MODULAR EXERCISE PLATFORM

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ABSTRACT

An exercise platform may include: (A) a base having a base cavity; (B) an insert that: (1) is sized to be stably received within the base cavity; and, (2) has an insert cavity; and, (C) another insert sized to be stably received within the insert cavity. The base cavity may also be sized to stably receive the base of a balance trainer and the insert cavity may also be sized to stably receive a portion of a stability ball.
MODULAR EXERCISE PLATFORM

[0001] This application claims priority from U.S. Ser. No. 60/895,612, entitled BALANCE PLATFORM, filed Mar. 19, 2007, which is incorporated herein by reference and to U.S. Ser. No. 29/284,117 titled MODULAR EXERCISE PLATFORM, filed Aug. 31, 2007, which is also incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] A. Field of Invention
[0003] This invention pertains to the art of methods and apparatuses concerning exercise devices, and more particularly to methods and apparatuses regarding the assembly and use of an exercise platform.

[0004] B. Description of the Related Art
[0005] Numerous exercise devices that require and/or develop a user's balance are well-known. Examples include exercise platforms, balance bars, core boards, balance trainers, and stability balls. While all such exercise devices may be beneficial for the user, a difficulty is in conveniently using these devices. What is needed is a modular exercise platform that can be quickly and easily adjusted to provide surfaces to accommodate any of the exercise equipment noted above.

SUMMARY OF THE INVENTION

[0006] According to one embodiment of this invention, an exercise platform may include: (A) a base having a base cavity sized to stably receive the base of a balance trainer; (B) a first insert sized to be stably received within the base cavity, the first insert including a substantially planar first surface and an insert cavity sized to stably receive at least a portion of a stability ball; and, (C) a second insert sized to be stably received within the insert cavity, the second insert including a substantially planar second surface. The first and second surfaces are substantially parallel and define a user exercise surface when the first insert is received within the base cavity and the second insert is received within the insert cavity.

[0007] According to another embodiment of this invention, the exercise platform may, in another embodiment, include a balance bar that extends upwardly from the base.

[0008] According to another embodiment of this invention, the exercise platform may be height adjustable.

[0009] According to yet another embodiment of this invention, the exercise platform may, in another embodiment, include a balance bar that extends upwardly from the base.

[0010] According to another embodiment of this invention, a method may include the steps of: (A) providing a base having a base cavity sized to stably receive the base of a balance trainer; (B) attaching a first insert, having a substantially planar first surface and an insert cavity sized to stably receive at least a portion of a stability ball, to the base within the base cavity; and, (C) attaching a second insert, having a substantially planar second surface, to the first insert within the insert cavity so that the first and second surfaces are substantially parallel and define a user exercise surface.

[0011] According to another embodiment of this invention, the step of attaching the first insert may include the step of rotating the first insert with respect to the base and the step of attaching the second insert may include the step of rotating the second insert with respect to the first insert.

[0012] Still other benefits and advantages of the invention will become apparent to those skilled in the art to which it pertains upon a reading and understanding of the following detailed specification.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] The invention may take physical form in certain parts and arrangements of parts, embodiments of which will be described in detail in this specification and illustrated in the accompanying drawings which form a part hereof and wherein:

[0014] FIG. 1 is a perspective view of an exercise platform according to one embodiment of this invention.

[0015] FIG. 2 is an assembly drawing of the exercise platform shown in FIG. 1.

[0016] FIG. 3 is a perspective view of the exercise platform shown in FIG. 1 with the first and second inserts removed and the base cavity visible.

[0017] FIG. 4 is a perspective view of the exercise platform shown in FIG. 3 with a balance trainer placed into the base cavity.

[0018] FIG. 5 is a perspective view of the exercise platform of FIG. 1 with the first insert removed and the insert cavity visible.

[0019] FIG. 6 is a perspective view of the exercise platform shown in FIG. 5 with a stability ball placed into the insert cavity.

[0020] FIG. 7 is a perspective view of another embodiment exercise platform using a ballet bar.

[0021] FIG. 8 is a perspective view of another embodiment exercise platform including additional support members.

[0022] FIG. 9 is a bottom view of the exercise platform shown in FIG. 8.

DETAILED DESCRIPTION OF THE INVENTION

[0023] Referring now to the drawings wherein the showings are for purposes of illustrating embodiments of the invention only and not for purposes of limiting the same, FIGS. 1-2 show an exercise platform 10 according to one embodiment of this invention. The exercise platform 10 may include a base 20, a first insert 60, a second insert 80 and a balance bar 100 that extends upwardly from the base 20. The exercise platform 10 of this invention can be easily adjusted and may be considered a modular exercise platform 10. The exercise platform 10 may be adjusted to provide: (1) a relatively flat user exercise surface 200 (shown in FIG. 1); (2) a surface ideal for stably receiving a stability ball 70 (shown in FIGS. 5 and 6); and, (3) a surface ideal for stably receiving a balance trainer 30 (shown in FIGS. 3 and 4).

[0024] With reference now to FIGS. 1-3, the base 20 may include a base cavity 22 which is sized to stably receive a balance trainer 30. By “stably receive” it is meant that the balance trainer 30 can be placed within the base cavity 22 and remain in a stable condition suitable for exercise by a user. It should be noted that the base 20 is adapted to receive any type or style of balance trainer 30 applied with sound engineering judgment. The base cavity 22 can also be of any design applied with sound engineering judgment. In one embodiment, shown, it may include a hole 21 and a recessed area 23 having an outer rim 25. The balance trainer 30 may be received within the base cavity 22 by placing the lower surface of the trainer base 31 onto the recessed area 23 with the outer edge of the trainer base 31 juxtaposed to the rim 25. For
the embodiment shown, the base 20 is formed with a sub-frame 24 which may comprise a pair of sub-frame bars 27 that receive a pair of base platform members 29. The platform members 29, 29 may be attached to the sub-frame 24 with bolts or screws, as shown.

[0025] With reference now to FIGS. 2-3 and 5-6, the first insert 60 will now be described. The first insert 60 may include a substantially planar surface 62 which may surround an insert cavity 64. The insert cavity 64 is sized to stably receive a stability ball 70. By “stably receive” it is meant that the stability ball 70 can be placed within the insert cavity 64 and remain in a stable condition suitable for exercise by a user. It should be noted that the insert cavity 64 is adapted to receive any type or style of stability ball 70 applied with sound engineering judgment. The insert cavity 64 may include an outer rim 63 used as described below. A tab and slot connection 66 is used to attach the first insert 60 to the base 20. The tab and slot connection 66 is comprised of at least one tab 71 and at least one slot 72. Any number of tabs and slots chosen with sound engineering judgment may be used to form the tab and slot connection 66 although four tabs 71 and four slots 72 are shown. In the embodiment shown, the tabs 71 extend outwardly from a bottom portion of the first insert 60 and the slots 72 are formed in the recessed area 23 of the base 20. It is contemplated, however, to form the tabs in the base 20 and the slots in the first insert 60. In any case, once the tabs 71 are aligned with the corresponding slots 72, which may be achieved by rotating the first insert 60 with respect to the base 20, the tabs 71 will be received within the slots 72 to thereby hold or secure the first insert 60 to the base 20. FIG. 5 shows the first insert 60 attached to the base 20. FIG. 6 shows how a stability ball 70 may be placed within the insert cavity 64 and then used for exercising. The first insert 60 may include at least one hand grip 68 (two shown) by which the user can rotate for attachment and detachment the first insert 60 to and from the base 20. While the specific shape and size of the first insert 60 can be any chosen with sound engineering judgment, for the embodiment shown, the outer edge 61 is substantially circular and the diameter D1 is substantially the same as the diameter of the outer rim 63 of the insert cavity 64.

[0027] With reference now to FIGS. 1-2, the user may hold or lean against the balance bar 100 in any known manner to support the user as various exercises are performed. For the embodiment shown, the balance bar 100 is substantially U-shaped having two legs 102, 102 and a cross member 104. Each leg 102 may, in one embodiment, be received on a connection portion 26 of the sub-frame 24 which extends through holes 19, 19 formed in the base 20 as shown in FIG. 2. A grip member 106, such as a foam rubber piece, may be attached to the cross member 104 in any known manner to provide a softer grip surface for the user. While the balance bar 100 shown is U-shaped, it is to be understood that the balance bar 100 may be any shape or style chosen with sound engineering judgment. In an alternate embodiment, no balance bar 100 is required. In another embodiment, the balance bar 100 may be height adjustable. The mechanism used for adjusting the height of the balance bar 100 can be any chosen with sound engineering judgment. Non-limiting examples include the use of detents or the use of one or more pins that are received in one of a plurality of holes formed in at least one leg 102. In yet another embodiment, shown in FIG. 7, the balance bar 100 may be a ballet bar 120. By “ballet bar” it is meant a bar that is well-suited for use in doing ballet type exercises. The upper portion 108, for example, may be a wooden bar formed in a manner that is well known to those in the art for ballet bars.

[0028] In another embodiment, shown in FIGS. 8-9, additional support members 17, 17 may be provided, as shown. Each support member 17 may have a first end 15 that connects to the balance bar 100 and a second end 13 that connects to the sub-frame 24. For the specific but non-limiting embodiment shown, the first end 15 comprises a tubular member 12 that receives a bottom portion of a leg 102 of the balance bar 100 and the second end 13 comprises an extension portion (not visible) that is received in an opening 11 (shown in FIG. 2) formed in an end of the sub-frame 24. The additional support members 17, 17 enable the balance bar 100 to withstand greater loads applied by the exerciser.

[0029] In another embodiment, shown for example in FIGS. 1 and 3, at least one loop 210, two shown, can be provided on the exercise platform 10. The loop(s) 210 can be used to attach another exercise related device such as a bungee resistance cord (not shown) for use in any manner known in the art. In one embodiment, shown, the loop(s) 210 is attached to the balance bar 100. In other embodiments, not shown, the loop(s) 210 may be attached directly to the base 20 and/or to the inserts 60, 80. In yet another embodiment, not shown, a platform extension may be provided. The platform extension allows the exerciser (or multiple exercisers) to use both sides of the platform 10.

[0030] With reference now to all of the FIGURES, it should be noted that the exercise platform 10 may be formed of any material and in any manner chosen with sound engineering judgment. In one non-limiting embodiment, the base 20 and the inserts 60, 80 are formed substantially of moldable plastic and the balance bar 100 and the sub-frame 24 are formed substantially of metal tubing. As noted above, the upper portion 108 of the ballet bar 120 may be formed of wood.

[0031] With reference now to FIGS. 1-6, the operation of the exercise platform 10 will now be described. With the exercise platform 10 in the condition shown in FIG. 3, with the inserts 60, 80 removed, the base 20 is in condition for
receiving a balance trainer 30 as shown in FIG. 4. More specifically, the trainer base 31 is simply positioned within the base cavity 22 and the balance trainer 30 is then stably received and may be used for corresponding exercises. If it becomes desirable to perform exercises with a stability ball 70, the exercise platform 10 as shown in FIG. 3 is adjusted by attaching the first insert 60 as shown in FIG. 5. This attachment of the first insert 60 to the base 20 may be accomplished by rotating or screwing the first insert 60 with respect to the base 20 in a first direction (clockwise, for example) into the base cavity 22. In this way the tabs 71 are aligned with and then received in the slots 72 and the first insert 60 is then stably received onto the base 20. In this condition, a stability ball 70 may be easily positioned within the insert cavity 64 as shown in FIG. 6. If it is then desirable to provide a flat user exercise surface 200, the second insert 80 can be positioned onto the insert cavity 64 as shown in FIG. 1. This attachment of the second insert 80 to the first insert 60 may be accomplished by rotating or screwing the second insert 80 with respect to the first insert 60 in a first direction (clockwise, for example) into the insert cavity 64. In this way the tabs 85 are received in the slots 86 and the second insert 80 is then stably received onto the second insert 80. It should be noted that the second insert 80 can remain attached to the first insert 60 during adjustment of the exercise platform 10. Thus, for example, if it becomes desirable to adjust the exercise platform 10 directly from the condition shown in FIG. 3 to the condition shown in FIG. 1, it is only necessary to attach both inserts 60, 80, as a single unit, to the base 20 by attaching the first insert 60 (with the second insert 80 already attached to the first insert 60) to the base 20 as just described.

With continuing reference to FIGS. 1-6, with the exercise platform 10 in the condition shown in FIG. 1, with the inserts 60, 80 attached, the exercise platform 10 provides a relatively flat user exercise surface 200. The flat user exercise surface 200 is, in one embodiment, defined by the substantially planar surface 62 of the first insert 60 and the substantially planar surface 82 of the second insert 80. While the planar surfaces 62, 82 are shown as being substantially horizontal, it is also contemplated that another embodiment that the planar surfaces 62, 82, and thus the flat user exercise surface 200, may be angled with respect to a horizontal plane. In yet another embodiment, the user exercise surface 200 may also include a substantially planar surface 202 of the base 20 that is substantially parallel to the planar surfaces 62, 82. The planar surface 202 can be provided in any location chosen with sound engineering judgment such as all around the first insert 60, as shown in FIG. 1. If it becomes desirable to perform exercises with a stability ball 70, the exercise platform 10 as shown in FIG. 1 is adjusted by removing the second insert 80 as shown in FIG. 5. This removal of the second insert 80 from the first insert 60 may be accomplished by lifting or raising the second insert 80 with respect to the first insert 60 out of the insert cavity 64. In this way the tabs 85 are removed from the slots 86. In this condition, a stability ball 70 may be easily positioned within the insert cavity 64 as shown in FIG. 6. If it then becomes desirable to perform exercises with a balance trainer 30, the exercise platform 10 as shown in FIG. 5 is adjusted by removing the first insert 60 as shown in FIG. 3. This removal of the first insert 60 from the base 20 may be accomplished by lifting or raising the first insert 60 with respect to the base 20 out of the base cavity 20. In this way the tabs 71 are removed from the slots 72. In this condition, a balance trainer 30 may be easily positioned within the base cavity 24 as shown in FIG. 4. It should again be noted that the second insert 80 can remain attached to the first insert 60 during adjustment of the exercise platform 10. Thus, for example, if it becomes desirable to adjust the exercise platform 10 directly from the condition shown in FIG. 1 to the condition shown in FIG. 3, it is only necessary to remove both inserts 60, 80, as a single unit, from the base 20 by removing the first insert 60 (with the second insert 80 attached to the first insert 60) from the base 20 as just described.

The embodiments have been described. Herein-above, it will be apparent to those skilled in the art that the above methods and apparatuses may incorporate changes and modifications without departing from the general scope of this invention. It is intended to include all such modifications and alterations in so far as they come within the scope of the appended claims or the equivalents thereof.

Having thus described the invention, it is now claimed:

I/We claim:
1. An exercise platform comprising:
   a base having a base cavity sized to stably receive a balance trainer;
   a first insert sized to be stably received within the base cavity, the first insert comprising a substantially planar first surface and an insert cavity sized to stably receive a stability ball;
   a second insert sized to be stably received within the insert cavity, the second insert comprising a substantially planar second surface; and
   wherein the first and second surfaces are substantially parallel and define a user exercise surface when the first insert is stably received within the base cavity and the second insert is stably received within the insert cavity.
2. The exercise platform of claim 1 further comprising:
   a balance bar extending upwardly from the base.
3. The exercise platform of claim 2 wherein the balance bar is height adjustable.
4. The exercise platform of claim 2 wherein the balance bar is substantially U-shaped.
5. The exercise platform of claim 2 wherein the balance bar comprises:
   a ballet bar.
6. The exercise platform of claim 2 wherein the base comprises:
   a sub-frame comprising a connection portion that extends from the base and connects to a bottom portion of the balance bar.
7. The exercise platform of claim 1 further comprising:
   a first tab-in-slot connection for use in attaching the first insert to the base; and,
   a second tab-in-slot connection for use in attaching the second insert to the first insert.
8. The exercise platform of claim 1 wherein:
   the first insert has a first hand grip for use in attaching the first insert to the base; and
   the second insert has a second hand grip for use in attaching the second insert to the first insert.
9. The exercise platform of claim 1 wherein the outer edges of the first and second inserts are substantially circular in shape.
10. The exercise platform of claim 1 wherein the user exercise surface is substantially horizontal.
11. The exercise platform of claim 1 wherein the base has a substantially planar base surface that is substantially paral-
lel to the first and second surfaces when the first insert is received within the base cavity and the second insert is received within the insert cavity.

12. A method comprising the steps of:
providing a base having a base cavity sized to stably receive the base of a balance trainer;
attaching a first insert, having a substantially planar first surface and an insert cavity sized to stably receive at least a portion of a stability ball, to the base within the base cavity; and,
attaching a second insert, having a substantially planar second surface, to the first insert within the insert cavity so that the first and second surfaces are substantially parallel and define a user exercise surface.

13. The method of claim 12 wherein:
the step of, attaching the first insert, comprises the step of rotating the first insert with respect to the base; and,
the step of, attaching the second insert, comprises the step of rotating the second insert with respect to the first insert.

14. The method of claim 12 further comprising the steps of:
detaching the second insert from the first insert; and,
placing a stability ball within the insert cavity.

15. The method of claim 12 further comprising the steps of:
detaching the first and second inserts; and,
placing a balance trainer within the base cavity.

16. The method of claim 12 further comprising the steps of:
detaching the first and second inserts together by detaching the first insert from the base without detaching the second insert from the first insert.

17. The method of claim 12 further comprising the steps of:
attaching a balance bar to the base.

18. The method of claim 17 further comprising the steps of:
adjusting the height of the balance bar.

19. The method of claim 13 wherein:
the step of, rotating the first insert with respect to the base, comprises the step of engaging a first tab with a first slot; and,
the step of, rotating the second insert with respect to the first insert, comprises the step of engaging a second tab with a second slot.

20. The method of claim 14 wherein the step of, detaching the second insert from the first insert, comprises the step of:
rotating the second insert with respect to the first insert.

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