

[54] **EXERCISING MACHINE**

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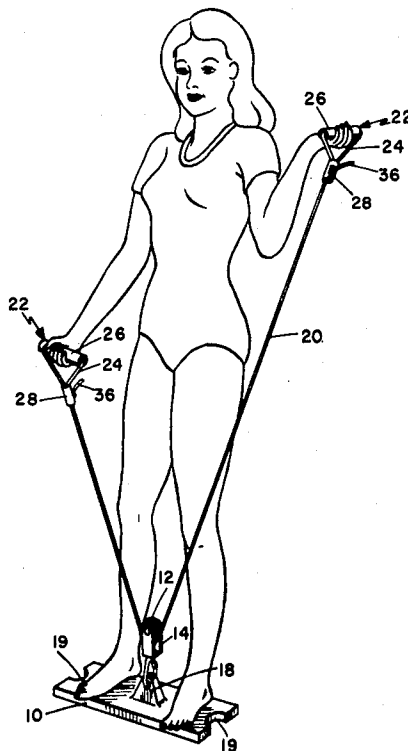
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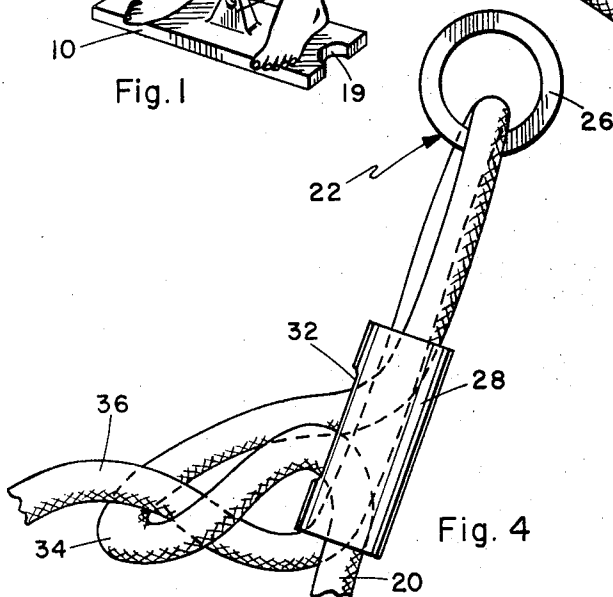
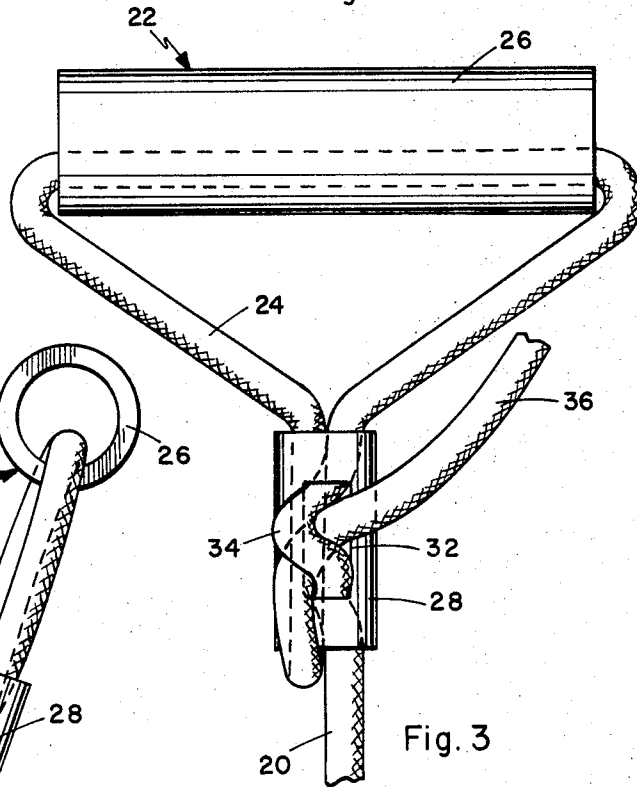
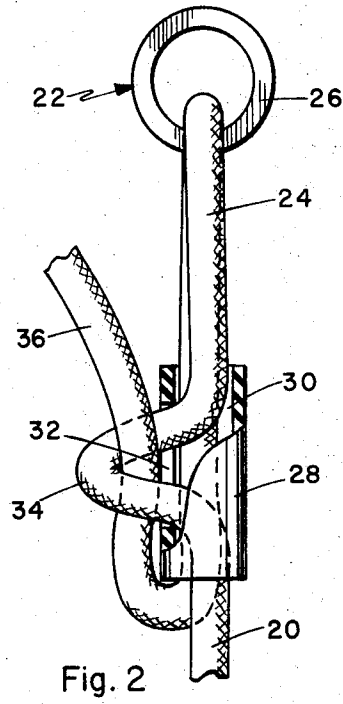
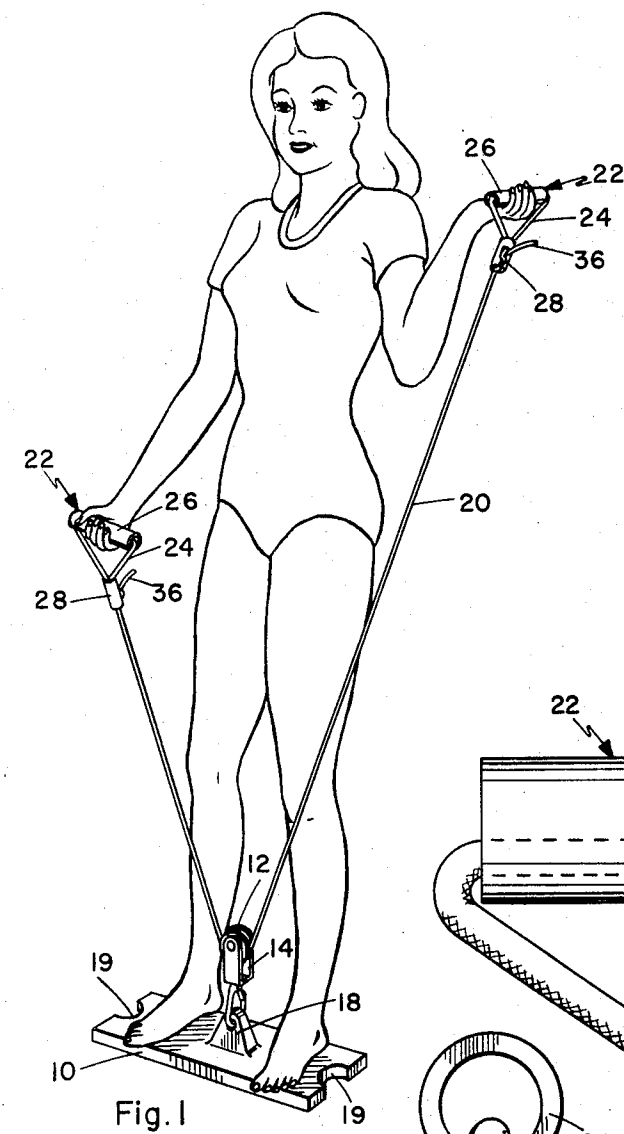
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ABSTRACT

An improved exercising machine, particularly for exercising the arm muscles while the user stands upon a base having a sheave about which a substantially inextensible flexible cable or rope is entrained, the cable having hand grip assemblies with a unique quick release fastening means for the handgrip assemblies to give infinitely adjustable cable lengths and comprising a body having a longitudinal bore therethrough and a transverse vent. A return cable portion and the adjacent cable portion extends through the bore. A loop in the return cable portion forms a loop extending outwardly from the vent and the terminal portion of the cable extends through the loop. The cable is calibrated for precise repeatable adjustment of the effective length of the cable. The ready adjustability of the exerciser makes it particularly useful by different members of a family, for example, and for changes between isometric and isotonic exercises. For storage purposes the base is formed with recesses in its ends around which the cable is sheaved.

3 Claims, 4 Drawing Figures





EXERCISING MACHINE

BACKGROUND OF THE INVENTION

Many devices have been developed to foster and facilitate desirable exercise and prior exercising machines for development of arm muscles are known to include devices employing cables, both elastic and non-elastic, passing through a pulley and with simple handgrips. The cables in these prior art devices are usually not easily adjustable in length or at least there is no quick-release means provided to make the length adjustment expeditiously achieved by the user. There is a need, therefore, for an exercising machine of this general type with a cable marked or calibrated and with the facility for the handgrips to be easily released and re-adjusted to known positions.

SUMMARY OF THE INVENTION

As claimed, this machine fills the need described immediately above having a cable which is calibrated to indicate the effective length, that is, the length of the two reaches of the cable between a pulley on a base and handgrips on the cable, the handgrip assemblies including resilient sleeves on returned cable portions and means for easy and quick release and re-fastening of the returned cable portions for use by persons of different heights and for different exercises.

BRIEF DESCRIPTION OF THE DRAWING

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

FIG. 2 is an enlarged side elevation view of one handgrip assembly, partially cut away;

FIG. 3 is a front view of a hand grip assembly; and

FIG. 4 is a side elevation view of a handgrip assembly illustrating the method of loosening the secured end of the cable for adjustment of the handgrip assembly on the cable.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

As illustrated a practical and preferred embodiment of this invention includes a base 10 which can be a simple elongated block of form-retaining material such as plastic or wood upon which the user stands. Centrally of the base a sheave 12 is freely rotatively mounted, on the upper side of the base as used. Ordinarily the sheave 12 is part of a simple pulley block 14 which may have a snap hook 16 to connect with an eye member 18 which may be formed unitary with the base in a raised central portion thereof as illustrated. The base has recesses 19 and in each end thereof to receive the cable 20, hereinafter described, when wound thereon for storage or shipment.

An inextensible flexible elongated element, hereinafter generically designated a cable 20, and usually being of rope/character, is entrained about the sheave 12 so that the two reaches of the cable can be manually pulled upwardly as illustrated, in opposition, for simultaneous exercise of both arms and related muscles.

Each of the handgrip assemblies 22, which incidentally can be used as foot stirrups, includes a returned cable portion 24 defining a loop threaded through a slightly flexible and resilient sleeve 26 dimensioned to be grasped by hand, and the returned portion, as well as an adjacent portion of the cable, are threaded

through a hollow body 28, illustrated as a short cylindrical tube with a bore 30 large enough to receive two side by side portions of said cable. Intermediate the length of said body 28 there is a vent 32 leading from the bore to the exterior of the body and dimensioned to accomodate a diverted loop portion 34 of the cable, ordinarily of the returned portion 24, and the extremity or terminal portion 36 of the cable is introduced through this diverted loop portion to lock the same in a simple knot as indicated at FIGS. 1, 2, and 3.

When it is desired to adjust the handgrip assemblies, one or both, the terminal portion 36 is deliberately pulled outwardly away from the body 28, carrying with it the diverted loop portion 34, thus loosening said simple knot in the cable and permitting shifting of the handgrip assembly with a greater or lesser length of said terminal portion 36 being extended.

The importance of easy adjustment is stressed because the same equipment may be used by different persons of different height, such as different members of a family, and for different exercises, both isometric and isotonic and this requires adjustment in the effective length of the cable 20. Therefore a quick-release means such as that described above, in items 28 to 36, is very desirable. The instant structure is also proposed as being aesthetically and economically attractive.

The invention has been described above as primarily an arm exercising machine but it will be recognized that as mentioned above the assemblies 22 may be used as stirrups for the feet in leg exercising, the snap hook 16 being then ordinarily secured to an eye bolt or the like in a wall or other fixed support and the cable being operated more or less horizontally. The slightly resilient sleeves 26 have non-slip characteristics in this use as well as when employed as hand grips and the easy adjustability remains important.

I claim:

1. Improvements in an exercising machine or the like having a releasibly anchored sheave and a flexible cable entrained around said sheave so that the two end portions of the cable can be separately pulled by the two hands of the user, said improvements comprising:

handgrip-stirrup assemblies on the end portions of said cable, each assembly including:

a returned cable portion defining a loop; quick-release securing means adjustably fastening said returned cable portion to an adjacent portion of the cable comprising a body having a bore there-through and a vent leading

from said bore to the exterior of said body; said returned cable portion and said adjacent portion of the cable extending through said bore and the former having a diverted loop portion thereof extending outwardly through said vent with a terminal portion of the cable introduced into said diverted loop portion to constitute a simple knot easily untied by an intentional pull on said terminal portion.

2. Improvements according to claim 1 wherein said cable has spaced markings thereon enabling precise and repeatable adjustment of the handgrip-stirrup assemblies for different effective lengths of the cable.

3. Improvements according to claim 1 including a base upon which said sheave is attached;

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said base being an elongated block of form-retaining material capable of being held in place by the user standing thereon; and
said base having opposed arcuately recessed portions

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to receive and hold said cable when superficially reeled thereon for storage and shipment of the exercising machine.

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