United States Patent [19]

Sterlicchi

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[54] **JOGGER BALL**

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[52] **U.S. Cl.** ..... **272/70,** 272/57 R, 272/60

[51] **Int. Cl.** **A63b 23/04**

[58] **Field of Search** ..... 272/57 E, 69, 1, 272/1 R, 57 R, 57 D, 59 R, 70; 273/58 B, 58 F; 128/25 B; 5/345 R

[56] **References Cited**

UNITED STATES PATENTS

2,775,452	12/1956	Libra	272/57 E X
3,627,314	12/1971	Brown	272/57 E
3,641,601	2/1972	Sieg	272/57 R X
1,800,811	4/1931	Wolfe	273/58 F
3,167,312	1/1965	Blanchard	272/57 E
3,122,377	2/1964	Mortenson	272/57 E

FOREIGN PATENTS OR APPLICATIONS

233,201	4/1961	Australia	272/57 E
370,108	4/1932	Great Britain	272/57 E

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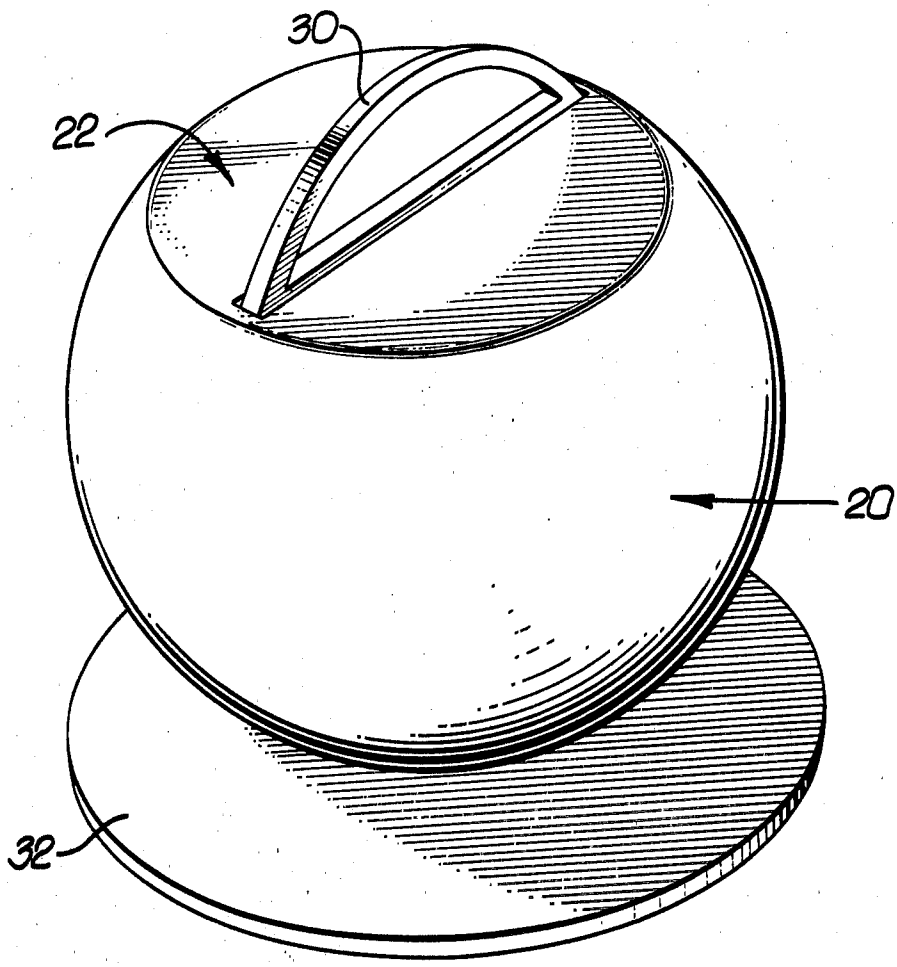
[57] **ABSTRACT**

A sealed, partially inflated, flexible ball having a flap top portion and an interior disc centrally dividing the ball vertically into two separate compartments. An air passageway is formed in the disc between the two separated compartments. Thus, when a user stands on top of the flat portion of the ball and shifts his weight from one foot to the other air will flow, correspondingly, to the compartment with the lower pressure thereby inducing a jogging action.

6 Claims, 4 Drawing Figures



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SHEET 1 OF 2

FIG. 1.

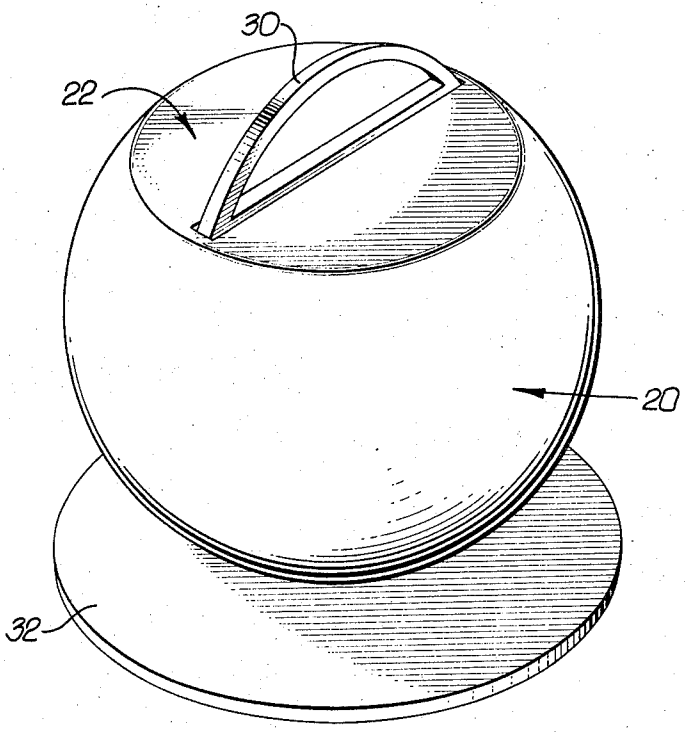

FIG. 2.

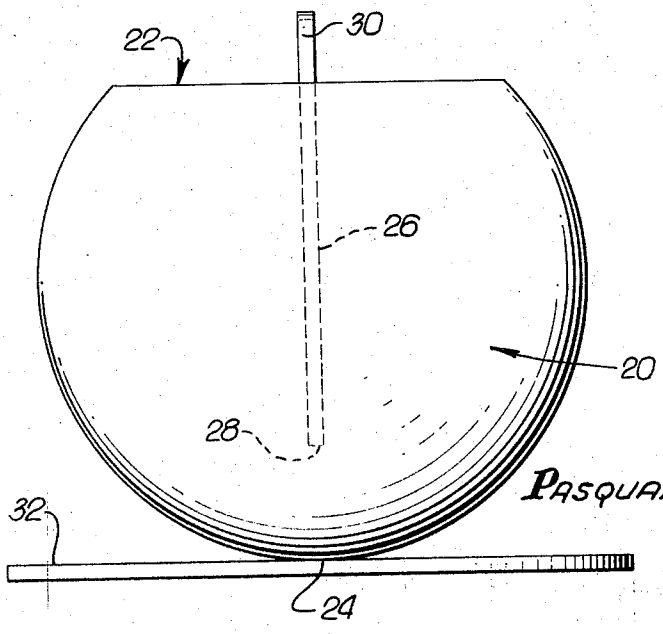

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FIG. 3.

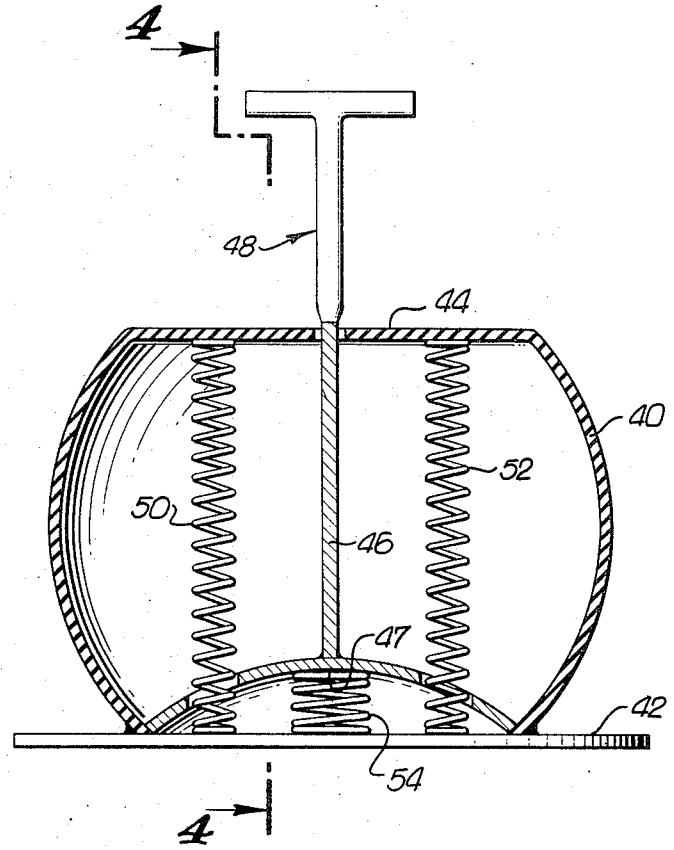
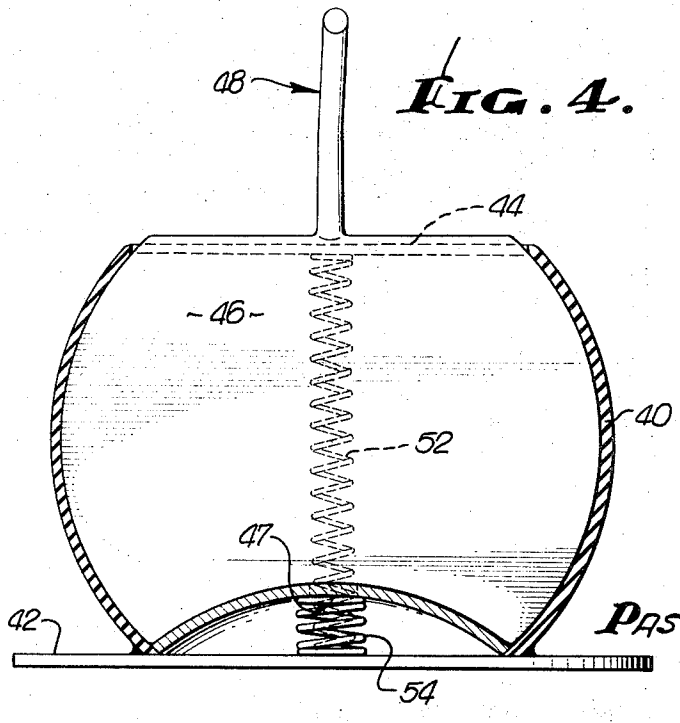


FIG. 4.



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JOGGER BALL

BACKGROUND OF THE INVENTION

It has been well publicized that exercise, expecially by sedentary men, is important for the maintenance of good health. One form of exercise which has often been recommended is jogging. Unfortunately, however, despite its value, the availability of suitably large facilities is often impossible. Hence, recourse must be had to jogging in confined spaces. This does not simulate effectively the exercise attained through regular jogging because of the loss of a certain amount of resiliency by the restricted stride.

In order to supplement this lost resiliency various devices have been lacking in some respects until this invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an isometric view of a basic jogger ball device.

FIG. 2 is a side plan view of the jogger ball as shown in FIG. 1.

FIG. 3 is a modification of the basic jogger ball device showing additional spring supplementation and a handle taken as a cross-sectional view therethrough.

FIG. 4 is a sectional view of the modified jogger ball taken through 4—4 in FIG. 3.

DESCRIPTION OF THE INVENTION

Referring, at first, basically to FIGS. 1 and 2 the rudimentary form of this device is shown as an inflated ball 20, generally round, but with a flat top portion 22. Centrally dividing the interior of the ball 20 and extending diametrically from opposite side walls along the top portion 22 and down the side walls toward the bottom 24 of the ball 20 is a disc 26. This disc 26 seals the air flow from the sides of the ball which it divides except for a space between its bottom edge 28 and the inside bottom portion 24 of the ball 20. In the form shown here a simple handle 30 extends above the top surface 22 and above the disc 26 to provide a hand hold for a user of this device. As a stabilizer for the ball, a bottom plate 32 can be used as a supporting surface upon which the bottom surface 24 rests.

A modified form of the device is shown in FIG. 3 and 4 which again utilizes an inflatable ball 40 as shown previously which can be mounted on a stabilizer plate 42. The ball 40 includes a flat top surface 44 and a central disc 46 extending from the top surface 44 diametrically to the opposite side walls and down toward the bottom of the ball as described previously. A space is left between the bottom edge 47 of the disc 46 and the bottom portion of the ball which in this form is secured to plate 42.

The ball 40 is sealed to the outside air and disc 46 substantially divides it into two separate compartments so that air flow between the compartments takes place through the space beneath disc 46 as in the comparable form shown in FIGS. 1 and 2.

In the form shown in FIGS. 3 and 4 a handle 48, which is T-shaped, extends upwardly from the center top portion of surface 44 to a position which will serve as a suitable hand grip in accordance with this invention.

As additional resilient support springs 50 and 52 are spaced on opposite sides of disc 46 and extend vertically between the bottom of top surface 44 and the top of plate 42.

Also, an additional center spring 54 may be utilized for more resilient support by positioning it vertically to extend between the bottom edge 47 of disc 46 and the adjacent top surface of plate 42.

In use, the form of this invention shown in FIGS. 1 and 2 is suitable as a toy for small children. The ball is inflated with enough air to support a person standing on the top surface 22 with his feet positioned on opposite sides of the adjacent portion of disc 26. The amount of inflation is limited so that it doesn't prevent airflow from one compartment to the other when a user shifts his weight from one foot to the other.

Thus, because of the resilient buoyancy a bouncing effect is created by the sealed, partly inflated ball. As the user's weight is shifted to a compartment, the air therein is forced through the air passageway between the bottom edge 28 of disc 26 and the inside bottom portion 24 of ball 20 to the other compartment. In turn, the user's foot positioned on top of the compartment to which his weight has been shifted will sink and the other foot will raise as the air is forced into the compartment below.

In order for the user to keep his balance, he will tend to shift his weight to the other foot which is being raised. This will cause a reversal of the airflow between the compartments and repetition of the pattern. Hence, a user of the ball with his feet positioned on opposite sides of the disc and on top of the ball, will naturally simulate jogging as he shifts his weight raising and lowering his feet.

Children can use the jogging ball as a game to see who can stay on the longest or jog the fastest, and adults can use the jogging ball for exercise. Of course, as the weight of the person increases the ball will need to be inflated more to support them. and may require a larger size ball than that used for small tots. To stabilize themselves on the ball, a user can hold onto the handle 30 and also, if desired, mount it on a bottom plate 32 which is generally flat.

In order to provide a better foot support, the top surface 22 of the ball can be flat as shown and made of a thicker more durable material than the rest of the ball. The ball itself, preferably, is made of a resilient, flexible rubber or plastic, which is durable enough to withstand substantial use and abuse. The disc itself is normally made of rigid material, and substantially divides the ball equally, but air passageways between the divided compartments are in all forms included.

The modification of the invention shown in FIGS. 3 and 4 includes supplemental resiliency, if desired, provided by the vertical springs 50 and 52 which extend within each of the compartments of ball 40 divided by the center disc 46 between the respective top and bottom surfaces thereof. As a still further resilient support, a vertical center spiral spring 54 can be mounted between the bottom 47 of the center disc 46 and the adjacent bottom surface of the ball.

An improved hand grip is shown in FIGS. 3 and 4 by the T-shaped extended handle 48. Also the flat bottom plate 42 can be attached to the ball 40 to form a part of the bottom surface as a stabilizer for the device. Basically, as in the earlier described form, the device operates the same and variations for weight and resiliency are primarily controlled by changes of the air pressure within the ball.

Though several specific forms of this invention have been shown and described herein, this invention is not meant to be limited strictly as disclosed, but is intended to comprehend all modifications and forms within the spirit of the following claims.

I claim:

1. A sealed, partially inflated ball made of generally flexible material with a top portion generally flattened to provide foot supports, said ball being divided into two substantially equal compartments by a center disc secured in a substantially vertical position within said ball and extending along the center of said top portion and toward the bottom of said ball between opposite inner sides thereof, said center disc forming air passageway means within the interior of said ball to allow air movement between the divided compartments sufficient to quickly raise said top portion of said ball on the side of said center disc opposite from said top portion over a compartment onto which a user's weight has been shifted, holding means extending upwardly from said top portion of said ball enabling a user to maintain his balance by grasping said holding means, and said ball being inflated with enough air to support a person standing on it, but not so much as to prevent airflow from one compartment to the other because of weight shifting of a user having his feet positioned on top of said ball on the opposite sides of said disc.

2. A sealed, partially inflated ball as defined in claim 1 wherein said holding means includes a handle extending from said top portion of said ball.

3. A sealed, partially inflated ball as defined in claim 2 in combination with a generally flat plate in which the bottom of said ball can be stabilized in place during use.

4. A sealed, partially inflated ball as defined in claim 1 wherein said air passageway means comprises a spacing between the bottom of said disc and the adjacent interior bottom of said ball.

5. A sealed, partially inflated ball as defined in claim 3 which includes, as additional resilient support, vertical springs extending within each of said compartments between the respective top and bottom surfaces thereof on opposite sides of said center disc.

6. A sealed partially inflated ball as defined in claim 4 which includes a vertical resilient spring extending between the bottom of the center disc and the adjacent interior bottom of said plate.

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