

United States Patent

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[54] EXERCISING APPARATUS

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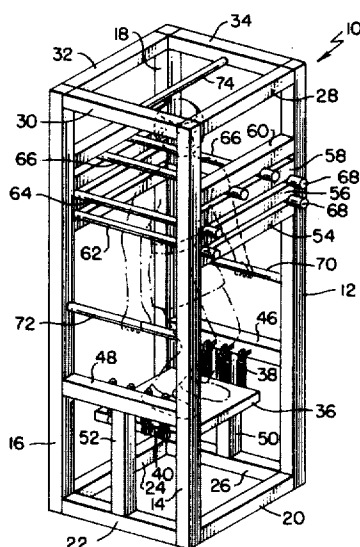
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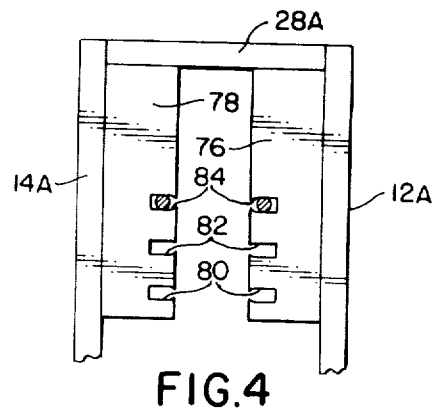
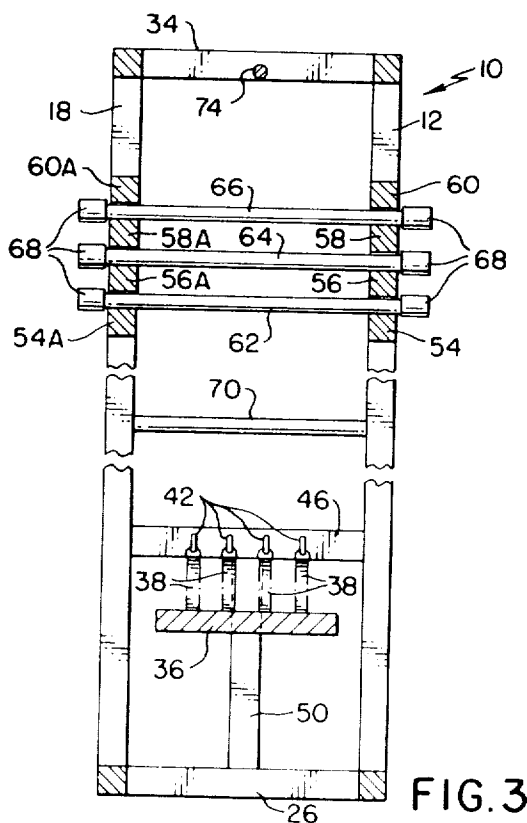
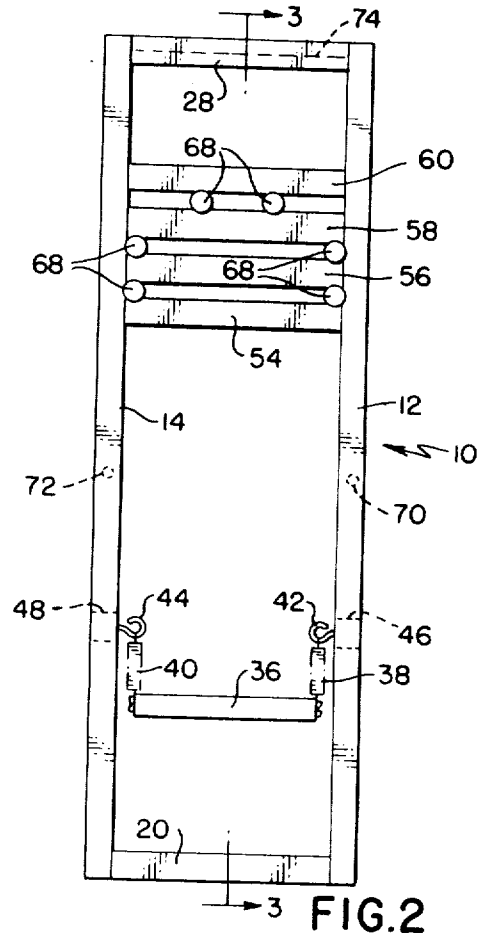
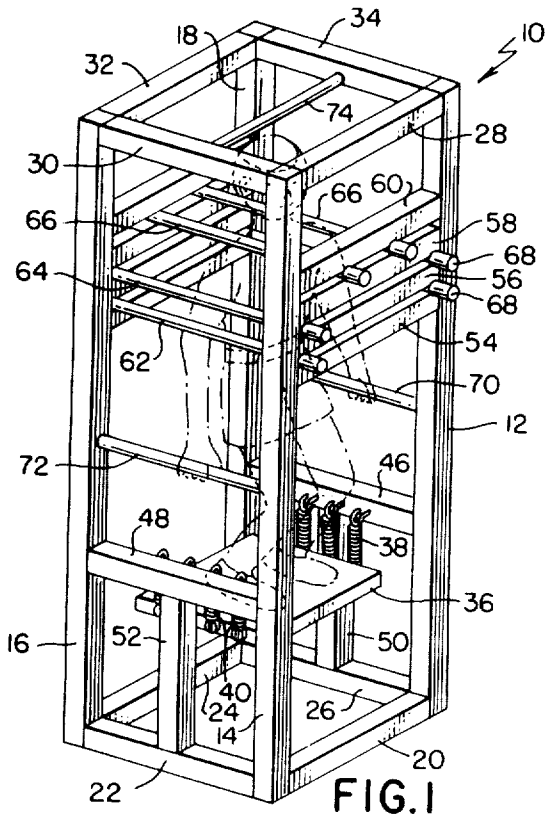
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ABSTRACT

An exercising apparatus for permitting individual body building and conditioning exercising is disclosed. A platform is yieldably mounted in a supporting frame for movement in the vertical direction. A plurality of horizontal bars are mounted on the frame vertically above the platform. An exerciser stands on the platform and exerts pressure or force against the horizontal bars. The force is transmitted through the body to the platform which moves vertically downward.

9 Claims, 4 Drawing Figures





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EXERCISING APPARATUS

BACKGROUND OF THE INVENTION

This invention relates to exercising apparatus and more particularly to an exercising apparatus having new and improved utility.

It has been proven that man has a greater chance of surviving when his body is in condition. It is well known that men who are overweight are more prone to heart problems. A man whose body is flabby from nonuse and/or no exercise is more prone to sickness than the conditioned man. In addition, a man's mental outlook is improved when his body is properly conditioned through exercise and the like.

Many persons join private health clubs, public health clubs, gymnasiums and the like in order to get in condition or to stay in condition. Many people, however, do not have the time or the money to join such clubs in order to keep their bodies in condition.

Accordingly, it is an object of this invention to provide an exercising apparatus which may be used in the home to provide the necessary exercising needed to keep the body in condition.

A further object of this invention is to provide an exercising apparatus which is compact, takes up little space, yet provides for a multitude of different exercises designed to strengthen the body and maintain the body in condition.

A further object of this invention is to provide exercising apparatus which permits an exerciser to progress at his own individual rate.

SUMMARY OF THE INVENTION

This invention provides an exercising apparatus which permits a multitude of exercises to be accomplished thereon. A yieldable platform is supported on a frame below a plurality of horizontal bars. An exerciser stands on the yieldable platform and exerts pressure against the horizontal bars so as to overcome the resistance of the platform and urge it vertically downward. The exercising apparatus is of simple and economical construction, permits individual exercising, and allows an exerciser to progress at his own rate.

Other details, uses, and advantages of this invention will become apparent as the following description of the exemplary embodiments thereof presented in the accompanying drawings proceeds.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings show present exemplary embodiments of this invention in which:

FIG. 1 is a perspective view illustrating the exercising apparatus in use;

FIG. 2 is a front elevation view of the exercising apparatus of FIG. 1;

FIG. 3 is a cross sectional view taken on the line 3—3 of FIG. 2; and

FIG. 4 is a fragmentary front view of another exemplary embodiment of the exercising apparatus of this invention and particularly illustrating another shoulder bar configuration.

DESCRIPTION OF ILLUSTRATED EMBODIMENTS

Reference is now made to the FIGS. 1, 2 and 3 of the drawings, which illustrate one exemplary embodiment of the exercising apparatus of this invention, which is designated generally by the reference numeral 10. The exercising apparatus 10 is comprised of four vertical members 12, 14, 16 and 18 which define an outer supporting frame. Braces 20, 22, 24 and 26 cooperate with the vertical members at the base or bottom and braces 28, 30, 32 and 34 engage the vertical members at the upper end thereof. The vertical members and braces thus define a supporting frame which is substantially rectangular in shape and elongated in the vertical or upright position.

A platform 36 is yieldably mounted within the supporting frame. In the preferred embodiment of this invention, the platform 36 is mounted with a plurality of springs 38 and 40, secured by any suitable means, along opposite sides of the platform. Each spring 38 and 40 is respectively connected with a hook or the like 42 and 44, respectively. The hooks 42 are carried by a horizontal brace 46 and the hooks 44 are carried by a like horizontal brace 48. Vertical braces 50 and 52 provide additional support for the horizontal braces 46 and 48, respectively.

A plurality of horizontal cross braces 54, 56, 58 and 60 are secured between vertical members 12 and 14 near the upper end of the frame. Like braces having the same numeral designation with the addition of the letter "A" are secured at the rear between the vertical members 16 and 18. The braces 54—60 define a plurality of slots therebetween. Mounted in each slot is a pair of horizontal rods, each pair being designated generally as 62, 64 and 66. An enlarged cap or the like 68 is mounted over the end of each respective rod. The caps 68 prevent the inadvertent removal of one of the rods from the slot.

Approximately midway between the platform 36 and the rods 62, rods 70 and 72 are respectively secured between vertical members 12 and 18 and vertical members 14 and 16. A rod 74 is secured between braces 30 and 34 at the top of the supporting frame.

In operation, an exerciser will enter the apparatus 10 and stand on the platform 36. Keeping the back substantially straight and vertical, the exerciser will flex or bend his knees and adjust one pair of the rods 62, 64 or 66 to cooperatively engage the exerciser's shoulders. If desired, padding may be applied either to the shoulders or to the rods. When so positioned, the exerciser will then exert force to press against the respective shoulder rods. This force is transmitted through the feet to the platform 36 which will resist such force. However, as the spring resistance is overcome by the force exerted by the exerciser, the platform 36 will be pushed towards the bottom of the apparatus 10. The different heights of the respective shoulder rods permit an exerciser to exercise or push from varying positions, i.e., from a slight knee bend to a full knee bend. In addition, the varying heights of the shoulder rods permit exercise by persons of different heights.

Another exercise may be accomplished by the person grasping the rods 70 and 72 with his hands and asserting a similar type pushing and pulling of the respective muscles to be used. The rod 74 may be used as

either a head push or a hand push. In the head push, a suitable hat or the like is placed on the head which engages the rod 74. The exerciser then exerts the pressure or force against the rod 74 so as to strengthen the neck muscles. Similarly, the hands may grasp the rod 74 while the exerciser exerts the pressure or force against the rod 74 causing the platform 36 to be urged downwardly. While springs have been illustrated as the yieldable platform supporting means in the preferred embodiment, it should be noted that other means for supporting the platform may be used. Any yieldable means, such as pistons and cylinders and the like, may be used so long as the means provide a resistance which must be overcome by the exerciser.

Another exemplary embodiment of this invention is illustrated in FIG. 4. Only a fragmentary view is illustrated showing essentially another embodiment of the shoulder rod supporting means and will be designated by the same reference numerals followed by the letter designation "A" and not described again. In this embodiment, supporting braces 76 and 78 are respectively mounted to vertical members 12A and 14A, respectively. Like braces are also mounted to vertical members at the rear. Braces 76 and 78 are each formed with slots 80, 82 and 84. Like slots form the respective shoulder rod holding slots. In this embodiment, only a single pair of shoulder rods is required. To obtain different heights for the exerciser, it is only necessary to move the shoulder rod from one slot to the next slot. It is also seen that the respective braces 76 and 78 extend upwardly so as to coact with the cross brace 28A.

In the utilization of the exercising apparatus 10, every individual may tailor his exercise to his own personal condition. In other words, all exercises start with the individual applying zero force or pressure. There is a gradual application of pressure as the exerciser begins to exert the pushing or pulling. Unlike weightlifting where there is a given amount of weight which must be overcome before the weight may be lifted, in this exercising apparatus, a person starts at zero and applies pressure in continuous increments to reach his own level. Although only exemplary examples of exercises have been illustrated, it is obvious that every individual may devise variations of these exercises. As an example, the platform may be used as a running-in-place platform. Likewise, the head bar 74 may be used as a chinning bar.

It can be seen that it is possible to perform a multitude of exercises with the exercising apparatus of this invention. Thus, this invention provides an exercising apparatus which accomplishes the objectives hereinbefore set forth.

While present exemplary embodiments of this invention have been illustrated and described, it will be recognized that this invention may be otherwise variously embodied and practiced by those skilled in the art.

What is claimed is:

1. An exercising apparatus comprising a support frame, said frame having four vertical corner members and braces therebetween to define a substantially upright rectangular enclosure; a platform mounted in said frame in the lower part thereof for movement in a

vertical direction; means yieldingly resisting movement of said platform in the downward direction; first and second horizontal slot defining means secured to said frame in the upper part thereof; a pair of movable rods supported in the slots formed by said first and second slot defining means, said rods being movable so as to engage an exerciser's shoulders when the exerciser is standing on said platform wherein the exerciser pushes against said movable rods whereby said platform is urged downward against the resistance of said yielding means.

2. An exercising apparatus as set forth in claim 1 further comprising a pair of stationary rods secured to said frame between said platform and said movable rods for grasping with the hands to perform exercises therein.

3. An exercising apparatus as set forth in claim 2 further comprising a single stationary rod secured to the top of said frame above said movable rods, said rod being engageable with the head and hands for pushing against.

4. An exercising apparatus as set forth in claim 3 in which said yielding means is spring means connecting said platform with said frame.

5. An exercising apparatus as set forth in claim 4 in which said spring means comprises first spring elements connecting one side of said platform with one side of said frame and second spring elements connecting the other side of said platform with the other side of said platform.

6. An exercising apparatus as set forth in claim 1 further comprising a plurality of first and second slot defining means secured to said frame, said plurality define a plurality of slots; and a plurality of pairs of movable rods, one each pair of rods being supported in each slot.

7. An exercising apparatus comprising a vertical support frame; a platform; spring means connecting said platform to said support frame; a plurality of vertically spaced horizontally extending pairs of bars with each pair of bars being generally parallel to each other and mounted on said support frame above said platform so as to define increasing heights between said platform and each of said pairs of bars, means mounting each of said bars on said frame for movement toward and away from each other in a horizontal plane only wherein an exerciser will stand on said platform and engage one of said pairs of bars whereby pushing against said pair of bars will cause a force to be transmitted through the body to said platform to act against said spring means.

8. An exercising apparatus as set forth in claim 7 further comprising a pair of stationary bars, one each of said bars being mounted to said support frame on each side of said platform and between said platform and the lowermost pair of horizontal movable pair of bars for hand grasping by an exerciser standing on said platform.

9. An exercising apparatus as set forth in claim 8 further comprising a single bar mounted to said support frame above the uppermost pair of horizontally movable bars wherein an exerciser standing on said platform may push directly against said single bar.

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