

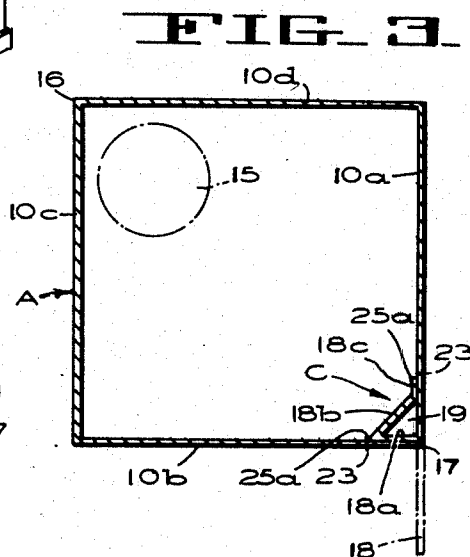
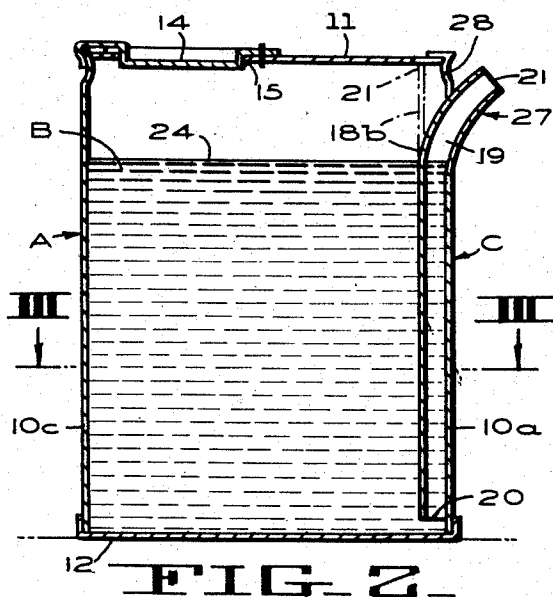
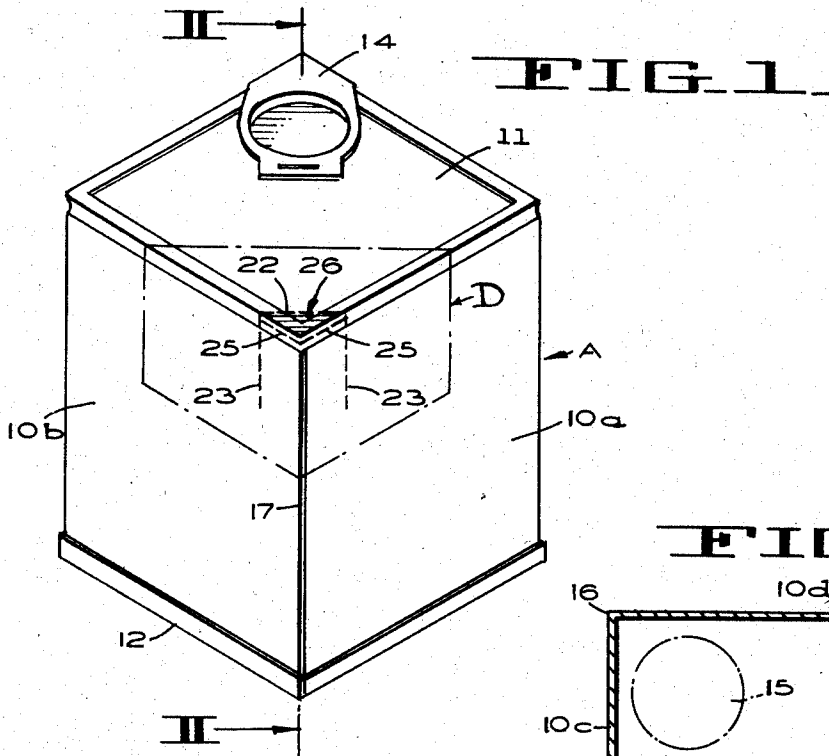
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CARTON WITH BUILT-IN SUCTION TUBE

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CARTON WITH BUILT-IN SUCTION TUBE

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3 Claims. (Cl. 222—527)

The present invention relates to improvements in a carton with built-in suction tube. It consists of the combinations, constructions and arrangement of parts, as hereinafter described and claimed.

An object of this invention is to provide a carton, which is adapted for holding milk, soft drinks, beverages or the like, and having a normally-sealed suction tube built into the carton. It is proposed to arrange the upper section of the suction tube in such a manner that access thereto may be easily obtained, and this section deflected from the carton so that a person may drink the liquid directly from the tube. Thus the contents of the carton may be maintained in a sanitary condition and ready for immediate use.

Other objects and advantages will appear as the specification continues. The novel features will be set forth in the claims appended hereunto.

DRAWING

For a better understanding of my invention, reference should be had to the accompanying drawing, forming part of this specification, in which:

Figure 1 is an isometric view of my carton with a built-in suction tube;

Figure 2 is a vertical sectional view taken along the plane II—II of Figure 1, illustrating the suction tube in drinking position; and

Figure 3 is a sectional view taken along the horizontal plane III—III of Figure 2.

While I have shown only the preferred form of my invention, it should be understood that various changes, or modifications, may be made within the scope of the annexed claims without departing from the spirit thereof.

Detailed description

Referring now to the drawing, it will be noted that the carton A defines side walls 10a, 10b, 10c and 10d, a cover 11, and a bottom wall 12, all being secured together to provide a unitary structure. A conventional closure cap 14 has been disclosed for closing the filling and outlet opening 15, which is fashioned in the cover adjacent to the corner 16 of the carton. The liquid contents of this carton is designated at B; and, as previously mentioned, may consist of milk, soft drinks, beverages or the like.

At the opposite corner 17 of the carton from that of the closure cap, I provide a built-in suction tube C, which is normally confined within the carton. This tube may be made from a flap 18, which is provided as an extension on the side wall 10a, as suggested by the dot-dash lines in Figure 3. During the forming of the carton, the flap may be folded so that its portion 18a bears against and is secured to the inner surface of the side wall 10b. Moreover, the flap portion 18b may be folded so as to form a member which extends diagonally across the interior of the corner 17 of the carton, with the marginal section 18c of the latter portion being secured to the side wall 10a. This construction will provide a

bore 19 of triangular cross-section, extending lengthwise through the suction tube C, the wall 10a forming one wall of the tube. Thus the folded flap 18 provides two adjacent walls of the tube, while the carton side 10a forms the third wall.

As shown in Figure 2, the lower end 20 of the tube is arranged adjacent to but spaced apart from the bottom wall 12 to thus permit the liquid contents B to flow into the bore 19 of the suction tube. When the carton is formed, the upper end 21 of this tube is arranged underneath the cover 11, as indicated by the dot-dash lines in Figure 2.

It will be observed from Figure 1 that a score-line 22 extends diagonally across a corner section of the cover 11, substantially in registration with the flap portion 18b. Also, the side walls 10a and 10b have score-lines 23 extending downwardly therealong to approximately the level 24 of the liquid contents B, these score-lines substantially registering with the lateral edges 25a of the suction tube (see Figure 3).

Moreover, horizontally-extending score-lines 25 are fashioned in the upper parts of the side walls 10a and 10b, immediately below the cover 11. Thus, a triangularly-shaped tearable tab 26 is provided as a part of the cover 11, with this tab overlying and covering the upper end 21 of the suction tube.

Summary of operation

Having thus described the various structural features of the carton and its built-in suction tube, the operation thereof is summarized briefly as follows:

When a person wishes to drink the liquid contents B from the carton A, the tab 26 is torn along the score-lines 22 and 25 so as to sever the tab from the remaining part of the cover 11. This will expose the upper end 21 of the suction tube C for manual grasping, and this end then may be pulled outwardly so as to bend the top section 27 of the suction tube C away from the carton, as shown in full lines in Figure 2. This will result in tearing the side walls 10a and 10b downwardly along the score-lines 23, but not below the liquid level 24.

The removed tab 26 may be thrown away, and the top section 27 placed in a person's mouth for the purpose of drinking the liquid contents B from the carton. Air can enter the carton through an opening 28, which is provided when the top section of the tube is deflected outwardly. The liquid contents will enter the suction tube C by flowing under the lower end 20 of this tube.

Thus it will be apparent that the suction tube C is accommodated within the confines of the interior of the carton A, until such time as a person removes the tearable tab 26 and pulls the top section 27 of the tube outwardly into drinking position. The suction tube does not interfere with the stacking or nesting of the cartons when being merchandised.

As a further sanitary means, a seal D may be applied to the carton walls 10a and 10b, and to the cover 11, to protect the score-lines 22 and 23 and keep sanitary the corner of the carton that contains the built-in tube C.

I claim:

1. A carton comprising a cover, a bottom wall and spaced side walls, two of said walls defining at least one corner, a deformable tube positioned within said carton at said corner, said tube comprising a member extending between and interconnecting the side walls defining said corner with each of the ends of said member extending vertically upwardly along the inner surface of one of the latter walls in spaced relationship to said corner, said member ends being each connected along its length to one of the latter walls respectively, and forming said tube with the latter side walls at said corner, said member being spaced from said bottom wall and being spaced

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from said top wall, said two of said side walls having score means extending therealong adjacent the top thereof downwardly along each of the latter side walls and parallel to said tube at a distance from said corner along each of the latter walls, which is greater than the distance 5 along each wall between the connection of said member ends to said walls and said corner, for separation of said tube comprising said member and the side wall portions to which it is attached from said side walls for a distance downwardly from the top of said tube sufficient 10 to enable bending of said tube outwardly from within said carton to expose the top of said tube.

2. The carton of claim 1 wherein said member is

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formed by an extension flap of one of said two walls which define said corner.

3. The carton of claim 1 wherein one of said two side walls forming said corner has an extension flap, said flap extending inwardly of said carton away from said corner along the other of said two walls, said member comprising a continuation of said flap.

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