ABSTRACT

A toy comprises a circular plate having one end of a resilient member releasably connected thereto. The other end of the resilient member is releasably connected to a fluid-filled, collapsible element. The releasable connection between the resilient member and the fluid-filled collapsible element allows the fluid-filled, collapsible element to be filled whenever there is leakage of fluid from the collapsible element.
This invention relates to a toy and a method of making said toy.

Various types of toys have been previously suggested in which a ball element is connected to a support element or paddle by a resilient connector and bounces on the support element. In these previously suggested toys, breaking of the resilient connector between the support element and the bouncing element rendered the toy useless.

The present invention satisfies the foregoing objection by providing a toy in which the breaking of the resilient connector does not render the toy useless, as it is only necessary to replace the resilient connector since it is releasably connected to both the support element and the bouncing element and the toy of this invention has a relatively long life in comparison with previously available toys of the same type.

The toy of the present invention would be particularly useful to an advertiser since the toy is inexpensive and will not become useless in a short period of time. By providing a bouncing element of substantial size, effective advertising material, for example, may be printed on both the bouncing element and the support element.

The present invention contemplates using a fluid-filled, collapsible element as the bouncing element. Therefore, the device of the present invention may be employed as an exerciser by increasing the weight of the fluid-filled, collapsible element. So constructed, the device may be employed in the practice of physical therapy, if desired.

An object of this invention is to provide a device of the character stated, having replaceable elements to prolong its useful life.

Another object of this invention is to provide a method of forming a toy of the character stated.

A further object of this invention is to provide a toy that also may be used as an exerciser, or as an advertising piece.

These and other objects are attained by the means described herein and as disclosed in the accompanying drawings, in which:

FIG. 1 is an elevational view of the toy of the present invention.

FIG. 2 through 6 are perspective views of portions of the toy of the present invention and illustrating the various steps employed in assembling the same.

Referring to the drawing and particularly FIG. 1, there is shown the toy of the present invention including a circular rebounding disc or plate 10 having a resilient member 12, which may be a rubber thong or the like, releasably attached thereto. A collapsible element 14 is here shown as an inexpensive conventional rubber balloon or the like, which, if desired, may be formed of any other suitable, flexible material capable of retaining air or other inflating fluid. The collapsible element or balloon is releasably connected to the remaining end of the resilient member 12, as will be explained. The disc or plate 10 may be inexpensively formed of cardboard or paperboard, as well as any other appropriate material.

In assembling the toy of the present invention, the end 13 of the resilient member 12 is passed through a central opening 16 (see FIG. 2) in the central portion of the circular disc 10. The circular disc 10 also has openings 18 and 20 at opposite sides of the central opening 16. The three openings 16, 18, and 20 preferably, though not necessarily, are disposed in a straight line.

After the resilient member 12 is passed through the opening 16 from front face 22 of the disc 10 to rear face 24 thereof as shown in FIG. 2, the resilient member 12 is then passed through the opening 18 as shown in FIG. 3 and returned to the front face 22 of the disc; then, the resilient member end 13 is passed through the opening 20 in the disc from the front face 22 to the rear face 24 in the manner shown in FIG. 4.

The end 13 of the resilient member 12 may then be tied to its loop portion 15 between the openings 16 and 18 on the rear face 24 of the disc in the manner shown at 17 in FIG. 5. After this connection has been formed, a knot 26 may be formed in the end 13 of the resilient member 12 to insure that there is no possibility of the tied connection at the loop becoming free unless so desired. When it is desired that the tied connection at 17, the knot 26 must be first removed.

As an alternative procedure which has been found quite satisfactory, knot 17 may be omitted. That is, the thong end 13 of FIG. 4 may simply be knotted at the rear face of disc 10, to normally preclude withdrawal of end 13 through the opening 20. This simplified procedure effects a reliable attachment which may readily be released when necessary, for the replacement of worn or broken parts.

The collapsible element 14 has its filler neck 28 twisted in the manner shown in FIGS. 3 and 4, to prevent any leakage of fluid from the collapsible element 14 through the neck thereof. This twisting of the neck 28 is effected after the collapsible element 14 has been filled with a fluid such as air, for example.

After the resilient member 12 has had the knot 26 formed therein, the other end of the resilient member 12 is to be knotted as at 32 and placed adjacent the neck 28 as shown in FIG. 5. A resilient member 30, which may be a rubber band, for example, is then wound about the end of the resilient member 12 and the neck 28 of the collapsible element 14, in the manner shown in FIG. 6. The knot 32 is formed in the end of the resilient member 12 to prevent any inadvertent displacement of the resilient member 12 from the neck 28 of the collapsible element 14.

The resilient member or band 30 may be easily removed to release the resilient member 12, from the collapsible element 14. Thus, if the collapsible element 14 should be a rubber balloon and loses air over a period of time, it may be easily refilled by removing the member 30 and untwisting the neck 28 without rupturing or damaging the neck. After the collapsible element 14 is refilled, the neck 28, may be again twisted, and the resilient member 30 again wound about the neck 28 and the resilient member 12, to restore the connection.

Furthermore, if the collapsible element 14 should burst or otherwise fail to retain the fluid therein, another collapsible element 14 may be easily substituted and connected to the resilient member 12. Likewise, if the resilient member or thong 12 should break, it may be easily replaced. Thus, the toy of the present invention retains its usefulness over a long period of time by reason of the easy replacement of the breakable or wearable items.

The present device preferably has at least one pair of diametrically disposed openings 34 and 36 (see FIG. 1) formed in the circular disc or plate 10. Either of the openings 34 or 36 may, for example, be used in bouncing the collapsible element 14 relative to the circular disc 10.

Furthermore, if the collapsible element 14 should be filled with a relatively heavy fluid so that the toy may function as an exerciser, it may require two persons to hold the circular disc 10, with one person grasping one of the openings 34 or 36 another person grasping the remaining opening of the disc. Thus, the toy of the present invention could be employed as a group exerciser, if desired, in the practice of physical therapy.

When used as an advertising medium, the circular disc 10 may have advertising applied to the front face 22, the rear face 24, or to both faces of the disc, as may be desired. Likewise, the collapsible element 14 could have advertising matter applied thereon. Thus, an advertiser could use the toy for advertising purposes, and obtain maximum effectiveness due to the ease of replacement of any of the breakable or wearable elements.

An advantage of this invention is that any element of the toy can be easily replaced. Another advantage is that the collapsible element can be easily filled with an inflating fluid whenever necessary, without subjecting the neck 28 thereof to destructive stress or strain.

What is claimed is:

1. A toy comprising, a hand held rebounding plate and a fluid-filled element with means connecting the plate and element together,
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3, the element having a neck thereon through which it may be filled with a fluid, the plate having a forward wall and a rearward wall and three spaced apart substantially aligned openings in the approximate center thereof, the forward wall being the wall against which the element contacts during use of the toy, the means connecting the plate and element together comprising a resilient strand, the strand being removably connected at each end to the element and to the plate, the strand being removably connected to the plate by one end of the strand extending through the center opening from the forward wall to the rearward wall and then through one of the aligned openings from the rearward wall to the forward wall defining a loop between the center opening and the one aligned opening, the strand then extending over the center opening and to the other aligned opening and defining a loop on the forward wall longer than the loop on the rearward wall, the strand then extending through the other aligned opening from the forward wall to the rearward wall, the free end of the strand having means associated therewith to prevent the end from passing through the other aligned opening from the rearward wall to the forward wall, the other end of the strand being connected to the element after the element is filled with fluid and the neck twisted to retain the fluid by the free end having a knot therein and a reverse bend inwardly of the knot the reverse bend lying parallel to and against the twisted neck, and a resilient endless band disposed about the twisted neck and the reverse bend of the strand in tight encircling relationship to removably secure the strand to the element and to hold the twist in the neck and further aid in preventing leakage of the fluid.

2. The toy as set forth in claim 1 wherein the means associated with the free end is a knot formed in the free end which will prevent the free end from passing through the other aligned opening.

3. The toy as set forth in claim 1 wherein the means associated with the free end is the tying of the free end to the loop between the center opening and the one aligned opening on the rearward wall.

4. The toy as set forth in claim 1 wherein the rebounding plate has at least one opening adjacent the outer edge thereof which opening serves as a handgrip means.

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