ADJUSTABLE EXERCISE OR WEIGHT DEVICE

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ABSTRACT

An exercise device includes a carrier having an opening formed between two arms for receiving a neck portion of a user and for attaching onto an upper portion of the user, and having a curved bottom surface for suitably attaching onto the upper portion of the user, and a handle device provided on the carrier for being grasped by the user, to stably hold the carrier on the user. One or more weight members may be adjustably attached to the carrier for applying different weights onto the user. An anchoring or securing device may anchor or secure the weight members to the carrier for preventing the weight members from moving relative to the carrier. A presser may press or secure the weight members to the carrier.
ADJUSTABLE EXERCISE OR WEIGHT DEVICE

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

The present invention relates to an exercise or weight device, and more particularly to an exercise or weight device adjustable to different weights for selectively attaching onto the upper or the chest portion or the shoulders of the users and for applying a suitable weight or resistance onto the users during exercise routines.

[0002] 2. Description of the Prior Art

Typical exercise devices, such as weight lifting devices, dumbbells, or the like, normally comprise a handle for being grasped or held by the users, and for being used to train their upper muscles groups. However, the typical weight lifting devices or dumbbells may not be attached onto the users, such as the upper portions of the users, to apply weight to the users.

For some long distance runners, for example, they may prepare one or more sand bags by themselves, and carry the sand bags onto the upper portions of their bodies, to increase the weight or the burden to their upper portions, and to train or to increase their endurance or physical strength.

However, the typical sand bags that are prepared by the users themselves have no handles or hand grips provided thereon, and thus may not be easily carried or grasped or held by the users, and such that may not be easily used for exercising purposes or for muscle training purposes.

[0007] U.S. Pat. No. 5,299,999 to Brine discloses one of the typical weight packs for exercising and including two hooks for attaching onto the back portion of the users. However, the hooks should be made of strong or right or hard materials such that the users may not feel comfortable while exercising when wearing or using the typical weight packs.

[0008] U.S. Patent Application No. U.S. 2004/0072660 A1 to Mecneri et al. discloses a typical weighted collar including a pair of handles extended from a front surface for grasping by a user and for placing the collar on and lifting the collar from the shoulders of the users. However, the typical weighted collar may not be easily adjusted to different weights.

[0009] The present invention has arisen to mitigate and/or obviate the afore-described disadvantages of the conventional lifting exercise devices.

SUMMARY OF THE INVENTION

[0010] The primary objective of the present invention is to provide an exercise or weight device for selectively attaching onto the upper or the chest portion or the shoulders of the users and for applying a suitable weight or resistance onto the users during exercise routines.

[0011] The other objective of the present invention is to provide an exercise or weight device adjustable to different weights for fitting onto various users of different strengths.

[0012] In accordance with one aspect of the invention, there is provided an adjustable exercise or weight device adjustable to different weights for fitting onto various users of different strengths.

[0013] Further objectives and advantages of the present invention will become apparent from a careful reading of the detailed description provided hereinafter, with appropriate reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1 is an upper perspective view of an exercise or weight device in accordance with the present invention;

[0015] FIG. 2 is a partial exploded view of the exercise or weight device, as seen from the upper portion of the exercise device;

[0016] FIG. 3 is another partial exploded view of the exercise or weight device, as seen from the bottom portion of the exercise device;

[0017] FIG. 4 is a front plan schematic view of the exercise or weight device;

[0018] FIG. 5 is a front plan schematic view similar to FIG. 4, illustrating the operation of the exercise or weight device;

[0019] FIG. 6 is a cross sectional view of the exercise or weight device, taken along lines 6-6 of FIG. 4, and

[0020] FIG. 7 is a perspective view illustrating the operation of the exercise device, and illustrating the attachment of the exercise or weight device onto the user.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0021] Referring to the drawings, and initially to FIGS. 1-4, an exercise or weight device 1 in accordance with the present invention comprises a base panel or carrier 10 including a curved shape or a curved bottom surface 11 (FIGS. 5-6) having a shape corresponding to the outer contour of the upper or the chest portion and/or the shoulders of the users and for suitably or stably attaching onto the upper portions of the users (FIG. 7), and for applying a suitable weight onto the upper portion of the users. The carrier 10 further includes an opening 12 formed in the rear portion 13 thereof, and defined between two arms 14, for relatively receiving the neck portion of the user, best shown in FIG. 7, and for allowing the carrier 10 to be suitably or stably attached onto the upper chest portions of the users, in order to apply selected weights onto the users.

[0022] The carrier 10 further includes a deck 15 formed or provided in the middle portion 16 thereof and located in front of the opening 12 thereof and/or located between the arms 14 of the carrier 10 for supporting or attaching a handle device 20. The carrier 10 may further include one or more, such as two inclined surfaces or segments 17 formed or provided in the middle portion 16 thereof and preferably located between the arms 14 and the deck 15 and/or parallel to the arms 14 and the deck 15 or the X-axis of the exercise device 1, or inclined upwardly or downwardly from the deck 15 toward the arms 14 respectively, for forming or defining a depression 18 between the deck 15 and the inclined surfaces or segments 17. The handle device 20 may include two or more handle members molded or formed separately (FIGS. 2, 3) and secured together with such as latches or fasteners (not shown), or by welding processes, or the like.

[0023] The handle device 20 includes a substantially U or V-shaped configuration having an opening 21 formed therein and defined between two arms 22 for being suitably grasped or held by the users, also best shown in FIG. 7. The handle device 20 includes a protrusion or column or casing or post 23 disposed or attached or formed or provided on or extended downwardly from the middle portion 24 thereof and located in front of the opening 21 thereof and/or located between the
arms 22, the post 23 may be engaged onto the deck 15 of the carrier 10 and may be secured to the deck 15 of the carrier 10 with such as latches or fasteners (not shown), or by welding processes, or the like. The latches or fasteners (not shown) for securing the post 23 to the deck 15 may be received in the depression 18 of the carrier 10 and may be prevented from being contacted with the users.

The handle device 20 includes a notch or chamber 25 formed in the post 23 and opened forwardly for slidably receiving a fastener member 30, such as a bolt 30, a latch, a quick release fastener or the like, and includes a compartment 26 (FIGS. 2, 3) formed in the middle portion 24 of the handle device 20 and intersecting or communicating with the chamber 25 of the post 23 for rotatably receiving an enlarged knob or head 31 of the fastener member 30. The bolt or fastener member 30 is rotatably attached or secured to the carrier 10 with such as latches or fasteners (not shown), or with a clamping or retaining ring 32 (FIGS. 2, 3, 6), and the head 31 of the fastener member 30 is partially exposed or extended out through the compartment 26 of the handle device 20 for allowing the fastener member 30 to be threaded or rotated relative to the carrier 10 and the handle device 20 with the head 31.

One or more weight members 40 may further be provided and engaged onto the carrier 10 and to be selectively or changeably secured to the carrier 10 or the post 23 with the fastener member 30. The weight members 40 each preferably include a shape or contour similar or identical to that of the carrier 10 for snugly fitting onto the carrier 10 (FIGS. 1, 4-6). For example, the weight members 40 each include a curved shape or structure 41 having a shape corresponding to the curved shape of the carrier 10 for preventing the weight members 40 from moving along the X-axis of the exercise device 1 or from moving forwardly and rearwardly relative to each other and relative to the post 23 and the carrier 10, and each also include an opening 42 formed in the rear portion 43 thereof, and defined between two arms 44, for receiving the neck portion of the user.

The weight members 40 each also include a deck 45 formed or provided in the middle portion 46 thereof and located in front of the opening 42 thereof and/or located between the arms 44 for engaging with the deck 15 of the carrier 10, and each also include one or more, such as two inclined surfaces or segments 47 formed or provided in the middle portion 46 thereof and preferably located between the arms 44 and the deck 45 and/or substantially parallel to the arms 44 and the deck 45 or the X-axis of the exercise device 1, or inclined upwardly or downwardly from the deck 45 toward the arms 44 respectively, for suitably engaging with the inclined segments 17 of the carrier 10, and for preventing the weight members 40 from moving laterally or sidewise relative to each other and relative to the post 23 and the carrier 10.

The weight members 40 each further include a space 48 formed in the middle portion 46 or the deck 45 and defined between the inclined segments 47 of the weight members 40 for selectively receiving the post 23 and for allowing the weight members 40 to be further attached or anchored to the post 23 and for preventing the weight members 40 from moving along the Y-axis of the exercise device 1 or from moving laterally and sidewise relative to the carrier 10 and the handle device 20. The curved structure 41 of the weight members 40 and the curved bottom surface 11 of the carrier 10 may thus be used as a means for preventing the weight members 40 from moving along the X-axis of the exercise device 1 or from moving forwardly and rearwardly relative to each other and relative to the post 23 and the carrier 10.

The weight members 40 each further include an extension 49 extended into the space 48 thereof and having a sink 50 formed therein and defined by a peripheral flange 51 and/or an inclined peripheral surface 52, alternatively, the sink 50 may also be directly formed in the deck 45 of each of the weight members 40, and a slot 53 formed in the peripheral flange 51 and communicating with the sink 50 of the weight members 40 respectively for allowing the fastener member 30 to be engaged into the sink 50 via the slot 53 of the weight members 40 respectively and thus for allowing the weight members 40 to be suitably attached or engaged onto the post 23 of the handle device 20 and/or of the carrier 10. The inclined surfaces or segments 17, 47 of the carrier 10 and the weight members 40 and the curved bottom surface 11 of the carrier 10 may further be used as a means for preventing the weight members 40 from moving laterally or sidewise relative to each other and relative to the post 23 and the carrier 10.

A pressing means or presser 33 is attached or engaged onto the fastener member 30 and includes a screw hole or an inner thread 34 formed therein for threading or engaging with the fastener member 30 and for allowing the presser 33 to be slid and rotated or moved up and down by rotating the fastener member 30 relative to the post 23 and the carrier 10. The sink 50 of the weight member 40 includes a width or diameter greater than the width of the slot 53 of the weight member 40, best shown in FIGS. 2, 3. The presser 33 is engageable into the sink 50 and includes an inclined peripheral surface 35 for engaging with the inclined peripheral surface 52 of the weight member 40, and includes a diameter equal to that of the sink 50 of the weight member 40 and greater than that of the slot 53 of the weight member 40 for solidly anchoring or securing the weight members 40 to the handle device 20 and the carrier 10 (FIGS. 1, and 4-6) and for preventing the weight members 40 from moving laterally or sidewise and forwardly or rearwardly and up and down relative to each other and/or relative to the post 23 and the carrier 10.

The presser 33 includes a shank 36 extended therefrom and having the inner thread 34 formed therein for threading or engaging with the fastener member 30. One or more followers or other pressing members 37 may further be provided and each include a bore 38 formed therein for slidably receiving or engaging onto the shank 36 of the presser 33 and for allowing the followers or other pressing members 37 to be forced into the sinks 50 of the other weight members 40 and thus for allowing the weight members 40 each to be solidly anchored or secured to the handle device 20 and the carrier 10 with the presser 33 or one of the followers or other pressing members 37. The presser 33 may be adjusted up and down relative to the fastener member 30 and the post 23 and the carrier 10 for selectively or adjustably securing or anchoring different number of weight members 40 to the post 23 and the carrier 10. The fastener member 30 and the presser 33 may thus be used as a means for selectively or adjustably securing the weight members 40 to the post 23 and the carrier 10 and for preventing the weight members 40 from moving up and down relative to each other and relative to the post 23 and the carrier 10.

In operation, as shown in FIG. 7, the carrier 10 and/or the weight members 40 may be suitably attached onto the upper portion of the user, in order to apply a predetermined weight onto the user, and the user may grasp the handle device 20 to stably carry or retain the carrier 10 and/or the weight members 40 on the upper or chest portion of the user, and the user may then conduct various kinds of exercises, such as running, jogging, bending twisting, or the like. It is to be noted that the exercise or weight device may also be used
for conducting various kinds of exercises with the carrier 10, without the weight members 40.

[0032] The typical exercise devices failed to provide a carrier 10 having an opening 12 for relatively receiving the neck portion of the user, and failed to provide a carrier 10 having a curved bottom surface 11 for suitably or stably attached onto the upper or chest portions of the users, and failed to provide a handle device 20 having an opening 21 formed and defined between two arms 22 for being suitably grasped or held by the users, and failed to provide one or more weight members 40 for selectively or adjustably attaching onto the carrier 10 and for allowing the weight members 40 to be superposed with each other and to be seen by people.

[0033] Accordingly, the exercise or weight device in accordance with the present invention may be provided for selectively attaching onto the upper or the chest portion or the shoulders of the users and for applying a suitable weight or resistance onto the users during exercise routines, and adjustable to different weights for fitting onto various users of different strengths.

[0034] Although this invention has been described with a certain degree of particularity, it is to be understood that the present disclosure has been made by way of example only and that numerous changes in the detailed construction and the combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as hereinafter claimed.

1 claim:

1. An exercise device comprising:
   a carrier including an opening formed therein and defined between two arms for receiving a neck portion of a user and for attaching onto an upper portion of the user, and including a curved bottom surface for suitably attaching onto the upper portion of the user, and
   a handle device provided on said carrier for being grasped by the user, to stably hold said carrier on the user.

2. The exercise device as claimed in claim 1, wherein said handle device includes an opening formed therein and defined between two arms for being grasped by the user.

3. The exercise device as claimed in claim 1, wherein said handle device includes a post extended therefrom for securing to said carrier.

4. The exercise device as claimed in claim 1, wherein at least one weight member is selectively attached to said carrier.

5. The exercise device as claimed in claim 4 further comprising means for anchoring said at least one weight member to said carrier and for preventing said at least one weight member from moving relative to said carrier.

6. The exercise device as claimed in claim 5, wherein said anchoring means includes a first curved shape formed in said carrier and a second curved shape formed in said at least one weight member for engaging with said first curved shape of said carrier and for preventing said at least one weight member from moving relative to said carrier.

7. The exercise device as claimed in claim 5, wherein said anchoring means includes a first inclined surface formed in said carrier and a second inclined surface formed in said at least one weight member for engaging with said first inclined surface of said carrier and for preventing said at least one weight member from being grasped by the user.

8. The exercise device as claimed in claim 4, wherein said handle device includes a presser for selectively securing said at least one weight member to said carrier.

9. The exercise device as claimed in claim 8, wherein said handle device includes a post extended therefrom and secured to said carrier, said presser is adjustable relative to said post.

10. The exercise device as claimed in claim 9, wherein said handle device includes a fastener member adjustably securing said presser to said carrier.

11. The exercise device as claimed in claim 10, wherein said post includes a chamber formed therein for receiving said fastener member and said presser.

12. The exercise device as claimed in claim 11, wherein said handle device includes a compartment formed therein and communicating with said chamber of said post, said fastener member includes a head rotatably received in said compartment of said handle device for rotating said fastener member relative to said carrier and said post.

13. The exercise device as claimed in claim 10, wherein said fastener member is rotatably attached to said carrier with a retaining ring.

14. The exercise device as claimed in claim 8, wherein said at least one weight member includes a sink formed therein and said presser is selectively engageable with said sink of said at least one weight member and for anchoring said at least one weight member to said carrier and said post.

15. The exercise device as claimed in claim 14, wherein said at least one weight member includes an inclined peripheral surface for defining said sink thereof, and said presser includes an inclined peripheral surface for engaging with said inclined peripheral surface of said at least one weight member.

16. The exercise device as claimed in claim 14, wherein said at least one weight member includes an extension extended therefrom and having said sink formed in said extension and defined by a peripheral flange, and a slot formed in said peripheral flange and communicating with said sink of said at least one weight member for allowing said fastener member to be engaged into said sink via said slot of said at least one weight member.

17. The exercise device as claimed in claim 8, wherein said presser includes a shank extended therefrom, and at least one pressing member slidably engaged onto said shank of said presser.

18. The exercise device as claimed in claim 17, wherein said at least one weight member includes an inclined peripheral surface for defining said sink thereof, and said at least one pressing member includes an inclined peripheral surface for engaging with said inclined peripheral surface of said at least one weight member.

19. An exercise device comprising:
   a carrier for attaching onto an upper portion of a user, and
   a handle device provided on said carrier and including an opening formed therein and defined between two arms for being grasped by the user.

20. An exercise device comprising:
   a carrier for attaching onto an upper portion of a user, and
   a handle device provided on said carrier for being grasped by the user, and
   at least one weight member selectively attached to said carrier.

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