

Dec. 6, 1966

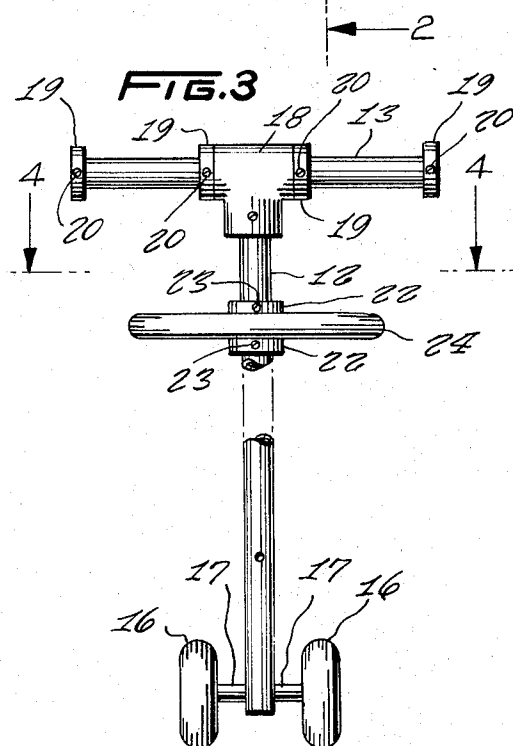
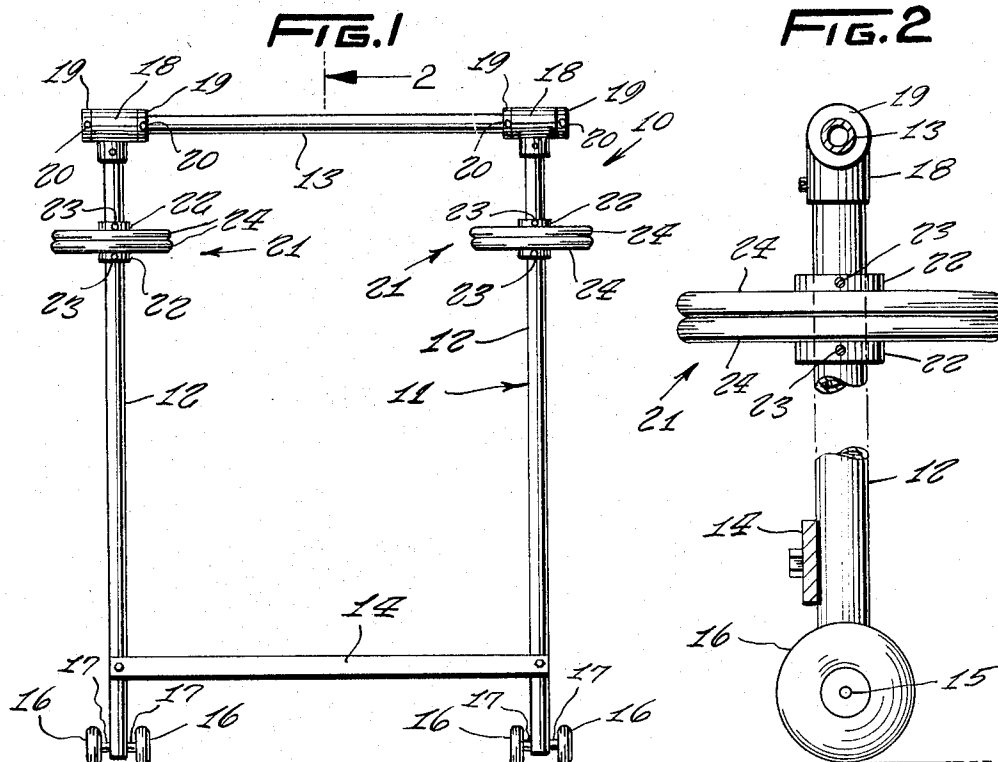
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3,290,044

MOBILE EXERCISE BAR

Filed July 8, 1963

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

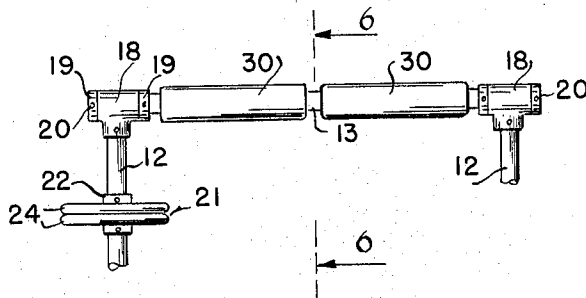


FIG. 5

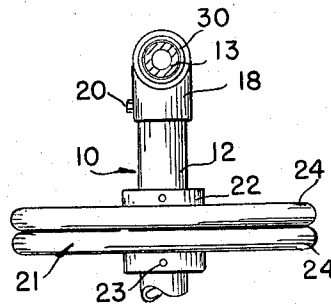


FIG. 6

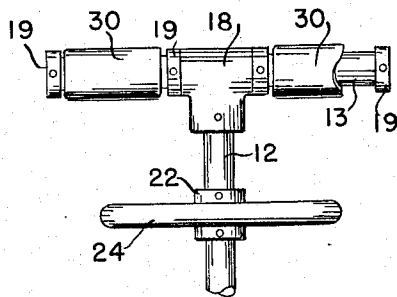


FIG. 7

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## MOBILE EXERCISE BAR

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4 Claims. (Cl. 272-81)

This invention relates to exercising devices generally and specifically it relates to exercising bars.

A principal object of the present invention is to provide a mobile exercising bar where men, women or children, regardless of their physical weakness or strength, will perform progressive weight exercise movement and wherein weights can be selectively loaded or unloaded from the bars.

Another object of the present invention is to provide a mobile exercise bar having a basic principle of a second class lever wherein wheels act as a fulcrum and barbell plates upon the bar serve as resistance, the plates being placed at various selected points upon the bar or bars. Effort is expended by the exerciser at the opposite end to the fulcrum. The mechanical advantage of the bars is decreased by placing the weights closer to the handle bar end. Mobility is imparted to the bar or bars by the addition of wheels.

Still another object of the present invention is to provide a mobile exercise bar having means for providing various types of exercise, such as overhead pressing movements for triceps, deltoids, trapezius and associated neck and upper back areas, curling movements for biceps and flexor and extensor muscles of the forearm and related wrist area, rowing movements for deltoids, trapezius, brachialis, latissimus dorsi and associated deep muscle areas, dead lifting movements for overall back area, knee bending movements for vastus lateralis, vastus medialis, gluteus maximus, rectus femoris, toe raising movements for gastrocnemius, supine pressing and pressing and pulling movements for pectorals, rib cages, shoulder and arm assemblies.

A still further object of the present invention is to provide a mobile exercise bar having means whereby in all the exercises the tension on the muscles is constant in overcoming the constant pull of gravity and lessened mechanical advantage. Secondly, there is no problem of balance for the wheels are in contact with a flat surface at all times, the wheels being capable of placement at various heights, such as on the floor, on a chair, on a table, or the like, and at whatever elevation the wheels are placed and an exercise performed, the wheels move, enhancing the range of movement, and in this manner the exerciser does not have to bend, twist or jerk his body abnormally to complete an exercise.

Other objects of the invention are to provide a mobile exercise bar having the above objects in mind which is of simple construction, has a minimum number of parts, is inexpensive to manufacture and efficient in operation and use.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in conjunction with the accompanying drawing, in which:

FIGURE 1 is a front elevational view of the device;

FIG. 2 is a fragmentary, enlarged view taken along the lines 2-2 of FIG. 1;

FIG. 3 is a fragmentary front elevational view showing a modified form of construction;

FIG. 4 is a transverse view taken along the lines 4-4 of FIG. 3;

FIG. 5 is a partial front elevation of a device similar to that shown in FIG. 1,

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FIG. 6 is a partial side elevation in enlarged section taken along the line 6-6 of FIG. 5, and

FIG. 7 is a partial front elevation with parts in broken section showing a modification of the device shown in FIG. 3.

Referring now to the drawing, the numeral 10 represents a mobile exercise bar according to the present invention wherein there is a frame 11 comprised of a pair of vertical bars 12 made preferably of round stock of solid or hollow plastic, metal or fiberglass, a horizontal bar 13 made of like material and a horizontal stabilizer bar 14, made of metal, plastic or fiberglass and of rectangular configuration. At the lower ends of each of the bars 12 there is a cross shaft 15 extending out of each side of the bar having a wheel 16 mounted upon each opposite end of the shaft and spacers 17 which are located between each wheel and the bar. At the upper ends of each of the bars 12 there is a T-joint 18 which connects the bar 12 with bar 13. Collars 19 are fitted on bar 13 adjacent each side of the T-joint, each collar 19 having a set screw 20 locking the collar to the bar. Upon each bar 12 there is located a weight unit 21, supported in selected position by means of collars 22 retained upon the bar by means of set screws 23, the weight assembly including a selective number of disc-shaped weights 24, each having a central opening for fitting upon the bar 12.

It is to be noted that the wheels 16 may be rubber tired or not, as preferred, and made in various sizes or other material, if desired. A tubular sleeve 30, as shown in FIGS. 5, 6 and 7, may be fitted around those sections of the device which the exerciser grasps, the sleeve being rotatable upon the bar 13 or the bar 13 itself may be rotatable due to use of plain fittings.

FIGURES 3 and 4 show a construction wherein there is a singular vertical bar 12 made preferably of round stock to the upper end of which there is attached a T-joint 18. A de-mountable handle bar 13 extends horizontally through the T-joint with equal amounts thereof extending out of each side of the T-joint. A collar 19 is secured by means of a set screw 20 to the handle 13 adjacent to each side of the T-joint and at the terminal ends of the handle. A sleeve 30, as shown in FIGS. 5, 6 and 7, may be carried on each side of the handle providing rotatable hand grasping means. Disc shaped weights 24 may be secured at selective positions along vertical bar 12 by means of collars 22 secured to the bar 12 by means of set screws 23. At the lower end of the bar 12 there is a transverse shaft 17 at the ends of which there is a wheel 16.

While the FIGURES 1, 2, and 3 show the present device in a vertical position for illustration purposes, it is to be understood that in operative use the device is manipulated on assorted planes and angles to the horizontal with the exerciser grasping the handle 13 while the mobile fulcrum 16 of the device rests on a flat surface to move back and forth on the mobile fulcrum of the device. This apparatus uses the mechanical disadvantage of the second-class lever principle. The device permits the exerciser to expend effort upon resistance which is in the same plane as the effort expended. This results in constant resistance to the effort from beginning to the end of the exercise movement. The weights 24 can be placed at any point along the vertical bars 12. The device can be used by the exerciser either grasping the handle and facing it or grasping the handle and being turned away from it.

In FIGS. 5, 6 and 7 the use of sleeves 30 is illustrated. These sleeves 30 are mounted on the handle bars 13 to be grasped by the user. The sleeves 30 are rotatable upon the handle bars 13.

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In operative use, the weight assembly may be selectively positioned along the length of bars 12 and may be varied in the amount of weight, as desired.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

Having thus set forth and described our invention, what we claim is:

1. In a mobile exerciser the combination of a generally flat frame comprised of a transverse portion and an upright portion having an upper end and a lower end, shaft means on said frame at said lower end in a transverse direction to said frame, a plurality of wheels in axial alignment with each other and mounted on said shaft means for rotary movement with respect to said frame, a hand grasping means extending in a transverse direction to said frame disposed at the upper end of said frame, a weight adjustably mounted on said upright frame portion, said weight being slideable between the upper and lower ends of said frame, and means for selectively securing said weight at various elevations between the upper and lower ends of said upright frame portion, said weight comprising a flat disc having a central opening therethrough for receiving said upright frame portion.

2. Structure as set forth in claim 1 wherein said hand grasping means comprises a horizontal transversely extending upper cylindrical bar and further comprising a plurality of vertical cylindrical bars at opposite sides of

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said mobile exerciser and connected to the ends of said upper cylindrical bar, and a horizontal transversely extending stabilizer bar at the lower end of said frame and connected to said vertical cylindrical bars.

3. Structure as set forth in claim 1 wherein said hand grasping means comprises a transversely extending horizontal cylindrical bar disposed at the upper end of said frame and wherein said upright frame portion comprises a vertical cylindrical bar joined at its upper end to a mid-portion of said hand grasping means.

4. Structure as set forth in claim 3 wherein said hand grasping means further includes a pair of sleeves mounted for rotation upon the horizontal bar disposed at the upper end of said frame.

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