24, 1940, Serial No. 337,029

1 Claim. (Cl. 229-51)

This is a continuation in part of my copending application, Serial No. 193,936, filed March 4, 1938.

My invention relates to cartons or boxes made from fibrous sheet material; and it is among the objects of my invention to provide improved means for opening the same.

Another object is to provide a carton originally sealed but openable to form a reclosable container.

Another object is to provide a carton having a tear strip encircling the body thereof for disconnecting a part of the carton.

Still another object is to provide a modified carton construction having a tear strip removable to form a hinged cover.

A further object is to provide another modified carton structure in which a tear strip is removable to form a pouring opening.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of my invention. It is to be understood that I do not limit myself to this disclosure of species of my invention, as I may adopt variant embodiments thereof within the scope of the claim.

Referring to the drawing:

Figure 1 is a perspective view of a carton embodying the improvements of my invention, with portions of the structure broken away to show the liner.

Figure 2 is a similar view showing a modified construction.

Figure 3 is a perspective view illustrating another modification of the invention; and

Figure 4 is a similar view showing the cover open.

Figure 5 is a perspective view of still another modification having a tear strip removable to provide a pouring opening.

In terms of broad inclusion, the carton of my invention comprises a wall having spaced lines of weakness to form a tear strip. In one form of the invention the tear strip encircles the carton to separate it into cover and body sections. A liner in the carton provides a sleeve with which the cover section engages for reclosing the container. In another form of the invention the encircling tear strip is disposed closely adjacent the carton top for disconnecting the latter. In another modification the tear strip extends across three walls only to form a hinged cover when the strip is removed. A further form of the carton structure embodies a tear strip ex-

tending across one wall only to form a pouring opening.

In greater detail, and referring particularly to Figure 1 of the drawing, my carton or box preferably comprises a body having side walls 1, end walls 2, and closure flaps 3 at the top and bottom of the carton, all formed from a single blank of fibrous sheet material. The side and end walls of the carton body are preferably joined by a gluing strip 4; and in the finally closed position the flaps 3 are glued together to completely seal the carton. A tubular liner 6 of relatively stiff fibreboard is preferably arranged in the carton coextensive with the side and end walls. This liner is preferably formed from a single blank of material suitably scored and held in tubular shape by a gluing strip 7. The liner is proportioned to fit snugly within the carton and is held by frictional engagement with the walls.

Means are provided for conveniently opening the carton. For this purpose I provide spaced rows of perforation 8 defining parallel lines of weakness and preferably extending transversely across all four walls of the carton body to provide a tear strip 9 encircling the carton. The tear strip is preferably disposed about the upper portions of the carton to divide it into a main section 11 and a cover section 12 of less height than the main section. It is understood that tear strip 9 lies only in the outer walls of the carton, leaving liner 6 extending the full length of the carton when the tear strip is removed. The cover section 12 may then be slipped off over the flanges formed by the projecting end of the liner and replaced at will, providing a reclosable carton of neat appearance and affording a tight seal when the cover section is replaced. Since there is more frictional resistance between the liner and main carton section than between liner and cover, due to the shorter height of the latter, the liner is not displaced when the cover is removed.

Means are also arranged to provide a finger hold on the pull strip. To this end I preferably make two parallel cuts 13 aligned with perforations 8, and join these cuts with a perpendicular cut 14, making an H-shaped incision to form a pair of tabs 16. This incision is shown located in a side wall, but it may be formed in an end wall, or partly in one wall and partly in another to arrange the tabs at an edge of the carton. Pull strip 9 is thus provided with a finger tab 16 at each end, enabling a person to tear out the strip from either end. This is a decided advan-

tage should the strip accidentally tear crosswise when pulling from one end before the strip is completely torn out. Tabs 16 normally lie in the plane of the carton wall and are not apt to be dislodged during ordinary handling, yet may readily be lifted out by inserting a fingernail or pointed instrument between the tabs. One tab bends back as the other is lifted out to facilitate grasping the outturned tab.

The carton above described is particularly well adapted for packaging breakfast cereals and other products used from time to time so that the reclosable feature comes into play. Such products may be packed directly within the carton or within a bag disposed in the carton.

Figure 2 shows a modified construction in which the tubular liner is omitted and the tear strip 9 located closer to the top of the carton. In this form the top is to be thrown away when the carton is opened. The contents may either be packed directly within the carton or within a bag 17.

Figures 3 and 4 disclose another modification wherein the tear strip 9 extends across only three walls of the carton, preferably across the side walls and one end wall, leaving the other end wall intact to form a hinged connection for the cover section. The tear strip may be formed as a horizontal band, or may have inclined portions along the side walls terminating at upper corners as shown. A cut 18 across each end of the strip terminates the tear-out. In the construction

illustrated the score line along the end closure flap 3 forms a hinge for the cover section. As in the construction of Figure 1, the tubular liner 6 is preferably provided to form flanges for reseating the cover.

Figure 5 shows still another modification in which the tear strip 9 extends across one wall only, preferably along the upper edge of an end wall. When this strip is removed the wall portion below the slot thus provided may be pressed inwardly or pulled outwardly to form a relatively large pouring opening, which opening decreases in size when the wall springs back into its normal plane.

I claim:

A carton having spaced lines of weakness in walls thereof to provide a tear strip for effecting separation of the carton into main and cover sections upon removal of the strip, said tear strip extending across three of the walls of the carton in spaced relation to the top wall of the cover section to leave main and cover sections connected by the fourth wall on a line closely adjacent two of the adjacent corners of the fourth wall, and a stiff tubular open ended liner in the carton coextensive with the side and end walls thereof to provide a flange over which the separated cover section may be reseated in its unopened position to leave exposed a band of the liner equal in width to the tear strip.

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