

No. 685,788.

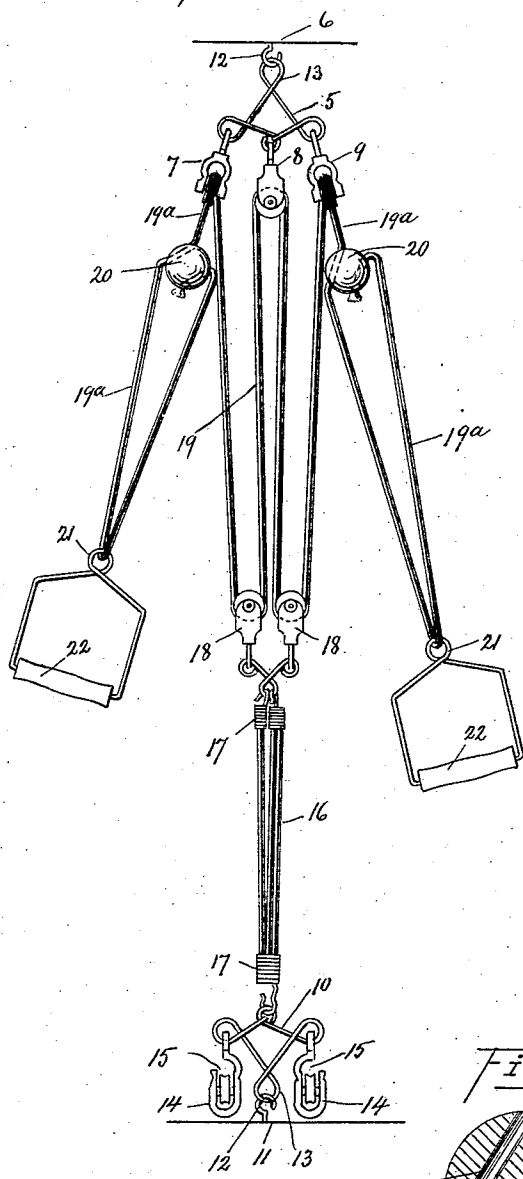
Patented Nov. 5, 1901.

**B. A. McFADDEN.**  
**EXERCISING APPARATUS.**

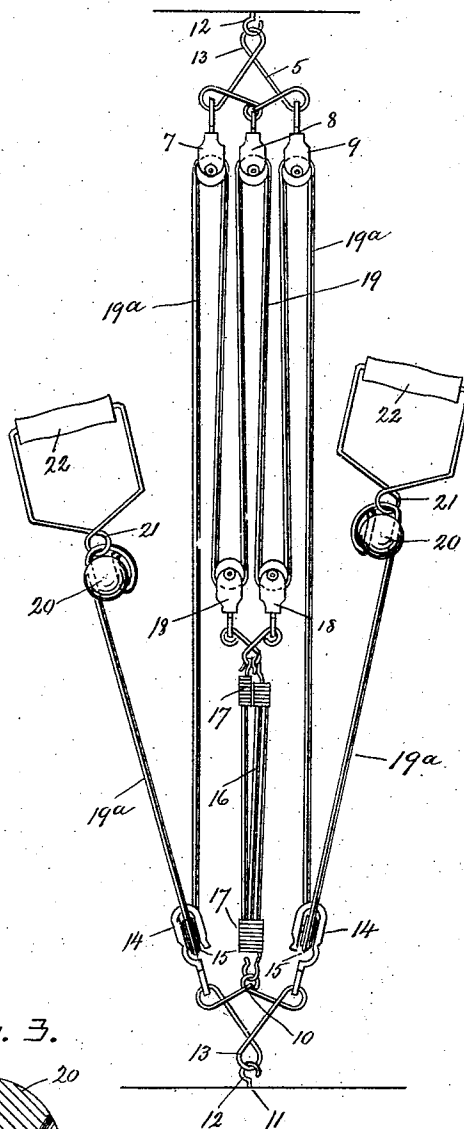
(Application filed Dec. 21, 1900.)

(No Model.)

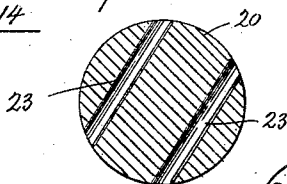
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## EXERCISING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 685,788, dated November 5, 1901.

Application filed December 21, 1900. Serial No. 40,628. (No model.)

*To all whom it may concern:*

Be it known that I, BERNARD ADOLPHUS MCFADDEN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Exercising Apparatus, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to exercising apparatus, and particularly to apparatus of this class employing elastic cords, pulleys, and ropes or non-elastic cords provided with handles and in which the exercising is accomplished by pulling on said ropes or non-elastic cords; and the object of the invention is to provide an apparatus of this class with means whereby the direction of the pull or the point from which the pull is made may be changed when desired.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same reference characters in each of the views, and in which—

Figure 1 is a front elevation of an exercising apparatus constructed according to my invention; Fig. 2, a similar view showing the parts in a different position, and Fig. 3 a sectional view of a detail of the construction.

In the drawings forming part of this specification I have shown an exercising apparatus of the class specified which is adapted to be secured to two stationary supports, one of which is overhead or in an elevated position and the other preferably at the floor or about level with the feet of the party using the same, and this apparatus consists of a cross-head or pulling attaching device 5, which is adapted to be secured to an overhead support 6 and which is provided with three pulleys 7, 8, and 9, and a supplemental cross-head or attaching device 10, which is adapted to be connected with or secured to a support 11, preferably at about the level of the feet of the operator, and the connection of these cross-heads or attaching devices 5 and 10 is preferably what is known as a "loose" connection, the said cross-heads or attaching devices being free to swing on the parts with which they are con-

nected, and said connection being preferably made by means of hooks 12, secured to the supports, and eyelets or rings 13, connected with or forming a part of the cross-heads or attaching devices.

Loosely connected with the lower cross-head or attaching device 10 is an elastic 16, preferably composed of a plurality of elastic cords secured together at each end, as shown at 17, and a rope or non-elastic cord 19 is passed through the upper central pulley 8 and through each of the pulleys 18, and the separate reaches or sides 19<sup>a</sup> thereof are then passed through the upper pulleys 7 and 9, as clearly shown in Fig. 1, and each of said sides or separate reaches 19<sup>a</sup> of the rope or non-elastic cord 19 is then connected with rings or eyelets 21, formed on or connected with handle devices 22.

In my invention the lower cross-head or attaching device 10 is provided with two supplemental pulleys 14, which are loosely connected therewith and which are open at one side, as shown at 15, and in connecting the ends of the separate sides or reaches 19<sup>a</sup> of the rope or non-elastic cord 19 with the handle devices 22 I employ balls 20, a sectional detail of one of which is shown in Fig. 3, and said reaches or sides 19<sup>a</sup> of the rope or non-elastic cord 19 are passed loosely through the rings or eyelets 21, formed on or connected with the handle devices 22, and the ends of said separate sides or reaches 19<sup>a</sup> of the rope or non-elastic cord 19 are then securely connected with the balls 20, this connection being preferably made by passing the ends of said rope or cord through said balls and tying knots therein; but this connection, however, may be made in any desired manner. In Fig. 3 I have shown one of the balls 20 provided with two transverse bores or passages 23, through which, in the form of construction shown, the rope or non-elastic cord 19 or the separate ends thereof are passed, as hereinbefore described, and with this construction it will be seen that the said balls are free to slide on said rope or non-elastic cord and may be raised into the position shown in Fig. 1 or lowered into the position shown in Fig. 2.

When the parts of the apparatus are in the position shown in Fig. 1, the operator stands in front of the apparatus and pulls on the

handles 22, and various positions of the body may be assumed and various movements adapted, all of which are familiar to operators of exercising apparatus of this class, and whenever the operator desires to change the point from which the pull is made the balls 20 are moved down adjacent to the handles, as shown in Fig. 2, and the rope or non-elastic cord 19 or the separate sides or reaches thereof are hooked into the pulleys 14, as clearly shown in Fig. 2, and the apparatus is operated by pulling upwardly instead of downwardly, and various positions of the body may be assumed and various movements adapted, the same as with the apparatus when the parts thereof are in the position shown in Fig. 1.

The improvement which constitutes the basis of this application is found in the balls 20, which are movable on the rope or non-elastic cord 19 or the separate sides or reaches 19<sup>a</sup> thereof and in the supplemental pulleys 14, the other parts of this apparatus being well known, and by means of this improvement I provide an apparatus of the class specified by means of which a far greater variety of movements and many movements of a different character are possible than with apparatus of this class as heretofore constructed. My invention, however, is not limited to the balls 20, constructed as herein described, these balls forming, as will be seen, means for lengthening the sides or separate reaches 19<sup>a</sup> of the rope or non-elastic cord 19, and any suitable device by means of which this operation may be performed may, as will be readily understood, be employed without departing from the spirit of my invention or sacrificing its advantages, and although I have shown the pulleys 14 connected with the same device with which the elastic device 16 is connected it will be apparent that any suitable connection may be provided for the said pulleys.

Although I have described the cord 19 as non-elastic, said cord may, under certain conditions, be elastic, or partially so, and my invention is not limited to the use of elastic material in the construction of this cord.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An exercising apparatus, comprising top and bottom attaching devices, open pulleys connected with the bottom attaching device, a plurality of pulleys connected with the top attaching device, intermediate pulleys connected with the bottom attaching device by an elastic cord or cords, and a rope or non-elastic cord passed through one of the top pulleys and through the intermediate pulleys, the separate sides or reaches of said rope or cord being then passed through two of the top pulleys and adjustably connected with

handles, the ends of said sides or reaches of said rope or non-elastic cord being provided with devices which are adjustably connected with the separate sides or reaches of said rope or non-elastic cord, and the end portions of said sides or reaches of said rope or cord being adapted to be connected with, or passed through the open pulleys connected with the bottom attaching device, substantially as shown and described.

2. An exercising apparatus, comprising top and bottom attaching devices, three pulleys connected with the top attaching device, two open pulleys at the bottom of the apparatus, two intermediate pulleys connected with the bottom attaching device by an elastic connection, and a rope or cord passing through one of the top pulleys and through the intermediate pulleys, the separate sides or reaches of said rope or cord being then passed through two of the top pulleys and then loosely through handles connected therewith, and means for adjusting the lengths of the separate sides or reaches of said rope or cord, between said handles and the top pulleys, and the end portions of said sides or reaches of said rope or cord being adapted to be connected with, or passed through the open pulleys connected with the bottom attaching device, substantially as shown and described.

3. An exercising apparatus, comprising top and bottom attaching devices, three pulleys connected with the top attaching device, two open pulleys at the bottom of the apparatus, two intermediate pulleys connected with the bottom attaching device by an elastic connection, and a rope or cord passing through one of the top pulleys and through the intermediate pulleys, the separate sides or reaches of said rope or cord being then passed through two of the top pulleys and then loosely through handles connected therewith, and means for adjusting the lengths of the separate sides or reaches of said rope or cord, between said handles and the top pulleys, consisting of a ball with which the ends of the separate sides or reaches of the cords are connected, and through which said separate sides or reaches of said cord are passed, and the end portions of said sides or reaches of said rope or cord being adapted to be connected with, or passed through the open pulleys connected with the bottom attaching device, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 19th day of December, 1900.

BERNARD ADOLPHUS McFADDEN.

Witnesses:

F. A. STEWART,  
M. K. LOWERRE.