July 30, 1946. T. M. EYNON 2,405,024

EXERCISING DEVICE

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Fig. 1

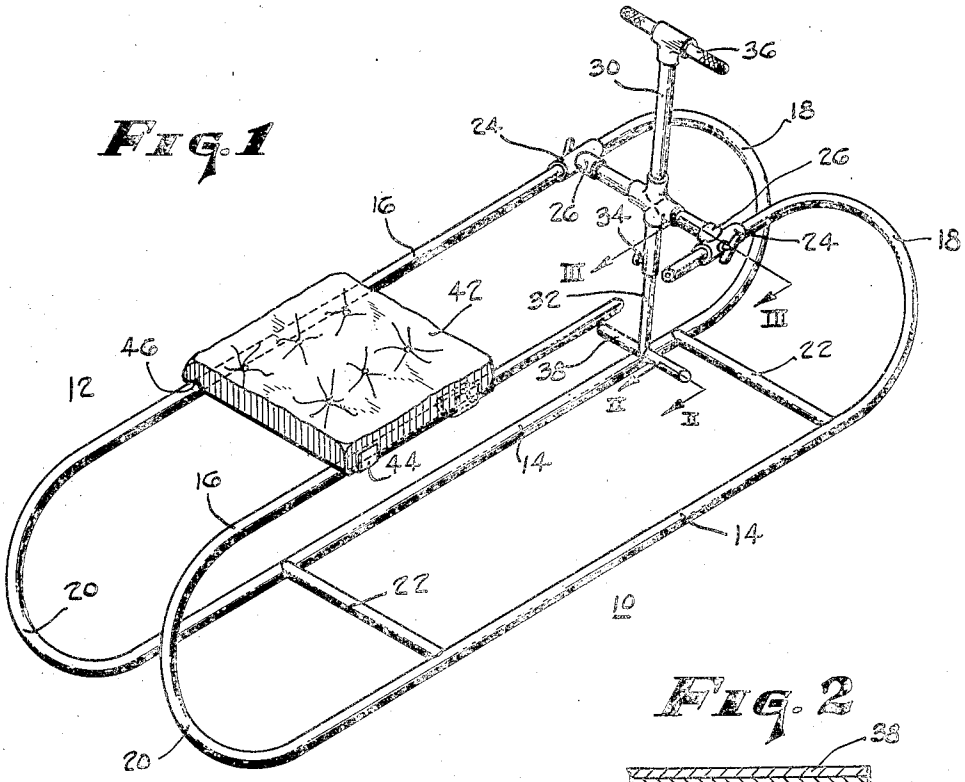
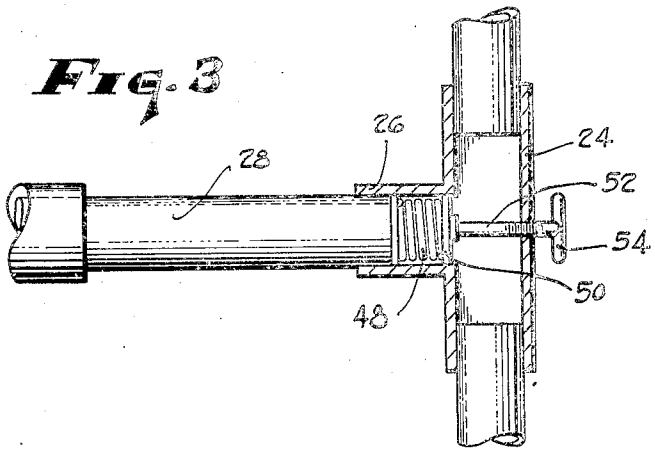


Fig. 2

Fig. 3



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EXERCISING DEVICE

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1 Claim. (Cl. 272—58)

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This invention relates to an exercising device and has for an object to produce a light, inexpensive and easily assembled construction.

A further object is to produce an exercising device which can be used by persons of different stature with minimum adjustment, which can be effected by anyone and without skill or much effort.

A still further object of the invention is to produce a device of the type set forth the use of which will exercise all the essential muscles of the body.

A still further object is to produce an exercising device which can be used by persons having varying degrees of physical strength, as well as by persons who may have permanently or temporarily lost the use of one arm or one leg.

These and other objects are effected by the invention as will be apparent from the following description and claims taken in connection with the accompanying drawing, forming a part of this application, in which:

Fig. 1 is a perspective view of an exercising device embodying my invention;

Fig. 2 is an enlarged section on line 2—2 of Fig. 1; and

Fig. 3 is an enlarged section on line 3—3 of Fig. 1.

Referring to the drawing, my improved exercising device includes a supporting framework, a seat slidable on the framework, a rocker arm adapted to be grasped by the person using the device for support while performing the desired movement, and means for adjusting the size and resistance of the device.

The supporting frame is preferably formed of bent tubing which affords sufficient strength, which is light, inexpensive and easy to make. As shown, the supporting frame comprises two side members 10 and 12, each formed of a piece of tubing bent upon itself to form a bottom member 14, a top member 16, and front and rear members 18 and 20 which are suitably round to present an attractive appearance. The bottom members 14 are braced by cross pieces 22 which are preferably detachably secured thereto in any approved manner. As shown, each of the side members 10 and 12 is made of one piece of tubing bent to the shape shown, but it is to be understood that each of these members may be made of more than one piece. For example, the horizontal portions 14 and 16 may be made of one piece each, and each of the end pieces 18 and 20 may be made as a separate piece, the pieces being detachably assembled by suitable couplings.

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In any event, the length of the bottom pieces 14 is such as to afford full stability and preclude any possibility of upending or toppling over.

Carried by the upper member 16, near the front end of the device are sleeves 24 which are provided with right angle bushings 26. As shown, the sleeves 24 serve to connect or cover the junction of the ends of the top members 16, but the primary purpose of the sleeves and bushings is to support and adjust a cross member 28 the ends of which are journaled for free rotation within the bushings 26, as shown in Fig. 3.

The cross piece 28 carries an operating rocker arm composed of upper and lower telescoping pipe sections 30 and 32 which are held in adjusted position by a thumb screw 34. The upper section 30 carries a hand bar 36 which is also formed of pipe section, while the lower section 32 carries a foot rest 38. The foot rest 38 is preferably also formed of pipe for ease and inexpensiveness of manufacture and assembly, but is weighted by a heavy filler 40. The weighting of the foot rest 38 causes the rocker arm to assume a vertical position, when not in use, and also provides a weight to be moved by the person taking the exercise, thus compelling a minimum amount of exertion beyond that required for unencumbered body movement.

A seat 42, made of wood or other material, is pivoted upon and slidable longitudinally of one of the top frame members 16 by means of rings 44 loosely engaging the top piece 16. The other or opposite edge of the seat is grooved, as at 46, and rests on the opposite top member 16.

In order to provide for adjusting the load, springs 48 are confined between the ends of the cross piece 28 and a plunger 50 which is adjustable to increase or decrease the tension of the springs by a stem 52, threadedly engaging the wall of the sleeve 24 and provided with a handle 54.

In operation, the person adjusts the seat 42 longitudinally and the telescoping sections 30 and 32 of the operating arm to suit his or her stature. Also, the springs 48 are adjusted to produce the desired load. The person then sits on the seat and with one or both arms grasps the handle bar 36 and puts one or both feet on the foot rest 38. Thus seated, the person now sways to and fro, pivoting about the hips. As the person sways, the handle bar 36 and the foot rest 38 tend to approach parallelism with the top bars 14 and 16, depending on the spacing of the seat from the operating arm and the extent to which the person chooses to bend.

While I have shown the frame member to be preferably constructed of piping bent to the desired form, as shown, it is to be understood that the same can be varied without departing from the scope of my invention. The sleeves **24** may be in the nature of union couplings or as illustrated in the drawings. By the construction illustrated, the exercising device may be easily dismantled by disconnection of the cross pieces **28** and **22**, whereupon the side frame members **10** and **12** with the seat **42** folded against the side member **10**, may be easily carried from place to place or can be stored in a minimum of space.

It will thus be seen that I have produced an extremely simple exercising device by which the person taking the exercise can simulate the movements of rowing or horseback riding and that the movements involved in operating the device exercise every part of the human body, both muscular and respiratory. By adjusting the rocker arm to increase or decrease the space between the handle bar and the foot rest, not only is the device adjusted to persons of different stature, but also the nature of the exercise to be performed will be changed. Thus, for a person of given stature, if the space between the foot rest and the handle bar is decreased, there will be more deflection or bending of the legs and the spine, and vice versa. The same effect may be produced by varying the distance of the seat from the rocker arm. In addition to these various changes which can be effected by my novel arrangement, it is also clear that the load to be overcome can also be varied by adjustment of the tension springs **48** so that the person can perform the exercise with a minimum of effort or with a greatly increased exertion as desired. An important feature of my apparatus is that, unlike other exercising devices, it is not mandatory for the person taking the exercise to use or possess the use of both arms and legs and that a person who has temporarily or permanently lost the use of one arm and one leg or both arms or both legs can enjoy the benefits of this exercising device, since, by grasping the handle bar with one arm or by placing one foot on the foot rest, the device is capable of satisfactory operation in contrary distinction from devices which depend for operation on two or more pedals, cranks or other operating devices which canont be satisfactorily employed by any one who does not have the use of all limbs. This makes my exercising device particularly adaptable for the rehabilitation of injured veterans.

What I claim is:

An exercising device comprising two elongated side frames each including an upper horizontal member and a lower horizontal member, a lower cross member rigidly connecting the lower members of said side frames, an upper cross member secured to the upper members of said side frames and freely rotatable about a horizontal axis, a vertical member rigidly carried by said upper cross member, a hand grip carried by the upper end of said vertical member, a foot rest carried by the lower end of said vertical member, and a seat slidably mounted on the upper members of said side frames, said foot rest being heavier than said hand grip to afford resistance against free movement of said vertical member.

THOMAS M. EYNON.