PORTABLE EXERCISE APPARATUS

Inventor: Albert Weber, Los Angeles, CA (US)

Correspondence Address:
PATWRITE, LLC
408 W. MAIN ST.
MARSHALLTOWN, IA 50158-5759 (US)

Appl. No.: 11/307,078
Filed: Jan. 23, 2006

Related U.S. Application Data
Provisional application No. 60/645,122, filed on Jan. 21, 2005.

ABSTRACT
A portable inflatable exercise apparatus comprises a tubular body having a longitudinal axis of symmetry with handles disposed on either end. The exercise apparatus is selectively filled with air or water depending on the exercises chosen by a user. Valves are provided to allow either air or water to be added or drained from tubular body and foam grips are provided to allow the user to comfortably grip the exercise apparatus during use. The tubular body is made of heavy duty vinyl. Because of the natural spring action of the filled apparatus, it allows a user to gain the benefit of exercising without straining or injuries common to impact exercise routines and devices.
PORTABLE EXERCISE APPARATUS
RELATED APPLICATIONS

[0001] This application claims priority and herein incorporates by reference U.S. provisional patent application No. 60/645,122, filed Jan. 21, 2005.

BACKGROUND OF THE INVENTION

[0002] The latest figures released by the government are rather alarming concerning the number of overweight people in the United States. As more people take note of the health related dangers of our obesity, diet and exercise play an important role in long term weight loss and overall health. A key component is exercise as attested by most doctors and dieting programs. The importance of exercise is hard to overestimate. The “couch potato” syndrome is even affecting the youth of America. As baby boomers age, the need for exercise is becoming apparent. Strenuous exercise can cause more harm than benefit especially among older participants and the harmful effects of high impact exercise is well documented. Doctors and health professionals are generally in agreement that even moderate exercise is very beneficial.

[0003] There are many studies and surveys demonstrating that most people who join health gyms or spas wind up dropping out after a short time and most people who purchase home exercise equipment wind up using them as clothes hangers. People may be intimidated by large bulky machines that require giving up a significant amount of floor space. Others never make the purchase because of space concerns or the high price associated with most home exercise equipment. Additionally, even those people who have home exercise equipment and who use it regularly, cannot easily take it with them when they travel or when they go to the office.

[0004] Another problem associated with regular exercise is the lack of time that most people experience while trying to adhere to a regular exercise schedule. There is a need for a device that can be used while doing other things such as watching television or sitting in an office chair.

[0005] There is a need for a light and portable exercise apparatus that is relatively inexpensive that allows a user to easily fit exercise into a busy routine. There is a further need for an apparatus that allows for a variety of exercise routines thereby avoiding the tedium that often accompanies repeated exercise routines. The need also exists for a single apparatus that can be used for stretching, calisthenics, or aerobic exercise routines.

SUMMARY OF THE INVENTION

[0006] It is an object of the present invention to provide an exercise apparatus that is lightweight and portable.

[0007] It is yet another object of the present invention to be able to fit in a small suitcase, purse or carry-on luggage.

[0008] It is a further object of the present invention to allow a user to switch between an air-filled mode to a water filled mode thereby enabling a wide selection of exercise routines.

[0009] It is yet a further object of the present invention to provide a low cost, highly portable exercise apparatus that is easily carried with a user or stored in a very small space.

[0010] Yet a further object of the present invention is to provide a device that is easily operated while a user is engaged in other tasks such as watching television or sitting in a chair.

[0011] The present invention can be used while standing, sitting or lying down. The present invention allows a user to target specific muscle groups or problem areas. The present invention may be used by people who ordinarily would be unable to exercise because of pain or damage caused by impact due to the cushioning effect provided by the present invention. The present invention can be folded into a very small space that fits in most purses and briefcases. Office workers can relieve stress by taking a short break without leaving the office.

[0012] Other features and advantages of the instant invention will become apparent from the following description of the invention which refers to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] FIG. 1 is a side view of an embodiment of the present invention.

[0014] FIG. 2 is a cross-sectional view along line 1-1 of FIG. 1.

[0015] FIG. 3 is an illustration of a person using the present invention while sitting.

[0016] FIG. 4 is an illustration of a person using the present invention while lying down.

DETAILED DESCRIPTION OF THE INVENTION

[0017] Referring now to FIGS. 1 and 2, an exercise apparatus, shown generally as 10, comprises a tubular body 22 which has an interior surface 21 and which defines a fluid-fillable space 15. In one embodiment, apparatus 10 is made from heavy duty vinyl; however, other suitable materials could be used such as composites, rubber or coat canvas or other fluid-impermeable material. Additionally, in another embodiment (not shown), the tubular body 22 is made from a fluid permeable material with an inflatable tube (not shown) inserted inside to provide fluid-fillable space 15. Various embodiments ranging in length from 12 inches to 48 inches would enable customization. The typical adult size would be approximately 36 inches long having a diameter of approximately 6 inches. Of course, apparatus 10 can vary in length from a small size suitable for children to a large adult size. In production, children’s sizes as well as small, medium and large adult sizes are utilized allowing a customized fit for ease of use and maximum enjoyment and benefit.

[0018] In the embodiment depicted, exercise apparatus 10 is formed by heat sealing the heavy duty vinyl to form tubular body 22. A seam 30 is produced at both ends and along a bottom portion of tubular body 22. Although the embodiment depicted tapers at the ends, other end shapes are possible and would not materially alter the performance or function of the device. Two valves 18 and 20 respectively are provided to enable a user to fill the fluid-fillable space 15 with either air or water. Of course other fluids such as helium or pressurized CO2 or N2O, non toxic liquids or even light weight gels such as a silicone gel may be used to fill fluid
fillable space 15. The advantage of using air and water is that they are easily replaced by the user and therefore the exercise apparatus 10 can be depressurized or drained allowing it to fit in a very small space.

Various exercise routines can be performed using exercise apparatus 10. The embodiment shown has foam handles 14 mounted on fabric straps 12 which are attached to tubular body 22 with rivets 16. The fabric straps 12 attach to tubular body 22 along a portion of seam 30 where the vinyl comes together and joins both sides to form a double thick portion. Rivets 16 attach through this double thick portion providing a secure mounting base for straps 12 and handle 14. Fabric straps 12 could be attached using other fasteners or grommets to provide a secure gripping surface enabling a user to perform various exercise routines. Additionally, it is not necessary to make the strips 15 out of fabric. Any suitable material could be used and would be apparent to one skilled in the art.

In the embodiment shown, a Halkey-Roberts Valve Type 18 is used easily allowing a user to inflate exercise apparatus 10 using lung power. In the embodiment shown, an ordinary drinking straw (not shown) is inserted in the Halkey-Roberts Valve and then the user blows through the straw inflating the present invention. Of course any appropriate valve structure could be used including power options such as inflation using the exhaust function of a vacuum cleaner, pressurized cartridges, etc.

Valve 20 has a large diameter opening allowing it to be placed against a common faucet to enable filling the present invention with water. A cover 29 compresses an O-ring 27 to secure valve 20 ensuring that the water does not leak out while in use. Again, valves that allow easy filling are well known in the art and any suitable valve would be appropriate and function satisfactorily to enable other embodiments of the present invention.

In reference to FIGS. 3 and 4, exercise apparatus 10 is shown being operated by a user 50 in a sitting position (FIG. 3) and while lying down (FIG. 4.) Exercise apparatus 10 may also be used standing up (not shown.) Because exercise apparatus 10 is fluid filled, it provides a natural cushioning effect when used. This helps prevent muscle strains and other injuries and supports the user’s 50 back. To perform the sitting exercises, user 50 sits in a chair 60 and then performs various routines. Floor exercises are performed by placing exercise apparatus 10 on the floor and then following the selected exercise routine.

There are over 44 different exercise routines that can be performed using the exercise apparatus 10 and new routines are certain to be developed. Some examples of the exercises possible include the following:

1. Body supported push-ups.
2. Skimming stomach pumps.
3. Elbow supported frontal roll.
4. Elbow supported full body roll.
5. Flexing head and neck.
6. Elbow supported arm roll.
8. Spinal roll and stretch.
9. Lower back supported sit-ups and ab-crunches.
10. Lower back supported groin lift.
11. Head and neck squeeze.
12. Lower back supported waist twirl, bicycle and scissors.
14. Side to side roll.
17. Leg squeeze.
19. Arm swing.
20. Overhead twirl.
22. Back swing.
23. Arm curls.
24. Lower back lift.
26. Lower back supported sit-ups and ab-crunches.
27. Lower back supported groin lift.
28. Head and neck squeeze.
29. Lower back supported waist twirl, bicycle and scissors.
30. Buttocks roll.
31. Side to side roll.
32. Deep knee bend.
33. Chest/Bicep squeeze.
34. Leg squeeze.
35. Hand squeeze.
36. Arm swing.
37. Overhead twirl.
38. Shoulder swing.
40. Arm curls.
41. Lower back lift.
42. Military press.
water if heat is desired. The present invention, when partially filled with hot or cold water, is easily wrapped around a body part providing effective treatment of the desired area.

[0054] Many different exercise routines can be developed for the present invention. Rolling exercises, lifting and swinging routines are all easily adaptable for use with the present invention. For example, arm curls are a well known exercise routine done with barbells. Traditionally, a user holds either a single long barbell with two hands or else a small barbell for each hand and lifts the barbell upwards defining and arc and lowering the barbell repeating this motion for the desired “reps”. With the present invention, the routine is almost identical except that instead of a barbell, the user is lifting and lowering the water filled exercise apparatus. The weight is varied by adding or subtracting water.

[0055] A further example of the versatility and adaptability of the present invention is the age old push-up. Traditionally this is done by lying down on the floor face down and lifting with the arms rotating your body up and away from the floor and then lowering back down. This is fatigueing and not easily done by older exercisers. A very similar exercise can be done by simply placing the exercise apparatus under the abdomen and then performing the push-up.

[0056] Although the instant invention has been described in relation to particular embodiments thereof, many other variations and modifications and other uses will appear to those skilled in the art.

What is claimed is:

1. A portable exercise apparatus comprising:
   a tubular body having wall portions bounding an inflatable chamber wherein said inflatable chamber is capable of being filled with a fluid;
   said tubular body being generally elongated along a longitudinal axis of symmetry and having opposing axial ends; and
   said opposing axial ends having handles attached thereon.
2. The portable exercise apparatus according to claim 1 wherein said tubular body is tapered along both said axial ends.
3. The portable exercise apparatus according to claim 1 wherein said handles are made from nylon.
4. The portable exercise apparatus according to claim 3 wherein said handles have a foam grip.
5. The portable exercise apparatus according to claim 1 wherein said tubular body is made from heavy duty vinyl.
6. A portable exercise apparatus comprising:
   an inflatable tube defining an inner chamber capable of being filled with a fluid;
   said inflatable tube having a longitudinal axis of symmetry;
   at least one valve disposed on said tubular body wherein a fluid may be selectively introduced into said inner chamber;
   a first handle perpendicularly disposed to said axis of symmetry along an extreme end of said inflatable tube;
   a second handle perpendicularly disposed along an opposite extreme end of said inflatable tube; and
   said first and second handles being adapted to fit a user's hand.
7. The portable exercise apparatus according to claim 6 wherein said at least one valve is adapted to be used by a mouth of a user.
8. The portable exercise apparatus according to claim 6 wherein said at least one valve is adapted for use with a faucet.
9. The portable exercise apparatus according to claim 6 wherein said fluid is air.
10. The portable exercise apparatus according to claim 6 wherein said fluid is water.
11. The portable exercise apparatus according to claim 6 wherein first and second handle has a foam grip.
12. The portable exercise apparatus according to claim 6 wherein said tubular body is made from heavy duty vinyl.
13. A method of exercising using a portable exercise apparatus comprising the steps of:
   obtaining an inflatable tube defining an inner chamber capable of being filled with a fluid wherein said inflatable tube having a longitudinal axis of symmetry and a first handle perpendicularly disposed to said axis of symmetry along an extreme end of said inflatable tube and a second handle perpendicularly disposed along an opposite extreme end of said inflatable tube and said first and second handles being adapted to fit a user's hand;
   filling said inflatable tube with a fluid;
   selecting an exercise from a suitable routine adapted for compatibility with said portable exercise apparatus; and
   repeating said selected exercise for a suitable period of time.
14. The method of exercising using the portable exercise apparatus according to claim 13 wherein said fluid is air.
15. The method of exercising using the portable exercise apparatus according to claim 13 wherein said fluid is water.
16. The method of exercising using the portable exercise apparatus according to claim 13 wherein the step of selecting an exercise includes watching an electronic media presentation illustrating at least one exercise routine.
17. The method of exercising using the portable exercise apparatus according to claim 13 wherein the step of selecting an exercise includes selecting said exercise based on a specific target area of concern to said user.
18. The method of exercising using the portable exercise apparatus according to claim 13 wherein said user is seated while using said method.
19. The method of exercising using the portable exercise apparatus according to claim 13 wherein said user is lying down while using said method.
20. The method of exercising using the portable exercise apparatus according to claim 13 wherein said user is standing while using said method.

* * * * *