Dec. 10, 1929. V. DATTILO 1,738,987

EXERCISING DEVICE

Filed Dec. 21, 1928

Fig. 1.

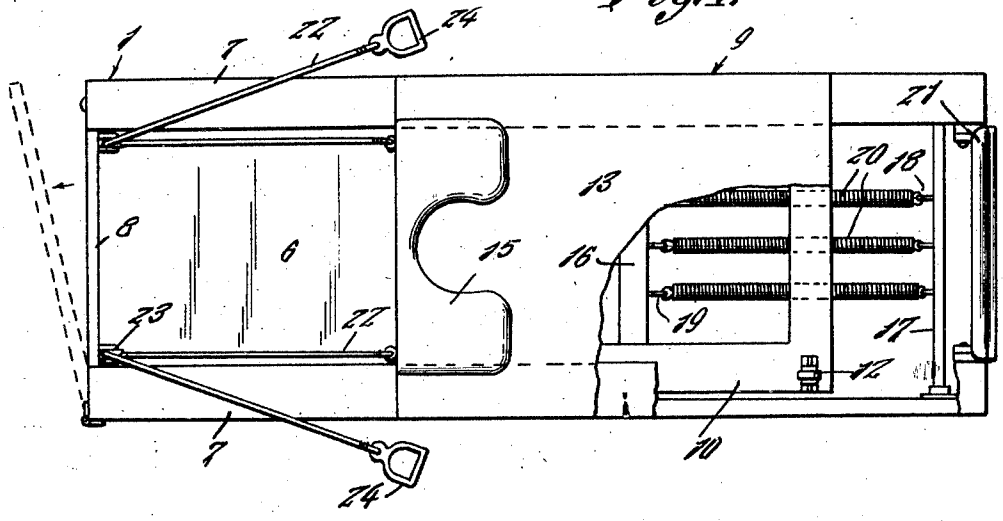
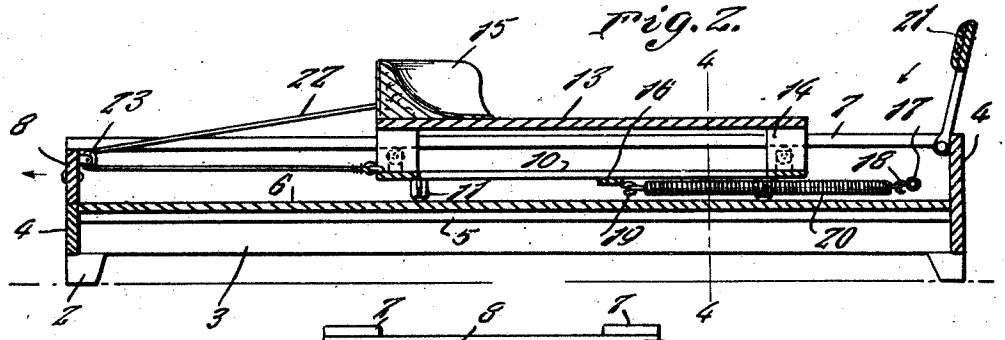


Fig. 2.



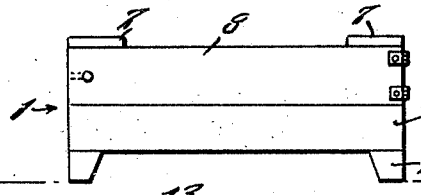


Fig. 3.

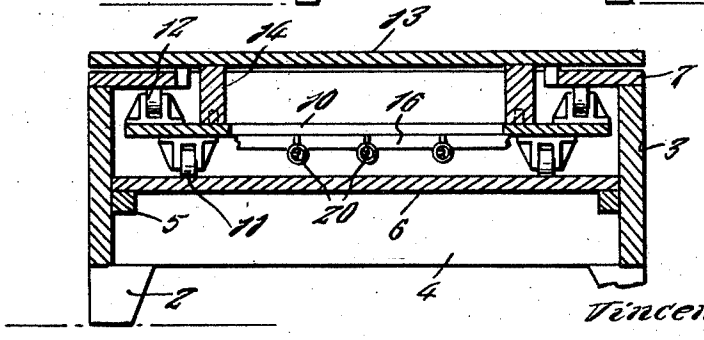


Fig. 4.

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UNITED STATES PATENT OFFICE

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EXERCISING DEVICE

Application filed December 21, 1928. Serial No. 327,659.

The present invention relates to improvements in exercising devices and has for its principal object to provide an apparatus that includes a housing within which is arranged for reciprocatory movement a carriage upon which the person using the device is adapted to lie when carrying out the exercises.

One of the important objects of the present invention is to provide an exercising device of the above mentioned character wherein retractile coil springs are associated with the stationary housing or base at one end, and with the adjacent end of the movable carriage for normally maintaining the carriage at one end of the housing or base, means being provided whereby the occupant of the carriage may effect the movement of the carriage to the opposite end of the base against the tension of the spring either by using his feet or hands, and in this manner, the limbs of the user of the device will be exercised in a positive and efficient manner.

Another important object of the invention is to provide an exercising device of the above mentioned character that can be constructed to provide the bottom of a couch or davenport when the apparatus is not to be used for exercising purposes.

Still a further object is to provide an exercising device of the above mentioned character that is simple in construction, inexpensive, strong and durable and further well adapted to the purpose for which it is designed.

Other objects and advantages of the invention will become apparent from the following description when taken in connection with the accompanying drawing.

In the accompanying drawing wherein like reference characters indicate corresponding parts throughout the same:

Figure 1 is a top plan view of the exercising device embodying my invention, parts being broken away.

Figure 2 is a longitudinal sectional view through the exercising device.

Figure 3 is a forward end elevation, and

Figure 4 is a sectional view taken approximately on the line 4—4 of Figure 2.

In the drawing wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates generally a substantially rectangular shaped base or housing, the same comprising the leg members 2 on the upper ends of which are supported the sides 3 and the end walls 4. Longitudinally extending strips 5 are secured on the inner faces of the intermediate portions of the side walls 3 to provide a support for the false bottom 6 as clearly indicated in Figures 2 and 4.

Relatively narrow boards 7 are secured along their outer longitudinal edges on the upper edges of the respective side walls 3 so that the inner portions of these boards extend inwardly of the side walls, as also indicated very clearly in Figure 4, and the purpose of this construction will be presently described.

The upper edge portion of the forward end wall is cut out to accommodate the horizontally swinging door 8, and this door is of substantially the same width as the base or housing 1. Any suitable securing means may be provided for maintaining the horizontally swinging door in a closed position.

Forming a salient part of the present invention is the carriage denoted generally by the numeral 9, the same being adapted for reciprocatory movement on the base 1 in the manner to be presently described in detail.

This carriage includes a rectangular shaped frame 10 that is of a width less than the distance between the side walls 3, and suitable rollers 11 are secured to the bottom side of the frame at the respective corners thereof for rolling engagement with the upper surface of the false bottom 6.

Similar rollers 12 are secured on the upper face of the frame 10 at the respective corners thereof for rolling engagement with the bottom faces of the respective boards 7, and in this manner the frame 10 is properly spaced between the guides 7, and the false bottom 6. Furthermore the rollers permit the free sliding movement of the carriage in a longitudinal direction.

A platform 13 is supported by the frame 10 in superposed relation with respect thereto by means of the supporting blocks 14 and this

platform is of a width substantially equal to the width of the base or housing 1, and the blocks 14 are of such height as to slightly space the bottom face of the longitudinal edge portions of this platform with respect to the upper faces of the guide boards 7, as clearly indicated in the drawing.

Arranged on the forward end portion of this platform 13 is a combined head and shoulder rest 15.

A cross bar 16 is attached to the under side of the frame 10 at the intermediate portion thereof while extending transversely between the sides 3 adjacent the rear end of the base or housing 1 is the tubular rod 17 that has extending laterally from the intermediate portion thereof the spaced hooks 18. Similar hooks 19 extend from the rear longitudinal edge portion of the cross bar 16.

A plurality of retractile coil springs 20 are connected at their forward ends to the hooks 19 and at their rear ends to the respective hooks 18. These retractile coil springs normally maintain the carriage 9 adjacent the rear end portion of the base or housing 1.

A vertically swinging foot rest 21 is hinged at its lower end within the rear end portion of the base or housing 1, and when disposed vertically in an operative position, the same is arranged in the manner as clearly shown in Figure 2. When not in use, the foot rest is capable of swinging downwardly for disposition below the top of the base so as to be concealed.

A pair of cables 22 are secured at one end to the forward end of the frame 10, these cables being trained over suitable pulleys 23 secured on the inner side of the horizontally swinging door 8 and attached to the free ends of these cables are the handles 24.

In operation, a person lies upon the platform 13 with his head and shoulders resting on the member 15 and normally his legs will assume a bending position. However, by placing the feet against the foot rest 21 and pushing against the same, said carriage 9 will be caused to move forwardly against the tension of the coil springs 20, and in this manner the lower limbs of the person using the device will be thoroughly exercised.

By removing the feet from the foot rest 21, the retractile coil springs 20 will automatically return the carriage 9 to its normal position adjacent the rear end of the base.

The carriage may be actuated by hand in a similar manner by grasping the handles 24 and exerting a rearward pull on the free ends of the cables 22, and it is readily obvious that such actuation of the cables will result in the carriage 9 moving forwardly against the tension of the retractile coil springs. In this manner the arms of the user of the device will be exercised.

The carriage 9 may be removed entirely from the base by disconnecting the springs 20 from the hooks 19 and by swinging the door 8 to an open position and sliding the carriage through the forward end of the base or housing.

When not in use, the device may be employed as the base portion of a couch or davenport and the exercising apparatus will be entirely concealed from view.

The provision of an exercising device of the above mentioned character will enable a person to exercise his limbs in a positive and efficient manner. The simplicity of my device enables the same to be constructed at a low cost, and furthermore the device will be strong and durable.

While I have shown the preferred embodiment of my invention it is to be understood that minor changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claims.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

1. In an exercising device of the class described, a base including side and end walls, and a bottom, guides extending inwardly from the upper edge portion of the side walls, a platform arranged for slidable movement on the base, said platform including a frame, rollers secured on the bottom of the frame for engagement with the bottom of the base, additional rollers secured on the upper face of the frame for engagement with the bottom faces of the respective guide members, a human body supporting platform secured on the frame for disposition above the guide members, retractile coil springs connected at one end to the rear end portion of the base, and at their opposite ends to the adjacent end of the frame for normally holding the movable carriage adjacent the rear end portion of the base, and means whereby the occupant of the platform can move the carriage forwardly on the base against the tension of the retractile coil springs.

2. In an exercising device of the class described, a base including side and end walls, and a bottom, guides extending inwardly from the upper edge portion of the side walls, a platform arranged for slidable movement on the base, said platform including a frame, rollers secured on the bottom of the frame for engagement with the bottom of the base, additional rollers secured on the upper face of the frame for engagement with the bottom faces of the respective guide members, a human body supporting platform secured on the frame for disposition above the guide members, retractile coil springs connected at one end to the rear end portion of the base, and at their opposite ends to the adjacent end of the frame for normally holding the movable carriage adjacent the rear end portion of the base, means whereby the occupant of the plat-

form can move the carriage forwardly on the base, against the tension of the retractile coil springs, said last mentioned means comprising a foot rest attached to the rear end wall of the base.

3. In an exercising device of the class described, a base including side and end walls, and a bottom, guides extending inwardly from the upper edge portion of the side walls, a platform arranged for slidable movement on the base, said platform including a frame, rollers secured on the bottom of the frame for engagement with the bottom of the base, additional rollers secured on the upper face of the frame for engagement with the bottom faces of the respective guide members, a human body supporting platform secured on the frame for disposition above the guide members, retractile coil springs connected at one end to the rear end portion of the base, and at their opposite ends to the adjacent end of the frame for normally holding the movable carriage adjacent the rear end portion of the base, means whereby the occupant of the platform can move the carriage forwardly on the base against the tension of the retractile coil springs, said last mentioned means including a flexible member secured at one end to the forward end of the carriage, said flexible member being trained over a pulley secured on the forward end wall of the base and a gripping handle attached to the free end of the flexible member.

In testimony whereof I affix my signature.

VINCENT DATTILO.