

[54] **WEIGHTED BELT TYPE EXERCISING
DEVICE**

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[22] Filed: **Sept. 22, 1970**

[21] Appl. No.: **74,297**

[30] **Foreign Application Priority Data**

Sept. 24, 1969 Japan..... 44/91478
June 19, 1970 Japan..... 45/52750
June 19, 1970 Japan..... 45/52751

[52] U.S. Cl..... **272/57 R**, 128/75, 273/DIG. 19,
272/80, 272/DIG. 2

[51] Int. Cl..... **A63b 21/18**

[58] Field of Search..... 272/57 R, 57 D, 81,
272/79 R, 84, DIG. 4; 2/311, 319, 312, 308;
128/45, 46, 75

[56]

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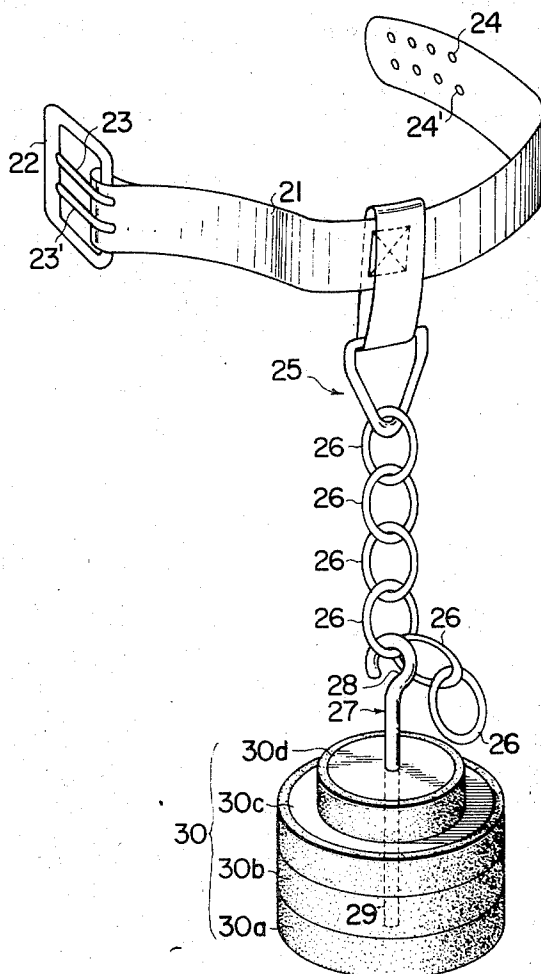
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[57]

ABSTRACT

This invention is used for exercising. The invention includes a plurality of weights that are removably attachable to a shaft which in turn is connected to a link chain. The chain has a loop portion on one end for attachment to a belt. The belt is releasably attachable to the waist of a user.

1 Claim, 4 Drawing Figures



WEIGHTED BELT TYPE EXERCISING DEVICE**BACKGROUND OF THE INVENTION****Field of the Invention**

The technical field of the present invention belongs to sporting goods.

Objects of the Invention

One of the main objects of the present invention is to obtain a gymnastic apparatus which is simple in the structure and easy to handle.

Another of the main objects of the present invention is to obtain a gymnastic apparatus in which a load easily adapted to the bodily strength or other conditions of the user can be obtained.

One of the subordinate objects of the present invention is to obtain a gymnastic apparatus of a low cost.

Various other subordinate objects of the present invention will be made clear by the specification.

SUMMARY OF THE INVENTION:

According to an embodiment of the present invention, this gymnastic apparatus comprises a waist belt fitted with a weight suspending member and one or more weights removably fitted to a weight fitting tool disengageably engaged with the above mentioned weight suspending member.

Further, according to another embodiment of the present invention, this gymnastic apparatus comprises a waist belt fitted with a weight suspending member and one or more weights removably fitted to a weight fitting tool adjustably and disengageably engaged with the above mentioned weight suspending member.

BRIEF DESCRIPTION OF THE DRAWINGS

By the following explanation relating to the drawings, the substance of the present invention will become more clear and its objects and additional advantages will also become clear.

FIG. 1 is a general perspective view of an embodiment of the present invention.

FIG. 2 is a vertically sectional view of a weight portion in FIG. 1.

FIG. 3 is a general perspective view of another embodiment of the present invention, and

FIG. 4 is a vertically sectional view of a weight portion in FIG. 3.

DESCRIPTION OF THE PREFERRED EMBODIMENT

A preferred embodiment of the present invention shall be explained in the following with reference to the drawings. However, it will be understood that this explanation is illustrative of the present invention and that therefore the present invention is not limited to the specific structure illustrated and explained herein.

An embodiment of the gymnastic apparatus of the present invention shall be explained in detail in the following. In FIG. 1, 1 is a waist belt fitted with a connecting member 2 at one open end and provided with parallel engaging holes 4 and 4' corresponding to engaging pins 3 and 3' of the connecting member 2 in the other open end portion.

This waist belt 1 can be formed of such belt-shaped material as a wide leather, cloth or synthetic resin.

5 is a weight suspending member fitted in a substantially middle portion of the waist belt 1 and formed by

fitting an annular connecting ring 7 to the lower end of a suspending piece 6 stitched to the waist belt 1.

8 is a weight fitting metal tool to whose threaded portion 9 is removably screwed a weight 11.

As shown in FIG. 1, the weight fitting metal tool 8 fitted with the weight can be removably connected to the suspending member 5 by hooking the connecting portion 10 of the fitting metal tool 8 to which this weight 11 is screwed on the connecting ring 7 of the above mentioned weight suspending member 5.

12 is an auxiliary weight which is fitted to the fitting metal tool 8 by being placed on the upper side of the weight 11 by fitting and inserting the rod portion 8a of the fitting metal tool 8 in an inserting hole 12a made through the center and then screwing the threaded portion 11a of the above mentioned weight 11 to the threaded portion 9 of the fitting metal tool 8 as shown in FIG. 2.

Therefore, said auxiliary weight 12 is fitted or removed after the weight 11 is removed.

Only one such auxiliary weight 12 is shown in the drawing but any other different weights may be used in practice.

The gymnastic apparatus of the present invention is formed as in the above. The method of using it shall be explained in the following.

First of all, the weight 11 or the weight 11 and auxiliary weight 12 fitted to the fitting metal tool 8 connected to the suspending member 5 can be suspended from the waist portion by winding and fitting the waist belt 1 to the waist portion of the user and connecting the other end portion of the belt with the connecting member 2 to fasten the waist belt 1 to the waist portion.

While the weight 11 or the weight 11 and auxiliary weight 12 is or are suspended, the waist portion of the user is rocked forward and rearward or rightward and leftward so that the weight 11 or the weight 11 and auxiliary weight 12 suspended from the suspending member 5 may be rocked forward and rearward or rightward and leftward in the use.

Further, as another using method, while the above mentioned weight is suspended in the same manner, a bending and stretching exercise of the body of the user is practiced so that the weight suspended from the suspending member 5 may rise and fall in the vertical direction.

The auxiliary weight 12 may be or may not be added to the weight 11 according to the bodily strength of the user. The number of the auxiliary weights to be used is increased or decreased according to the increase of the bodily strength or the recovery of the sick person.

Another embodiment of the gymnastic apparatus of the present invention shall be explained in detailed with reference to FIGS. 3 and 4.

21 is a waist belt fitted with a connecting member 22 at one open end and provided with parallel engaging holes 24 and 24' corresponding respectively to engaging pins 23 and 23' of the connecting member 22 in the other open end portion.

This waist belt 21 can be formed of such belt-shaped material as a wide leather, cloth or synthetic resin and a proper cushioning material (not shown) can be attached to the inside of the waist belt to be in close contact directly with the waist portion of the body when the belt is fitted to the waist portion.

25 is a weight suspending member fitted in a substantially middle portion of the waist belt 21. This suspending

ing member 25 is made by connecting many annular rings 26 so that its length, that is, the length of the suspending member 25 from the waist belt 21 to the connecting portion 28 of the later described weight fitting metal tool 27 may be adjusted by connecting the connecting portion 28 of said weight fitting metal tool 27 with any ring 26 from the fitting portion on the waist belt 21 to the open end of said weight suspending member 25.

The method of adjusting the length of the suspending member 25 is not limited to the method explained with reference to the illustrated suspending member 25. For example, the suspending member 25 may be made in the form of a belt and fitted with such adjusting member as a belt extending and contracting tool which can adjust the length. By the way, when this latter method is to be used, it will be necessary to provide such connecting portion as an annular portion which can engage and connect with the connecting portion 28 of the weight fitting metal tool 27 at the open end of the suspending member 25.

This suspending member 25 is to suspend the weight fitted to the weight fitting metal tool 27 and is therefore formed so that it may well endure the load of the weight lest it should break under the load.

The connecting portion 28 provided in the upper portion of the weight fitting metal tool 27 so as to be connected with the above mentioned suspending member 25 is made in the form of a hook so that it may be hooked on the ring 26 of the suspending member 25 and, when it is unhooked from the ring 26, the weight fitting metal tool 27 may be disengaged from the suspending member 25.

29 is a weight fitting threaded portion made in the lower portion of the weight fitting metal tool 27.

30 is a weight. Among the illustrated weights 30, the weight 30a is provided with a threaded hole 31 which can be screwed with the threaded portion 29 of the weight fitting metal tool 27 so that the weight 30a may be screwed to the threaded portion 29 of the weight fitting metal tool 27 through said threaded hole 31. An inserting hole 32 through which the rod portion 27a of the weight fitting metal tool 27 can be inserted is made through each of the other weights 30b, 30c and 30d. When the above mentioned weight 30a is to be screwed, after it is removed, the rod portion 27a of the weight fitting metal tool 27 is fitted and inserted through the inserting hole 32 of each of the weights 30b, 30c and 30d and then the weight 30a is screwed again to the threaded portion 29 so that, as shown in FIGS. 3 and 4, the respective weights 30b, 30c and 30d may be placed in turn on the weight 30a and fitted to the weight fitting metal tool 27.

Further, in case the respective weights 30 are to be removed, when the weight 30a is removed from the threaded portion 29 of the fitting metal tool 27, the other weights can be separated and removed in turn from the rod portion 27a.

The weight 30d among the illustrated weights 30 is made lighter than any other weight 30 but it is possible to make all the weights the same in practice. It is needless to say that, when various different weights are prepared, there is an advantage that it is easy to adjust the energy to be consumed according to the bodily strength of the user.

33 is a cushioning material attached to the peripheral side of each weight 30 so that the body of the user may be prevented from being hurt by the weight.

The gymnastic apparatus of the present invention is formed as in the above. The method of using it shall be explained in the following. First of all, the weight 30 can be suspended from the waist portion by winding and fitting the waist belt 21 to the waist portion of the user, connecting the other end portion of the belt with the connecting member 22 to fasten the waist belt 21 to the waist portion and then engaging the connecting portion 28 of the weight fitting metal tool 27 fitted with the weight 30 with the suspending member 25 (which may be connected in advance when the waist belt 21 is fitted).

While the weight 30 is suspended, the waist portion of the user is rocked forward and rearward or rightward and leftward so that the weight 30 suspended from the suspending member 25 may be rocked forward and rearward or rightward and leftward in the use.

Further, as another using method, while the above mentioned weight 30 is suspended in the same manner, a bending and stretching exercise of the body of the user is practiced so that the weight 30 suspended from the suspending member 25 may rise and fall in the vertical direction.

In the case of the above mentioned rocking exercise, if it is made in an upright standing place or, for example, within a room, it is effective to suspend the weight 30 so that it may not contact the floor and may be as lower as possible than the waist portion. Therefore, in the case of connecting the connecting portion 28 of the fitting metal tool 27 with the suspending member 25, the connecting portion 28 of the fitting metal tool 27 is engaged and connected with the ring 26 as low as possible by confirming in advance that, when the connecting portion 28 of the fitting metal tool 27 is hooked on the ring 26 of the suspending member 25, the weight 30 may not contact the surface of the upright standing place.

On the other hand, in the case of the below mentioned bending and stretching exercise, it is necessary to set the gymnastic apparatus so that, when the leg portions are bent down, the weight 30 may not collide with the surface of the upright standing place.

All the four weights 30 to be fitted to the fitting metal tool 27 as illustrated are not always fitted in practice. According to the bodily strength of the user, only one, that is, only the weight 30a is fitted and, in case the weight 30a is too light for the exercise, any of the other weights 30b, 30c and 30d may be fitted in practice. Further, for example, when the weight of each of the weights 30a, 30b and 30c is 7 kg and that of the weight 30d is 3 kg, at first, with 7 kg of the weight 30a, the exercise is practiced by the above mentioned two methods. In case the bodily strength is increased as a result and the weight becomes insufficient, 3 kg of the weight 30d are added so that a total of 10kg of the weights may be fitted. Then the weight 30d is removed and the weight 30b is fitted so that the total may be 14 kg. Further, the weight 30d is again added so that the total may be 17 kg. Also, instead of the weight 30d, the weight 30c is added so that the total may be 21 kg. Then, at last, the weight 30d is added to make the total 24 kg. That is to say, as illustrated, the four weights 30 are fitted to be used.

Therefore, as already described, it is preferable that various weights 30 are provided. For the cure or recovery of a sick person or, for example, a person having a pain in the waist, a very light weight is used. For the increase of the beauty or bodily strength of a healthy person, a weight according to the bodily strength of the user is used.

Thus, according to the gymnastic apparatus of the present invention, a rocking or bending and stretching exercise is practiced while suspending a weight from the waist portion of the user and, therefore, particularly the strengths of the legs, waist, abdominal muscle and back can be increased.

Further, the exercise of rocking or bending and stretching the waist with the gymnastic apparatus of the present invention is so rhythmical and moderate that the apparatus is favorable to the cure and recovery of such sick person as of a waist pain and is very effective to the cure of a waist pain in particular. The inventor himself is also continuously practicing an exercise with said gymnastic apparatus for about 20 minutes in the morning and evening every day to completely cure the waist pain.

Further, in the second embodiment, as the length of the suspending member 25 for the weight 30 is made adjustable, the above mentioned exercise can be practiced smoothly without being influenced by the height of the user, as a plurality of weights 30 are removably

fitted to the fitting metal tool 27, the energy to be consumed can be adjusted according to the bodily strength of the user and, as an exercise can be practiced while increasing the weights in turn, the apparatus is very effective to the increase of the bodily strength or beauty of a healthy person and to the recovery or cure of a sick person.

What is claimed is:

1. A gymnastic apparatus comprising: a waist belt to be worn around the waist of a user of the gymnastic apparatus; weight suspending member connected to said waist belt and comprising a link chain having a plurality of interconnected chain links; a plurality of weights each having apertures therethrough; a waist fitting tool comprising a shaft extendable through the apertures in said weights and having at one end thereof means for releasably supporting said weights during use of the apparatus and having at the other end a hook engageable individually with selected ones of said chain links for connecting said weight fitting tool to said weight suspending member thereby suspending said weights from said waist belt and enabling selective variation of the distance between said weights and said waist belt; and cushioning means disposed on each of said weights for cushioning any impact between a user of the gymnastic apparatus and the suspended weights.

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