

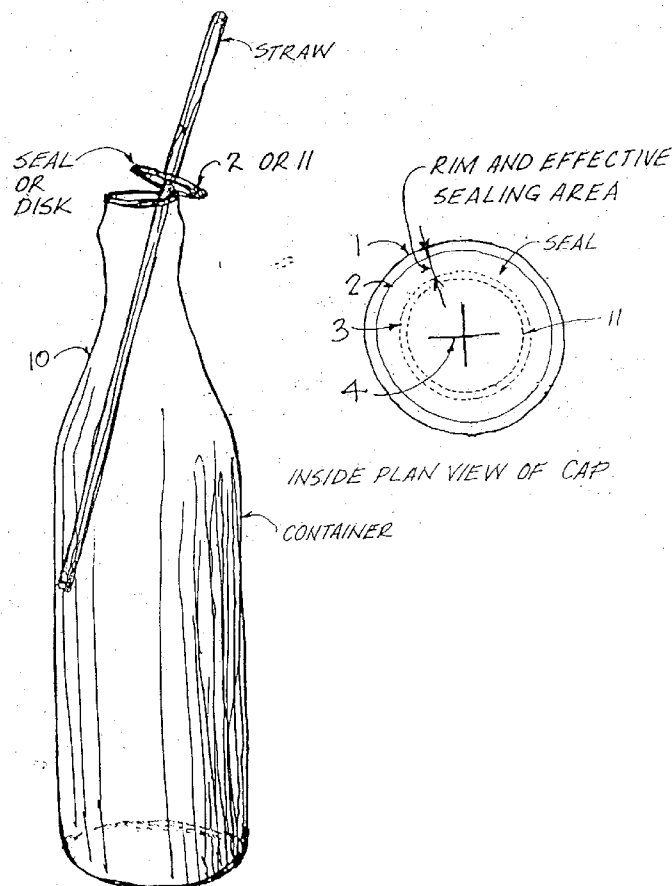


US 20050029270A1

(19) **United States**(12) **Patent Application Publication**
Marshall(10) **Pub. No.: US 2005/0029270 A1**(43) **Pub. Date: Feb. 10, 2005**(54) **STRAW-INSERTABLE, REUSABLE
DRINKING CONTAINER SEAL**(76) Inventor: **Randall S. Marshall**, Washington, DC
(US)Correspondence Address:
RANDALL S. MARSHALL
5225 AMES ST., N.E.
WASHINGTON, DC 20019 (US)(21) Appl. No.: **10/636,764**(22) Filed: **Aug. 8, 2003****Publication Classification**(51) **Int. Cl.⁷ A47G 19/22**(52) **U.S. Cl. 220/705; 215/388; 220/229**(57) **ABSTRACT**

A straw-insertable, sealing and resealing device is disclosed, including a flexible disk-like body and a geometrically shaped body for a drinking container, especially a container used for beer, soft drink, punch, fruit juice, vegetable juice,

drinking water, and other consumable liquids. The said sealing device comprises at least one or a combination of disk-like bodies and geometrically shaped bodies within a drinking container cap having one or plurality of lines of weakness located on the top surface of at least one said body within the container rim adapted for inserting, holding and adjusting the length a drinking straw through the said top surface and thus into the drinking container and resealable when placed back into the said container. Once the container has been opened, one or a plurality of disk-like-bodies or geometrically shaped bodies are removed from within the cap and utilized to hold a drinking straw in place above the rim of the said container while in use. The length of the straw above the container rim is adjusted within at least one said disk-like body or geometrically shaped body to suit the user. At least one flexible disk-like body or geometrically shaped body is also removable or extendable to hold a drinking straw both inside and outside of the drinking container. After use, the straw and disk-like body or geometrically shaped body is discarded or put back into the container cap for resealing. At least one extended disk-like body or geometrically shaped body will also be utilized by the manufacturer to install and store a straw within the container for the consumer's use.



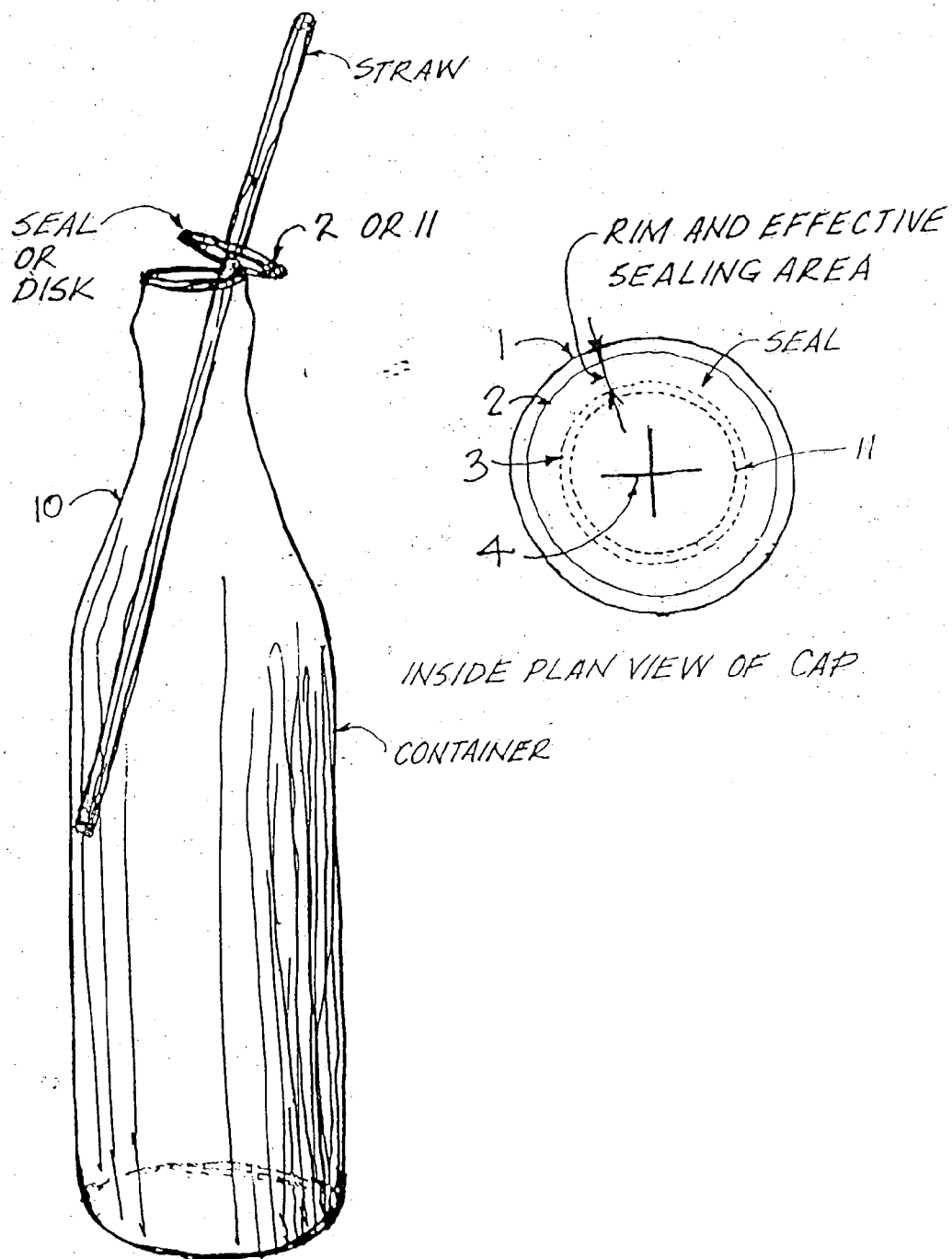
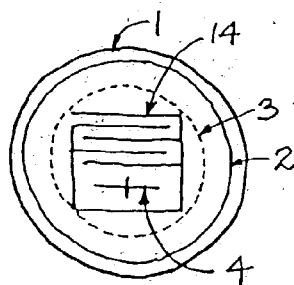
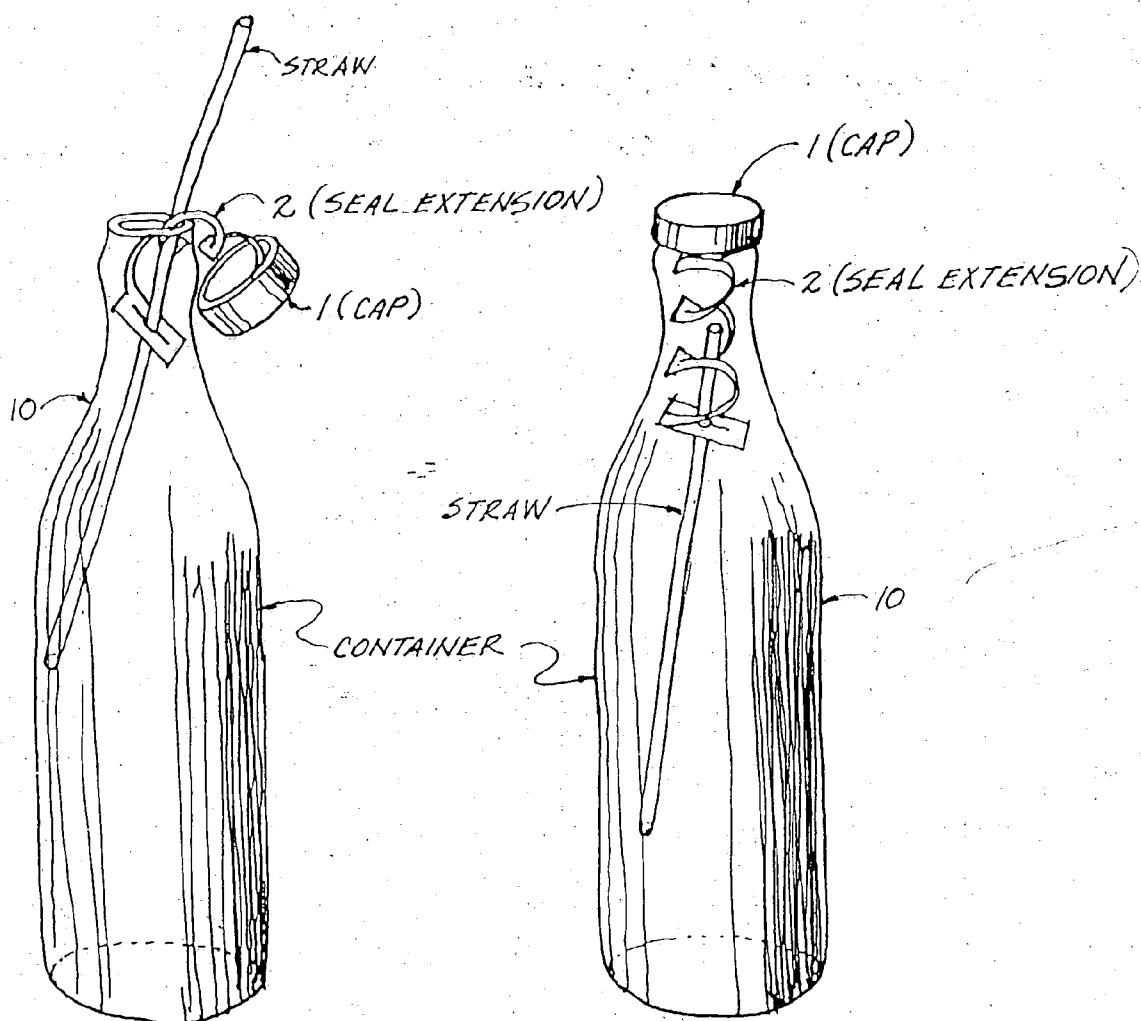


FIG. 1



PLAN VIEW - INSIDE OF CAP

FIG 1-A

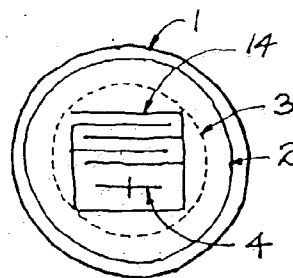


FIG 1-B

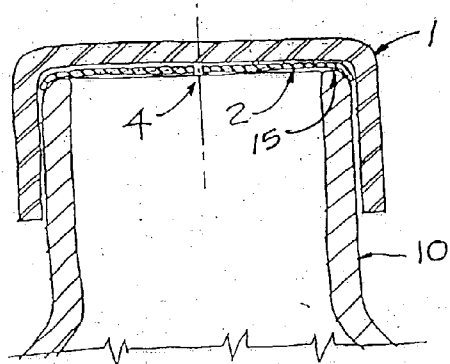


FIG 5

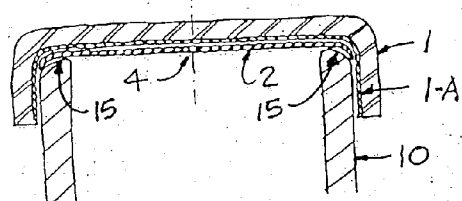


FIG 6

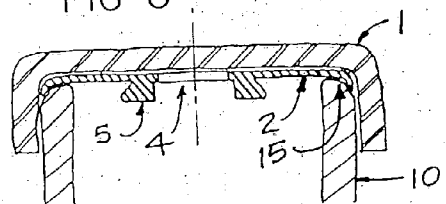


FIG 7

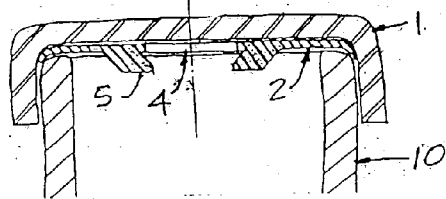


FIG 8

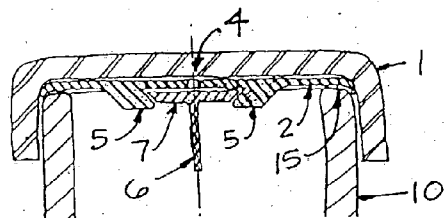


FIG 9

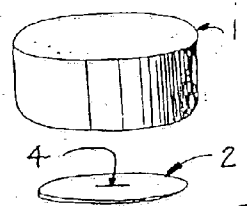
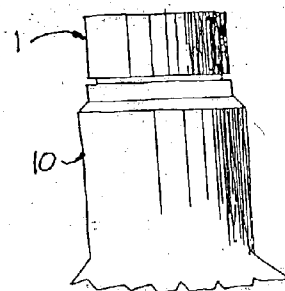


FIG 2

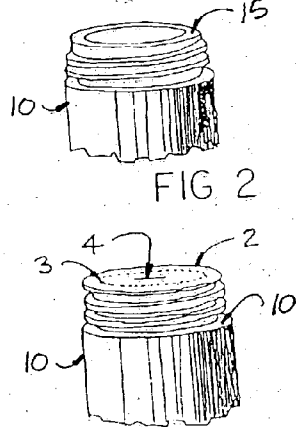


FIG 3

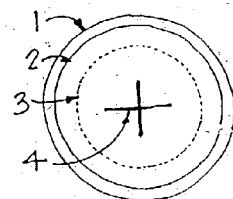


FIG 4

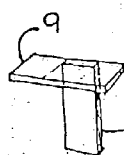


FIG 11

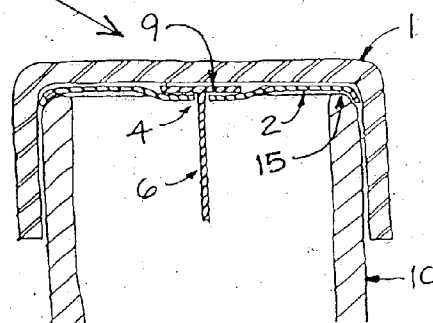


FIG 10

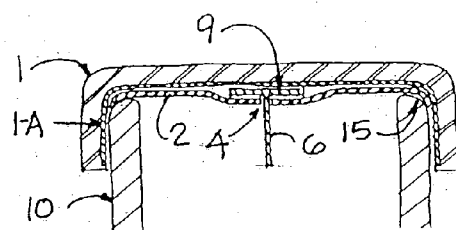
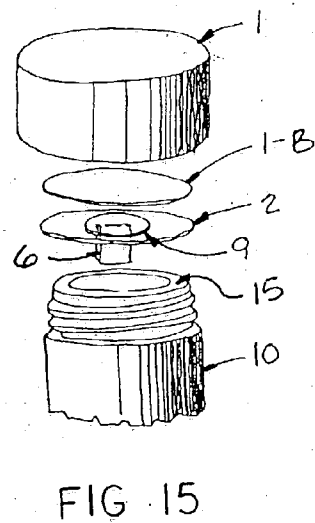
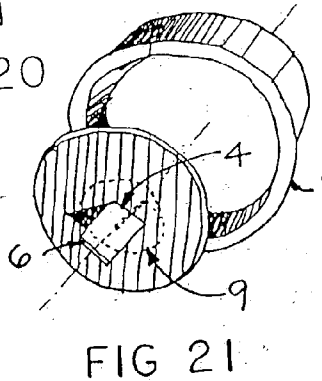
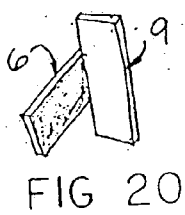
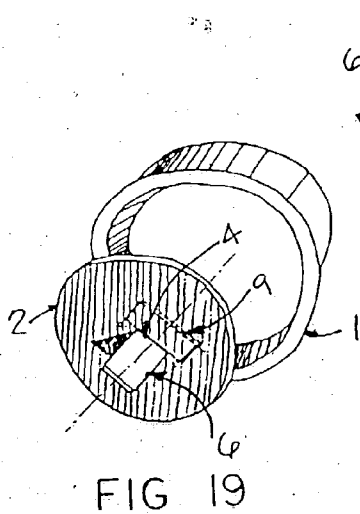
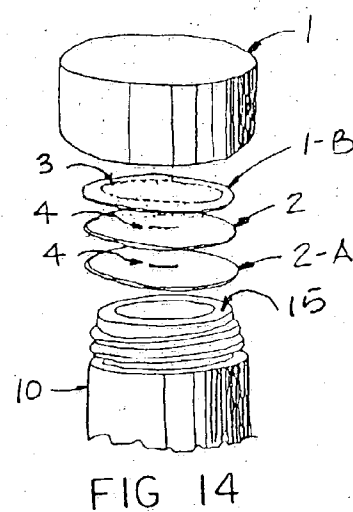
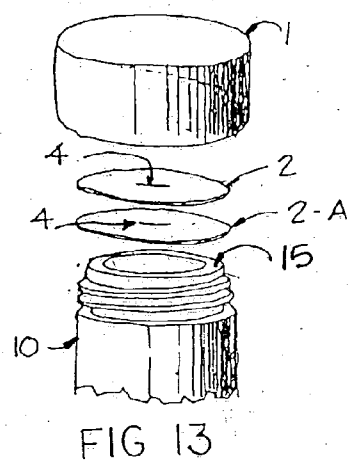
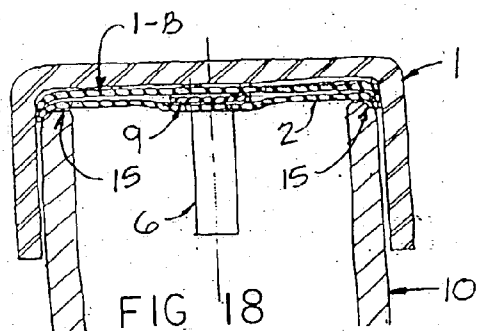
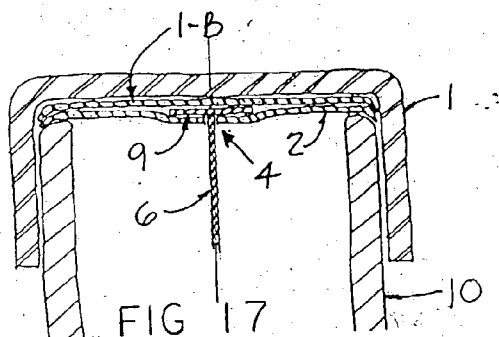
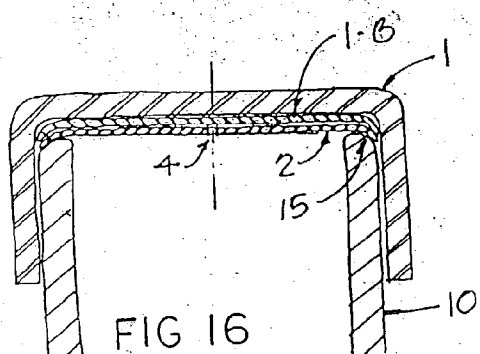
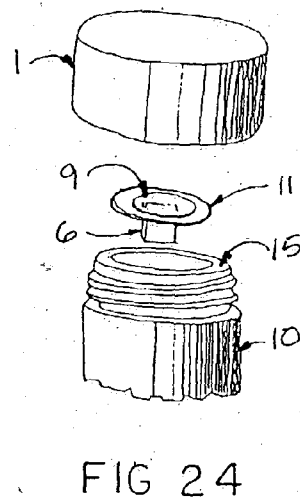
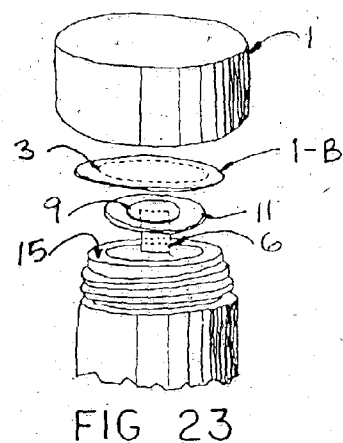
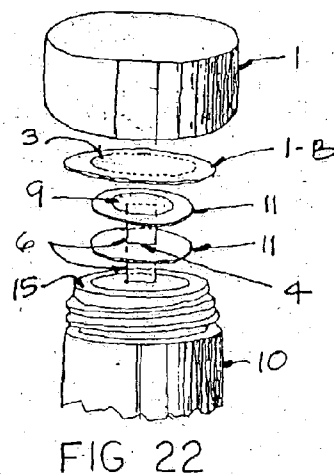
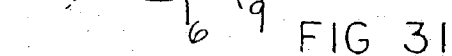
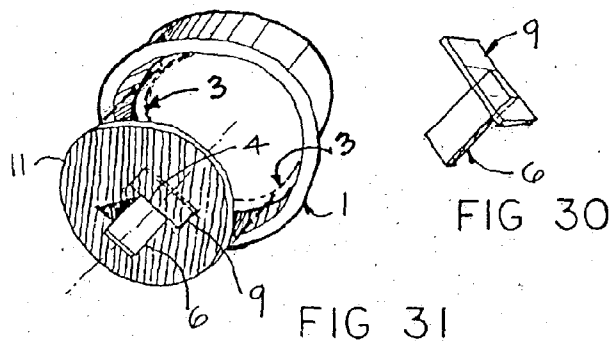
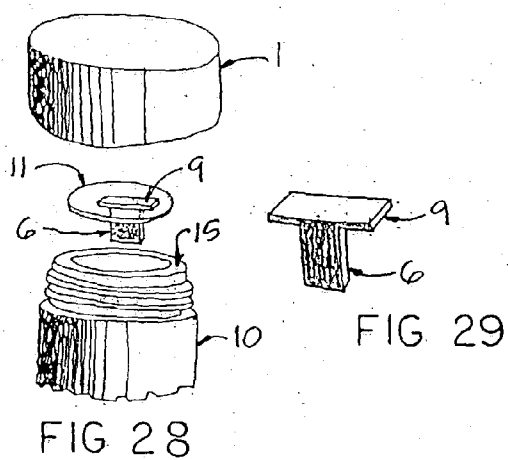
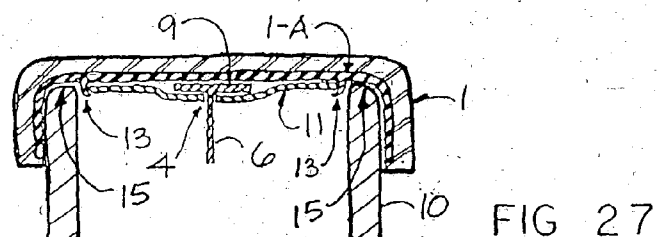
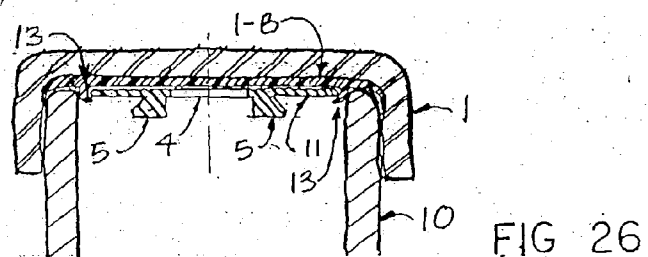
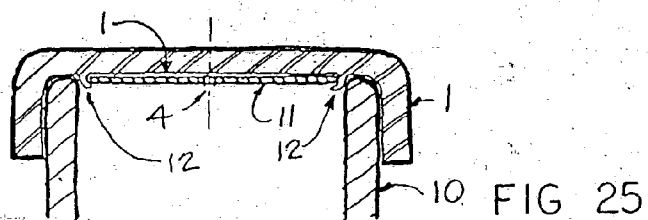


FIG 12





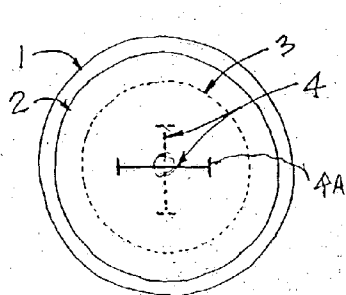


FIG 32
FIG 32-A

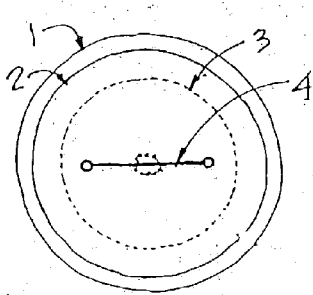


FIG 33

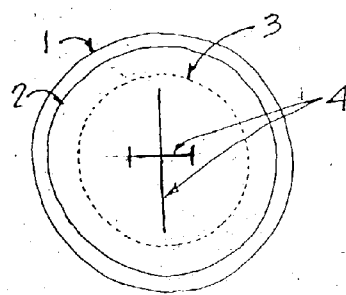


FIG 34

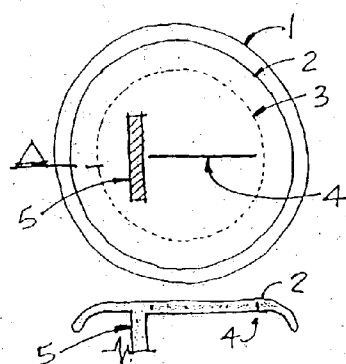


FIG 35

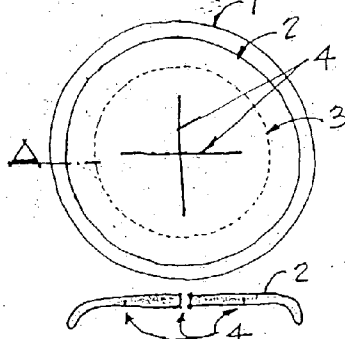


FIG 36

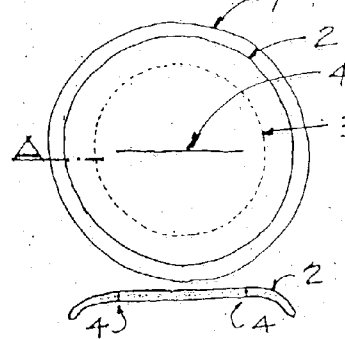


FIG 37

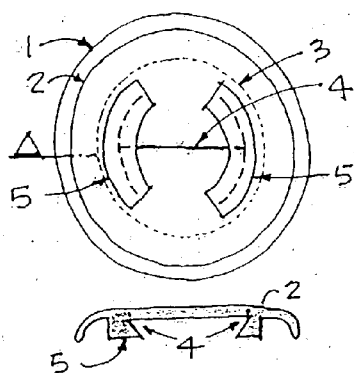


FIG 38

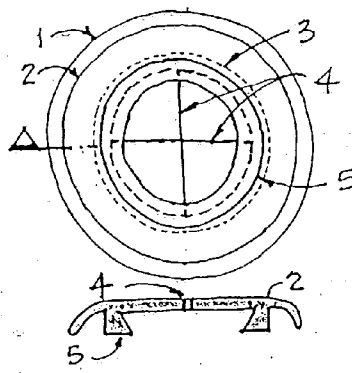


FIG 39

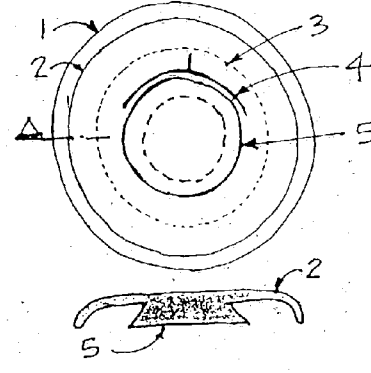


FIG 40

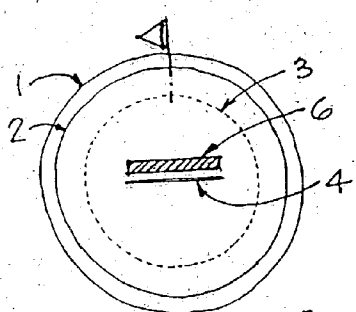


FIG 41

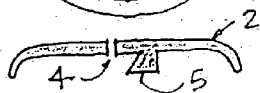
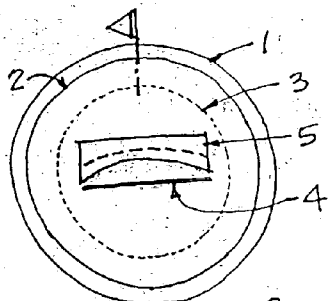


FIG 42

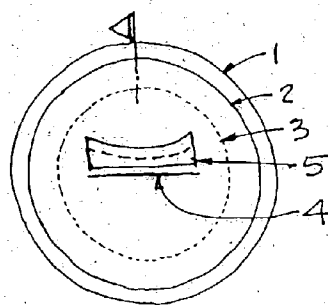


FIG 43

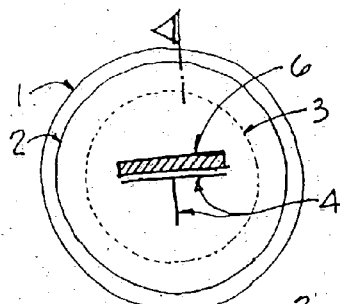


FIG 44

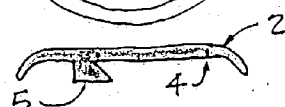
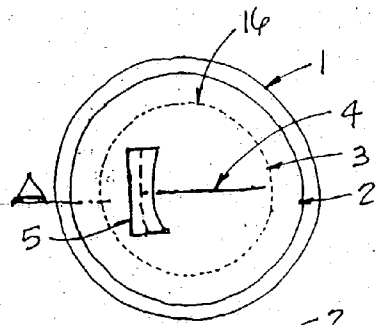


FIG 45

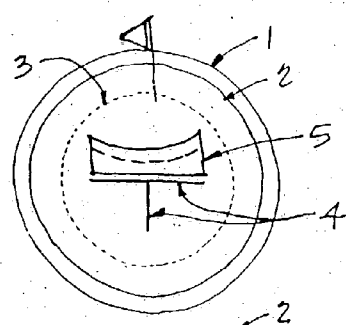


FIG 46

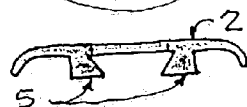
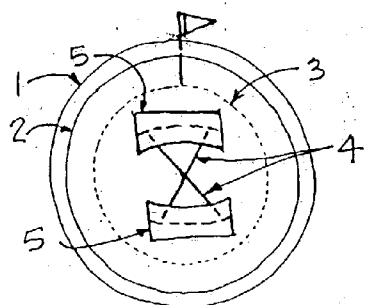


FIG 47

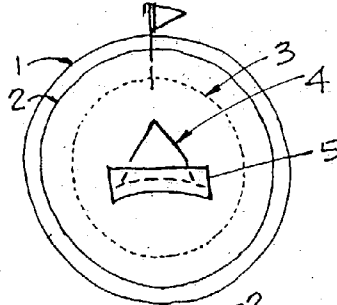


FIG 48

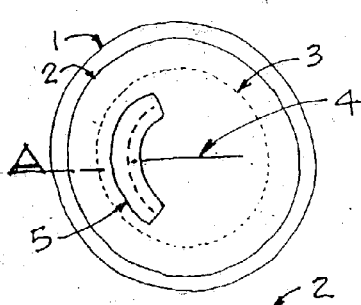


FIG 49

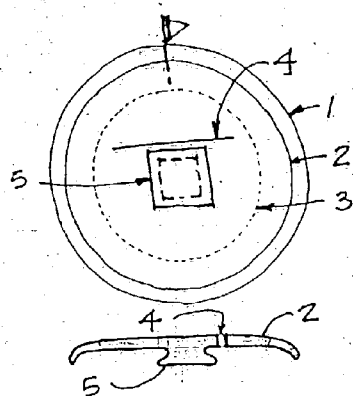


FIG 50

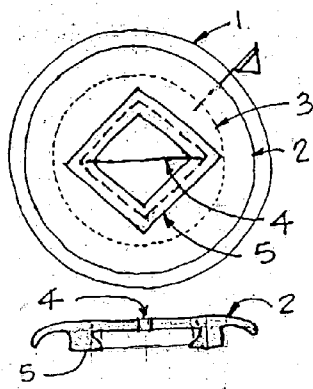


FIG 51

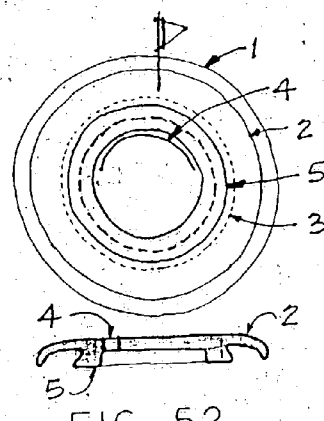


FIG 52

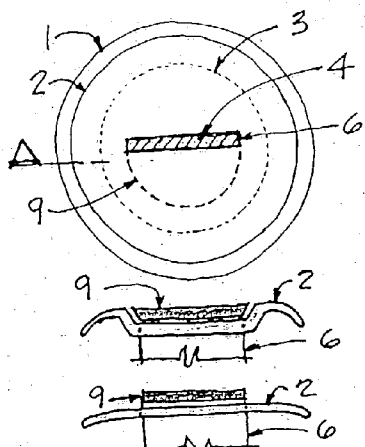


FIG 53

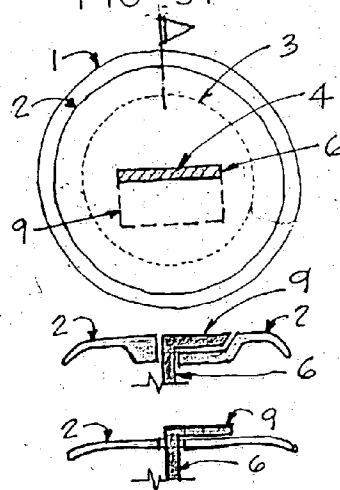


FIG 54

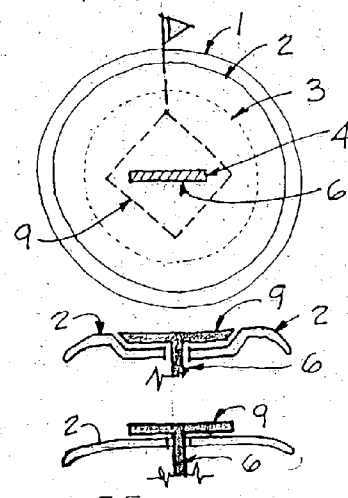


FIG 55

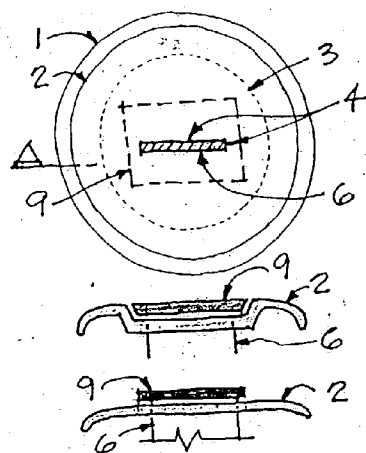


FIG 56

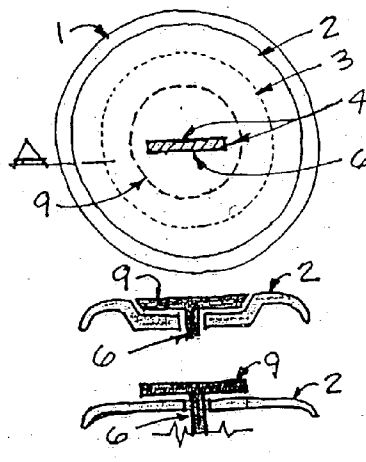


FIG 57

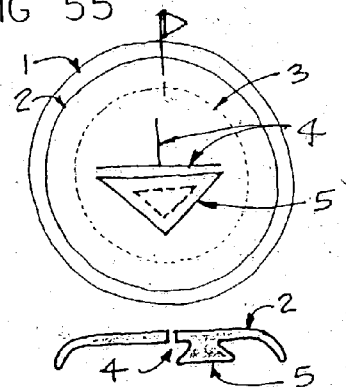


FIG 58

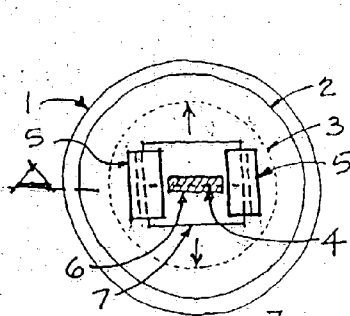


FIG 59

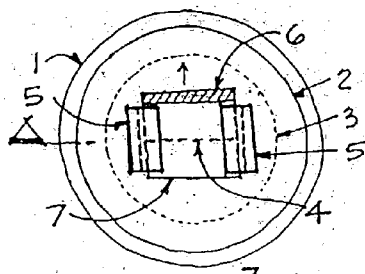


FIG 60

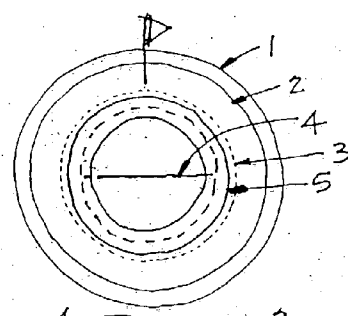


FIG 61

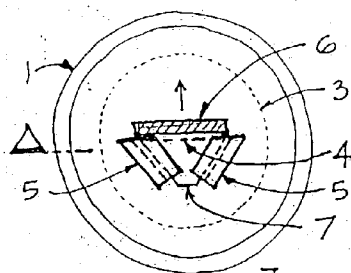


FIG 62

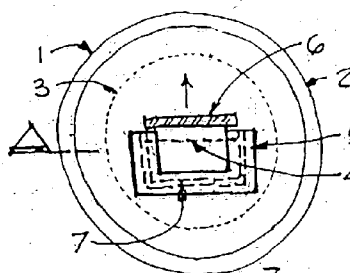


FIG 63

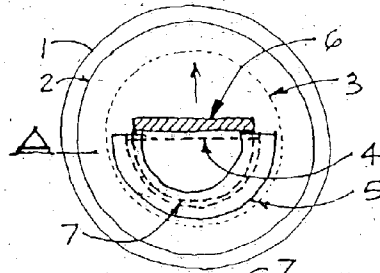


FIG 64

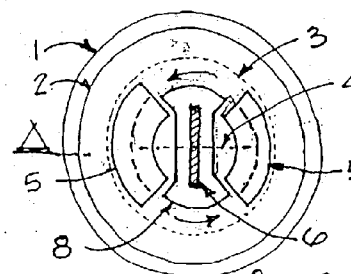


FIG 65

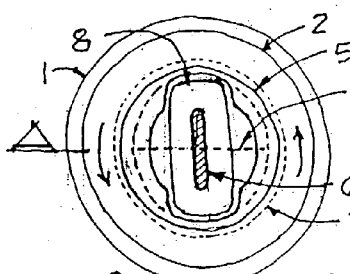


FIG 66

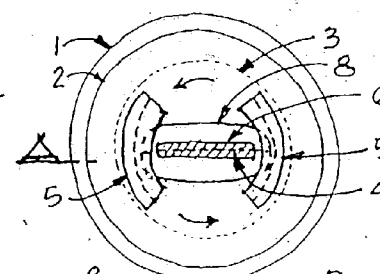
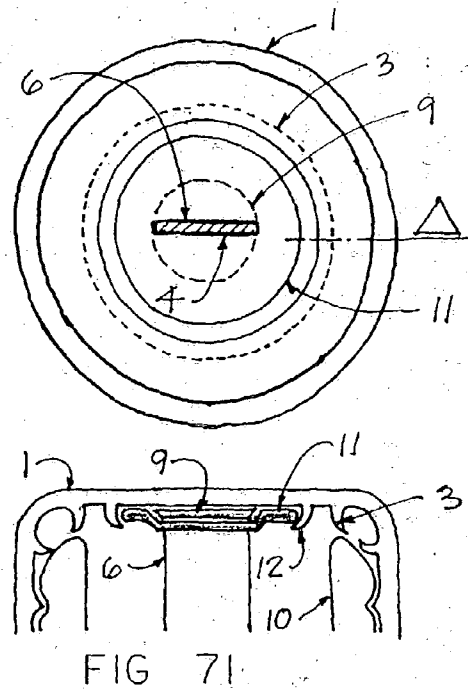
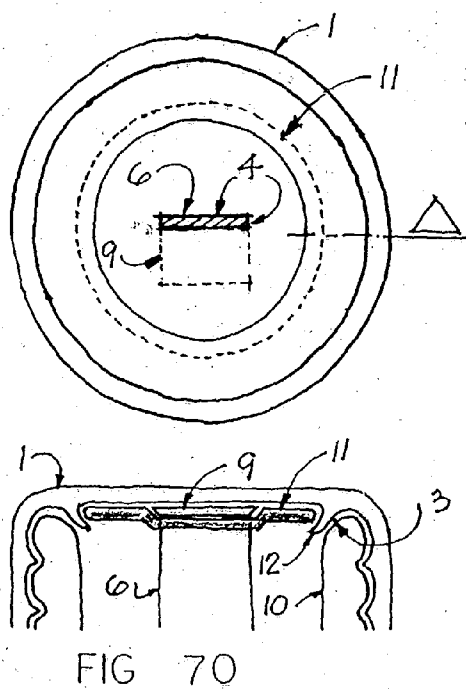
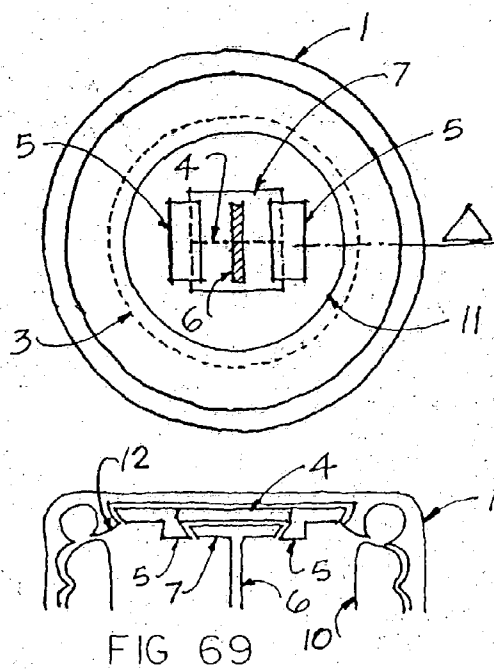
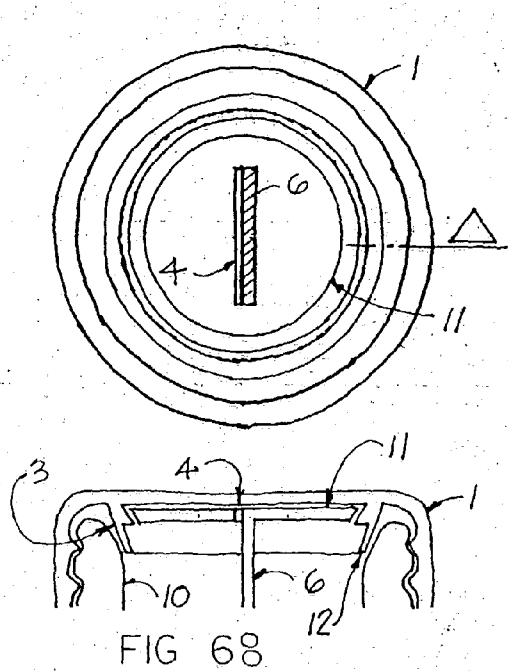


FIG 67



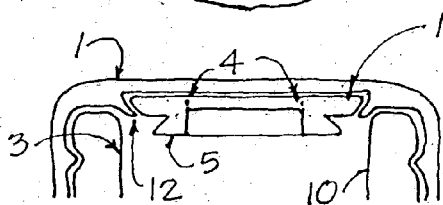
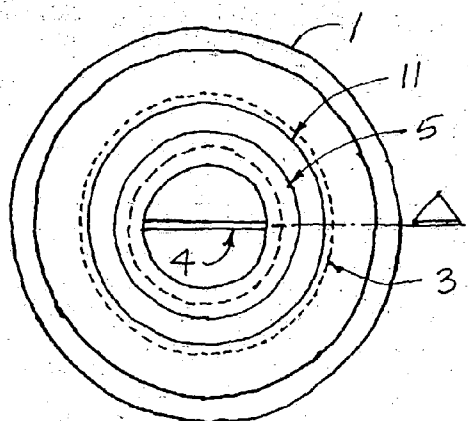


FIG 72

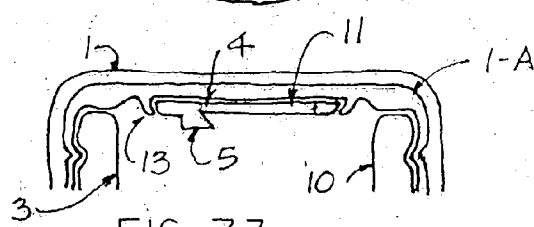
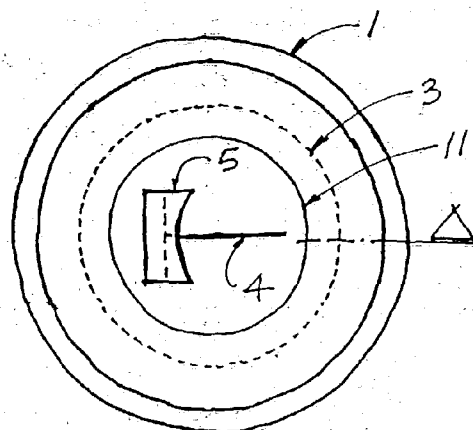


FIG 73

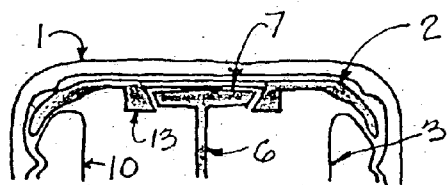
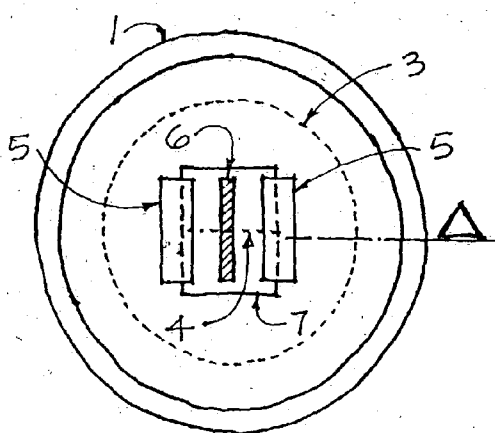


FIG 74

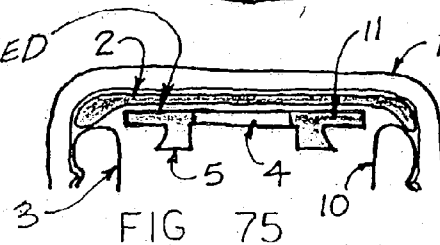
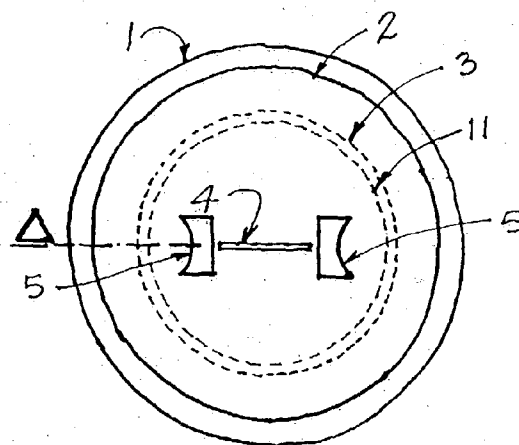


FIG 75

ATTACHED

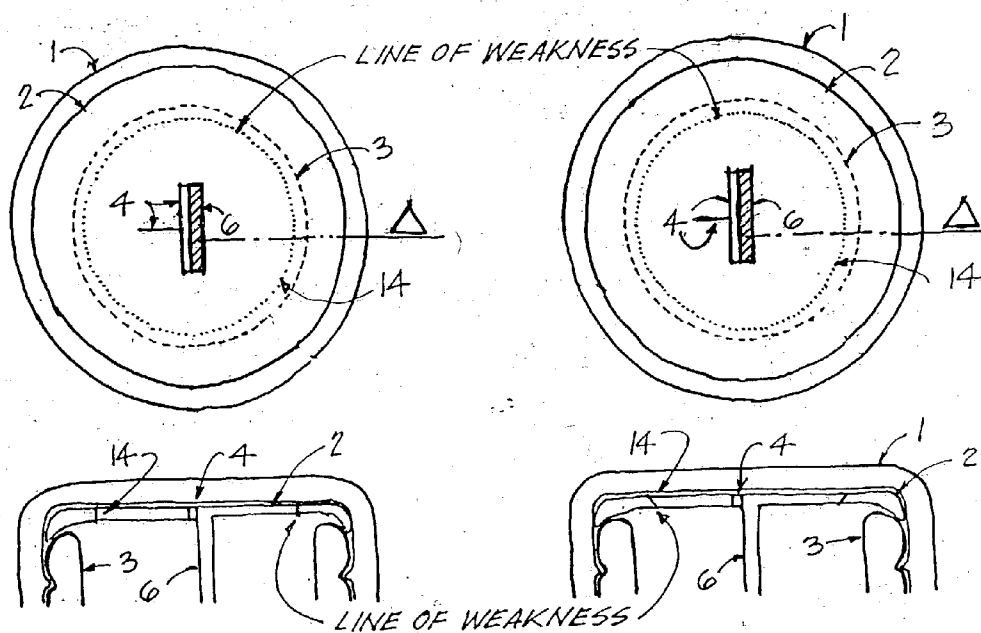


FIG 76

FIG 77

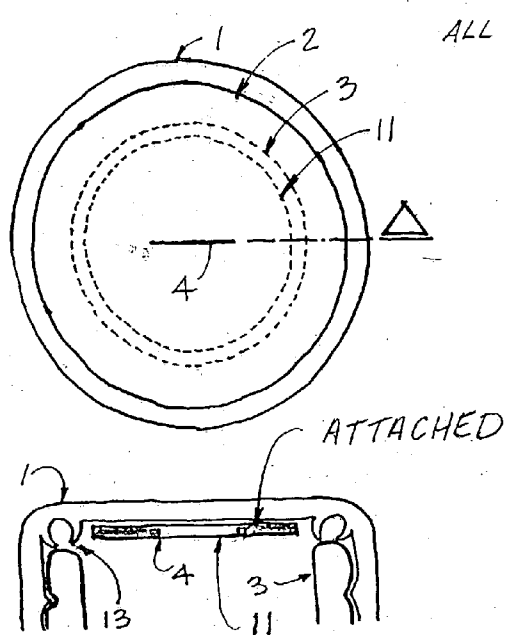
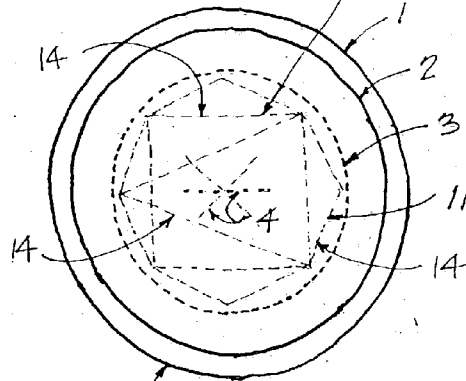


FIG 78

ALL GEOMETRIC SHAPES



NOTE: THIS PLAN VIEW SYMBOLIZES THE MIXING AND INTERMIXING OF ALL ELEMENTS ILLUSTRATED FROM FIG 1 THRU

FIG 79

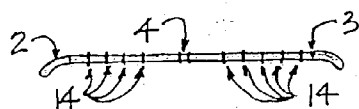
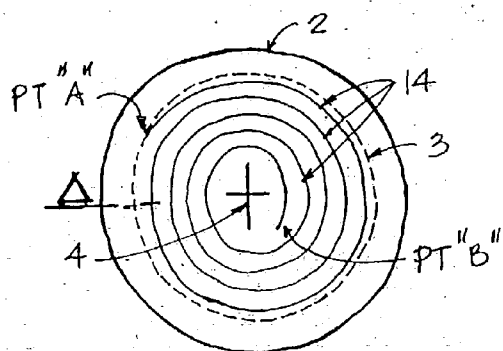


FIG 80

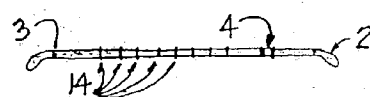
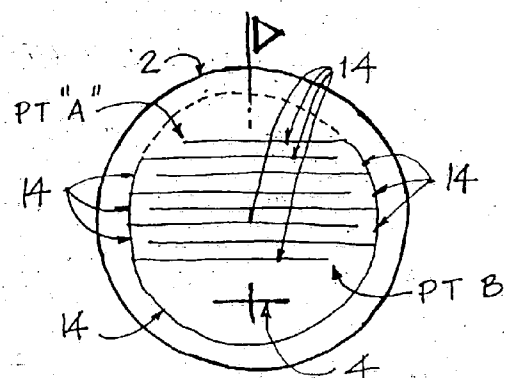


FIG 81

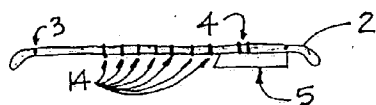
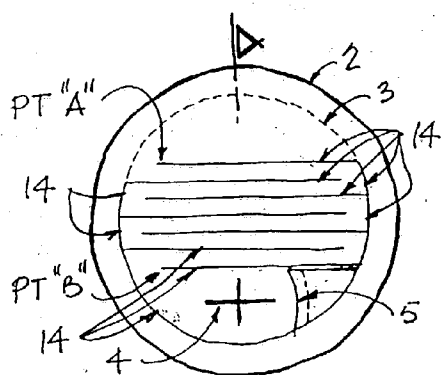


FIG 82

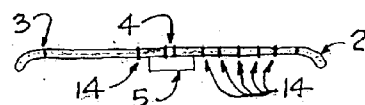
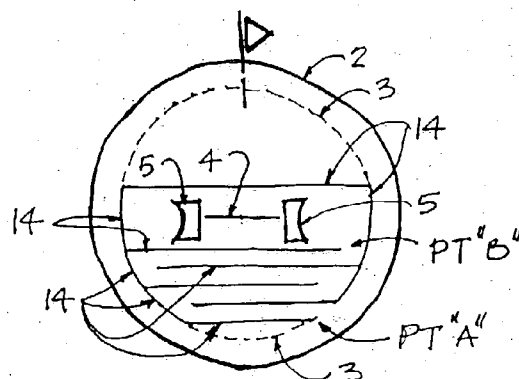


FIG 83

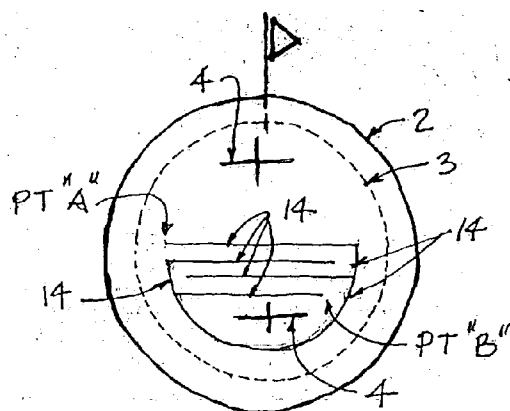


FIG 84

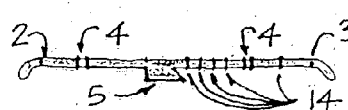
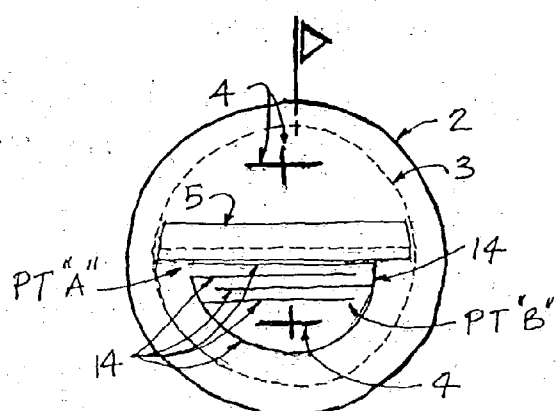


FIG 85

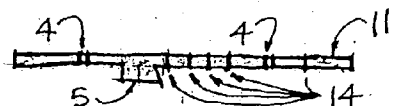
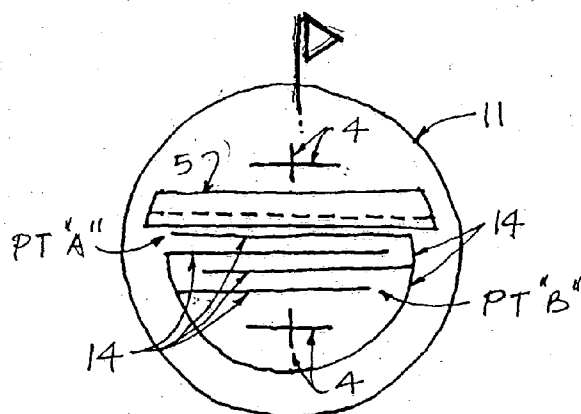


FIG 86

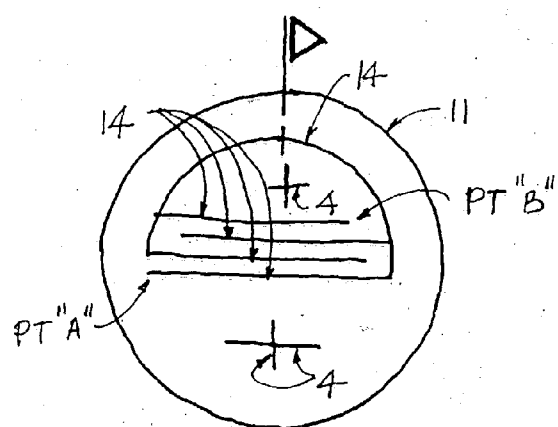


FIG 87

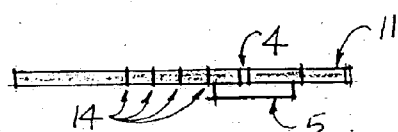
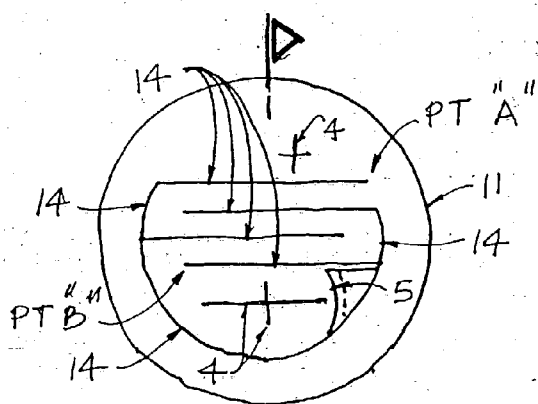


FIG 88

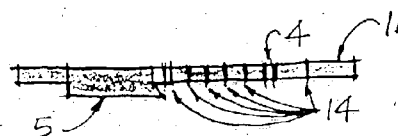
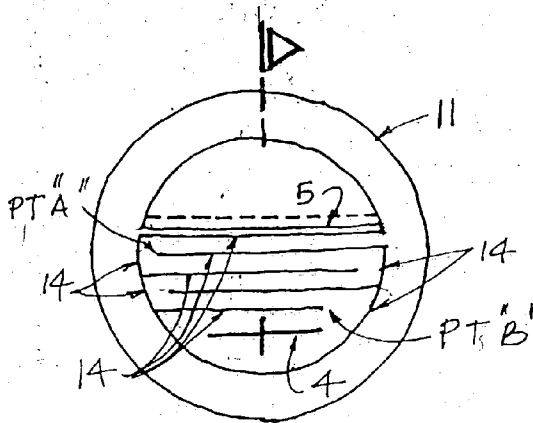


FIG 89

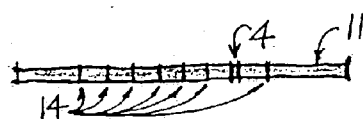
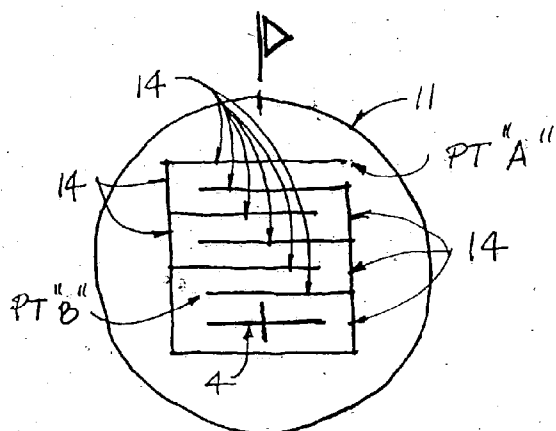


FIG 90

FIG 91

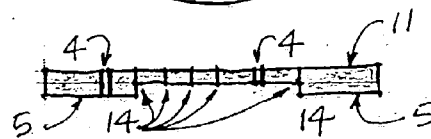
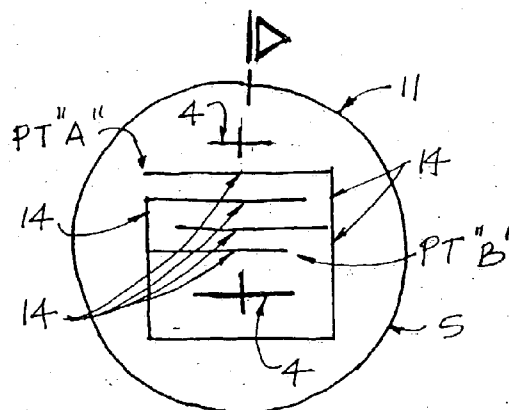


FIG 92

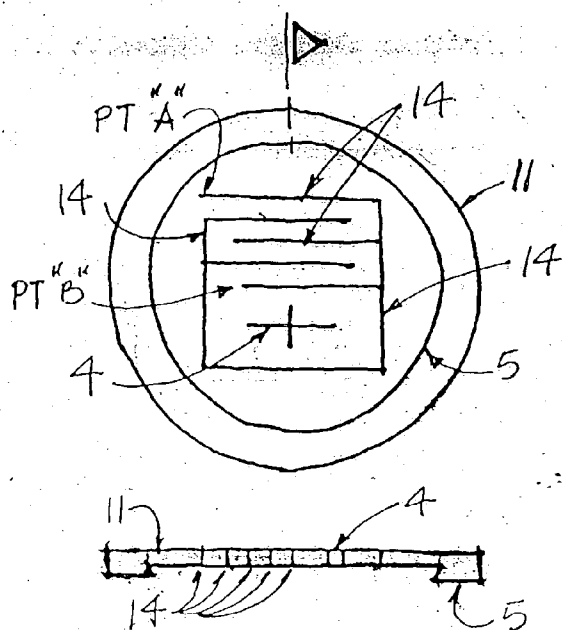


FIG 93

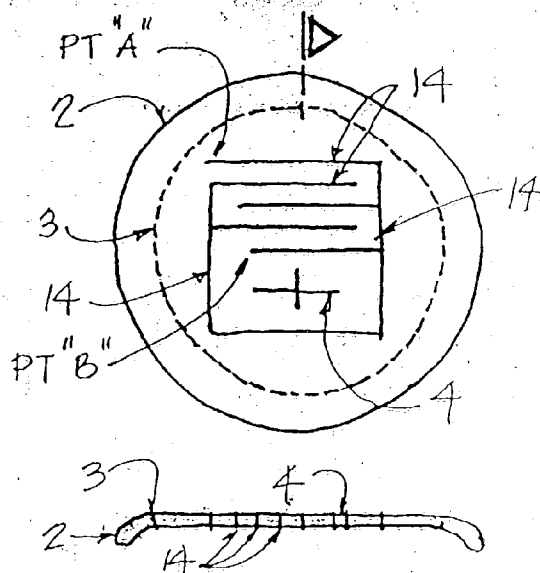


FIG 94

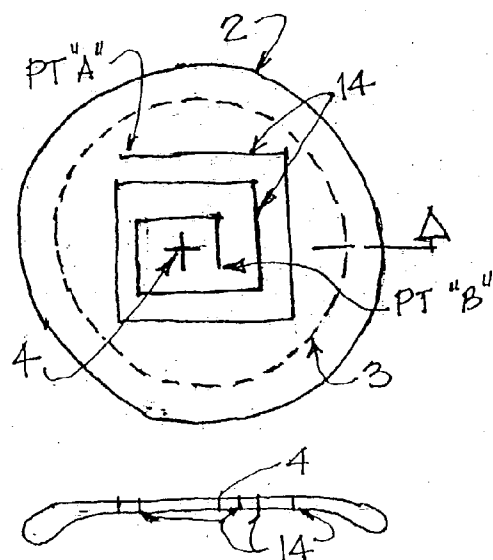


FIG 95
FIG 96

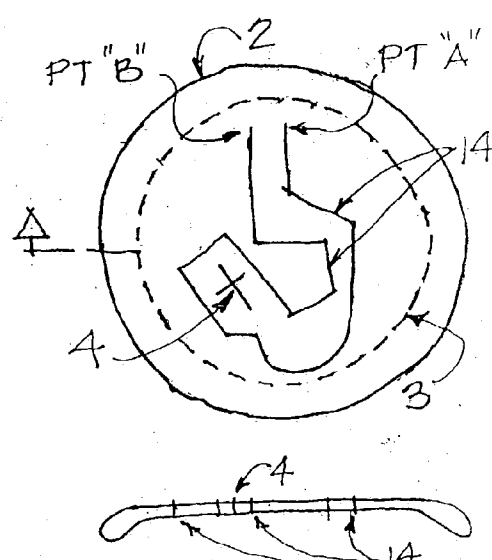


FIG 97
FIG 98

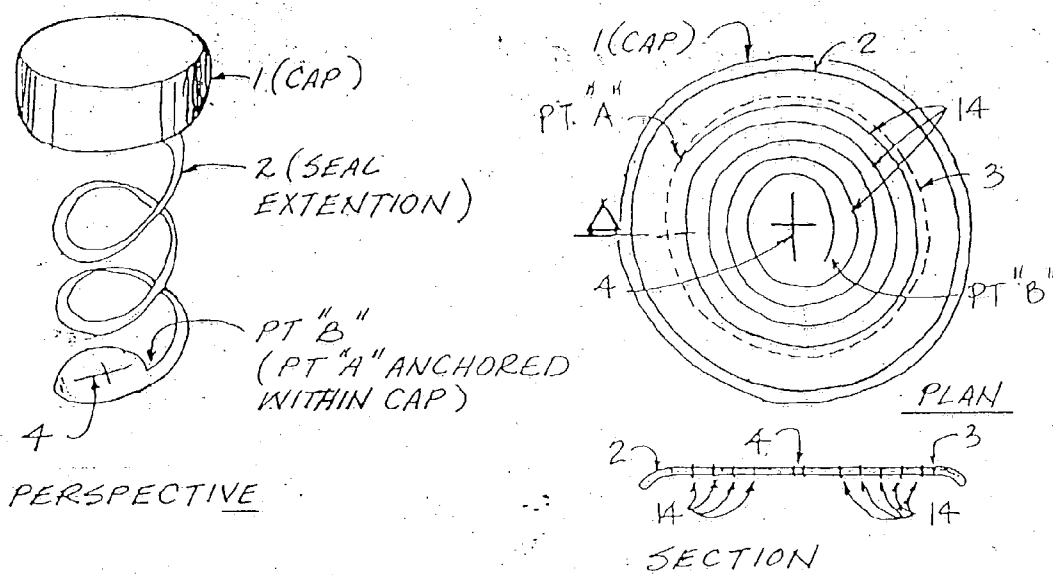


FIG 99

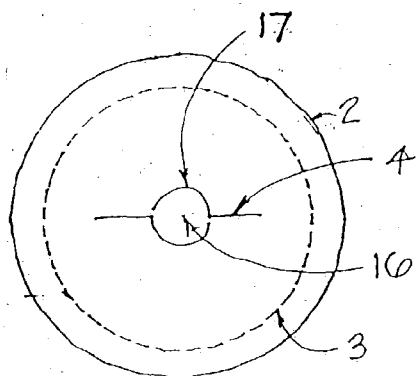


FIG 100

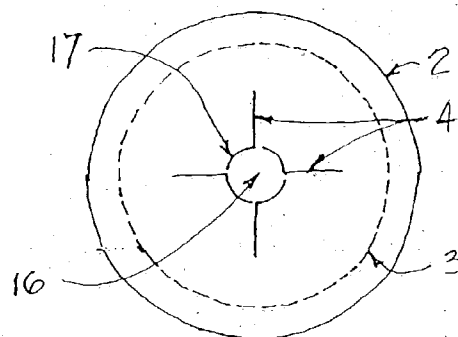


FIG 101

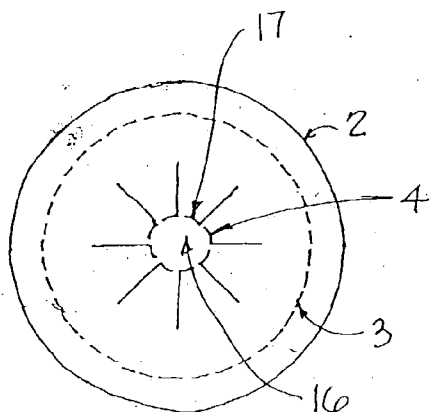


FIG 102

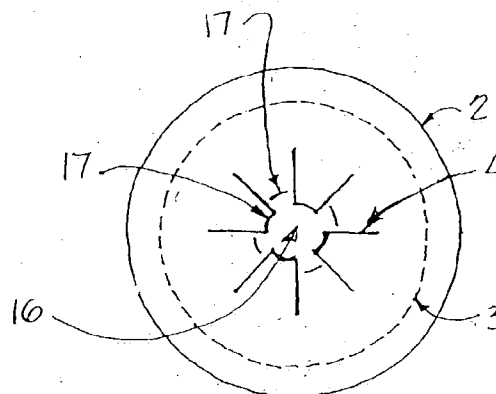


FIG 103

STRAW-INSERTABLE, REUSABLE DRINKING CONTAINER SEAL

RELATED US APPLICATION DATA

[0001]

Inventor(s):	Date:	U.S. Pat. No:
Gregory Et Al	31 Oct. 1995	5,462,187
J. G. Paniagua	28 Aug. 1962	3,051,342
Toczek Et Al.	14 Mar. 1995	5,397,023
Rush Et Al.	15 Sep. 1992	5,147,065
John B. Busch	27 Apr. 1928	1,706,209
Shull	30 Jul. 1985	4,531,649
Loffler	14 Jul. 1992	5,129,533
N. J. Penning	4 Mar. 1942	2,388,568
M. A. Van Der Spek	11 Nov. 1952	2,617,559
N. R. Mainiere	3 Jun. 1958	2,837,234
H. E. Vivian Et Al.	26 Sep. 1961	3,001,883
Dutt Et Al.	20 Jan. 1987	4,637,519
Ichinose Et Al.	14 Apr. 1981	Re. 30,573
L. J. Kennedy		3,767,076
M. Tate Et Al.	12 Jun. 1934	1,962,883
G. C. Allen	23 Oct. 1944	2,432,132

RELATED FOREIGN APPLICATION DATA

[0002]

Inventor(s):	Date:	Patent Number:
France	February 1963	1,322,638
Canada	9 Sep. 1973	933,489

BACKGROUND OF THE INVENTION

[0003] When a straw is used to consume a beverage from a drinking container-, such as beer, soft drink, fruit juice, vegetable juice, drinking water, and other consumable liquids, it usually sinks below the rim of the container, after one sip or another. Many consumers will then stick a finger, usually dirty, into the neck of the container to retrieve the straw. Others will put the neck of the container, also usually unsanitary, into their mouth and turn the container up side down in an attempt to retrieve the straw. For many years, drinking directly from the mouth of a container has been a hygiene concern to some users for several external reasons. Further, when drinking from a large container with a straw, one often desires to save some of the beverage and put the cap back on the container, if it has not been dropped or lost. Further yet, when one wishes to drink with a straw from that same container later, another straw may be needed and not be available. Therefore, a container that has a cap attached and stores a retrievable drinking straw helps to solve some hygiene concerns and also helps to make drinking from a container more convenient and safe.

SUMMARY OF THE INVENTION

[0004] The present invention relates to utilizing one or a plurality of disk-like bodies or geometrically shaped bodies having one or a plurality of lines of weakness for inserting and holding a drinking straw through at least one said body and thus into a drinking container and resealing the said

container cap when the user desires. The present invention also relates to utilizing one or a plurality of disk-like bodies or geometrically shaped bodies comprising one or a plurality of lines of weakness within the container rim and on the top surface of the said body that are removable, extendable and adaptable for inserting and holding a drinking straw both inside and outside of a drinking container. At least one disk-like body or geometrically shaped body is also used for inserting and holding a drinking container straw to an adjusted length above the container rim. When a drinking container has been opened at least one or more disk-like bodies or geometrically shaped bodies are removed, used and put back into the said container cap or discarded, leaving at least one said body for resealing.

[0005] Accordingly, an object of the present invention is to provide a sealing device for a container cap comprising one or a plurality of disk-like bodies having at least one line of weakness, within the container rim, adapted for inserting and holding a drinking straw through the top surface and thus into the drinking container and resealable when placed back into the said container.

[0006] Another object of this invention is to provide a sealing device for a drinking container cap comprising at least one disk-like body and at least one geometrically shaped body, attached within the container rim, and adapted for removal and for inserting and holding a drinking straw through the top surface of at least one said body and thus into the drinking container and resealable when placed back into the said container.

[0007] Another object of this invention is to provide a sealing device for a drinking container cap comprising one or a plurality of geometrically shaped bodies with one or a plurality of lines of weakness, within the container rim, adapted for inserting and holding a drinking straw through the top surface and thus into the drinking container and resealable when placed back into the container.

[0008] Another object of this invention is to provide a sealing device for a drinking container cap comprising at least one disk-like body having at least one line of weakness, within the container rim, for removal or extending the said body, adapted for inserting and holding a drinking straw through the top surface above the container rim and thus into the drinking container and resealable when placed back into the said container cap.

[0009] Another object of this invention is to provide a sealing device for a container cap comprising at least one disk-like body attached to at least one geometrically shaped body having at least one line of weakness, within the container rim, for removal or extending the said body, adapted for inserting and holding a drinking straw above the container rim and thus into the drinking container and resealable when placed back into the said container cap.

[0010] Another object of this invention is to provide a sealing device for a container cap comprising at least one geometrically shaped body attached to one or a plurality of geometrically shaped bodies having at least one line of weakness, within the container rim, removable, extendable, and adaptable for inserting and holding a drinking straw above the container rim and thus into the drinking container and resealable when placed back into the said container cap.

[0011] Another object of the present invention is to provide a sealing device for a drinking container cap compris-

ing one or a plurality of disk-like bodies having at least one line of weakness, within the container rim, adapted for inserting, holding and adjusting the length of a drinking straw above the container rim and thus into the drinking container and resealable when placed back into the said container cap.

[0012] Another object of the present invention is to provide a sealing device for a drinking container cap comprising one or a plurality of geometrically shaped bodies having at least one line of weakness, within the container rim, adapted for inserting, holding and adjusting the length of a drinking straw above the container rim and thus into the drinking container and resealable when placed back into the said container cap.

[0013] Another object of the present invention is to provide a sealing device for a drinking container cap comprising at least one disk-like body having one or a plurality of lines of weakness, within the container rim, removable, extendable and adaptable for inserting and holding a drinking straw both inside and outside of the drinking container.

[0014] Another object of the present invention is to provide a sealing device for a drinking container cap comprising at least one geometrically shaped body having one or a plurality of lines of weakness, within the container rim, removable, extendable and adaptable for inserting and holding a drinking straw both inside and outside of the drinking container.

[0015] Another object of this invention is to provide a sealing device for a drinking container cap comprising at least one of the aforementioned bodies with one or a plurality of lines of weakness, within the container rim, reinforced to stop the propagation of tearing the said lines of weakness when inserting a drinking straw.

[0016] Another object of the present invention is to provide a sealing device for a drinking container cap comprising at least one of the aforementioned bodies, attached, within the container rim, to at least one projection or removable assembly.

[0017] Another object of the present invention is provide a sealing device for a drinking container cap comprising a plurality of disk-like bodies or geometrically shaped bodies with at least one symbol or message or both on at least two said bodies.

[0018] Other and further objects of the present invention will become apparent upon an understanding of illustrative embodiments about to be described, or will be indicated in the appended claims. Various advantages not referred to herein will occur to one skilled in the art upon employment of the invention in practice.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] Item 1 is the container cap. Item 1-A of FIGS. 6, 12, and 27 is a non-pierced and non-removable disk-like body. Item 1-B of FIGS. 14-18, 22, 23 and 26 is a non-pierced and removable disk-like body. Item 2 is a removable disk-like body with a diameter greater than the container rim. Item 4 represents one or a plurality of lines of weakness for inserting and holding a drinking straw. Item 5 is a projection from a flexible disk-like body or geometrically shaped body. Item 6 is a removable and extended projection.

Item 7 is a removable and sliding assembly. Item 8 is a removable and pivoting assembly. Item 9 is a cap for a removable and extended projection. Item 10 is a drinking container. Item 11 is a removable and flexible geometrically shaped body having a diameter less than the container rim. Item 12 are extended projections from a container cap for holding in place a flexible geometrically shaped body 11. Item 13 are extended projections from a disk-like body 2 for holding in place a flexible geometrically shaped body 11. Item 14 of FIGS. 76, 79, 80, 90 and 95 shows a continuous line of weakness for tearing off an adjacent surface. Item 15 of FIGS. 13, 14 & 16 is the effective sealing area of a container rim. Item 16 is a circular hole through a flexible geometrically shaped body. Item 17 is a portion of a line of weakness in the form of an arc of a circle.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0020] The following examples are intended for illustrations only. As various changes may be made in the construction and arrangement of the preferred invention without departing from the spirit and scope and without sacrificing any of its advantages, it is to be understood that all matter herein are not intended to limit my invention in any combination of related ways shown.

[0021] FIG. 1 is a sketch of a drinking container 10 with a straw held in place on the rim with a flexible geometrically shaped body 11 or a disk-like body 2. Also shown is a plan view of a disk-like body within a container cap 1 indicating the effective sealing area 2 and lines of weakness 4 within the ineffective sealing area 3. FIG. 1-A is a drinking container 10 with an extended disk-like body 2 attached from within the cap 1. The plan view of FIG. 1-A shows a disk-like body within a container cap 1 with lines of weakness 14 and 4 in the ineffective sealing area 3. FIG. 1-B shows a drinking container 10 with a straw stored within and attached to an extended disk-like body 2. The plan view of FIG. 1-B is the same as 1-A. FIG. 2 is a fragmentary perspective view of a container 10, container cap 1 and a disk-like body 2 with a line of weakness 4.

[0022] FIG. 3 is a fragmentary perspective view of a drinking container 10 showing a line of weakness 4 within the ineffective sealing area 3. FIG. 4 is a plan view of the inside of a container cap 1 showing a disk-like body with a plurality of lines of weakness within the ineffective sealing area 3. FIG. 5 is a diagrammatic section through a container cap 1 and a flexible disk-like body 2 with a line of weakness 4. FIG. 6 is a diagrammatic section through a container cap 1 with a non-removable disk-like body 1-A and a flexible disk-like body 2 with a line of weakness 4. FIGS. 7 and 8 are diagrammatic sections through a container cap 1 and a pierced flexible disk-like body 2 and projections 5. FIG. 9 is a diagrammatic section through a container cap 1 and a flexible disk-like body 2 with an extended and removable projection 6.

[0023] FIG. 10 is a diagrammatic section through a container cap 1 and a flexible disk-like body 2 with a removable and extended projection attached above the said disk-like body 2. FIG. 11 is a perspective view of a removable and extended projection 6. FIG. 12 is a diagrammatic section through a container cap 1 with a non-removable disk-like body 1-A, a flexible disk-like body 2 and a removable and

extended projection 6. FIG. 13 is a fragmentary perspective view of a container 10, container cap 1 and a plurality of flexible disk-like bodies 2 and 2-A with lines of weakness 4. FIG. 14 is a fragmentary perspective view of a container 10, container cap 1 and a plurality of flexible disk-like bodies, 1-B, 2 and 2-A. The flexible disk-like body 1-B is without a line of weakness.

[0024] FIG. 15 is a fragmentary perspective view of a container 10, container cap 1, one non-pierced flexible disk-like-body 1-B, and one pierced, flexible disk-like body 2 with a projection cap 9 seated above the said disk 2.

[0025] FIG. 16 is a diagrammatic section through a container cap 1 and a plurality of flexible disk-like bodies 2 with only the lower said body having a line of weakness 4. FIG. 17 is a diagrammatic section through the container cap 1 and a plurality of flexible disk-like bodies, 1-B and 2. The lower body is pierced and has a removable and extended projection 6 attached above the lower said body 2. FIG. 18 is similar to FIG. 17. FIG. 19 is a perspective sketch showing a container cap 1, a disk-like body 2, and a removable and extended projection 6 seated above the said disk-like body 2. FIG. 20 is a perspective view of a removable and extended projection 6 used in FIG. 19.

[0026] FIG. 21 is similar to FIG. 19, except the removable and extended projection cap is circular. FIG. 22 is a fragmentary perspective view of a container 10, container cap 1, a non-pierced-flexible disk-like body 1-B, and two flexible geometrically shaped bodies 11 with a removable and extended projection 6 seated above the middle of said bodies 11. The two geometrically shaped bodies 11 have diameters less than the container rim 3. FIG. 23 is a fragmentary perspective view similar to FIG. 22, except 23 has one pierced, flexible geometrically shaped body 11.

[0027] FIG. 24 is a fragmentary perspective view similar to FIG. 23, except 24 has one pierced, flexible geometrically shaped body 11 attached within the container rim 3. FIG. 25 is a diagrammatic section through a container cap 1 and a pierced, flexible geometrically shaped body 11 attached to projections 12 within the ineffective sealing area of the container rim 3. FIG. 26 is a diagrammatic section through a container cap 1, a pierced, flexible geometrically shaped body 11 with projection 5 and attached to a non-pierced, flexible disk-like body with projections 13 within the ineffective sealing area of the container rim 3.

[0028] FIG. 27 is a diagrammatic section through a container cap 1 with a non-removable disk-like body 1-A, having attachable projections 13 within the ineffective sealing area 3, and a pierced, flexible geometrically shaped body 11 with an extended and removable projection cap 9 seated above the said body 11. FIG. 28 is similar to FIG. 24, except the attached, extended and removable projection has a rectangular cap 9. FIG. 29 is a perspective view of a removable and extended projection 6. FIG. 30 is similar to FIG. 29. FIG. 31 is a perspective view of a container cap 1 showing a pierced, flexible geometrically shaped body 11 attachable within the ineffective sealing area 3.

[0029] FIGS. 32, 33 and 34 show a plan view of a disk-like body within a container cap 1 having one or a plurality of lines of weakness 4 and at least one transverse tear-stopping means at the ends of at least one said line. FIG. 35 is a plan and sectional view of a container cap 1 and a

flexible disk-like body 2 with a line of weakness 4 and a tear-stopping means in the form of an extended projection 5 at one end. FIGS. 36 and 37 show a plan and sectional view of a disk-like body 2 within a container cap 1 with one or a plurality of lines of weakness 4. FIGS. 38-52 and 61 show a plan and sectional view of a disk-like body 2 having one or a plurality of lines of weakness reinforced with at least one projection 5 located within the container rim 3. FIGS. 53-57 show a plan and sectional view of a pierced, flexible disk-like body 2 within a container cap 1 with a removable and extended projection 6 within the container rim 3.

[0030] FIGS. 59, 60, 62, 63 and 64 show a plan and sectional view of a pierced, flexible disk-like body within a container cap 1 comprising at least one line of weakness with a sliding, removable and projecting assembly 8. FIGS. 65-67 are similar to FIG. 59, except the sliding, removable and projecting assembly 8 is pivotal. FIG. 68-73 show a plan and sectional view of a pierced, geometrically shaped body 11 attached within the rim of the container 3 comprising at least one removable and projecting assembly 6. FIGS. 72 and 73 also show reinforcing with at least one projection 5. FIG. 74 is a plan and sectional view of a disk-like body 2 pierced with a removable and extended projecting assembly 7.

[0031] FIG. 75 is a plan and sectional view of a geometrically shaped body pierced, attached and reinforced with two projections 5. FIGS. 76 and 77 show a plan and sectional view of a disk-like body 2 having a diameter greater than the container rim 3 and having a line of weakness 4 for a straw and for tearing and removing a geometrically shaped body having a line of weakness 14 and a projection 6.

[0032] FIG. 78 shows a plan and sectional view of a geometrically shaped body 11 with a diameter less than the container rim 3, attached and having a line of weakness 4 for inserting and holding a straw. FIG. 79 represents a disk-like body 2 having a diameter greater than the container rim 3 with an ineffective sealing area 3 for accommodating a variety of shapes and sizes of geometrically shaped bodies 11 with one or a plurality of lines of weakness 4 for inserting and holding a straw.

[0033] FIG. 80 shows a plan and sectional view of a flexible disk-like body 2 having a continuously reducing circumferential line of weakness 14 from point (pt) "A" to Pt "B" within the container rim 3, creating a continuous surface of rounded shapes from the said rim to the smaller area at pt "B" having lines of weakness 4 for inserting and holding a straw. FIGS. 81-83 show a plan and sectional view of a flexible disk-like body 2 having continuously alternate parallel lines of weakness connected with transverse lines of weakness creating continuously adjacent parallel surfaces connected with transverse surfaces from point (pt) "A" to pt "B." Point "B" is adjacent to a surface with one or a plurality of lines of weakness 4 for inserting and holding a straw. FIGS. 82 and 83 also show projections for reinforcing areas of the said disk-like body 2.

[0034] FIGS. 84 and 85 show a plan and sectional view of a flexible disk-like body 2 having continuously alternate parallel lines of weakness 14 connected with transverse lines of weakness creating continuously adjacent parallel and transverse surfaces from point (pt) "A" to pt "B." Two surface areas have lines of weakness 4 for inserting and holding a straw. FIG. 85 also shows a projection for

reinforcing the said disk-like body 2. FIGS. 86 and 87 are similar to FIGS. 84 and 85, except 86 and 87 are disk-like bodies 2 having a diameter less than the container rim 3. FIGS. 88 and 89 are similar to 86 and 87, except FIG. 89 has one pierced location for inserting and holding a straw.

[0035] FIG. 90 shows a plan and sectional view of a geometrically shaped body 11 having continuously alternate parallel lines of weakness 14 connected with transverse lines of weakness creating continuously adjacent rectangular surfaces from point (pt) "A" to pt "B." The surface adjacent to pt "B" has at least one line of weakness 4 for inserting and holding a straw. FIG. 91 is similar to 90, except the straw inserting and holding device is a disk-like body 2 having a diameter greater than the container rim 3. FIG. 92 is similar to 90, except the perimeter of the said body is reinforced. FIG. 93 is similar to 92 except, the reinforced perimeter has a diameter greater than the container rim 3. FIG. 94 is similar to 90, except 94, has a diameter greater than the container rim 3.

[0036] FIG. 95 shows a plan and sectional view of a flexible disk-like body 2 having a diameter greater than the container rim and having a continuously reducing circumferentially rectangular line of weakness 14 from point (pt) "A" to pt "B," within the container rim 3, creating a continuous surface of rectangular shapes from pt "A" to pt "B." The area adjacent to pt "B" has lines of weakness 4 for inserting-and holding a straw. FIG. 96 is similar to 95, except the disk-like body has a diameter less than the container rim 3.

[0037] FIG. 97 shows a plan and sectional view of a flexible disk-like body 2 having a diameter greater than the container rim and having a continuous line of weakness from point (pt) "A" to pt "B," creating a continuous surfaces of geometric shapes. The surface has lines of weakness for inserting and holding a straw. FIG. 98 is similar to 97, except the disk-like body 2 has a diameter less than the container rim 3.

[0038] FIG. 99 is a perspective of an extended disk-like body from point (pt) "A" inside the container cap 1 to pt "B" and a surface having lines of weakness 4 for inserting and holding a straw. FIG. 99 also shows a plan view of the said disk-like body 2 when placed inside the said cap 1. FIG. 100 is a plan view of a flexible-disk-like body 2 having a line of weakness 4 including two arcs of a circle 17. FIG. 101 is similar to 100, except there are lines of weakness 4 including four arcs of a circle 17. FIG. 102 is similar to 101, except there are eight lines of weakness 4 and eight arcs of a circle 17. FIG. 103 is similar to 102, except there are eight lines of weakness 4 and two inner circles having four arcs in each 17.

Having thus described my invention, I claim:

1. A straw-insertable, sealing and resealing device for a drinking container cap comprising:

one or a plurality of flexible bodies having a top surface with at least one dimension greater or less than the said drinking container rim opening;

one or a plurality of said flexible bodies having a top surface with one or a plurality of lines of weakness within the ineffective sealing area of the said container rim opening;

at least one said flexible body attached to one or a plurality of said flexible bodies within the said container cap;

wherein at least one said flexible body is adapted for removal to permit inserting and holding a drinking straw through the said top surface and thus into the said drinking container.

2. A straw-insertable, sealing and resealing device for a drinking container cap comprising:

one or a plurality of flexible bodies having a top surface with at least one dimension greater or less than the said drinking container rim opening;

one or a plurality of said flexible bodies having a top surface with one or a plurality of lines of weakness within the said container cap;

at least one said flexible body attached to one or a plurality of said flexible bodies within the said container cap;

wherein at least one said flexible body is adapted for removal to permit inserting and holding a drinking straw through the said top surface and thus into the said drinking container.

3. A straw-insertable, sealing and resealing device for a drinking container cap comprising:

in combination, a self-sealing and resealing container cap with one or a plurality of flexible bodies attached within the said drinking container cap;

one or a plurality of said flexible bodies having a top surface with one or a plurality of lines of weakness within the ineffective sealing area of the said container rim opening;

wherein at least one said flexible body is adapted for removal to permit inserting and holding a drinking straw through the said top surface and thus into the said drinking container.

4. A straw-insertable, sealing and resealing device for a drinking container cap comprising:

one or a plurality of flexible bodies having a top surface with at least one dimension greater or less than the said drinking container rim opening;

at least one said flexible body having at least one continuously reducing circumferential line of weakness creating at least one continuous surface starting and ending within the ineffective sealing area of the said container rim opening;

one or a plurality of said flexible bodies having a top surface with one or a plurality of lines of weakness within the said ineffective sealing area of the said container rim opening;

wherein at least one said flexible body is adapted for removal and or extension to permit inserting and holding a drinking straw through the said top surface and thus into the said drinking container.

5. A straw-insertable, sealing and resealing device for a drinking container cap comprising:

one or a plurality of flexible bodies having a top surface with at least one dimension greater or less than the said drinking container rim opening;

at least one said flexible body having at least one continuously reducing, geometrically shaped line of weakness creating at least one continuous surface, starting and ending within the ineffective sealing area of the said container rim opening;

one or a plurality of said flexible bodies having a top surface with one or a plurality of lines of weakness within the said ineffective sealing area of the said container rim opening;

wherein at least one said flexible body is adapted for removal and or extension to permit inserting and holding a drinking straw through the said top surface and thus into the said drinking container.

6. A straw-insertable, sealing and resealing device for a drinking container cap comprising:

one or a plurality of flexible bodies having a top surface with at least one dimension greater or less than the said drinking container rim opening;

at least one said flexible body having at least one multi-directional line of weakness creating at least one continuous surface, starting and ending within the ineffective sealing area of the said container rim opening;

one or a plurality of said flexible bodies having a top surface with one or a plurality of lines of weakness within the said ineffective sealing area of the said container rim opening;

wherein at least one said flexible body is adapted for removal and or extension to permit inserting and holding a drinking straw through the said top surface and thus into the said drinking container.

7. A straw-insertable, sealing and resealing device for a drinking container cap comprising:

one or a plurality of flexible bodies having a top surface with at least one dimension greater or less than the said drinking container rim opening;

at least one flexible body having continuously alternate parallel lines of weakness with at least one connecting transverse line of weakness creating at least one continuous surface of continuously adjacent parallel surfaces connected with at least one transverse surface, starting and ending within the ineffective sealing area of the said container rim opening;

one or a plurality of said flexible bodies having a top surface with one or a plurality of lines of weakness within the said ineffective sealing area of the said container rim opening;

wherein at least one said flexible body is adapted for removal and or extension to permit inserting and holding a drinking straw through the said top surface and thus into the said drinking container.

8. A straw-insertable, sealing and resealing device for a drinking container cap comprising:

one or a plurality of flexible bodies having a top surface with at least one dimension greater or less than the said drinking container rim opening;

at least one said flexible body having continuously alternate parallel lines of weakness with at least one connecting transverse line of weakness creating at least one

continuous surface of continuously adjacent rectangular surfaces connected with at least one transverse surface, starting and ending within the ineffective sealing area of the said container rim opening;

one or a plurality of said flexible bodies having a top surface with one or a plurality of lines of weakness within the said ineffective sealing area of the said container rim opening;

wherein at least one said flexible body is adapted for removal and or extension to permit inserting and holding a drinking straw through the said top surface and thus into the said drinking container.

9. A straw-insertable, sealing and resealing device of claim 4 wherein one or a plurality of said flexible bodies are attached within the said drinking container cap with at least one said body having at least one continuously reducing circumferential line of weakness creating at least one continuous surface, starting and ending within the said container cap.

10. A straw-insertable, sealing and resealing device of claim 5 wherein one or a plurality of said flexible bodies are attached within the said drinking container cap with at least one said body having at least one continuously reducing, geometrically shaped line of weakness creating at least one continuous surface, starting and ending within the said container cap.

11. The straw-insertable, sealing and resealing device of claim 6 wherein one or a plurality of said flexible bodies are attached within the said drinking container cap with at least one said flexible body having at least one multi-directional line of weakness creating at least one continuous surface, starting and ending within the said container cap.

12. A straw-insertable, sealing and resealing device of claim 7 wherein one or a plurality of said flexible bodies are attached within the said drinking container cap with at least one said body having continuously alternate parallel lines of weakness creating at least one continuous surface of continuously adjacent parallel surfaces connected with at least one transverse surface, starting and ending within the said container cap.

13. A straw-insertable, sealing and resealing device of claim 8 wherein one or a plurality of said flexible bodies are attached within the said drinking container cap with at least one said flexible body having continuously alternate parallel lines of weakness with at least one connecting transverse line of weakness creating at least one continuous surface of continuously adjacent rectangular surfaces connected with at least one transverse surface, starting and ending within the said container cap.

14. The claims of **1** through **13** wherein the said flexible body is a disk-like body.

15. The claims of **1** through **13** wherein the said flexible body is one of multiple shapes and sizes.

16. The straw-insertable, sealing and resealing device of claims **1** through **15** wherein at least one said body has at least one extended projection or assembly within the ineffective sealing area.

17. The straw-insertable and flexible body of claims **1** through **15** and also **1** through **15** combined with claim **16** wherein at least one said body is attached to the said drinking container cap and has at least one extended projection or assembly within the ineffective sealing area.

18. The straw-insertable and flexible body of claims **1** through **15** and also **1** through **15** with various combinations of claims **16** and **17** wherein the said one or plurality of lines of weakness used for inserting and holding a drinking straw has one or a plurality of tear-stopping means.

19. The straw-insertable and flexible body of claims **1** through **15** and also **1** through **15** with various combinations of claims **16**, **17** and **18** wherein the said one or a plurality of lines of weakness used for inserting and holding a drinking straw are reinforced with one or a plurality of extended projections for stopping the propagation of the tearing of the said one or plurality of lines of weakness.

20. The straw-insertable and flexible body of claims **1** through **15** and also **1** through **15** with various combinations of claims **16**, **17**, **18** and **19** wherein the said one or a plurality of lines of weakness used for inserting and holding a drinking straw are reinforced with one or a plurality of thickened body portions for stopping the propagation of the tearing of the said one or plurality of lines of weakness.

21. The straw-insertable and flexible body of claims **1** through **15** and also **1** through **15** with various combinations of claims **16**, **17**, **18**, **19** and **20** wherein the said one or a plurality of lines of weakness used for inserting and holding a drinking straw has at least one slit, hole or a combination of both.

22. Claims **1** through **15** and also **1** through **15** with various combinations of claims **16**, **17**, **18**, **19**, **20** and **21** wherein the said straw-insertable, sealing and resealing device for a drinking container comprising:

in combination, a self-sealing and resealing container cap with one or a plurality of flexible bodies attached within the said container cap;

one or a plurality of said flexible bodies having a top surface with one or a plurality of lines of weakness within the said container cap;

wherein at least one said flexible body is adapted for removal and or extension to permit inserting and holding a drinking straw through the said top surface and thus into the said drinking container.

23. The straw-insertable and flexible body of claims **1** through **15** and also **1** through **15** with various combinations of claims **16**, **17**, **18**, **19**, **20**, **21** and **22** wherein at least one said body has at least one symbol, message or a combination of both.

* * * * *