A multifunctional fitness apparatus contains a base including a rolling disc and a rotating disc; a first guide rail set; a seat connected with the base and including two connecting shafts; a second guide rail set and a third guide rail set connecting with the two shafts axially; a first pedal set and a second pedal set coupling with the second guide rail set and the third guide rail set; and the first pedal set including a first post, a first handle, and a first roller; the second pedal set including a second post, a second handle, and a second roller. Thereby, the user holds the first handle and the second handle by two hands and kneels, sits, or stands on the first pedal set and the second pedal set to exercise.
MULTIFUNCTIONAL FITNESS APPARATUS

FIELD OF THE INVENTION

[0001] The present invention relates to a multifunctional fitness apparatus which allows the user to change various exercise modes.

BACKGROUND OF THE INVENTION

[0002] Conventional exercise apparatuses can only be used in a single mode without changing various exercise modes, so users will feel bored to stop exercise.

[0003] The present invention has arisen to mitigate and/or obviate the afore-described disadvantages.

SUMMARY OF THE INVENTION

[0004] The primary object of the present invention is to provide a multifunctional fitness apparatus which allows the user to change various exercise modes.

[0005] To obtain the above objective, a multifunctional fitness apparatus provided by the present invention contains:

[0006] a base including a rolling disc disposed on an upper side thereof and a rotating disc arranged on the rolling disc, wherein the rotating disc allows rotating in a clockwise direction and in an anti-clockwise direction so that a user kneels, sits, or stands on the rotating disc to exercise;

[0007] a first guide rail set;

[0008] a seat connected with the base by ways of the first guide rail set and including two connecting shafts;

[0009] a second guide rail set and a third guide rail set, the two shafts axially connecting with the second guide rail set and the third guide rail set;

[0010] a first pedal set and a second pedal set, the second guide rail set and the third guide rail set coupling with the first pedal set and the second pedal set; and

[0011] the first pedal set including a first post mounted on a free end thereof, a first handle fitted on the first post, and a first roller fixed on a bottom surface of the free end thereof;

[0012] the second pedal set including a second post mounted on a free end thereof, a second handle fitted on the second post, and a second roller fixed on a bottom surface of the free end thereof, such that the user holds the first handle and the second handle by two hands and kneels, sits, or stands on the first pedal set and the second pedal set to exercise.

[0013] The foregoing, as well as additional objects, features, and advantages of the invention will be more readily apparent from the following detailed description, which proceeds with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1 is a perspective view showing the assembly of a multifunctional fitness apparatus according to a preferred embodiment of the present invention.

[0015] FIG. 2 is a perspective view showing the exploded components of the multifunctional fitness apparatus according to the preferred embodiment of the present invention.

[0016] FIG. 3 is a perspective view showing the exploded components of a first pedal set of the multifunctional fitness apparatus according to the preferred embodiment of the present invention.

[0017] FIG. 4 is a perspective view showing the operation of the first pedal set of the multifunctional fitness apparatus according to the preferred embodiment of the present invention.

[0018] FIG. 5 is a perspective view showing the exploded components of the second pedal set of the multifunctional fitness apparatus according to the preferred embodiment of the present invention.

[0019] FIG. 6 is a perspective view showing the operation of the first pedal set of the multifunctional fitness apparatus in a first exercise mode.

[0020] FIG. 7 is a perspective view showing the operation of the first pedal set of the multifunctional fitness apparatus in a second exercise mode.

[0021] FIG. 8 is a perspective view showing the operation of the first pedal set of the multifunctional fitness apparatus in a third exercise mode.

[0022] FIG. 9 is a perspective view showing the operation of the first pedal set of the multifunctional fitness apparatus in a fourth exercise mode.

[0023] FIG. 10 is a perspective view showing the operation of the first pedal set of the multifunctional fitness apparatus in a fifth exercise mode.

[0024] FIG. 11 is a perspective view showing the operation of the first pedal set of the multifunctional fitness apparatus in a sixth exercise mode.

[0025] FIG. 12 is a perspective view showing the operation of the first pedal set of the multifunctional fitness apparatus in a seventh exercise mode.

[0026] FIG. 13 is a perspective view showing the operation of the first pedal set of the multifunctional fitness apparatus in an eighth exercise mode.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0027] With reference to FIGS. 1-5, a multifunctional fitness apparatus according to a preferred embodiment of the present invention comprises:

[0028] a base 10 including a rolling disc 11 disposed on an upper side thereof and a rotating disc 12 arranged on the rolling disc 11, wherein the rotating disc 12 allows rotating in a clockwise direction and in an anti-clockwise direction so that a user kneels, sits, or stands on the rotating disc 12 to exercise;

[0029] a first guide rail set 20;

[0030] a seat 30 connected with the base 10 by ways of the first guide rail set 20 and including two connecting shafts 31, 32;

[0031] a second guide rail set 40 and a third guide rail set 50, the two shafts 31, 32 axially connecting with the second guide rail set 40 and the third guide rail set 50;

[0032] a first pedal set 60 and a second pedal set 70, the second guide rail set 40 and the third guide rail set 50 coupling with the first pedal set 60 and the second pedal set 70; and

[0033] the first pedal set 60 including a first post 61 mounted on a free end thereof, a first handle 62 fitted on the first post 61, and a first roller 611 fixed on a bottom surface of the free end thereof; the second pedal set 70 including a second post 71 mounted on a free end thereof, a second handle 72 fitted on the second post 71, and a second roller 711 fixed on a bottom surface of the free end thereof, such that the user holds the first handle 62 and the second handle 72 by two hands and kneels, sits, or stands on the first pedal set 60 and the second pedal set 70 to exercise. Thereby, the user allows changing various exercise modes by ways of the multifunctional fitness apparatus.

[0034] The base 10 also includes a fixing member 13 fixed thereon, the fixing member 13 has a rotary knob 131 secured on a bottom end thereof and connecting with the base 10 so as
to drive a crank 132 and a connection stem 133 by which a fixed stem 134 is driven to position the rotating disc 12.

[0034] The first post 61 allows expending and retracting to adjustably change its height. For example, the first post 61 is set at least three heights based on the user's low posture, sitting posture, and standing posture in exercise. For instance, when the first post 61 is set at a middle height, the user holds the first handle 62 of the first post 61 in a sitting posture to do rowing exercise or chest exercise.

[0035] The first post 61 and the second post 71 include a plurality of counterweight block 90 disposed thereon to match with a damping effect, thus increasing exercise result.

[0036] The first guide rail set 20 includes two first rails 21, a first rod 22, and a first positioning mechanism 23. The two first rails 21 are mounted in the base 10, and each first rail 21 has a plurality of orifices 211 defined thereon and spaced apart from each other equidistantly. One end of the first rod 22 is fixed to the seat 30, the first rod 22 slides between the two first guide rails 21. The first positioning mechanism 23 is mounted on a free end of the first rod 22 and has two first balls 231 extending out of one of the plurality of orifices 211, a first conical projection 232 pushed by a first spring 233 to keep its first largest segment 2321 abutting against the two first balls 231, a unlock button 234 for driving a first peg 235 by which the first conical projection 232 is driven to move and press the first spring 233, and the first conical projection 232 further moves toward a first smallest segment 2322 to unlock the two first balls 231 so that the first balls 231 retract inwardly to adjust a position of the seat 30 and the first rod 22. Thereafter the unlock button 234 is released so that the first spring 233 is biased against the first conical projection 232 back to an original position, such that the two first balls 231 position one of the plurality of orifices 211, thus fixing the seat 30.

[0037] The second guide set 40 includes two second rails 41 and a second rod 42, and the third guide set 50 includes two third rails and a third rod. Each of the two second rails 41 and the two third rails has a plurality of holes 411 defined thereon and spaced apart from each other equidistantly. One end of the second rod 42 is fixed to a front end of a first pedal 63, and one end of the third rod is fixed to a front end of a second pedal 73, two front ends of the first pedal 63 and the second pedal 73 are axially connected with the two connecting shafts 31, 32 of the seat 30. The second rod 42 and the third rod slide between the two second rails 41 and the two third guide rail. Two second positioning mechanisms 80 are disposed on two free ends of the second rod 42 and the third rod, and each second positioning mechanism 80 has two second balls 81 extending out of one of the plurality of holes 411, a second conical projection 82 pushed by a second spring 83 to keep its second largest segment 821 biasing against the two second balls 81, and a unlocking loop 84 for driving a second peg 85 to move the second conical projection 82 and to push the second spring 83, such that the second conical projection 82 moves toward a second smallest segment 822 to unlock the two second balls 81 so that the two second balls 81 retract inwardly to adjust a position of the first pedal set 60, the second pedal set 70, the second rod 42, and the third rod, thereafter the unlocking loop 84 is released so that the second spring 83 pushes the second conical projection 82 back to an original position, hence the two second balls 81 position one of the plurality of holes 411 so to fix the first pedal set 60 and the second pedal set 70.

[0038] The multifunctional fitness apparatus of the present invention is formed in a ladybug shape, wherein the seat 30 is like a head of a ladybug, a base 10 is like an abdomen of the ladybug, the first pedal set 60 and the second pedal set 70 are similar to two wings of the ladybug. Thereby, a shape of the multifunctional fitness apparatus is novel to increase user's interest.

[0039] Referring further to FIG. 6, in operation, the first handle 62 and the second handle 72 are held by the user, and two start positions of the first pedal set 60 and the second pedal set 70 are close to the rotating disc 12, and the first pedal set 60 and the second pedal set 70 are locked so that two arms of the user accurately push forward to stretch two arms and to exercise abdomen, waist, and two thighs.

[0040] As shown in FIG. 7, the user holds the first handle 62 and the second handle 72 and kneels on the rotating disc 12 to rotate waist and buttck.

[0041] As illustrated in FIG. 8, the base 10 is moved forwardly or backwardly based on a length of the legs, and the rotating disc 12 is fixed, thereafter the user sits on the rotating disc 12 and holds the first handle 62 and the second handle 72 to do butterfly stroke movement. For example, the user sits on the rotating disc 12, and then pulls the first handle 62 and the second handle 72 backwardly to do chest and abdomen exercise, thereafter the first handle 62 and the second handle 72 are accurately pushed forward to repeat the chest and abdomen exercise.

[0042] With reference to FIG. 9, the user sits on the rotating disc 12, stretches two legs toward the seat 30, and then holds the first handle 62 and the second handle 72 to do seated rowing exercise. For example, the user accurately pushes the first handle 62 and the second handle 72 forward and then pulls the first handle 62 and the second handle 72 backward. Conventional fitness apparatus can only provide linear pushing and sliding movement, but the multifunctional fitness apparatus of the present invention can do accurate pushing and sliding exercise. In addition, the first post 61 and the second post 71 have the plurality of counterweight blocks 90 to enhance exercise effect. This accurate pushing and sliding exercise can stretch spine and legs. Also, a distance between the base 10, the first handle 62, and the second handles 72 allows to be adjusted according to using requirement.

[0043] As illustrated in FIG. 10, when desiring to do leg stretching exercise, the rotating disc 12 is locked, and the first post 61 and the second post 71 are removed. Thereafter, the user sits on the rotating disc 12 and stretches two legs toward the first pedal set 60 and the second pedal set 70 and then retracts two legs back to an original position, i.e., the user stretches two legs forwardly and expends them to both sides. Besides, the rotating disc 12 is capable of being unlocked to rotate the user's waist and buttck leftward and rightward.

[0044] With reference to FIG. 11, the user stands on the rotating disc 12, holds the first handle 62 and the second handle 72 of the first post 61 and the second post 71, and then rotates waist. In other words, the first post 61, the second post 71, the first handle 62, and the second handle 72 are used as fulcrums, then the user stands on the rotating disc 12 and rotates the rotating disc 12, and two hands expend with the rotation of waist.

[0045] Referring further to FIG. 12, the user stands on the first pedal set 60 and the second pedal set 70 and holds the first handle 62 and the second handle 72 of the first post 61 and the second post 71 and then expands two hands toward both sides, thus doing chest movement.

[0046] As illustrated in FIG. 13, after the rotating disc 12 is unlocked, it allows being rotated 360 degrees so that the user stands on the rotating disc 12 to rotate randomly.
[0047] Thereby, the multifunctional fitness apparatus of the present invention has aesthetics appearance and provides various movements.

[0048] While the preferred embodiments of the invention have been set forth for the purpose of disclosure, modifications of the disclosed embodiments of the invention as well as other embodiments thereof may occur to those skilled in the art. Accordingly, the appended claims are intended to cover all embodiments which do not depart from the spirit and scope of the invention.

What is claimed is:

1. A multifunctional fitness apparatus comprising:
   a base including a rolling disc disposed on an upper side thereof and a rotating disc arranged on the rolling disc, wherein the rotating disc allows rotating in a clockwise direction and in an anti-clockwise direction so that a user kneels, sits, or stands on the rotating disc to exercise;
   a first guide rail set;
   a seat connected with the base by ways of the first guide set and including two connecting shafts;
   a second guide rail set and a third guide rail set, the two shafts axially connecting with the second guide rail set and the third guide rail set;
   a first pedal set and a second pedal set, the second guide rail set and the third guide rail set coupling with the first pedal set and the second pedal set;
   the first pedal set including a first post mounted on a free end thereof, a first handle fitted on the first post, and a first roller fixed on a bottom surface of the free end thereof;
   the second pedal set including a second post mounted on a free end thereof, a second handle fitted on the second post, and a second roller fixed on a bottom surface of the free end thereof; such that the user holds the first handle and the second handle by two hands and kneels, sits, or stands on the first pedal set and the second pedal set to exercise.

2. The multifunctional fitness apparatus as claimed in claim 1, wherein the base also includes a fixing member fixed thereon, and the fixing member has a rotary knob secured on a bottom end thereof and connecting with the base so as to drive a crank and a connection stem by which a fixed stem is driven to position the rotating disc.

3. The multifunctional fitness apparatus as claimed in claim 1, wherein the first post allows expending and retracting to adjustably change its height.

4. The multifunctional fitness apparatus as claimed in claim 1, wherein the first guide rail set includes two first rails, a first rod, and a first positioning mechanism: the two first rails are mounted in the base, and each first rail has a plurality of orifices defined thereon and spaced apart from each other equidistantly; one end of the first rod is fixed to the seat, the first rod slides between the two first guide rails; the first positioning mechanism is mounted on a free end of the first rod and has two first balls extending out of one of the plurality of orifices, a first conical projection pushed by a first spring to keep its first largest segment abutting against the two first balls, a unlock button for driving a first peg by which the first conical projection is driven to move and press the first spring, and the first conical projection further moves toward a first smallest segment to unlock the two first balls so that the two first balls retract inwardly to adjust a position of the seat and the first rod, thereafter the unlock button is released so that the first spring is biased against the first conical projection back to an original position, such that the two first balls position one of the plurality of orifices, thus fixing the seat.

5. The multifunctional fitness apparatus as claimed in claim 1, wherein the second guide set includes two second rails and a second rod; and the third guide set includes two third rails and a third rod; each of the two second rails and the two third rails has a plurality of holes defined thereon and spaced apart from each other equidistantly; one end of the second rod is fixed to a front end of a first pedal, and one end of the third rod is fixed to a front end of a second pedal, two front ends of the first pedal and the second pedal are axially connected with the two connecting shafts of the seat; the second rod and the third rod slide between the two second rails and the two third guide rails; two second positioning mechanisms are disposed on two free ends of the second rod and the third rod, and each second positioning mechanism has two second balls extend out of one of the plurality of holes, a second conical projection pushed by a second spring to keep its second largest segment biasing against the two second balls, and a unlocking loop for driving a second peg to move the second conical projection and to push the second spring, such that the second conical projection moves toward a second smallest segment to unlock the two second balls so that the two second balls retract inwardly to adjust a position of the first pedal set, the second pedal set, the second rod, and the third rod, thereafter the unlocking loop is released so that the second spring pushes the second conical projection back to an original position, hence the two second balls position one of the plurality of holes so to fix the first pedal set and the second pedal set.

6. The multifunctional fitness apparatus as claimed in claim 1, wherein the first post is set at least three heights based on the user's low posture, sitting posture, and standing posture in exercise.

7. The multifunctional fitness apparatus as claimed in claim 1, wherein the first post and the second post include a plurality of counterweight block disposed thereon to match with a damping effect, thus increasing exercise result.

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