

[54] **TOY STRAW WITH AN INTERNAL FOUNTAIN**

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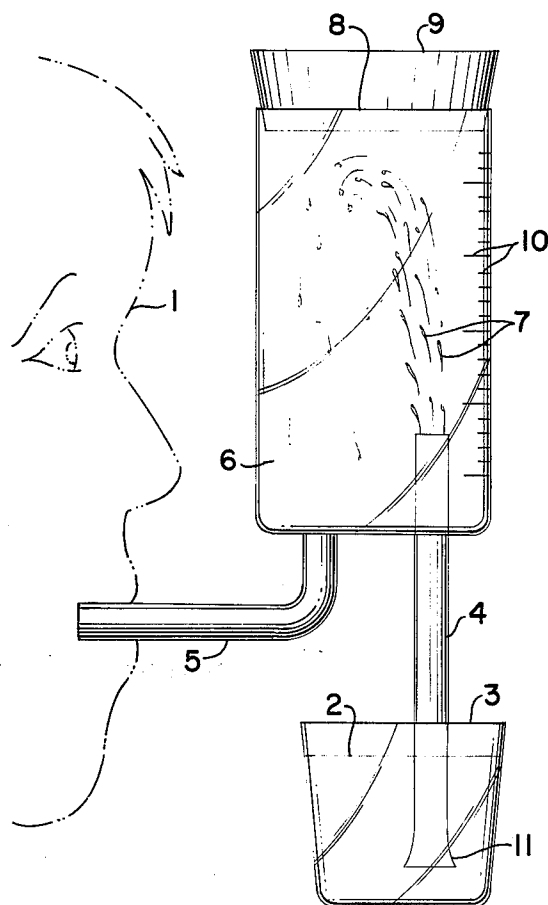
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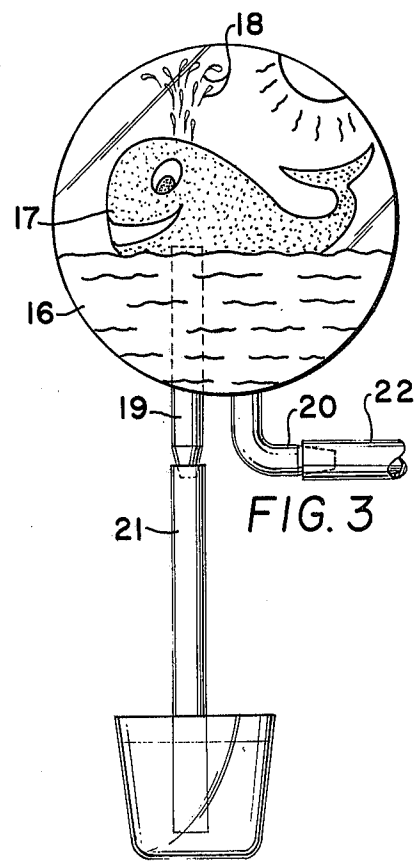
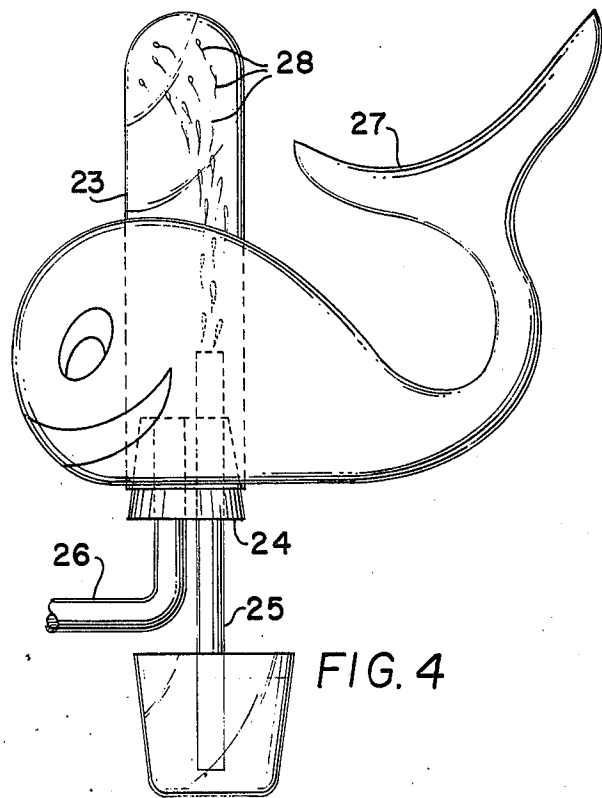
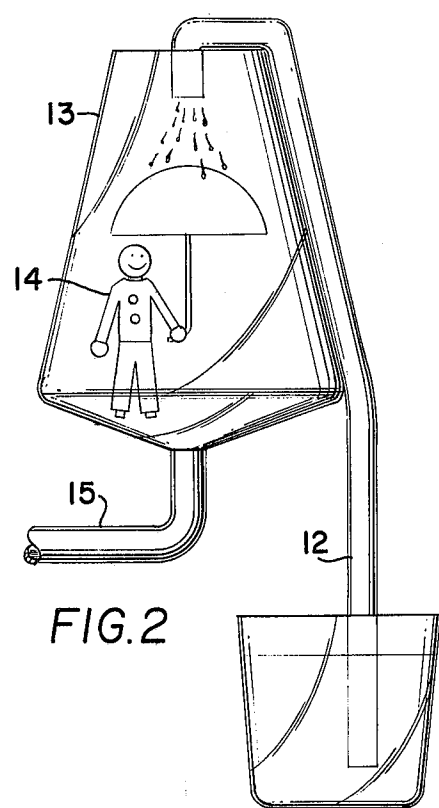
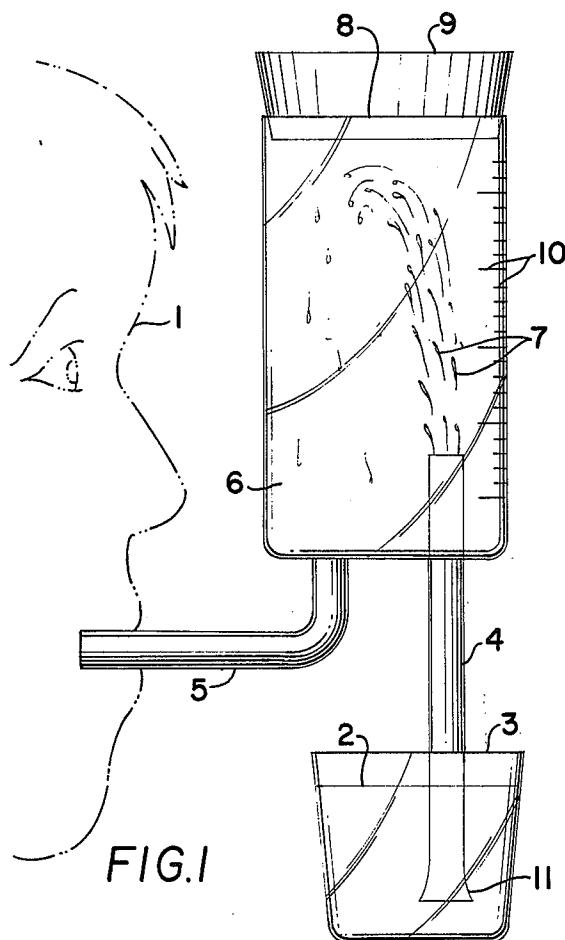
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[57] **ABSTRACT**

A toy in the form of a straw for drinking fluids. The straw has an enlarged transparent section, forming a chamber, near its center, and is shaped so that the chamber is clearly visible to the user. The vacuum caused when sucking fluid through the straw creates a rush of fluid which forms an amusing fountain within the chamber. Interest may be further increased by the addition of a fountain-related object, within or external to the straw. It may create the illusion of a whale or a dolphin spouting, a fireman spraying water, a rainstorm or a child's head, etc. The chamber may have an opening to permit easy cleaning. It may also be used with separate throw-away straws.

11 Claims, 4 Drawing Figures





TOY STRAW WITH AN INTERNAL FOUNTAIN

CROSS-REFERENCE TO RELATED APPLICATIONS

I have simultaneously filed two other closely related patent applications, "TOY STRAW WITH AN INTERNAL FOUNTAIN-PROPELLED OBJECT," and "TOY STRAW WITH AN INTERNAL MOVING OBJECT." All three should be considered together.

BACKGROUND AND SUMMARY OF THE INVENTION

My invention relates to toys and in particular to straws through which people will drink milk and other beverages.

The purpose of my invention is to provide an amusing toy, and also provide a device that will create a diversion to make fluid intake more pleasurable for those children who do not like milk, juice, etc.

The unique feature of my invention is the creation of a fountain within an enlarged portion of the straw, by the normal sucking action of a child. The fountain effect may be enhanced by adding a fountain-related subject to the straw. For example, the fountain could become the spout of a whale. For purposes of cleanliness, the enlarged area may have an opening with a removable cover, yielding easy access to the fountain area. For sanitary reasons, and for simplicity of manufacture, instead of a full-sized straw, the chamber may be fabricated with connecting means to permit the use of separate, washable, or throw-away plastic or paper straws.

BRIEF DESCRIPTION OF THE DRAWINGS

To obtain a complete understanding of this toy in its various forms, I offer the following detailed description with the accompanying drawings.

FIG. 1 is an elevation view of a child sucking fluid through the straw, creating a fountain.

FIG. 2 is an elevation view of a straw where the fountain represents rain falling on a figure within the chamber.

FIG. 3 is an elevation view of a straw where the fountain represents a whale's spout.

FIG. 4 is an elevation view of a straw placed within a toy whale.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. 1 shows a child 1 drinking fluid 2 from a glass 3 with the aid of the toy straw. The toy comprises a straw with an immersion section 4, and oral section 5, and an enlarged section forming a chamber 6, located between the immersion and oral sections. The fountain 7 is formed within the chamber.

When the child sucks on the free end of the oral section 5 of the straw, he creates a vacuum in the chamber. The fluid is forced up the immersion section by the relatively higher ambient air pressure. A child sucking gently can create a pressure differential sufficient to cause an on-rush of fluid resulting in a fluid fountain within the chamber. The harder the child sucks, the larger will be the fountain.

The straw should be transparent, with plastic a likely choice of materials. The section of straw which is placed in the glass should be fairly rigid so the child may seek out the last few drops of fluid. The section of

straw entering the child's mouth may be of the same material, or it may be more flexible for safety. Both of these sections of the straw must be attached to the chamber in a manner that minimizes air and fluid leakage.

As a general rule, the various straw sections should be shaped and arranged so the chamber is clearly visible to the user of the straw. In FIG. 1, both the oral section and the immersion section of the straw enter the chamber from the bottom. This effectively places the chamber and its display at eye level where it is best appreciated. There is no functional reason why this configuration must be maintained. The fluid will squirt into the chamber regardless of the relative positions or attitudes of the junctions, be they top, bottom, side, or combination thereof.

The chamber may be a continuous, closed surface, except where it is joined to the oral and immersion sections, or it may have an opening 8 which is sealed with a removable sealing means 9, such as a snap-on cap, screw-on cap, cork, etc. The opening will provide manufacturing access if required, and will permit easier washing subsequent to use of the toy. The location and size of the opening and its sealing means are not critical.

The immersion section, and/or the oral section of the straw may communicate with the chamber by passing through the removable sealing means.

Markings 10 may be placed on the chamber to permit the size of the fountain to be measured. These markings may be graduations, numbers, words, etc. Using these markings, children may compete in fountain-making contests.

The extremities of the straw may be slightly widened into a flare-mouth 11, facilitating an inflow of water for washing the straw.

FIG. 2 shows a variation of the toy with the immersion section 12 of the straw entering the chamber 13 from the top. Within the chamber is a figure 14 with an umbrella. When the child sucks on the oral section 15, he creates an "April Shower" in the chamber. The chamber may be decorated with sun, birds, flowers, etc. to enhance the image.

Many combinations are possible wherein the representation of a fountain-related subject is located within the chamber.

FIG. 3 shows a disc-like shape for the chamber 16. Within the chamber is a whale 17, and the fountain 18 appears to be the whale's spout. Many combinations are possible with representations of fountain-related subjects, wherein the fountain appears to emanate from the subject.

It is not always necessary to place an actual object within the chamber. If the chamber is thin, the illusion of the whale spouting, or of any fountain-related subject, will be equally effective with just a representation of the subject rendered in two dimensions on the surface of the chamber.

Instead of having full-length oral and immersion sections attached permanently to the chamber, two short tapered appurtenances 19 and 20 protrude from the chamber. Standard discardable paper or plastic straws 21 and 22 fit snugly over the appurtenances to complete the toy. This arrangement has manufacturing and packaging advantages and is more sanitary. Appurtenance 20 is bent so that the oral and immersion straw 22 may be angled directly towards the child's mouth.

If reusable separable straws are utilized, they may be flare-mouthed, and the appurtenances need not be tapered, still maintaining the snug fit. It is not necessary that this type of appurtenance be used. Any coupling means may be used to separably connect straw sections to the chamber, as long as a tight joint results.

FIG. 4 shows a chamber 23 in the form of a vial. The open end of the vial is plugged with a cork 24. Through this removable sealing means passes an immersion straw section 25, and oral straw section 26. This assembly is combined with a toy whale 27, so that the fountain 28 seems to be spouting from the whale's head. Many combinations are possible where a representation of a fountain-related subject may be located external to the chamber.

Amongst the many applicable subjects that may be used with the fountain are elephants, dolphins, fireboats, firemen, Old Faithful, public fountains of note, soda or beer bottles for advertising, etc.

Although I have described my invention with a certain degree of particularity, it is understood that the present disclosure has been made only by way of example and that various changes in the details of construction and the combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention hereinafter claimed.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. A toy, of the nature of a straw for drinking liquids, comprising a straw having an immersion section adapted to be placed in a drinking glass containing liquid, an oral section adapted to be placed in the mouth, and a chamber located between said immersion section and said oral section of said straw, said oral section of said straw terminating at the bottom wall of said cham-

ber so that all the liquid which enters said chamber can flow out of the chamber through said oral section, suction at said oral section creating a fountain of liquid within said chamber, said chamber being formed at least in part of transparent material and said fountain projecting into said transparent part so that said fountain of liquid is clearly visible from outside said chamber.

2. A toy, according to claim 1, wherein said chamber has an opening which is sealed with a removable sealing means.

3. A toy, according to claim 2, wherein at least one of said sections of said straw communicates with the chamber through the removable sealing means.

4. A toy, according to claim 1, wherein markings are placed on said toy, permitting the size of said fountain to be measured.

5. A toy, according to claim 1, wherein coupling means are provided to separably connect at least one of said sections of said straw to said chamber.

6. A toy, according to claim 1, wherein at least one of said sections of said straw is flare-mouthed.

7. A toy, according to claim 1, in combination with the representation of a fountain-related subject associated with said chamber.

8. A toy, according to claim 7, wherein said representation is located within said chamber.

9. A toy, according to claim 7, wherein said representation is a two-dimensional rendering on the surface of said chamber.

10. A toy, according to claim 7, wherein said representation is external to said chamber.

11. A toy, according to claim 7, wherein said fountain appears to emanate from said representation.

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