The present invention relates generally to inflatable toys and specifically to an inflatable toy having attachment means at its base to orient and maintain the toy in an upright position upon a flat surface such as a floor.

With the advent of mass production techniques for the utilization of sheet plastic material, such as the well-known polyvinyl materials, there have been produced a large variety of inflatable toys. Among the more popular of these toys are items which have become generally known as "bop-bags." Bop-bags are inflated, elongated toys which generally have a relatively broad, weighted base and which taper upwardly toward a reduced diameter top. Because if the extremely low center of gravity created in such toys, the bop-bag may be pushed over and it will, due to its own weight distribution, spring back to an upright position. Although these devices have been relatively successful, they have certain undesirable features. The weight which provides the significant functional features of these toys creates problems in manufacture, shipment and storage. It is necessary to provide a relatively strong pouch within the bop-bag in order to contain the weighted material; the weighted material itself contributes significantly to the cost of manufacture of the finished toy; and the weighted material substantially increases shipment and inventory costs. Furthermore, in many instances, the degree of movement permitted by the weighted bop-bag design is greater than that desired.

Accordingly, it is an object of the present invention to provide an inflatable toy design obviating one or more of the aforementioned disadvantages. Specifically, it is an object of the present invention to provide a light weight toy which will maintain itself in a substantially upright position on a floor or other flat surface.

It is further within the contemplation of the present invention to provide an inflatable bop-bag type of toy having a suction cup attachment at its lower end for securement to a flat surface such as a floor.

It is still a further object of the present invention to provide an inflatable toy of inexpensive cost which provides a high degree of play value.

In accordance with one illustrative embodiment of the present invention there is provided an inflatable toy which is adapted to flexibly maintain itself in an upright position on a flat surface such as a floor. The toy comprises an elongated hollow body formed of a skin of non-porous flexible material. The body has an inflation opening therein and an inflation valve is provided for the entry and exit of air. A base member is secured to the lower portions of the body and comprises an inflatable, hollow closed loop formed of non-porous flexible material which also has an inflation opening and an inflation valve. A suction cup is secured to the inflatable toy and has a downward facing concave suction surface which terminates in a suction edge adapted to be engaged against a flat surface such as the floor. The suction edge extends slightly below the bottom of the base of the inflatable toy such that upon downward pressure applied to the toy, the suction cup will engage the flat surface for securement of the toy to the surface. The flexible nature of the materials of the toy will allow the toy to tilt to the side in response to the application of a sidewardly directed force, but then to spring back into its position perpendicular to the flat surface when that force is removed.

The above brief description, as well as further objects, features and advantages of the present invention, will be more fully appreciated by reference to the following detailed description, of one presently preferred embodiment, when taken in conjunction with the accompanying drawings wherein:

FIG. 1 is a perspective view of an inflatable toy exhibiting aspects of the present invention, diagrammatically illustrating the movement of the toy with respect to the flat surface to which the toy is fixed.

FIG. 2 is an exploded and partially sectional view of the various elements which are combined to form the construction according to the present invention; and

FIG. 3 is a partial sectional view of the lower portion of the toy showing the toy in its normal upright position and, in dotted line configuration, showing the position of the various structures when the toy is tilted from its normal upright position.

Referring now specifically to the drawings, there is shown an inflatable toy generally designated by the numeral 10. The toy 10 includes a body portion 12 and a base portion 14. In the illustrative embodiment depicted herein, the base portion 14 is comprised of an annular hollow loop 16 having a central web 18 joining and closing the loop 16. The material of the loop 16 and the web 18 may be conveniently formed of sheet plastic material such as polyvinyl. The seam 20 at the external circumference of the base member 14 and the seam 22 at the internal circumference of the loop 16 may be formed by heat sealing according to conventional technology. An inflation opening 24 is provided at any convenient location on the loop 16 and a seepage valve 26 is engaged with the opening 24 to provide means to inflate the loop 16 and then, after inflation, to make same airtight.

The body portion 12 of the toy 10 may be constructed with a generally conical body wall 28 which terminates at its upper edge in a spherical top portion 30 and at its lower edge in a bottom wall 32. All of the various segments of the body portion 12 may similarly be formed of a material such as polyvinyl and the various seams may be heat sealed as recited above with respect to the base 14. A body portion opening 34 is formed at a convenient point within the wall of the body 12 and an inflation valve 36 is engaged with the body 12 at that point as is conventionally known.

In accordance with the present invention, the inflatable toy including the body 12 and base 14 is further provided with a suction cup generally designated by the numeral 40. As shown in FIG. 3, the suction cup 40 is secured at the bottom of the toy 10 and along its vertical axis. The suction cup 40 has a mounting portion 42 along its axis and is formed with a concave suction surface 44 of generally spherical configuration which terminates at a suction edge 46. The suction edge 46 is in a plane substantially transverse to the central axis of the suction cup 40 and the central vertical axis of the toy 10. The suction cup 40 is physically secured to the remainder of the toy 10 by means of a threaded shank or stud 48 and a mounting wheel 50. The threaded stud 48 is secured to the body portion 42 of the suction cup 40 and extends downward from along the axis of the suction cup. As may be seen by comparing FIGS. 2 and 3, the mounting wheel 50 has an annular portion 52 and a central web 54. The mounting wheel 50 is sandwiched between the bottom wall 32 of the body portion 12 and the central web 18 of the base portion 14 and is positioned directly along the central axis of both. A threaded opening 56 is formed centrally of the mounting wheel 50 and a corresponding opening 58 is
formed in the central web 18 of the base 14. The stud 49 is then received through the opening 58 and is rigidly secured to the mounting wheel 50 and the threaded opening 56. Accordingly, the suction cup 40 is thus secured to the mounting wheel 50 which in turn is rigidly secured to the toy 10 at the joiner of the body 12 and base portion 14.

As may be seen in FIG. 3, the suction edge 46 of the suction cup 40 extends slightly below the lowermost portion of the base 14 of the toy 10. Accordingly, when the toy 10 is placed upon a flat surface, such as the surface S in FIG. 3, the first portion of the toy 10 to contact that surface is the suction edge 46 of the suction cup 40. As the toy 10 is moved downwardly on the toy 10, the volume defined by the suction surf. 44 and the flat surface S will be decreased. The release of downward force on the toy 10 will cause a corresponding decrease in pressure within the suction cup 40 due to the resilient and flexible nature of the material used to form said suction cup 40. The base 14 contacts the surface S along a band-like supporting surface at the bottom of the base 14.

When the toy 10 is secured to a flat surface, such as the floor S, and is pushed sidewardly, the entire construction is somewhat deformed by the resulting tipping action. One side of the base 14 may be raised from the floor while the other side is pressed downwardly against the floor. This relative movement is indicated by the arrow in FIG. 3 and one possible position of the various elements is shown by the dotted line configuration in that figure. In FIG. 1, there is diagrammatically illustrated the permissible extent of movement of the central axis of the toy 10. Specifically, the toy 10 may be moved or pushed through a series of movements inclining the body 12 of the toy 10 outwardly from the normal vertical axis. Because the toy 10 is fixed to the floor S at the center of the base 14, upon the application of sideward force the toy will deform but, upon release of that force, the toy will spring back to its normal upright position.

It will be appreciated that the toy 10 according to the present invention may be used in the manner of any of the hop-type inflatable devices now on the market and may be used in a number of ways in which current bop-bags are not capable of performing. The inflatable toy according to the present invention may be positioned not only perpendicular to a floor, but may be secured to a wall or other vertical surface or even secured to the ceiling of a room.

It will be appreciated that the present invention provides an inflatable toy having a high order of play value. Furthermore, it will be appreciated that a number of design changes may be made departing in various degrees from the specific toy illustrated herein, without departing from the spirit and scope of applicant's invention.

Accordingly, the following claims should be construed broadly in a manner consistent with the spirit and scope of the invention.

What I claim is:

1. An inflatable toy adapted to maintain itself in an upright position on a flat surface comprising a hollow body formed of a non- porous flexible material, said body having a base portion forming a generally annular supporting surface positioned to contact a flat surface upon which the toy is placed, and a flexible suction cup secured to said body within said annular supporting surface of said base portion, said suction cup having a downwardly-facing concave suction surface terminating in a suction edge, said suction cup being engageable with said flat surface for resiliently maintaining said toy in an upright position on said flat surface.

2. An inflatable toy adapted to maintain itself in an upright position on a flat surface comprising a hollow body formed of a non-porous flexible material, said body having a base portion having a continuous band-like supporting surface at the lower end of said toy positioned to contact a flat surface upon which the toy is placed, and a flexible suction cup, secured means attaching said suction cup within said supporting surface of said base portion, said suction cup having a downwardly-facing concave suction surface terminating in a suction edge, said suction edge extending downwardly of said supporting surface of said base portion for suctionsal engagement with a flat surface for maintaining said toy in an upright position on said flat surface.

3. An inflatable toy adapted to maintain itself in an upright position on a flat surface comprising an elongated hollow body including a skin of non-porous, flexible material, an inflation opening formed in said material, and a sealable inflation valve at said inflation opening, a base member including a hollow, closed loop formed of a non-porous material and secured to the bottom of said body and forming a base therefor, and a suction cup secured to the bottom of said toy having a suction surface adapted to engage a flat surface upon which said toy is placed.

4. An inflatable toy adapted to maintain itself in an upright position on a flat surface comprising an elongated hollow body including a skin of non-porous, flexible material, an inflation opening formed in said material, and a sealable inflation valve at said inflation opening, a base member including a hollow, closed loop formed of a non-porous material and secured to the bottom of said body and forming a base therefor, said closed loop having a base inflation opening formed therein, a sealable base inflation valve at said base inflation opening, and a suction cup secured to the bottom of said toy having a suction surface adapted to engage a flat surface upon which said toy is placed.

5. An inflatable toy adapted to maintain itself in an upright position on a flat surface comprising an elongated hollow body including a skin of non-porous, flexible material, an inflation opening formed in said material, and a sealable inflation valve at said inflation opening, a base member including a hollow, closed loop formed of a non-porous material and secured to the bottom of said body and forming a base therefor, a suction cup, and securement means attaching said suction cup to the bottom of said toy at the center of said base portion, said suction cup having a suction surface adapted to engage a flat surface upon which said toy is placed for resiliently maintaining said toy in an upright position on said surface.

6. An inflatable toy adapted to maintain itself in an upright position on a flat surface comprising an elongated hollow body including a skin of non-porous, flexible material, an inflation opening formed in said material, and a sealable inflation valve at said inflation opening, a base member including a hollow, closed loop formed of a non-porous material and secured to the bottom of said body, and forming a base therefor, a suction cup, and securement means attaching said suction cup to the bottom of said toy at the center of said base portion, said suction cup having a downwardly-facing suction surface extending below the lowest point of said base portion for engagement with the flat surface upon which said toy is placed for resiliently maintaining said toy in an upright position on said surface.

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