A portable seating surface with attachments for exercise equipment. This exercise seat cushion gives individuals the opportunity to tone or exercise anywhere they would sit utilizing the seat cushion with exercise attachments. It is lightweight, durable and can be used on any solid surface.
PORTABLE SEATING SURFACE WITH ATTACHMENTS FOR EXERCISE EQUIPMENT

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of priority of U.S. provisional application No. 62/027,011, filed Jul. 21, 2014, the contents of which are herein incorporated by reference.

BACKGROUND OF THE INVENTION

[0002] The present invention relates to a seat cushion, and more particularly to a seat cushion that is readily adapted to exercise apparatus for the attachment of resilient exercise bands. For busy individuals, it is hard to find the time to exercise or work out. With long work days, kids' activities and the need to sleep there are not enough hours in the day for busy individuals. There is a need to be able to fit exercise into other daily activities and have that ability at the tips of your fingers. This portable seat cushion with exercise attachment allows you to get your toning session in while at work, while watching your favorite TV show, resting on your back porch, at sporting events or anywhere a user travels. Similarly, for people who are confined to a wheelchair or have limited ambulation have limited access to exercise equipment.

[0003] Current exercise apparatus utilizing resilient exercise bands are not cushioned. Moreover, the attachment points for the exercise bands to the apparatus experience failure due to repeated tensioning of the attachment points in response to the exercise.

[0004] As can be seen, there is a need for an improved exercise apparatus for portability, comfort and durability.

SUMMARY OF THE INVENTION

[0005] In one aspect of the present invention, there is an apparatus comprising a top cushion formed from a resilient foam material; an anchor plate, disposed beneath the top cushion. At least one strap is operatively attached to the anchor plate at an attachment point. A cover substantially encloses the top cushion, anchor plate, and attachment point. The said strap extends through a side surface of said cover.

[0006] In another aspect of the invention, there is an exercise band, operatively attached to a loop defined in the at least one strap.

[0007] In alternative embodiments, the exercise band may have a flexible resilient band, adapted for isotonic exercise movements or the exercise band comprises a flexible non-resilient band, adapted for isometric exercise movements.

[0008] In another aspect of the invention the attachment point comprises an aperture defined between a top surface and a bottom surface of said anchor plate.

[0009] In an aspect of the invention, the strap extends through a grommet attached to a side surface of the cover. In another embodiment, the grommet is in substantial alignment with a lateral edge of said anchor plate.

[0010] In yet another aspect of the invention, the said anchor plate is comprised of a metallic material, and more preferably the anchor plate is comprised of stainless steel.

[0011] Another aspect of the invention includes a bottom cushion disposed beneath said anchor plate.

[0012] In another aspect of the invention, an exercise apparatus having a top cushion, comprising a resilient foam material; an anchor plate is positioned subjacent to the top cushion and has at least one strap operatively attached to an aperture defined in the anchor plate proximal to a side edge of the anchor plate; and an exercise band operatively attached to said at least one strap.

[0013] In another aspect, the exercise apparatus includes a bottom cushion disposed beneath said anchor plate. In yet another aspect of the exercise apparatus, a cover encloses the top cushion, anchor plate, and bottom cushion. A grommet in a side face of the cover is substantially aligned with a side edge of the anchor plate and proximal the aperture.

[0014] These and other features, aspects and advantages of the present invention will become better understood with reference to the following drawings, description and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] FIG. 1 is a perspective view of an embodiment of an exercise apparatus, shown in use.

[0016] FIG. 2 is a perspective view of an embodiment of the exercise apparatus.

[0017] FIG. 3 is an exploded view of the interior elements of the exercise apparatus, with the cover and grommets not shown for clarity.

[0018] FIG. 4 is a section view of an embodiment of the exercise apparatus, taken along lines 4-4 in FIG. 2.

[0019] FIG. 5 is a top view of an embodiment strap anchor plate.

[0020] FIG. 6 is a bottom view of an embodiment of the anchor plate.

DETAILED DESCRIPTION OF THE INVENTION

[0021] The following detailed description is of the best currently contemplated modes of carrying out exemplary embodiments of the invention. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles of the invention, since the scope of the invention is best defined by the appended claims.

[0022] Broadly, an embodiment of the present invention provides an exercise apparatus so that gives individuals the ability to exercise or work out anytime and anywhere. It allows for exercise at work during conference calls, while reading emails or during short breaks. It can be used while relaxing outside, watching your kids or during your favorite TV programs. It can be used during long sporting event weekends when you can't find the time for the gym.

[0023] The exercise apparatus is also well suited for individuals who are confined to wheelchairs or have limited ambulation. It can be taken anywhere a user may travel. With busy lifestyles the ability to work out during your daily routine is imperative since the majority of individuals have difficulty finding the time to exercise outside of their daily routine. This exercise apparatus allows for exercise at your fingertips when the time presents itself.

[0024] As best seen in reference to FIG. 1, a user 36 may utilize the exercise apparatus 10 in any number of ways, in this case the user 36 is depicted seated on a chair 28. In the embodiment depicted, the exercise apparatus 10 is positioned on the chair 28, while the user 36 is seated on the exercise apparatus 10. In this configuration, a pair of exercise bands 34 are operatively attached to at least one strap 22 extending outwardly from an end surface of the exercise apparatus 10, such as via a band clip 32. The band clip 32 may for example be a carabiner, hook, ring, or similar attachment device.
The exercise bands 34 are preferably comprised of a flexible resilient material, such as an elastic band or tube that permits isotonic resistance exercises to be performed by the user 36, such as a lifting movement depicted in the figure. Alternatively, the exercise bands 34 may be comprised of a flexible, but non-resilient material, such as a rope, cord or the like that permits isometric resistance exercises to be performed by the user 36.

Referring now to FIGS. 2 and 3, the exercise apparatus 10 includes a cover 12 that encloses a top cushion 14, a strap anchor plate 16, and an optional bottom cushion 20. In a preferred embodiment, the strap anchor plate 16 is positioned between the top cushion 14 and the optional bottom cushion 20. The apparatus 10 is dimensioned such that it is generally available as a seat cushion, such as for a stadium seat, a folding chair, and the like.

In a preferred embodiment, the cover 12 is made of a material for durability, cleanliness, and to reduce the incidence of slipping or sliding of the exercise apparatus 10 when utilized on smooth surfaces. A material such as that used to cover a yoga mat, or other types of exercise pads, are well suited for this purpose. The side surfaces of the cover may be comprised of a breathable fabric, such as a heavy indoor/outdoor material. Preferably, the cover 12 completely encloses the top cushion 14, the bottom cushion 20 and the anchor plate 16. Optionally, the cover 12 may include a slide fastener, snaps, hook and pile fasteners, or the like in order to open the cover and service the cushions 14, 20, plate 16, and attachment straps 22.

The top cushion 14 is preferably comprised of an open cell high density foam, such as that available from the Foam Factory of Macomb, Mich., identified as IID #26, the specifications for which are incorporated by reference. This material provides firmness for vigorously used products while providing softness and comfort. In a preferred embodiment, the top cushion 14 is provided with a 2" thickness of open cell high density foam. The strap anchor plate 16 is comprised of a substantially rigid plate of high-strength material, such as wood, plastic, metal, plexi-glass, or any material that would tolerate weight, and yet be light enough to foster portability by the user. In a preferred embodiment, the plate 16 is comprised of a stainless steel sheet, so as to avoid oxidation and rust as a consequence of moisture getting on the plate, such as from a user exercising on the apparatus. The bottom cushion 20 may be comprised of a 1" thickness of open cell high density foam. The combined thickness of the top cushion 14, plate 16, and bottom cushion 20, provide a height of the apparatus 10 such that the user’s 36 feet may maintain contact with the floor in most circumstances.

The strap anchor plate 16 has a plurality of apertures 18 defined through the top and bottom surfaces of the plate 16. The apertures 18 provide for the secure attachment of the straps 22 to the anchor plate 16. The straps 22 are attached to the apertures 18 so as to form a loop 24. The straps 22 may be tied to one another in a knot, or sewn together via stitching. Alternatively, or additionally, the straps 22 may be secured to the plate 16 via a threaded fastener, such as a screw 28, or a nut and bolt combination. In a preferred embodiment, the straps 22 are comprised of a high strength material, such as woven nylon webs, polyester belts, and the like.

As seen in reference to FIG. 4, an embodiment of the exercise apparatus 10, has at least one grommet 26 attached to the cover 12 and extends from a side edge surface of the apparatus and substantially aligned with the anchor plate 16 disposed within the cover 12. The strap 22 extends from its attachment to the anchor plate 16 via apertures 18 and through a hole in the grommet 26 such that strap loop 24 extends beyond the outside the cover 12 of the apparatus.

In the embodiments depicted in FIGS. 5 and 6, the exercise apparatus 10 is provided with a plurality of straps 22 attached to apertures 18 defined near the midpoint of the outer periphery of the top and bottom surfaces of the attachment plate 16. As may also be seen, the optional fasteners 28 may be included to secure the straps 22 to the plate 16.

As previously indicated, exercise bands 34 are operatively attached to the strap loops 24. In preferred embodiments of the invention, the exercise bands 34 are comprised of a flexible resilient material, such as rubber or elastic tubing. When equipped with resilient, elastic bands, the user 36 may utilize the exercise apparatus 10 to perform isotonic exercise regimens for improving their level of fitness and flexibility. The exercise bands 34 may include a selection from a plurality of bands having various elasticities so as to increase or decrease the force that must be applied by the user 36 to perform a particular exercise or to provide the user 36 a more difficult exercise regimen as their level of fitness improves.

Alternatively, if the exercise bands 34 are comprised of a non-elastic flexible material, the user may utilize the exercise apparatus 10 to perform isometric exercise regimens for improving their fitness and strength of their body. By providing attachment points at each of the sides of the apparatus 10 the user 36, or an assistant, such as a physical therapist for those who may not be in an ambulatory condition, may readily change the exercises performed.

For example, the exercise bands 34 can be configured at the sides of the device 10, such as shown in reference to FIG. 1 to perform exercises for the biceps, deltoids, rotator cuff, triceps, and pectoral and scapular musculature. By simply repositioning the exercise bands 34 to the aft attachment point, the user 36 can perform exercises, such as triceps extensions, obliques/abdominals, chest press, and posterior deltoid. From the front attachment lower extremity, hip, gluteal and core exercises can be performed. As may be readily appreciated, the exercise apparatus 10 of the present invention is readily adaptable to a wide variety of therapeutic and exercise protocols.

It should be understood, of course, that the foregoing relates to exemplary embodiments of the invention and that modifications may be made without departing from the spirit and scope of the invention as set forth in the following claims.

What is claimed is:

1. An apparatus comprising:
   a top cushion, comprising a resilient foam material;
   an anchor plate, disposed beneath said top cushion;
   at least one strap operatively attached to said anchor plate at an attachment point; and
   a cover substantially enclosing said top cushion, anchor plate, and attachment point, and said strap extends through a side surface of said cover.

2. The apparatus of claim 1 further comprising:
   an exercise band, operatively attached to a loop defined in said at least one strap.

3. The apparatus of claim 2, wherein said exercise band comprises a flexible resilient band, adapted for isotonic exercise movements.
4. The apparatus of claim 2, wherein said exercise band comprises a flexible non-resilient band, adapted for isometric exercise movements.

5. The apparatus of claim 1, wherein said attachment point comprises an aperture defined between a top surface and a bottom surface of said anchor plate.

6. The apparatus of claim 1, wherein said strap extends through a grommet attached to a side surface of said cover.

7. The apparatus of claim 6, wherein said grommet is in substantial alignment with a lateral edge of said anchor plate.

8. The apparatus of claim 1, wherein said anchor plate is comprised of a metallic material.

9. The apparatus of claim 1, wherein said anchor plate is comprised of stainless steel.

10. The apparatus of claim 1 further comprising:
    a bottom cushion disposed beneath said anchor plate.

11. An exercise apparatus comprising:
    a top cushion, comprising a resilient foam material;
    an anchor plate, subjacent to said top cushion;
    at least one strap operatively attached to an aperture defined in said anchor plate proximal to a side edge of said anchor plate; and
    an exercise band operatively attached to said at least one strap.

12. The exercise apparatus of claim 11, further comprising
    a bottom cushion disposed beneath said anchor plate.

13. The exercise apparatus of claim 12, further comprising
    a cover enclosing said top cushion, anchor plate, and said bottom cushion, wherein a grommet in a side face of said cover is substantially aligned with a side edge of said anchor plate and proximal said aperture.

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