STRETCHING EXERCISE APPARATUS

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ABSTRACT

A stretching exercise apparatus includes a first leg frame, a second leg frame oppositely spaced apart from the first leg frame, a seat frame connected transversely to the first and second leg frames, a leg lift frame pivoted to the first leg frame, an upright bar extending upwardly from and connected foldably to a top end of the first leg frame, and an elastic cord unit extending through the upright bar and the first leg frame and having one end connected to the leg lift frame and another end extending outwardly of the upright bar.
STRETCHING EXERCISE APPARATUS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates to an exercise apparatus, and more particularly to a stretching exercise apparatus.

2. Description of the Related Art

In the current busy society, people work in a regular workplace for long hours in a sitting or standing position. As a result, his/her body muscles may become sore and tired. To relieve the soreness and fatigue of the body muscles, he/she stands up to make some body stretching or change his/her working posture. However, following the popularity of exercise and health concepts, people are becoming more conscious about their body health and shape. Thus, how to effectively use an exerciser to assist self-stretching of the body becomes relatively important.

Currently available stretching exercisers are monotonous in use and are relatively heavy and thus not easy to store.

SUMMARY OF THE INVENTION

Therefore, an object of this invention is to provide a stretching exercise apparatus that is lightweight and that can provide various exercises to achieve stretching of body muscles.

According to the present invention, a stretching exercise apparatus includes a bench unit, an upright bar, and an elastic cord unit. The bench unit includes a first leg frame, a second leg frame oppositely spaced apart from the first leg frame, a seat frame connected transversely to the first and second leg frames, and a leg lift frame pivoted to the first leg frame. The upright bar extends upwardly from and is connected foldably to a top end of the first leg frame. The elastic cord unit extends through the upright bar and the first leg frame, and has one end connected to the leg lift frame and another end extending outwardly of the upright bar.

The beneficial effect of the present invention resides in that through coordination of the bench unit, the upright bar and the elastic cord unit, a user can perform various stretching exercises to effect stretching of his/her body muscles.

BRIEF DESCRIPTION OF THE DRAWINGS

Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiment with reference to the accompanying drawings, of which:

FIG. 1 is a perspective view of a stretching exercise apparatus according to the preferred embodiment of the present invention;

FIG. 2 is an exploded perspective view of the preferred embodiment;

FIG. 3 is a schematic side view of the preferred embodiment;

FIG. 4 is a perspective view of the preferred embodiment with a seat cushion removed to illustrate how an upright bar is disposed between seat bars of a seat frame;

FIG. 5 illustrates a first exercise using the preferred embodiment;

FIG. 6 illustrates a second exercise using the preferred embodiment;

FIG. 7 illustrates a third exercise using the preferred embodiment;

FIG. 8 illustrates a fourth exercise using the preferred embodiment;

FIG. 9 illustrates a fifth exercise using the preferred embodiment;

FIG. 10 illustrates a sixth exercise using the preferred embodiment;

FIG. 11 illustrates a seventh exercise using the preferred embodiment;

FIG. 12 illustrates an eighth exercise using the preferred embodiment;

FIG. 13 illustrates a ninth exercise using the preferred embodiment.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The above-mentioned and other technical contents, features, and effects of this invention will be clearly presented from the following detailed description of one embodiment in coordination with the reference drawings.

Referring to FIGS. 1 to 3, a stretching exercise apparatus according to the preferred embodiment of the present invention is shown to include a bench unit 2 and a support unit 3.

The bench unit 2 includes a first leg frame 21, a second leg frame 23 oppositely spaced apart from the first leg frame 21, a seat frame 22 connected transversely to the first and second leg frames 21, 23, a leg lift frame 24 that is pivotally connected to the first leg frame 21 and that is opposite to the seat frame 22, a seat cushion 25 disposed on the seat frame 22, and a lower rotatable knob 26 connected removably to the first leg frame 21.

The first leg frame 21 includes a first leg 211, two fixing plates 212 respectively fixed to two opposite lateral sides of the first leg 211, a lower support rod 213 extending through the fixing plates 212 in a direction transverse to the first leg 211, and a lower pulley 214 disposed on a bottom side of the first leg 211.

The seat frame 22 includes two spaced-apart seat bars 221 connected respectively to the two opposite lateral sides of the first leg 211, a pivot member 222 connected to one end of the seat bars 221 that are distal from the first leg 211, and two connecting seats 223 disposed respectively on the other ends of the seat bars 221.

The second leg frame 23 includes a bottom rod 232, two support rods 231 having bottom ends connected to the bottom rod 232 and top ends connected respectively to bottom sides of the seat bars 221, and two pulley sets 233 disposed on the bottom rod 232. The support rods 231 are disposed between the pulley sets 233. Each of the pulley sets 233 includes a seat 234 fixed to the bottom rod 232, and a pulley 235 mounted rotatably on the seat 234.

The leg lift frame 24 includes a movable bar 241 having an upper end 2411 pivoted between the fixing plates 212 and a lower end 2412 opposite to the upper end 2411, a hook 242 that is disposed on the lower end 2412 of the movable bar 241 and that faces the lower pulley 214, and an ankle engaging rod 243 extending transversely through the movable bar 241 at the lower end 2412 thereof.

The seat cushion 25 is supported on the seat bars 221, and is pivoted to the pivot member 222 at one end thereof. The seat cushion is rotatable about the pivot member 222 so as to be turnable upward relative to the seat bars 221.
The support unit 3 includes an upright bar 31, an elastic cord unit 32, an upper support rod 34, and an upper rotatable knob 35. The upright bar 31 extends upwardly from and is connected foldably to a top end of the first leg 211. The upright bar 31 has a plurality of spaced-apart holes 311, a connecting piece 33 disposed on a bottom end thereof and pivoted to the connecting seats 223, and two upper pulleys 36 disposed on a top end thereof.
The elastic cord unit 32 includes a woven elastic cord 321 and two pull rings 322. The elastic cord 321 is folded in half to form a folded end 3211 that extends through the upright bar 31 and the first leg 211 and that is fixed to the hook 242, and two connecting ends 3212 extending outwardly of the upright bar 31. The elastic cord 321 is looped around the upper and lower pulleys 36, 214. The pull rings 322 are respectively connected to the connecting ends 3212 and are disposed externally of the upright bar 31.
The upper support rod 34 is disposed transversely on the upright bar 31 in proximity to the top end thereof and is spaced apart from the seat frame 22.
The upper rotatable knob 35 is connected threadedly and removably to the upright bar 31 and the upper support rod 34. In this embodiment, the lower rotatable knob 26 is connected threadedly and removably to the first leg 211 and the upright bar 31, so that the upright bar 31 can be stably inserted into the first leg 211 of the first leg frame 21.
Referring to FIG. 4, in combination with FIG. 1, in use, the upright bar 31 can be folded or unfolded in accordance with the requirements of a user. When the user needs to fold the upright bar 31, the upper rotatable knob 35 is first loosened so that the upper support rod 34 can be removed, after which the upper support rod 34 is connected to one of the holes 311 so as to be disposed parallel with the upright bar 31. Subsequently, the lower rotatable knob 26 is loosened, the seat cushion 25 is turned and lifted upward, and the upright bar 31 is pivotal downward relative to the first leg frame 21 to be disposed between the seat bars 211, after which the seat cushion 25 is turned downwardly to cover the seat bars 211. Further, the pull rings 322 are pulled so as to loop the two connecting ends 3212 of the elastic cord 321 respectively around the pulleys 235 of the two pulley sets 233, so that the pull rings 322 can be conveniently gripped by the user during exercise.
FIG. 5 shows a first exercise using the preferred embodiment. The user sits on the seat cushion 25, lifts one leg to rest on one side of the upper support rod 34, and then stretches both his/her hands toward the head. This exercise can achieve stretching of the user’s whole body muscle.
FIG. 6 shows a second exercise using the preferred embodiment. The user sits on the seat cushion 25 facing the upright bar 31 and with his/her feet hooked on the ankle engaging rod 243. With both hands gripping the seat cushion 25, the user can start the exercise by moving his/her legs upward and downward a periodical manner to effect stretching of his/her legs muscles.
FIG. 7 shows a third exercise using the preferred embodiment. The user sits on the seat cushion 25 facing the upright bar 31 and with his/her feet hooked on the ankle engaging rod 243. With both hands gripping the two pull rings 322, the user can start the exercise by moving his/her upper body downward toward the seat cushion 25 and upward toward the upright bar 31 using the forces from his/her hands and abdomen. This exercise can achieve stretching of the user’s waist and back muscles.
FIG. 8 shows a fourth exercise using the preferred embodiment. The user sits on the seat cushion 25 spaced apart from the upright bar 31 but facing the same. With both hands grasping the two pull rings 322, the user can start the exercise by alternately pulling the pull rings 322, thereby effecting stretching of the user’s shoulders muscles.
FIG. 9 shows a fifth exercise using the preferred embodiment. The user sits on the seat cushion 25 with his/her back facing the upright bar 31. With both hands gripping the two pull rings 322, the user can start the exercise by pulling the pull rings 322 away from the upright bar 31 and moving his/her upper body toward and away from the upright bar 31 using the forces from his/her waist and hands, thereby effecting stretching of the user’s back and waist muscles.
FIG. 10 shows a sixth exercise using the preferred embodiment. The user sits on the seat cushion 25 with his/her back facing the upright bar 31. With both hands gripping the two pull rings 322, the user can start the exercise by simultaneously pulling the pull rings 322 to simulate a butterfly swimming style. This exercise can achieve stretching of the user’s back muscles.
FIG. 11 shows a seventh exercise using the preferred embodiment. The user lies on the seat cushion 25 with his/her head toward the upright bar 31, and lifts his/her legs to hook his/her feet into the two pull rings 322. The user can start the exercise by simultaneously moving both his/her legs toward and away from the upright bar 31 using the forces from his/her legs and abdomen, thereby achieving the effect of stretching muscles of the user’s hips and legs.
FIG. 12 shows an eighth exercise similar to the seventh exercise. However, in this exercise, the user’s legs are moved alternately. The effect of stretching the muscles of the user’s hips and legs can be similarly achieved.
FIG. 13 shows a ninth exercise using the preferred embodiment. The upright bar 31 is folded under the seat cushion 25, and the connecting ends 3212 of the woven elastic cord 321 are respectively looped around the pulleys 235. The user lies on the seat cushion 25, and starts the exercise by gripping the pull rings 322 with both hands and then pulling the pull rings 322. Hence, the effect of stretching muscles of the user’s arms and chest can be achieved.
The effects and advantages of the stretching exercise apparatus of this invention can be summarized as follows:
1. Through coordination of the bench unit 2 and the support unit 3, the user can perform various body exercises, thereby achieving the effect of stretching the whole body muscle.
2. Because the upright bar 31 can be folded under the seat cushion 25, the present invention can provide various exercises.
While the present invention has been described in connection with what is considered the most practical and preferred embodiment, it is understood that this invention is not limited to the disclosed embodiment but is intended to cover various arrangements included within the spirit and scope of the broadest interpretation so as to encompass all such modifications and equivalent arrangements.
What is claimed is:
1. A stretching exercise apparatus comprising: a bench unit including a first leg frame, a second leg frame oppositely spaced apart from said first leg frame, a seat
frame connected transversely to said first and second leg frames, and a leg lift frame pivoted to said first leg frame; an upright bar extending upwardly from and connected foldably to a top end of said first leg frame; and an elastic cord unit extending through said upright bar and said first leg frame and having one end connected to said leg lift frame and another end extending outwardly of said upright bar.

2. The stretching exercise apparatus as claimed in claim 1, wherein said first leg frame includes a first leg, said seat frame including two spaced-apart seat bars connected respectively to two opposite lateral sides of said first leg, and a pivot member connected to one ends of said seat bars that are distal from said first leg, said seat frame further including a seat cushion supported on said seat bars and pivoted to said pivot member to be turnable upward relative to said seat bars, said upright bar being pivotable downward relative to said first leg frame to be disposed between said seat bars when said seat cushion is turned and lifted upward.

3. The stretching exercise apparatus as claimed in claim 2, wherein said seat frame further includes two connecting seats disposed respectively on the other ends of said seat bars, said upright bar including a connecting piece pivoted to said connecting seats.

4. The stretching exercise apparatus as claimed in claim 2, wherein said leg lift frame includes a movable bar having an upper end pivoted to said first leg frame and a lower end opposite to said upper end, and a hook disposed on said lower end and facing said first leg, said elastic cord unit including an elastic cord and two pull rings, said elastic cord being folded in half to form a folded end at said one end of said elastic cord unit and fixed to said hook, and two connecting ends at said another end of said elastic cord unit, said pull rings being respectively connected to said connecting ends and being disposed externally of said upright bar.

5. The stretching exercise apparatus as claimed in claim 4, wherein said first leg frame further includes two fixing plates respectively disposed on said lateral sides of said first leg opposite to said seat bars, and a lower support rod extending through said fixing plates in a direction transverse to said first leg and said seat bars, said movable bar being pivoted to said fixing plates.

6. The stretching exercise apparatus as claimed in claim 5, further comprising an upper support rod disposed transversely on said upright bar in proximity to a top end thereof and spaced apart from said seat frame, and an upper rotatable knob connected removably to said upright bar and said upper support rod, said leg lift frame further including an ankle engaging rod extending transversely through said movable bar.

7. The stretching exercise apparatus as claimed in claim 2, wherein said seat unit further includes a lower rotatable knob connected removably to said first leg and said upright bar.

8. The stretching exercise apparatus as claimed in claim 2, wherein said second leg frame includes a bottom rod, two support rods having bottom ends connected to said bottom rod and top ends connected respectively to bottom sides of said seat bars, and two pulley sets disposed on said bottom rod, said support rods being disposed between said pulley sets.

9. The stretching exercise apparatus as claimed in claim 8, wherein each of said pulley sets includes a seat fixed to said bottom rod, and a pulley disposed on said seat.

10. The stretching exercise apparatus as claimed in claim 4, wherein said upright bar includes two upper pulleys disposed on a top portion thereof, said first leg frame further including a lower pulley disposed on a bottom side of said first leg and facing said hook, said elastic cord being looped around said upper and lower pulleys.

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