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2,547,362	4/1951	Berry.....	229/7(1)
3,134,530	5/1964	Chang.....	229/7(1)
3,303,985	2/1967	Prokes et al.	229/7(1)
3,385,501	4/1968	Chang.....	229/7(1)
3,397,830	8/1968	Chang.....	229/7(1)
3,422,984	1/1969	Foster.....	215/46.5X

Primary Examiner—Raphael H. Schwartz
Attorney—Frank Ledermann

[54] **COMBINATION BEVERAGE CONTAINER AND DRINKING STRAW**
11 Claims, 10 Drawing Figs.
[52] U.S. Cl..... **229/7,**
220/90.2; 215/1
[51] Int. Cl..... **B65d 17/00,**
B65d 17/06, B65d 47/00, B65d 83/00
[50] Field of Search..... **215/41.5,**
1Δ; 229/7; 220/90.2

[56] **References Cited**
UNITED STATES PATENTS
1,213,961 1/1917 Shepard (229/7)
2,220,746 11/1940 Wentz..... (229/7)
2,382,597 8/1945 Amberg..... 229/7(1)

ABSTRACT: A sealed beverage container has a drinking straw supported in a loop depending from a partly or wholly severable portion of the container cover. In one form such portion is a patchlike tear strip covering a slot in the cover, the slot being wider than the straw and preferably extending from the corner of the cover part way along a diagonal. In another form such portion is coplanar with and integral with the cover, the latter being provided with two niches in the circumferential edge thereof preferably spaced equidistant from a corner thereof, the tip of the corner between the niches being adapted to be grasped to tear the portion upward out of the plane of the cover. In both forms the straw is simultaneously tilted upward for extraction from the loop. Additional provision is made for standing the extracted straw upright in the corresponding corner of the container.

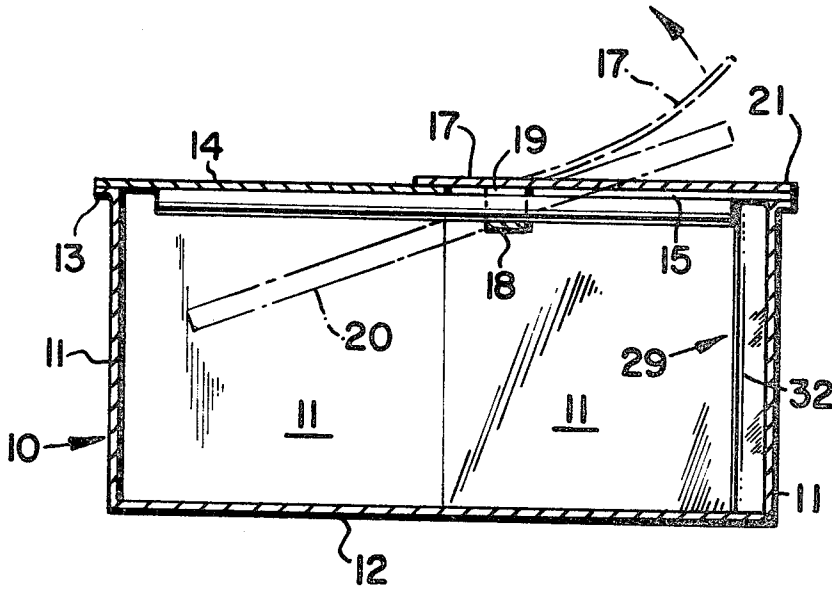


FIG.1

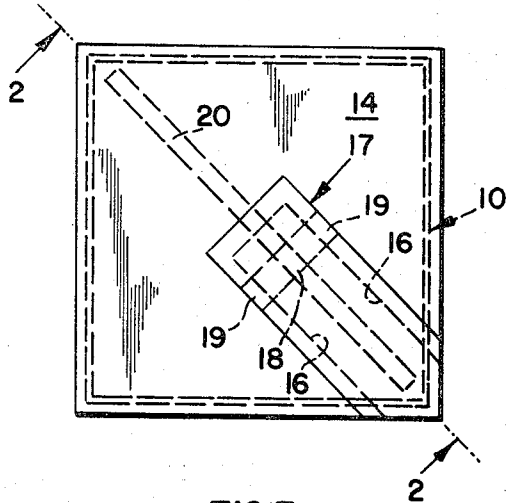


FIG.2

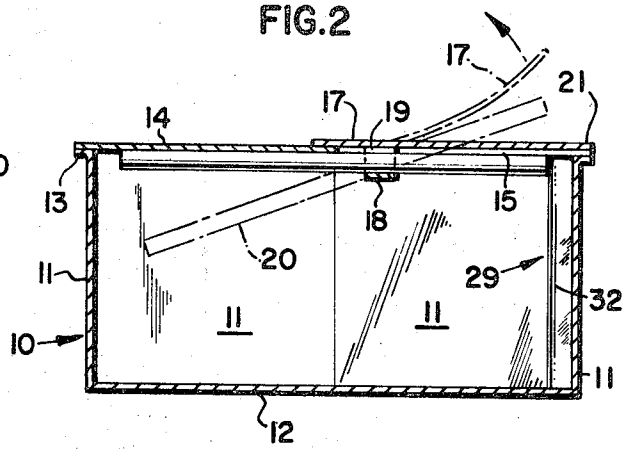


FIG.3

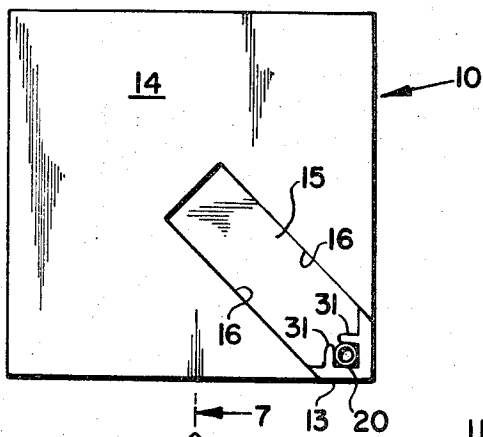


FIG.4

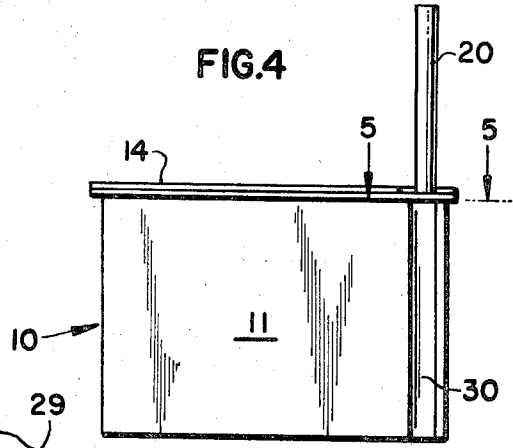
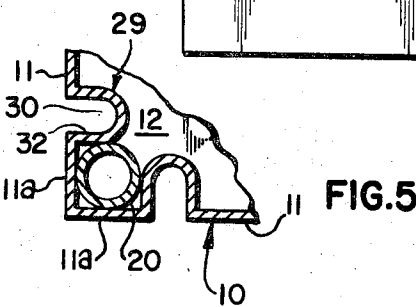
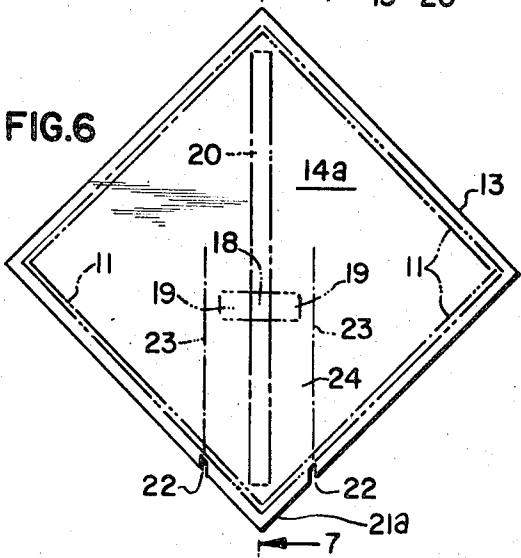


FIG.6



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FIG.7

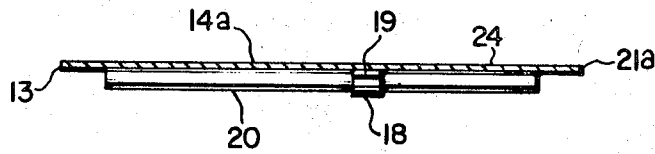


FIG.9

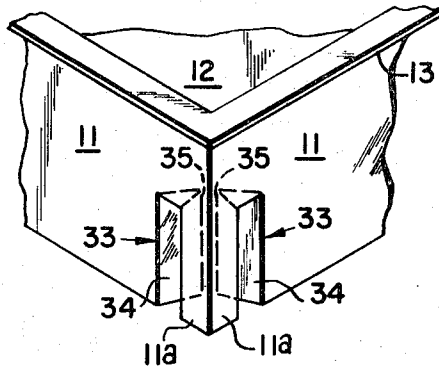


FIG.8

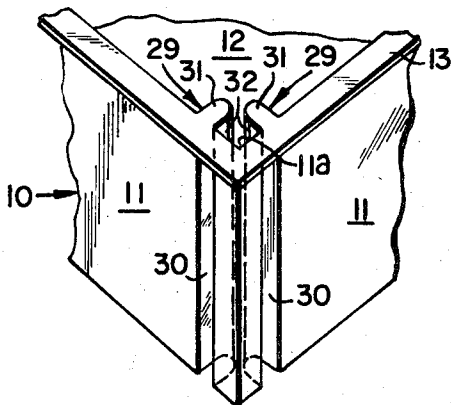
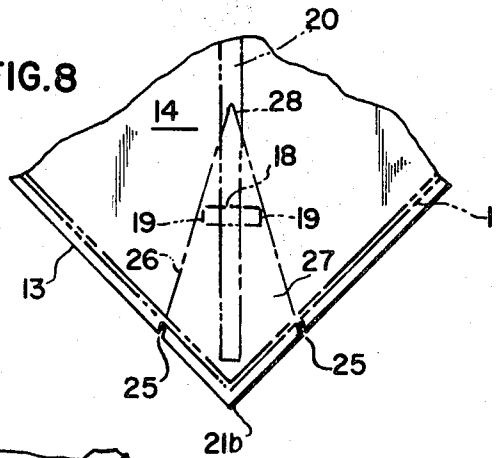


FIG.10

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COMBINATION BEVERAGE CONTAINER AND DRINKING STRAW

My U.S. Pat. No. 3,385,501 of May 28, 1968 discloses a container cover having a tear strip defined by spaced parallel slits extending from a corner of the cover on both sides of a diagonal, and a straw is carried in a loop suspended from the tear strip. Upon tearing the strip the straw is tilted upward to be grasped and extracted.

The present invention also embodies a drinking straw suspended from a tear strip or tearable portion which provides for tilting the straw upward together with the tearable portion, but the present invention achieves such result by means of different and improved constructions.

Referring briefly to the drawing, FIG. 1 is a top plan view of the container having a first form of cover wherein an access slot is closed by a tear strip adhered to the external surface of the cover.

FIG. 2 is a sectional view taken on the line 2-2 of FIG. 1 except that the tear strip is shown partly severed for access to the straw.

FIG. 3 is a top plan view of the container of FIGS. 1 and 2 with the tear strip and the straw omitted.

FIG. 4 is a side elevational view of the container as it would appear with the tear strip entirely removed and with the straw supported upright in the uncovered corner.

FIG. 5 is an enlarged fragmentary sectional view taken on the line 5-5 of FIG. 4.

FIG. 6 is a top plan view of a second form of container cover, the surrounding walls of the container body to which this cover is sealed being indicated in phantom.

FIG. 7 is a sectional view taken on the line 7-7 of FIG. 6.

FIG. 8 is a fragmentary view similar to FIG. 6 but showing a third form of cover which is a modification of that shown in FIG. 6.

FIG. 9 is a fragmentary perspective view of a modified form of the container with the cover omitted, showing a different construction for supporting the extracted straw in the upright position illustrated in FIG. 4.

FIG. 10 is an enlarged fragmentary perspective view of the container body, with the cover omitted, of the form shown in FIGS. 1-5.

Referring in detail to the drawing, the numeral 10 designates a container body shown rectangular in cross section and including the surrounding sidewalls 11 and the bottom wall 12. The upper edges of the walls 11 are flared outward to provide a circumferential flange 13.

The cover 14 is dimensioned to be complementary to the flange 13 and is sealed thereon to confine the liquid contents. A relatively wide slot 15 is provided in the cover, preferably extending along a diagonal thereof with the opposed longitudinal edges 16 of the slot preferably spaced equidistantly from the geometrical or straight line of the diagonal. A tear strip 17 having a greater length and width than the slot 15, has a depending loop 18 formed substantially intermediate the length of a relatively narrow band 19 whose end portions are adhered to the underside of the strip 17. A drinking straw 20 is releasably held in the loop 18 and is thus suspended from the strip 17. The band and hence the loop are so positioned on the tear strip that when the latter is adhered to the top surface of the cover and covers the slot 15, the loop 18 is positioned forward of the center of the cover. Thus, when the leading end 21 of the strip 17 is torn upward, as illustrated in phantom in FIG. 2, the straw is tilted upward into a convenient position to be grasped and inserted through the now exposed slot 15. To facilitate lifting of the tear strip, at least a portion of its extremity 21 is preferably left unadhered to the flange 13; since such feature is common and well known it is not specifically shown in the drawing.

In the modified form of cover 14a shown in FIGS. 6 and 7, instead of the slot 15 and tear strip 17, the cover has two short niches 22 cut therein equidistantly spaced from a corner apex and directed along parallel lines 23 shown in phantom in FIG. 6. With the cover made of a material such as foil

laminare, which is available on the market, upon lifting the extremity 21a of the portion of the cover between the niches and tearing upward as before, a tongue 24 will be severed out of the cover to provide a slot equivalent to the slot 15 of FIG. 3, as is obvious. In this form of cover the band 19 is adhered to the underside of the tongue portion 24 and its loop 18 carries the straw 20.

FIG. 8 illustrates a modified form of the cover of FIG. 6. Herein the niches 25, otherwise equivalent to the niches 22, are cut long converging lines shown in phantom at 26 so that, upon tearing the tip 21b upward a tongue portion 27 may be completely removed by continuing the tearing operation to the apex 28 at which the lines 26 meet.

In the case of the covers of FIGS. 6 and 8, score lines, not shown, may be cut partway into the cover along the lines shown in phantom, especially where it is desired to make the cover out of a material other than foil laminate, or such score lines may be provided no matter what material is used.

The container body 10, which is shown only in FIGS. 1-5 and 10, includes means for holding the extracted straw upright in a socket like frame in the exposed corner of the container body. Such means is there shown as two inwardly depressed vertical flutes 29 in the adjacent sidewalls 11 extending from the bottom of the container body to the level of the flange 13 with the latter having inward extensions 31 at the top of the recesses 30 thus formed in the sidewalls 11. These flutes provide opposed vertical wall portions 32 inside the container, which together with the adjacent portions 11a of the walls 11 provide a socket into which the straw can be inserted to reach to the bottom of the container and which maintains the straw in upright position. The essential characteristic of these flutes and those described below is that they provide vertical wall portions which extend inward from the walls 11 a distance sufficient to provide stops to prevent the straw from tilting out of the upright position.

Although the flutes 29 instead of extending the full height of the walls 11 may extend only part way upward from the bottom of the container and thus serve for the same purpose in, perhaps, a less effective manner, a modified form of flutes is shown in FIG. 9 and is particularly adaptable in the case where the flutes extend only partway upward. These flutes, shown at 33 in FIG. 9, provide wedge-shaped recesses 34 which provide opposed vertical wall portions 35 which again, together with the adjacent wall portions 11a provide a socket like frame within which the straw can register and be retained upright.

Flutes such as illustrated and described herein are readily provided, in the case of plastic containers, by the method known as "thermoforming," and obviously they may be formed by other methods whether the material used is a plastic or another material.

In order that the drinking straw 20 be constrained against floating upward when inserted into the socketlike structure which is clearly seen in FIG. 5, it is desirable that the straw engage the opposed walls 32 and 11a frictionally. Proper dimensioning of the various parts is readily accomplished to attain this end.

It is obvious that instead of having the container rectangular in cross section as illustrated in the drawing and described, since a rectangle is one form of a polygon, a six- or eight-sided polygon, or one having even a larger number of sides, may be substituted for the rectangular cross section. In such a case it is also obvious that any corner of the polygonal container can serve as the corner in which the socketlike enclosure is provided and the outer tapered extremity of the entrance slot is positioned, both of which as well as the suspended straw being similarly positioned along a diagonal through such corner.

I claim:

1. A combination beverage container and drinking straw comprising a container body polygonal in cross section and including a bottom wall, sidewalls having their upper edges flared outward to provide a circumferential flange, and a cover dimensioned complementarily to said flange sealed on said flange, said cover including a relatively wide tearable por-

tion which extends from a corner thereof toward the midportion thereof adapted to be torn from the cover in a direction toward said midportion thereby exposing a diagonal slot in the cover, said tearable portion having a width greater than the diameter of said straw and having means on the underside thereof for releasably suspending the straw therefrom in a position intermediate said tearable portion and substantially parallel with said cover, said container body having in the sidewalls thereof adjacent the corner thereof corresponding to said corner of the cover inwardly extending projections extending inward at approximately right angles to said adjacent sidewalls thereby defining together with the portions of said adjacent sidewalls which lie between said projections a socket-like enclosure in which said straw after extraction from said suspending means is registrable.

2. A combination according to claim 1, said tearable portion comprising a strip adhered to the upper surface of said cover.

3. A combination according to claim 1, said tearable portion lying in the plane of said cover, the end portion of said tearable portion which lies opposite the midportion of the cover having two niches cut into only that portion of the edges thereof which is superimposed on said flange, said niches being spaced from said corner of the cover and defining the width of the corresponding portion of the slot which is first exposed.

4. A combination according to claim 3, said niches being linearly mutually parallel and parallel with the geometric diagonal through said corner of the cover.

5. A combination according to claim 3, said niches being linearly mutually converging in directions toward a common point positioned within the boundaries of said cover.

6. A combination according to claim 5, said common point

being positioned on said geometric diagonal.

7. A combination according to claim 1, said projections within the container body extending only part way toward each other.

8. A combination according to claim 1, said projections having vertical wall portions on the mutually opposed sides thereof frictionally engageable by the straw.

9. A combination according to claim 8, said projections extending throughout the height of said adjacent sidewalls.

10. A combination according to claim 8, said projections extending part way upward from the bottom of the container body toward the upper edges of said sidewalls.

11. In combination, a sealed beverage container and a drinking straw comprising a container body polygonal in cross section including a bottom wall, sidewalls and a cover, said cover including a relatively wide tearable portion which extends from a corner thereof toward the midportion thereof adapted to be torn from the cover in a direction toward said midportion thereby exposing a diagonal slot in the cover, said tearable portion having a width greater than the diameter of said straw and having means on the underside thereof for releasably suspending the straw therefrom in a position intermediate said tearable portion and substantially parallel with said cover, said container body having in the sidewalls thereof adjacent the corner thereof corresponding to said corner of the cover inwardly extending projections extending inward at approximately right angles to said adjacent sidewalls thereby defining together with the portions of said adjacent sidewalls which lie between said projections a socketlike enclosure in which said straw after extraction from said suspending means is registrable.

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