

[54] **A MANUALLY OPERABLE
CANTILEVERED TYPE EXERCISING
DEVICE**

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272/70; 124/30

[56] **References Cited**

UNITED STATES PATENTS

588,350	8/1897	Perkins.....	272/84
1,333,005	3/1920	Warner.....	272/84
2,435,217	2/1948	Howell.....	124/30 UX
2,981,312	4/1961	Sundberg.....	272/70

FOREIGN PATENTS OR APPLICATIONS

503,931 3/1920 France.....272/84

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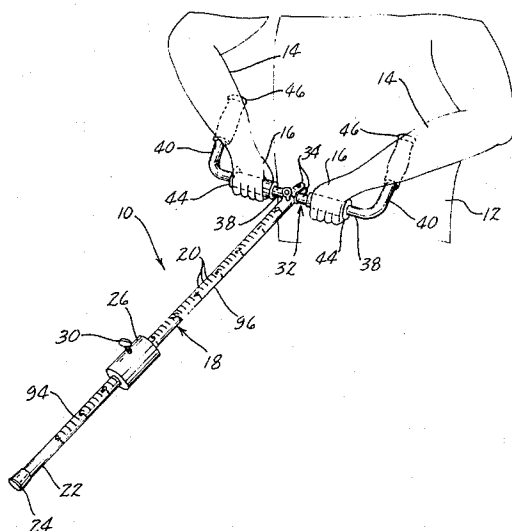
Assistant Examiner—William R. Browne

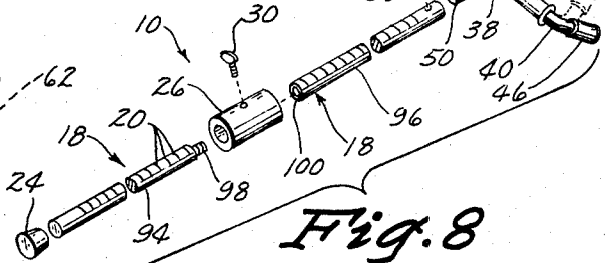
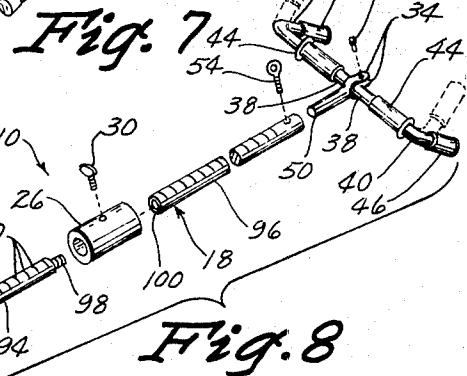
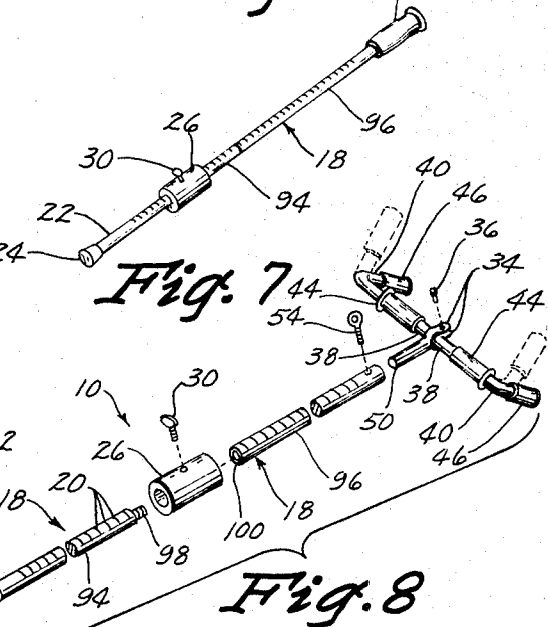
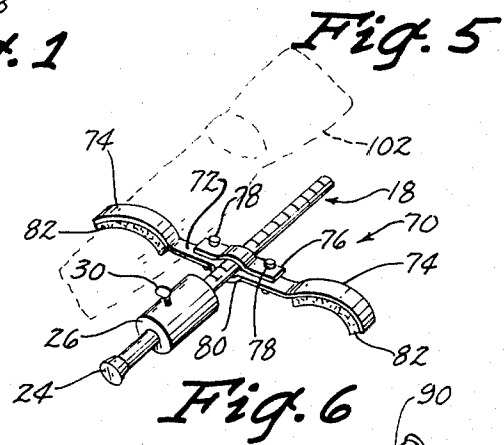
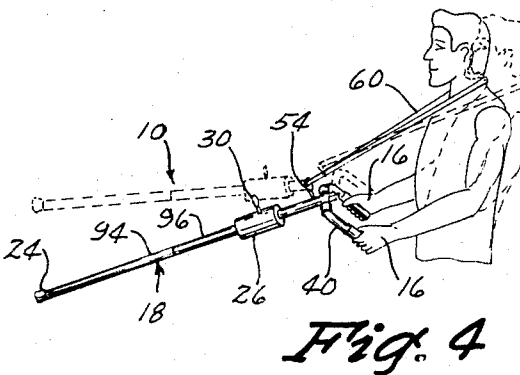
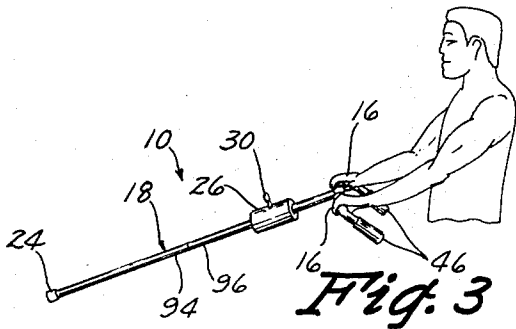
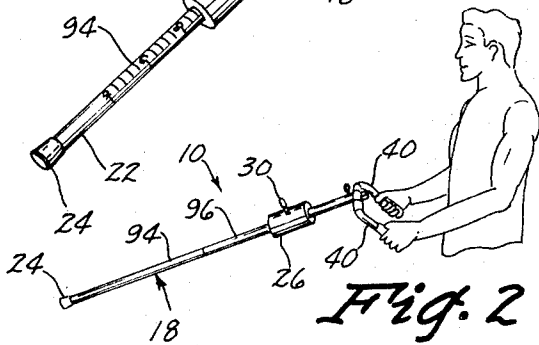
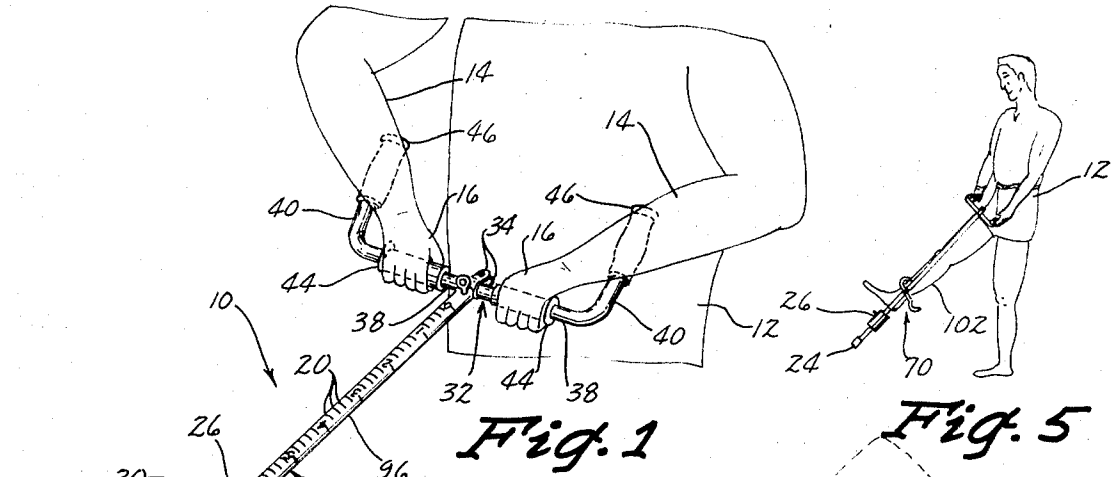
Attorney—Zarley, McKee & Thomte

[57] **ABSTRACT**

A device for performing a variety of exercises including an elongated member having calibrations along its length and a movable weight means mounted thereon adapted to be selectively positioned as desired. A U-shaped handle bar unit is rotatably connected at one end of the elongated member and may be turned as desired to perform various exercises. A strap may be connected to the elongated member and extend around the exerciser's neck for certain exercises. A cross piece may be selectively moved along the elongated member for desired leg exercises.

8 Claims, 8 Drawing Figures





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MANUALLY OPERABLE CANTILEVERED TYPE EXERCISING DEVICE

There are many muscles in the human body and it is difficult to give them all proper exercise. Many devices have been produced and are used for exercise purposes but so many of these devices are limited in their use and only provide exercise for certain muscles and parts of the body. Moreover, conventionally available exercise devices are awkward to handle and use and transport. It is particularly desirable that exercises devices be good looking in appearance and have an unlimited number of uses. The exercise device of this invention has these characteristics. For instance, it is contemplated that the person working in an office would use this device as it is convenient to use and to store. He may also carry it with him when he travels because it is easily disassembled and is very compact.

The exercise device of this invention is safe to use and may be used by children as well as adults.

This device is simple in design but permits the exerciser to perform a maximum number of exercises. He may exercise his neck, arm, leg and back muscles as well as his hands and wrists. These exercises will strengthen his hands, forearms, biceps, shoulders, neck and head muscles.

These and other features and advantages of this invention will become readily apparent to those skilled in the art upon reference to the following description when taken into consideration with the accompanying drawings, wherein:

FIG. 1 is a perspective view of the exercise device of this invention being held for use in a shoulder development exercise;

FIG. 2 is a view similar to FIG. 1 but in smaller scale showing the exercise device being held for exercising the hands, forearms, biceps and shoulders;

FIG. 3 is a view similar to FIGS. 1 and 2 but showing the exercise device being held in a position for curling exercising;

FIG. 4 is a view similar to FIGS. 1 through 3 but showing a neck strap connected to the exercise device and making it possible to exercise the neck and head muscles;

FIG. 5 is a view showing the device being used to exercise the leg muscles;

FIG. 6 is an enlarged in scale fragmentary view of the cross piece on the exercise device for engagement by the person's legs;

FIG. 7 is a perspective view of an alternate embodiment of this invention wherein a single elongated member is provided having a movable weight means thereon; and

FIG. 8 is an exploded perspective view of this invention.

The exercise device of this invention is referred to in FIG. 1 generally by the reference numeral 10 and is shown being held by a man 12 having arms 14 and hands 16.

The exercise device 10 includes an elongated rod member 18 calibrated along its length as indicated by the measurement markings 20. The lower end 22 of the rod member 18 includes a rubber or the like protective cap 24 to protect the floor or the like from damage.

A slidable cylindrical sleeve weight means 26 is movably mounted on the rod 18 and may be locked in any desired position by adjustment of the set screw 30

which is threadably secured to the weight sleeve 26 and is adapted to engage the rod 18.

In the embodiment of FIGS. 1-6 and 8 a bicycle type U-shaped handle bar 32 is rotatably connected to the inner end of the rod 18 by being clamped between two clamp elements 34. The clamp elements 34 are made adjustable by a bolt 36. The rod 18 engages the handle bar 32 at the center of its base portion 38 and thus the parallel handle portions 40 on opposite sides are equally spaced apart to make the device symmetrical in shape and uniformly distribute the forces while being used.

It is seen that handle grips 44 are placed on opposite sides of the rod 18 on the straight base portion 38 and handle grips 46 are provided on the parallel leg handle portions 40.

As seen in FIG. 8, the clamp elements 34 are on the end of a stub shaft 50 which is telescopically received in the adjacent end of the rod 18 and is held in position by an eye screw 54.

It is seen in FIG. 4 that the eye screw 54 engages the ends of a neck strap 60 extending around the person's neck 62.

In FIG. 5 and FIG. 6 a cross piece 70 has been added to the elongated rod member 18 and comprises a strap 72 including wing portions 74. A clamp strap 76 is disposed on the opposite side of the rod 18 and is connected to the strap 72 by screws 78 which clamp the strap 72 to the rod 18. The strap 72 is provided with an arcuate portion 80 at its center for being in engagement with the rod 18 and also has arcuate shaped wing portions 74 which matingly engage the person's leg through foam rubber cushion pads 82 having the same shape.

An alternate embodiment of this invention is shown in FIG. 7 wherein the rod 18 and the slidable weight 26 are associated with a longitudinally extending handle portion 90 which is merely an extension of the rod member 18.

The exercise device is made portable and compact for carrying by virtue of the rod 18 being comprised of two sections 94 and 96 which are threadably interconnected by the threaded portion 98 being received in the opening 100 as seen in FIG. 8. Thus it is seen that the exercise device can be taken completely apart since the handle bar 38 is easily removed and the stub shaft 50 may be disengaged from the handle bar 38 as well as from the elongated rod member 18. The cross strap 72 is also detachable as well as the neck strap 60.

In use it is seen that as viewed in FIG. 1 the hands being placed on the straight handle bar portions 38 with the handle bar portions 40 being under the arms the shoulders will be exercised along with the hands and the arms as the weighted elongated member 18 is raised and lowered. In FIG. 2 the person's hands 16 are placed on the ends of the handle bar portions 40 and thus give exercise to the hands, forearms, biceps, and shoulders as the rod 18 is raised and lowered. It is noted that in the early stages of working with this exercise that the closer the weight 26 is placed to the handle bar the easier it is to operate and conversely the farther away it is placed the harder it is to raise and lower the rod 18. Accordingly, the slidable weight 26 may be placed at the appropriate and desired position to give the desired resistance to exercise activity.

In FIG. 3 the hands 16 are placed on the straight handle bar portions 38 and a curling exercise is performed by the raising and lowering of the exercise device by turning of the hands 16. It is obvious that related muscles are also exercised during this operation.

The use of the neck strap 60 as seen in FIG. 4 provides exercise for the neck and head muscles while the hands may or may not be used as desired. As seen, the hands 16 are grasping the parallel handle portions 40 and they serve to guide the weighted elongated member 18 up and down as the neck 62 through the strap 60 pulls the member 18 up and down.

FIGS. 5 and 6 illustrate but one position, a standing position that may be assumed for exercising the leg 102 which engages the wing portions 74 of the cross strap 72.

A simplified embodiment of the invention is shown in FIG. 7 and as previously indicated only involves a single handle 90 which is a continuation of the rod member 18. The various exercise activities possible are it is believed numerous and will involve usage of one or both hands being placed on the handle member 90 in raising and lowering the weighted member 18.

It is believed that the exercise device of this invention is the most complete, simplified and streamlined exercise device of its type. It involves a minimum of parts but provides a maximum number of exercises.

Some changes may be made in the construction and arrangement of my exercise device without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

1. A manually operable cantilevered type exercising device, comprising,
 - an elongated member,
 - a weight means longitudinally slidably mounted on said elongated member for being selectively positioned thereon, and
 - a handle unit having a cross member at its center connected to one end of said elongated member, elongated handle portions at opposite ends of said cross member spaced apart at least a distance equal to the width of the body of the exerciser, said

elongated handle portions being interconnected by said cross member & extending at an angle to the plane of said elongated member and said cross member, said cross member providing hand gripping stations on opposite sides of said elongated member and the outer ends of said elongated handle portions providing handles,

said handles adapted to be held by the exerciser's hands at times and at other times engage the underside of exerciser's arms when the hands are on the hand gripping stations on the cross member.

2. The structure of claim 1 wherein said cross member is rotatably connected to said elongated member whereby said handles may be selectively angled relative to the longitudinal axis of said elongated member.

3. The structure of claim 3 wherein a connecting means is secured to said elongated member adjacent said cross member and is adapted to extend around the exerciser's neck to support the elongated member and exercise the exerciser's back and neck muscles.

4. The structure of claim 4 wherein a connecting means is secured to said elongated member adjacent said cross member and is adapted to extend around the exerciser's neck to support the elongated member and exercise the exerciser's back and neck muscles when the handles and neck are moved apart relative to one another.

5. The structure of claim 1 wherein said elongated member is calibrated along its length to provide an indication of lifting characteristics as said weight means is moved along said elongated member.

6. The structure of claim 1 wherein said elongated member is comprised of a pair of substantially equal length portions threadably interconnected.

7. The structure of claim 6 wherein said cross member is detachably connected to said elongated member and said weight means includes a thumb set screw selectively adjustable for engagement with said elongated member to limit movement of said weight means thereon.

8. The structure of claim 1 wherein a second cross member is selectively longitudinally movable on said elongated member for positioning to be engaged by the exerciser's leg.

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