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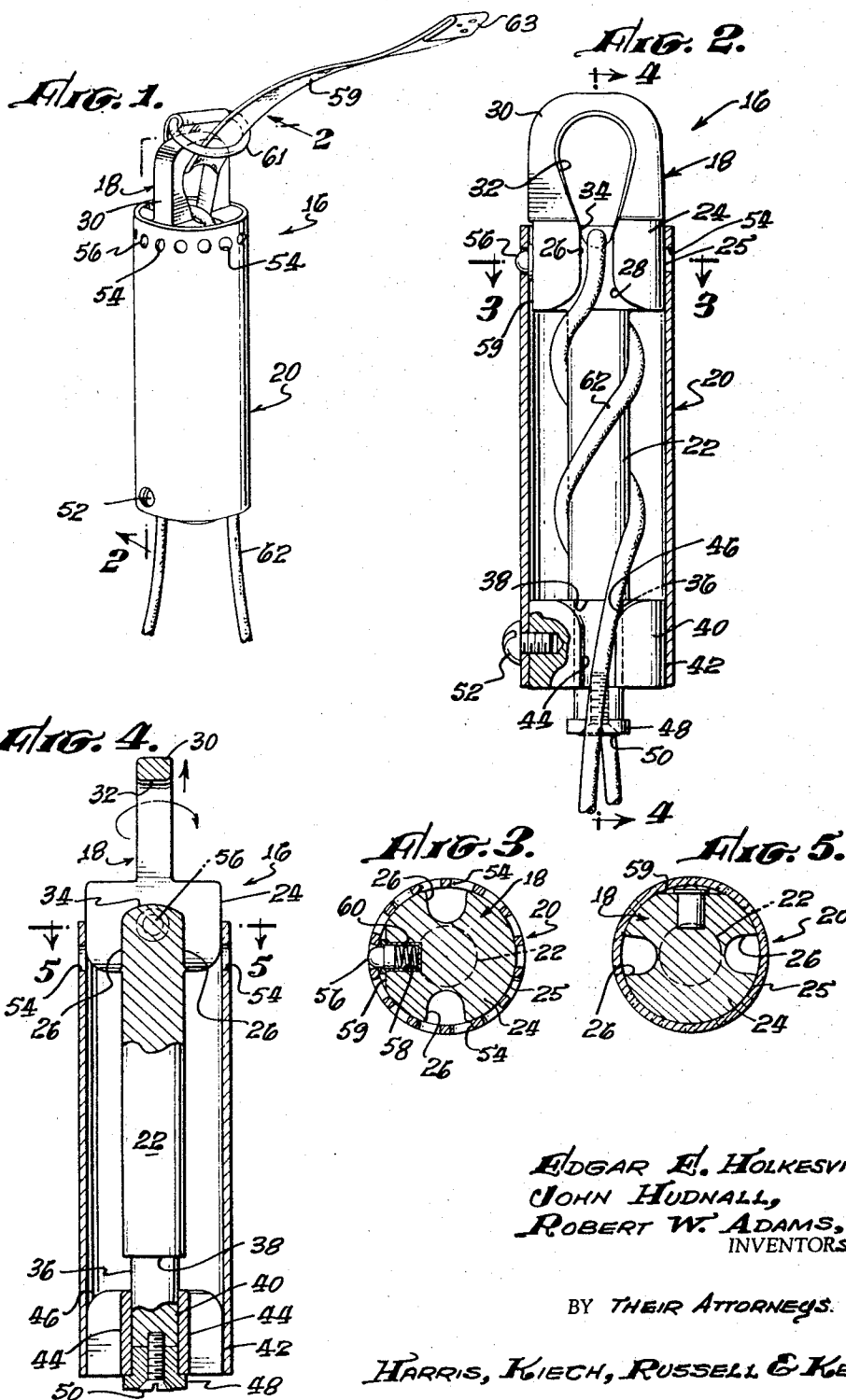
E. E. HOLKESVICK ETAL

3,411,776

RECIPROCATING FRICTION-TYPE EXERCISING DEVICE

Original Filed June 12, 1961

2 Sheets-Sheet 1



EDGAR E. HOLKESVICK,
JOHN HUDNALL,
ROBERT W. ADAMS,
INVENTORS.

BY THEIR ATTORNEYS.

HARRIS, KIECH, RUSSELL & KERN.

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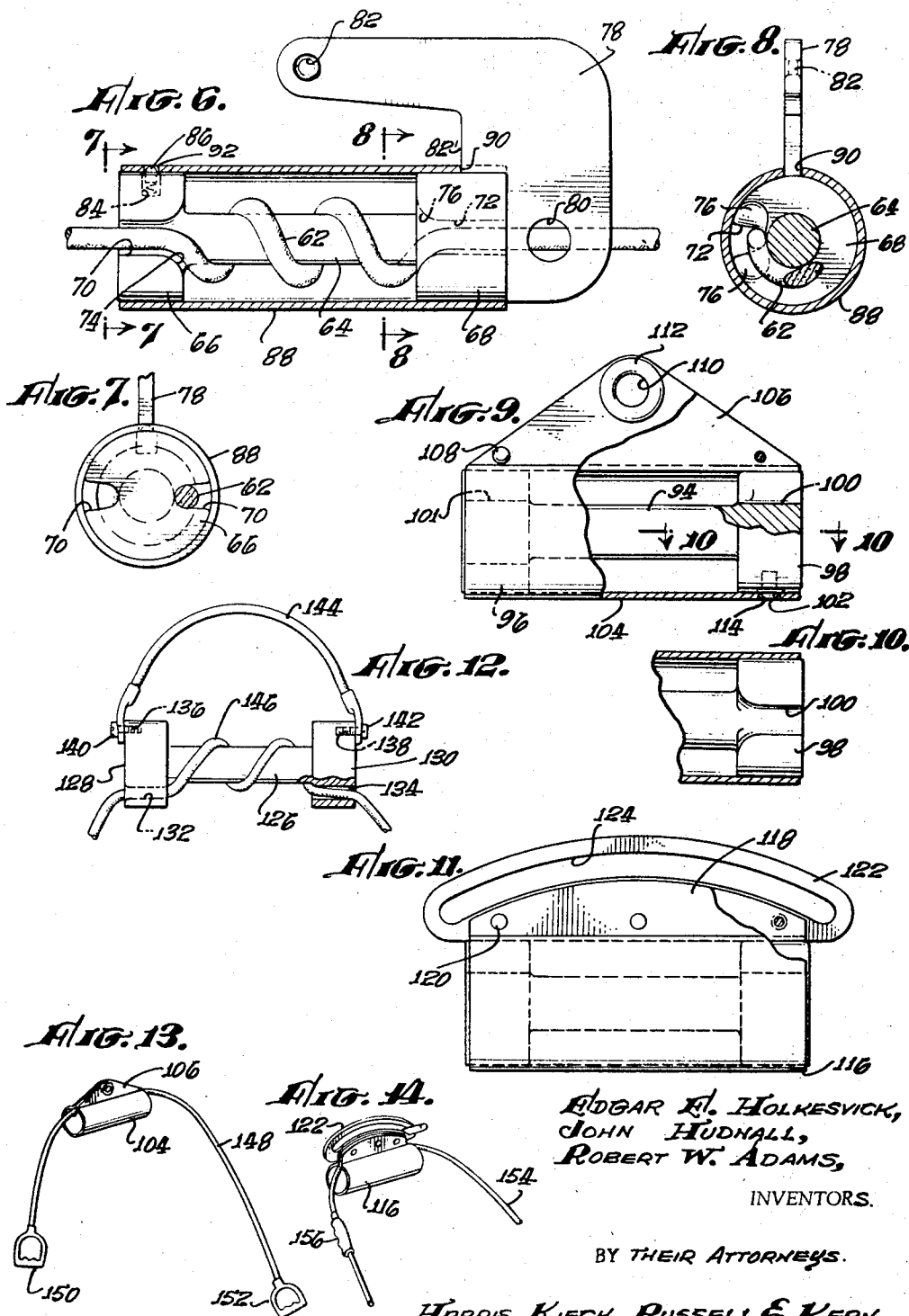
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RECIPROCATING FRICTION-TYPE EXERCISING DEVICE

Edgar E. Holkesvick Fullerton, and John Hudnall and
Robert W. Adams, Los Angeles, Calif., assignors, by
direct and mesne assignments, to Edgar E. Holkesvick,
Fullerton, Calif.

Original application June 12, 1961, Ser. No. 116,393, now
Patent No. 3,197,204, dated July 27, 1965. Divided and
this application June 9, 1965, Ser. No. 482,646

The portion of the term of the patent subsequent to
July 27, 1982, has been disclaimed
13 Claims. (Cl. 272—79)

ABSTRACT OF THE DISCLOSURE

An exercising device adapted to be suspended from a support and which includes an elongated shaft of a length to receive several turns of rope therearound. Spaced-apart apertures guide a length of rope onto and off of the shaft. A length of rope extends through one aperture, at least partially around the shaft and then out through the other aperture, the length of rope having a handle at each end whereby the rope can be moved back and forth through the device in sliding frictional engagement with the shaft.

This is a division of application Ser. No. 116,393, filed June 12, 1961, now U.S. Patent No. 3,197,204 granted July 27, 1965.

The present invention relates generally to the physical conditioning art and more particularly to a novel exercising device which is especially suitable for home use.

Briefly stated, one embodiment of the present invention comprises a body member which includes an elongated cylindrical shaft having hub portions at each end thereof. Axially extending passageways are provided in the hub portions so that a length of rope can be inserted through a passageway in one hub portion, thence around the shaft, and then out through a passageway in the other hub portion, or, the rope can be doubled back and returned in a similar fashion through diametrically opposed passageways in the hub portion. In this manner the rope is in sliding frictional engagement with the shaft whereby the user must exert a certain amount of force, and thereby exercise various muscles of the body, in pulling the rope through the device. Means are provided for supporting the device from adjacent an end or from adjacent the center thereof so that the rope can be pulled in a continuous manner, or alternately back and forth. In one embodiment, means are also provided for easily and quickly adjusting the number of turns of rope around the shaft by having one hub portion rotatable relative to the other hub portion.

It is well known that there are various types of exercising devices on the market and in use at the present time, some of which are limited to gymnasium usage, while others are usable in the home. However, most of the better exercising devices are relatively expensive, others are quite cumbersome and noisy, some are dangerous, and many which are relatively small and inexpensive are not satisfactory because they are limited in their usage and cannot be adjusted to suit the need of the person desiring to use them. Thus, exercising devices which employ springs and resilient members have been known to break or slip and thereby injure the user.

It is an object of the present invention, therefore, to provide a novel exercising device which is especially suitable for home use, i.e. one which is quiet, safe, and relatively inexpensive.

Another object is to provide such a device which can

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be easily and quickly adjusted to meet the individual requirements of each user.

A further object is to provide a novel exercising device which can be employed for all types of conventional exercises, such as those employing pushing, pulling, and bending.

Another object is to provide such a device which provides a continuous resistance of constant magnitude throughout its range of motion, as differentiated from a spring or similar type of resilient member where the resistance varies depending on the amount of extension.

Yet another object is to provide a novel exercising device which is compact in size and light in weight whereby it can be used in almost any type or size of room in a home, and which can be easily carried when traveling.

Further objects and advantages of the present invention will be apparent from the following detailed description, reference being had to the accompanying drawings wherein preferred embodiments of the present invention are shown.

In the drawings:

FIG. 1 is a perspective view of a novel exercising device constructed in accordance with the teachings of the present invention, shown in controlled adjustable position.

FIG. 2 is an enlarged vertical sectional view taken on the line 2—2 in FIG. 1;

FIG. 3 is a horizontal sectional view taken on the line 3—3 in FIG. 2;

FIG. 4 is a vertical sectional view taken on the line 4—4 in FIG. 2, showing the device in the freely rotatable position;

FIG. 5 is a horizontal sectional view taken on the line 5—5 in FIG. 4;

FIG. 6 is a front elevational view, partially in cross section, showing a modified exercising device embodying the same inventive concept but lacking the full adjustability of the embodiment shown in FIGS. 1 through 5;

FIG. 7 is an end view of the modified construction taken on the line 7—7 in FIG. 6;

FIG. 8 is a vertical sectional view taken on the line 8—8 in FIG. 6;

FIG. 9 is a front elevational view, partially in cross section, illustrating another modified construction;

FIG. 10 is a fragmentary horizontal sectional view taken on the line 10—10 in FIG. 9;

FIG. 11 is a front elevational view, partially in cross section, illustrating yet another modified construction;

FIG. 12 is a front elevational view, partially in cross section, illustrating a very basic or simplified exercising device embodying the teachings of the present invention;

FIG. 13 is a perspective view, on a reduced scale, showing a device of the type illustrated in FIG. 9 provided with a length of rope with operating handles; and

FIG. 14 is a perspective view, also on a reduced scale, showing the device of FIG. 11 provided with a length of rope which is pulled continuously in one direction during the operation of the device.

Referring to the drawings more particularly by reference numerals, specifically FIGS. 1 through 5, 16 indicates generally an exercising device constructed in accordance with the teachings of the present invention, which includes a body member 18 and a sleeve member 20 removably and adjustably mounted thereon.

The body member 18 contains an elongated shaft portion 22, preferably of cylindrical cross section, with an upper hub portion 24 with an outer peripheral surface 25 adjacent the upper end thereof, said hub portion being provided with two diametrically opposed, vertically extending passageways or slots 26 in the outer peripheral surface which have the bottom or inner ends thereof flared outwardly in an arc as at 28, for a purpose to appear. A plate-like tongue portion 30 projects upwardly above

the upper hub portion and contains an aperture 32, the lower part of said aperture coinciding with a groove 34 contained in the upper or end surface of the hub portion and interconnecting the slots 26. If desired, the tongue could be provided with two separate apertures, one adjacent the upper end thereof and one in registry with the groove 34, but it is preferably from a machining standpoint to employ a single elongated aperture.

The lower end of the shaft 22 contains a stud portion 36 of reduced diameter which provides a shoulder 38 between it and the shaft 22. Slidably and rotatably mounted on the stud portion 36 is a lower hub member 40 with an outer peripheral surface 42 which also contains two diametrically opposed passageways or slots 44 in said outer surface, the upper or inner ends of the slots 44 being flared outwardly in an arc as at 46 in a manner similar to the construction of the slots 26. A disc-like stop member 48 is fastened to the lower end of the stud portion 36 by a screw 50, thereby limiting the vertical movement of the lower hub member 40 between an upper position in which it abuts the shoulder 28 and a lower position in which it abuts the stop member 48.

The sleeve member 20 has an inside diameter which is only slightly greater than the outside diameter of the hub portion 24 and the hub member 40, and is of a length to extend between the outer ends of the hubs when the lower hub member is in the upper position as shown in FIG. 2. The lower of the sleeve member 20 is removably fastened to the lower hub member 40 as by means of a machine screw 52. Formed in the upper end of the sleeve member 20 are a plurality of circumferentially spaced, circular openings 54 (FIG. 2) which are adapted to receive a detent 56 with a rounded outer end surface which is positioned in a socket 58 (FIG. 3) contained in a flattened surface 59 of the upper hub portion 24 and urged into the sleeve-engaging direction by a coiled spring 60.

It will be apparent that when the lower hub member 40 is in the upper or controlled rotation position, the lower hub member and the sleeve 20 can be rotated, notch-by-notch, relative to the shaft 22 and the upper hub portion 24, the detent 56 being cammed into a retracted position as the sleeve is rotated relative thereto and thence moving out to an opening engaging position when the next opening 54 comes into alignment therewith.

On the other hand if one wishes to quickly rotate the sleeve member 20 and the lower hub member relative to the upper hub portion (e.g. where it is desirable to make several complete revolutions hurriedly) the lower hub member 40 can be moved to the lower or free position (FIGS. 4 and 5) in which the openings 54 in the upper end of the sleeve member 20 are below the detent 56, whereby the latter is in free sliding engagement with the smooth inner surface of the sleeve member. It will be noted that by adjusting the length of the sleeve member 20, the free rotation can be achieved with the lower hub member 40 in either the upper or the lower position. However, the illustrated construction is preferred because otherwise the sleeve member would project upwardly adjacent the tongue portion 30 during the free rotation operation.

When the device is to be used as an exerciser, a length of rope 62 could be inserted upwardly through one of the slots 44 in the lower hub member 40, through one of the slots 26 in the upper hub portion 24, through the groove 34, and thence downwardly through the other slots 26 and 44. The sleeve member 20 could then be rotated the desired number of turns, or portions of a turn, with the bottom hub member in either the upper or lower position so as to cause the rope 60 to be wrapped around the shaft 22 the desired number of turns as shown in FIG. 2. Obviously, this manner of inserting the rope into the device would have to be followed if the openings 26 and 44 were enclosed passageways instead of slots which are open to the outer surfaces of the hubs. This type of construction would function satisfactorily but would not have the addi-

tional advantages contained in the preferred construction.

Therefore, it will be understood that in the preferred construction illustrated, the rope is easily and quickly installed in the device by first removing the screw 52, slipping the sleeve member 20 from the body member 18, inserting the rope through the aperture 30 and then dropping both ends of the rope downwardly into the grooves 26 and 44 on the opposite sides of the body member. Thereafter, the sleeve members 20 can be quickly replaced on the body member and the screw 52 returned to its securing position. The sleeve member 20 and the lower hub member 40 can then be rotated the desired number of turns or portions of a turn, as previously described.

When the rope 62 has been properly positioned in the device, the exerciser 16 may be suspended from a support such as a hook or peg, by means of the aperture 32, or, a special strap 59 with a metal ring 61 at one end and a doubled-back portion 63 at the other end thereof can be inserted through the aperture 32 in the manner shown in FIG. 1 and the part of the strap containing the portion 63 placed between the top or side of a door and the door frame adjacent thereto.

The operator can then grasp one end of the rope 62 projecting from the bottom of the device, and, by pulling on it in a hand-over-hand fashion, exercise certain muscles of the body. The outer surface of the shaft portion 22 and the inner surfaces of the slots 26 and 44 are preferably polished to reduce the amount of wear of the rope resulting from the operation of the device. It will also be noted that the arcuate surfaces 28 and 46 at the inner ends of the slots 26 and 44, respectively, conform to the shape of the rope 62 which is twisted around the shaft portion 22 so as not to adversely affect the frictional drag on the rope or cause an undue amount of wear, as would result if sharp corners were used. Stating it differently, it has been found advisable to have smooth continuous surfaces devoid of sharp projections for best all around operation of the device. Thus, it will be noted that the device provides a continuous resistance of constant magnitude (per setting) throughout the entire range of motion.

If the exercising device is positioned above the user's head, the muscles which are exercised during a hand-over-hand pulling of the rope through the device as previously described would be the same as those exercised by a hand-over-hand climbing of a fixed rope. On the other hand, if the device were on a level with the user as the latter turned away from it, the result would be somewhat similar to that achieved by pulling on springs or by lifting weights actuated through a pulley arrangement.

After the rope has been pulled through the device in one direction, the user can grasp the other end of the rope and pull it thorough in the opposite direction. Another manner of using the device is to pull alternately on first one end of the rope and then on the other end thereof so as to move the rope back and forth through the device.

It will be obvious from the above description that the amount of friction, and therefore the amount of force required to pull the rope through the device, can be varied at will by merely rotating the sleeve member 20 and the lower hub member 40 relative to the shaft 22 and the upper hub portion 24. Also, as previously mentioned, this can be achieved either a notch at a time as when the lower hub member 40 is in the upper position, or by one or more complete turns as when the lower hub member 40 is in the lower position. Thus, a user may wish to start with a relatively low frictional resistance and gradually increase the amount of force required to pull the rope through the device, as by rotating the sleeve one notch each day.

It will be readily apparent that this small, quiet, safe, and relatively inexpensive exercising device can take the place of many larger and more cumbersome devices.

Another embodiment of the present invention, which is shown in FIG. 6, is somewhat more simple than the

device described above, and although it has a certain amount of adjustability, it is not as fully adjustable as the previously described embodiment. The modified construction includes a shaft 64 which has hub portions 66 and 68 at the opposite ends thereof, the hub portion 66 being preferably provided with two axially extending diametrically opposed slots 70, and the hub portion 68 being preferably provided with a single axially extending slot 72. It is preferred that the slot 72 be in axial alignment with one of the slots 70 for ease in forming. Here again, the slots could be replaced with enclosed passageways or holes but the slot construction is by far the preferred one for obvious reasons. As shown in FIGS. 6 and 8 the inner ends of the slots 70 are flared outwardly in an arcuate manner as at 74, and the inner end of the slot 72 is flared outwardly as at 76 in the same manner.

Fastened to the end face of the hub portion 68 is a plate-like L-shaped flange or tongue 78 which contains a first aperture 80 in axial alignment with the shaft 64, and a second aperture 82 approximately midway between the hub portions 66 and 68. The tongue 78 includes a guide portion 82' which projects inwardly over the outer peripheral surface of the hub portion 68 for a purpose to appear. The hub portion 66 contains a recess 84 in a flattened area which receives a spring-biased detent 86 which is similar in construction to the one previously described.

Slidably and removably mounted on the hub portions is a tubular sleeve member 88 which includes a slot 90 at one end thereof and an aperture 92 at the other end, preferably in axial alignment with the slot 90. The slot 92 is of a width to receive the guide portion 82' of the flange, and the length of the sleeve member is such that when it is moved to the right so as to fully engage the guide portion in the slot (FIG. 6), the aperture 92 is in alignment with the detent 86 and the sleeve member is maintained in position.

To use the device as an exerciser, the detent 86 is depressed against the action of the spring, and the sleeve 88 removed from the body member. The rope 62 is positioned in the slot 72, wrapped around the shaft 64 the desired number of times, and then positioned in either of the slots 70. Thereafter, the sleeve 88 is slipped over the hub portions 66 and 68 with the slot 90 in alignment with the guide portion 82', and, when the sleeve is fully on the body member, the detent 86 is engaged in the aperture 92.

If the person desires to use the device in such a manner that the rope 62 is pulled through it in one direction, it would be hung from a support by means of the aperture 80. On the other hand, if the rope is to be pulled back and forth, first with one arm and then with the other arm, the device would be supported by means of the aperture 82.

When it is desired to change the amount of force required to pull the rope through the device, the detent 86 can be depressed and the sleeve member 88 quickly removed from the body member and the rope removed from the slot 70 and either unwrapped from or wrapped further around the shaft 64. Thereafter, the sleeve member 88 is reinserted on the body member as previously described. It will be noted that the two diametrically opposed slots 70 in the hub portion 66 provide for a half-turn adjustment, and, if a quarter-turn adjustment were desired, a third slot could be provided between the two diametrically opposed slots 70.

As in the embodiment first described, the arcuate surfaces 74 and 76 permit the rope 62 to be twisted around the shaft 64 without causing undue wear or additional pressure at the edges of the slot.

A further modified construction, shown in FIGS. 9 and 10, is somewhat similar to the construction shown in FIG. 6 in that it includes a shaft 94 with said hub portions 96 and 98 at each end thereof, one of which has a single slot

100 and the other of which is provided with two diametrically opposed slots 101. This modification is also provided with a spring-biased detent 102 which is similar in construction to the one previously described. However, in the second modification a sleeve portion 104 with a double-flanged portion 106 is formed from sheet material which is wrapped around the hub portions 96 and 98 and the free ends thereof fastened together with rivets 108. An opening 110 is formed in the two face-to-face flange portions and a two-piece annular eye member 112 swaged together to further fasten together the two-piece flange portion 106. The sleeve portion 104 is also provided with a small aperture 114 at the bottom thereof to receive the detent 102 and maintain the sleeve portion on the body member.

In use, a rope is employed with the second modified construction in the same manner as previously described with reference to the modification shown in FIG. 6. Also, it will be readily apparent that the sleeve portion 104 can be easily and quickly removed from the body member by depressing the detent 102 whereby the position of the rope can be changed relative to the number of turns on the shaft 94.

A third embodiment, shown in FIG. 11, is very similar to the construction shown in FIG. 9 in that a sleeve portion 116 and a flange portion 118 are formed from sheet material which is wrapped around the hub portion and riveted together at 120. However, in this construction, a separate plate-like supporting bracket 122 is fastened to the flange portion 118 by the rivets 120, said supporting bracket containing an elongated arcuate slot 124. It will be noted that when the device is supported on a stud or hook which projects through the slot 124, tilting the device will cause the stud or hook to slide to either one end or the other of the slot, depending upon which end of the rope is being pulled, so that the rope will extend from the device in substantial axial alignment therewith.

A fourth modification and slightly different embodiment of the same invention is shown in FIG. 12. It will be noted that in all of the embodiments previously described, each was provided with a sleeve member to prevent the rope from escaping from the slot, which has been mentioned as the preferred construction. In the embodiment shown in FIG. 12 a separate sleeve is not necessary and therefore it is a very simple and economical construction. Thus, it includes a shaft 126 which has two hub portions 128 and 130 formed integral therewith at the ends thereof. The hub portion 128 has a single axially extending passageway 132 therethrough, and the hub portion 130 has a similar passageway 134 in alignment with the passageway 132. Here again, the inner ends of the passageway are preferably flared outwardly in the same manner as previously described in order to prevent the rope from binding on the corners. Diametrically opposite to the aforementioned passageways are two tapped recesses 136 and 138 which are also in alignment and which receive machine screws 140 and 142, respectively. These screws removably fasten a wire-like arcuate supporting member 144 to the hub portions approximately 180° from the passageways 132 and 134.

To use this modified construction as an exercising device, a rope 146 is inserted through one passageway, wrapped around the shaft the desired number of times, and then inserted through the other passageway. The device can then be hung from a support such as a door knob or the like (not shown) by means of the support member 144, and the device used in the manner previously described. Thus, it will be noted that the modification shown in FIG. 12 has somewhat the same action as the modification shown in FIG. 11 in that the arcuate supporting member 144 permits the device to pivot about the supporting stud or door knob depending upon which end of the rope is being pulled.

Although this embodiment has the disadvantage that it is necessary to rethread the rope 146 through the open-

ings each time an adjustment is made, it is extremely simple in construction and relatively inexpensive to manufacture, and, for that reason, has certain advantages over the other constructions previously described.

As mentioned hereinabove, a short length of rope can be pulled through any of these devices first in one direction and then in the other, or, a relatively long length of rope can be pulled continuously in one direction and then the direction reversed so as to pull the rope continuously in the other direction. FIG. 13 shows the device of FIG. 9 provided with a relatively short length of rope 148 which has stirrup-like handles 150 and 152 fastened to the ends thereof, whereby the rope can be moved back and forth by pulling first on one handle and then on the other. On the other hand, FIG. 14 shows the device of FIG. 11 mounted on a peg 153 and provided with a relatively long length of rope 154 which has removable gripping members 146 mounted thereon, whereby the rope can be pulled through the device first in one direction and then in the other direction. The gripping members 156 are preferably made of a soft resilient material such as rubber or one of the synthetic foams such as polyurethane or styrofoam, and are generally cylindrical in shape with a longitudinal slot for receiving the rope 154. The slots are preferably larger than the diameter of the rope when the gripping members are in the free position so that the user can move his hands, one in front of the other, with the gripping members positioned therein. Obviously, the person using the device could wear leather gloves to protect his hands instead of using the gripping members 156.

Thus, it is apparent that there has been provided a novel exercising device, together with several modifications thereof embodying the same inventive concept, which fulfills all of the objects and advantages sought therefor. All of the embodiments are simple in construction and relatively inexpensive to manufacture, and are of light weight and small size whereby they can be easily carried from one location to another or stored away in a small space. Furthermore, they are safe and noiseless and are therefore well suited for home use. All of the devices are adjustable so that the user can vary the amount of force required to pull a rope through the device, and the embodiment shown in FIGS. 1 through 5 permits a fine adjustment to be made easily and quickly by merely rotating the sleeve member relative to the body member until the desired change is achieved. However, the amount of resistance at any one setting is substantially constant so as to require a continuous pull of constant magnitude throughout the range of movement. The exercising device described herein is also of universal application in that it can be employed to exercise the same muscle which would be used in climbing a rope, pulling springs, lifting weights actuated through pulleys, and the like. It is to be understood that the foregoing description and the accompanying drawings have been given only by way of illustration and example and that changes and alterations in the present disclosure which will be readily apparent to one skilled in the art are contemplated as within the scope of the present invention.

We claim:

1. An exercising device, comprising:

a body member including a shaft with opposed ends and a hub portion adjacent each end thereof;

a passageway through each hub portion positioned radially outwardly of the shaft, said passageways being in axial alignment with each other;

a rope-like member extending through the passageways and wrapped around the shaft a selected number of turns;

fastening means at each hub portion positioned diametrically opposite to the passageway therethrough; and

support means connected to said fastening means for suspending the device from a support.

2. An exercising device, comprising:

a body member including a shaft with opposed ends and a hub portion adjacent each end thereof;

a rope-like member;

a slot in each hub portion of a size to slidably receive the rope-like member, said rope-like member extending through the slots and wrapped around the shaft a selected number of turns;

a sleeve member removably mounted on the body member so as to at least partially cover the slots in both hub portions, said sleeve being formed from a sheet of material which is wrapped around said body member with the ends thereof fastened together to provide a flange portion; and

means fastened to the flange portion for suspending the sleeve from a support.

3. An exercising device, comprising:

a body member including a shaft with opposed ends and a hub portion adjacent each end thereof;

a rope-like member;

a slot in each hub portion outwardly of the shaft, said slots being of a size to slidably receive the rope-like member, said rope-like member extending through the slots and wrapped around the shaft a selected number of turns;

a sleeve member removably mounted on the body member so as to at least partially cover the slots in both hub portions, said sleeve being formed from a sheet of material which is wrapped around said body member with the ends thereof fastened together to provide a flange portion; and

a bracket member with an arcuate slot therein fastened to said flange portion for suspending the sleeve member from a support.

4. An exercising device, comprising:

a body member including a shaft with opposed ends and a hub portion adjacent each end thereof;

a rope-like member;

a slot in each hub portion outwardly of the shaft, said slots being of a size to slidably receive the rope-like member, said rope-like member extending through the slots and wrapped around the shaft a selected number of turns;

a supporting bracket fastened adjacent the end of one of said hub portions and extending both axially alongside of and transversely of said body member; and removable means covering at least a portion of each slot to prevent the rope from moving outwardly from the slots.

5. An exercising device, comprising:

a body member including a shaft with opposed ends and a hub portion adjacent each end thereof;

a rope-like member;

a slot in each hub portion outwardly of the shaft, said slots being of a size to slidably receive the rope-like member, said rope-like member extending through the slots and wrapped around the shaft a selected number of turns;

a supporting bracket fastened to the end of one of said hub portions and extending both axially alongside of and transversely of said body member; and

a rigid sleeve member removably mounted on the body member so as to at least partially cover the slots in both hub portions.

6. An exercising device, comprising:

a body member including a shaft with opposed ends and a hub portion adjacent each end thereof;

a rope-like member;

a slot in each hub portion outwardly of the shaft, said slots being of a size to slidably receive the rope-like member, said rope-like member extending through the slots and wrapped around the shaft a selected number of turns;

an L-shaped supporting bracket connected to the end of one of said hub portions and including a portion which extends transversely of the body member and

a portion which extends substantially parallel to the shaft of the body member;

a first supporting aperture in said transverse portion and a second supporting aperture in said parallel portion; and

removable means covering at least a portion of each slot to prevent the rope-like member from moving outwardly from the slots.

7. An exercising device, comprising in combination:

a body member including an elongated shaft portion with a smooth outer surface and with a hub portion adjacent each end of the shaft portion, the smooth shaft portion being of a length to receive at least several turns of rope therearound;

at least one passageway in each hub portion positioned radially outwardly of the shaft and being of a size to slidably receive a length of rope passing there-through;

a length of rope having two free ends extending through a passageway in one hub portion, around said shaft portion in contact with the smooth outer surface thereof, and thence through a passageway in the other hub portion;

handle means adjacent each of the free ends of said length of rope; and

means connected to the body member for suspending the device from a support.

8. An exercising device, comprising in combination:

a body member including an elongated shaft portion with a smooth outer surface and with a hub portion adjacent each end of the shaft portion, the smooth shaft portion being of a length to receive at least two turns of rope therearound;

at least one slot in each hub portion of a size to slidably receive a length of rope positioned therein;

a length of rope having two free ends extending through a slot in one hub portion, around said shaft portion in contact with the smooth outer surface thereof, and thence through a slot in the other hub portion;

removable means associated with said slots for preventing the length of rope from moving transversely therefrom;

means for suspending the device from a support; and

handle means adjacent each of the free ends of the rope.

9. An exercising device, comprising in combination:

a body member including an elongated shaft portion with a smooth outer surface and with a hub portion adjacent each end of the shaft portion, the shaft portion being of a length to receive at least two turns of rope therearound;

at least one generally axially extending slot in each hub portion positioned radially outwardly of the shaft and being of a size to slidably receive a length of rope positioned therein;

a length of rope having two free ends extending through a slot in one hub portion, around said shaft portion in contact with the smooth outer surface thereof, and thence through a slot in the other hub portion;

removable means associated with said slots for preventing the length of rope from moving transversely therefrom;

means for suspending the device from a support; and

a handle attached to each free end of the length of rope.

10. An exercising device comprising in combination:

a body member including an elongated shaft portion of a length to receive several turns of rope therearound;

spaced-apart guide means associated with the body member for guiding a length of rope onto and off of said shaft portion;

means connected to the body member for removably attaching it to a support;

a length of rope for sliding frictional engagement with said shaft portion extending through one of said guide means, at least partially around the shaft portion and thence through the other guide means to provide two free ends of rope exteriorly of the body member; and

a handle member attached to each of said free ends of rope.

11. An exercising device, comprising in combination:

an elongated tubular housing with opposed ends;

an elongated shaft axially positioned in said housing and being of a length to receive several turns of rope therearound;

at least one passageway adjacent each end of the housing in communication with the interior thereof adjacent the shaft, said passageways being of a size to slidably receive a length of rope;

a length of rope for sliding frictional engagement with the shaft extending through a passageway adjacent one end of the housing, at least partially around the shaft, and thence through a passageway adjacent the other end of the housing to provide two free ends of rope exteriorly of said housing; and

a handle member attached to each of said free ends of rope for pulling said length of rope back and forth through said housing in sliding frictional engagement with the shaft.

12. An exercising device as defined in claim 11 which includes attachment means extending therefrom for removably attaching it to a support.

13. An exercising device as defined in claim 11 which includes flange-like means connected to the housing for removably attaching it to a support, said last named means containing an elongated opening which extends from adjacent one end of the housing to adjacent the other end thereof.

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RICHARD C. PINKHAM, *Primary Examiner*.
W. R. BROWNE, *Assistant Examiner*.