EXERCISING DEVICE FOR SIMULATING SKATEBOARDING

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ABSTRACT

An exercising device has a base, a sliding bracket and a supporting board. The base has a bottom frame, two curved rails and a guiding device. The curved rails are mounted on the bottom frame and are parallel to each other. The guiding device is mounted on the bottom frame between the curved rails. The sliding bracket is slidably mounted on the base and has a cross bar, two side frames and a driving device. The side frames are attached respectively to two ends of the cross bar and are slidably and respectively attached to the curved rails. The driving device is mounted between the side frames and the curved rails to drive the sliding bracket to slide along the curved rails. The supporting board is connected to the guiding device to make the support board being mounted on the sliding bracket in a swinging manner.
EXERCISING DEVICE FOR SIMULATING SKATEBOARDING

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention
The present invention relates to an exercising device, and more particularly to an exercising that can simulate skateboarding.

[0002] 2. Description of Related Art
Indoor exercisers, such as exercising bikes, treadmills, stepping exercisers and so on, are widely used and allow a user to take exercise conveniently. The conventional indoor exercisers are always composed of mechanical components or levers to simulate an exercising action. However, the conventional indoor exercisers have complex structures, costly and take large spaces for storing or operation. Additionally, the conventional exercisers cannot simulate sophisticated exercising actions, and the uses and operations of the conventional exercisers are limited and not versatile.

[0005] To overcome the shortcomings, the present invention tends to provide an exercising device to mitigate or obviate the aforementioned problems.

SUMMARY OF THE INVENTION

[0006] The main objective of the invention is to provide an exercising device that can simulate skateboarding and is versatile in use.

[0007] The exercising device comprises a base, a sliding bracket and a supporting board. The base has a bottom frame, two curved rails and a guiding device. The curved rails are mounted on the bottom frame and are parallel to each other. The guiding device is mounted on the bottom frame between the curved rails. The sliding bracket is slidably mounted on the base and comprises a cross bar, two side frames and a driving device. The side frames are attached respectively to two ends of the cross bar and are slidably and respectively attached to the curved rails of the base. The driving device is mounted between the side frames and the curved rails to drive the sliding bracket to slide along the curved rails. The supporting board is rotatably mounted on the sliding bracket and is connected to the guiding device on the base to make the support board being mounted on the sliding bracket in a swinging manner.

[0008] Other objects, advantages and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1 is a perspective view of a first embodiment of an exercising device in accordance with the present invention;
[0010] FIG. 2 is an exploded perspective view of the exercising device in FIG. 1;
[0011] FIG. 3 is an operational perspective view of the exercising device in FIG. 1;
[0012] FIG. 4 is an exploded perspective view of a second embodiment of an exercising device in accordance with the present invention;
[0013] FIG. 5 is an exploded perspective view of a third embodiment of an exercising device in accordance with the present invention; and
[0014] FIG. 6 is an exploded perspective view of a forth embodiment of an exercising device in accordance with the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

[0015] With reference to FIGS. 1 and 2, an exercising device in accordance with the present invention comprises a base (10), a sliding bracket (20) and a supporting board (30). The base (10) comprises a bottom frame (11), two curved rails (13) and a guiding device (14). The bottom frame (11) is rectangular and is composed of two longitudinal side bars, a middle bar and two lateral end bars mounted between the longitudinal side bars. Multiple supporting posts (12) are mounted respectively on ends of the longitudinal side bars.

[0016] The curved rails (13) are mounted on the bottom frame (11) and are parallel to each other. In practice, the curved rails (13) are mounted on the supporting posts (12) and respectively correspond to and are parallel with the longitudinal side bars. In the first embodiment, the curved rails (13) are convex curved rails (13).

[0017] The guiding device (14) is mounted on the bottom frame (11) between the curved rails (13). In the first embodiment, the guiding device (14) comprises a guiding frame (142) and a connecting bar (34). The guiding frame (142) is inclined on the bottom frame (11) near one end of the bottom frame (11) and has a top and an oval guiding channel (143) defined in the top of the guiding frame (142). The connecting bar (34) is attached to the bottom of the supporting board (30) and slidably extends into the oval guiding channel (143) in the guiding frame (142).

[0018] To inclindly mount the guiding frame (142) to the bottom frame (11), two supporting columns (141) in different lengths are mounted respectively on one of the lateral end bars and the middle bar of the bottom frame (11), and the guiding frame (142) is mounted on the supporting columns (141).

[0019] The sliding bracket (20) is slidably mounted on the base (10) and comprises a cross bar (22), two side frames (21) and a driving device. The cross bar (22) has two ends. The side frames (21) are attached respectively to the ends of the cross bar (22) and are slidably and respectively attached to the curved rails (13) of the base (10).

[0020] The driving device is mounted between the side frames (21) and the curved rails (13) to drive the sliding bracket (20) to slide along the curved rails (13). In a preferred embodiment, the driving device comprises multiple rollers (23, 24) and a motor (26). The rollers (23, 24) are rotatably attached to the side frames (21) at sides facing to each other and are arranged in pairs. In an alternative embodiment, the rollers (23, 24) are rotatably attached to the side frames (21) at sides opposite to each other. The rollers (23, 24) of each pair are respectively with a top and a bottom one of the curved rails (13). The motor (26) is attached to one of the curved rails (13) and is connected to and drives one of the rollers (24). When the motor (26) is switched on, the roller (24) connected to the motor (26) will be rotated, such that the sliding bracket (20) will be driven to slide along the curved rails (13).

[0021] The supporting board (30) is rotatably mounted on the sliding bracket (20) and is connected to the guiding device (14) on the base (10) to make the support board (30) being mounted on the sliding bracket (20) in a swinging manner. To rotatably mount the supporting board (30) on the sliding bracket (20), a sleeve (27) is mounted on the cross bar (22) of
the sliding bracket (20), and a mounting post (33) is mounted on the bottom of the supporting board (30) and rotatably extends into the sleeve (27) on the cross bar (22). In addition, the supporting board (30) may further comprise an L-shaped post holder (32) attached to the bottom of the supporting board (30), and the mounting post (33) and the connecting bar (34) are respectively attached to a middle and one end of the post holder (32).

With further reference to FIG. 3, when the motor (26) is switched on and the sliding bracket (20) move along the curved rails (13), the supporting board (30) will move with the sliding bracket (20) along the curved rails (13) in a curved track. With the curved movement of the supporting board (30), the connecting bar (34) will move along the oval guiding channel (143) in the inclined guiding frame (142). With the inclined arrangement of the guiding frame (142) and the oval guiding channel (143), the supporting board (30) will swing during the movement. With the curved movement and swinging motion of the supporting board (30), muscles of hands, legs and waist of a user can be trained when the user intends to keep balance on the swinging supporting board (30). Accordingly, the exercising device in accordance with the present invention can simulate a skateboarding action to provide a versatile and exciting exercising effect to a user who stands on the supporting board (30).

With reference to FIG. 4, in a second embodiment, the curved rails (13') are concave curved rails (13). The length of the sleeve (27) of the sliding bracket (20) is prolonged to keep the supporting board (30) bumping with the curved rails (13').

With reference to FIG. 5, in a third embodiment, the guiding device (15) comprises a guiding bar (151), a lever (152), a guiding tube (153) and a connecting bar (34). The guiding bar (151) is inclinedly mounted on the bottom frame (11) and has a top. The lever (152) is rotatably attached to the top of the guiding bar (151) and has a free end. The guiding tube (153) is secured on the free end of the lever (152). The connecting bar (34) is attached to the bottom of the supporting board (30) and rotatably extends into the guiding tube (153).

When the supporting board (30) moves with the sliding bracket (20) along the curved rails (13) in a curved track, the connecting bar (32) will drive the lever (152) to rotate relative to the inclined supporting bar (151). With such a guiding device (15), the supporting board (30) will be swung on the sliding bracket (20).

With reference to FIG. 6, the guiding device (15') comprising an inclined guiding bar (151'), a lever (152') and a guiding tube (153') can be applied on an exercising device having a base (10') with concave curved rails (13'). In the fourth embodiment of the exercising device in accordance with the present invention, the length of the sleeve (27) on the cross bar (22) of the sliding bracket (20') is prolonged to keep the supporting board (30) from bumping with the curved rails (13').

Even though numerous characteristics and advantages of the present invention have been set forth in the foregoing description, together with details of the structure and function of the invention, the disclosure is illustrative only, and changes may be made in detail, especially in matters of shape, size, and arrangement of parts within the principles of the invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.
10. The exercising device as claimed in claim 8, wherein the supporting board further comprises an L-shaped post holder attached to the bottom of the supporting board; the mounting post is attached to a middle of the post holder; and the connecting bar is attached to one end of the post holder.

11. The exercising device as claimed in claim 3, wherein the guiding device comprises a guiding bar inclinedly mounted on the bottom frame and having a top; a lever rotatably attached to the top of the guiding bar and having a free end; a guiding tube secured on the free end of the lever; and a connecting bar attached to a bottom of the supporting board and rotatably extending into the guiding tube.

12. The exercising device as claimed in claim 4, wherein the guiding device comprises a guiding bar inclinedly mounted on the bottom frame and having a top; a lever rotatably attached to the top of the guiding bar and having a free end; a guiding tube secured on the free end of the lever; and a connecting bar attached to a bottom of the supporting board and rotatably extending into the guiding tube.

13. The exercising device as claimed in claim 11, wherein the cross bar of the sliding bracket has a sleeve; and the supporting board has a mounting post mounted on the bottom of the supporting board and rotatably extending into the sleeve on the cross bar.

14. The exercising device as claimed in claim 12, wherein the cross bar of the sliding bracket has a sleeve; and the supporting board has a mounting post mounted on the bottom of the supporting board and rotatably extending into the sleeve on the cross bar.

15. The exercising device as claimed in claim 13, wherein the supporting board further comprises an L-shaped post holder attached to the bottom of the supporting board; the mounting post is attached to a middle of the post holder; and the connecting bar is attached to one end of the post holder.

16. The exercising device as claimed in claim 14, wherein the supporting board further comprises an L-shaped post holder attached to the bottom of the supporting board; the mounting post is attached to a middle of the post holder; and the connecting bar is attached to one end of the post holder.

17. The exercising device as claimed in claim 1, wherein the guiding device comprises a guiding frame inclinedly mounted on the bottom frame and having a top and an oval guiding channel defined in the top of the guiding frame; and a connecting bar attached to a bottom of the supporting board and having a free end slidably held in the oval guiding channel in the guiding frame.

18. The exercising device as claimed in claim 17, wherein the supporting board further comprises an L-shaped post holder attached to the bottom of the supporting board; and the connecting bar is attached to one end of the post holder.

19. The exercising device as claimed in claim 1, wherein the guiding device comprises a guiding bar inclinedly mounted on the bottom frame and having a top; a lever rotatably attached to the top of the guiding bar and having a free end; a guiding tube secured on the free end of the lever; and a connecting bar attached to a bottom of the supporting board and rotatably extending into the guiding tube.

20. The exercising device as claimed in claim 1, wherein the cross bar of the sliding bracket has a sleeve; and the supporting board has a mounting post mounted on the bottom of the supporting board and rotatably extending into the sleeve on the cross bar.

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