

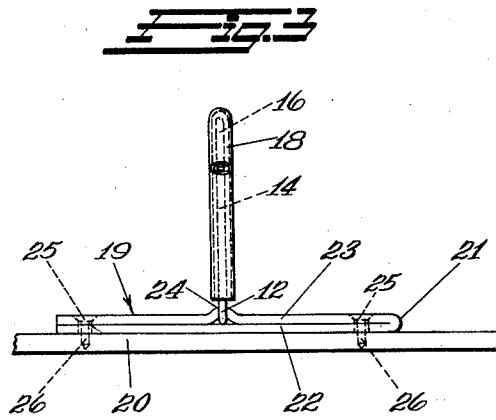
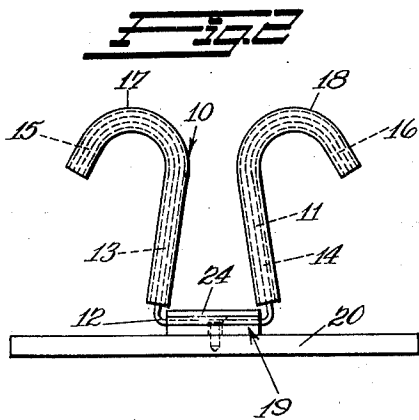
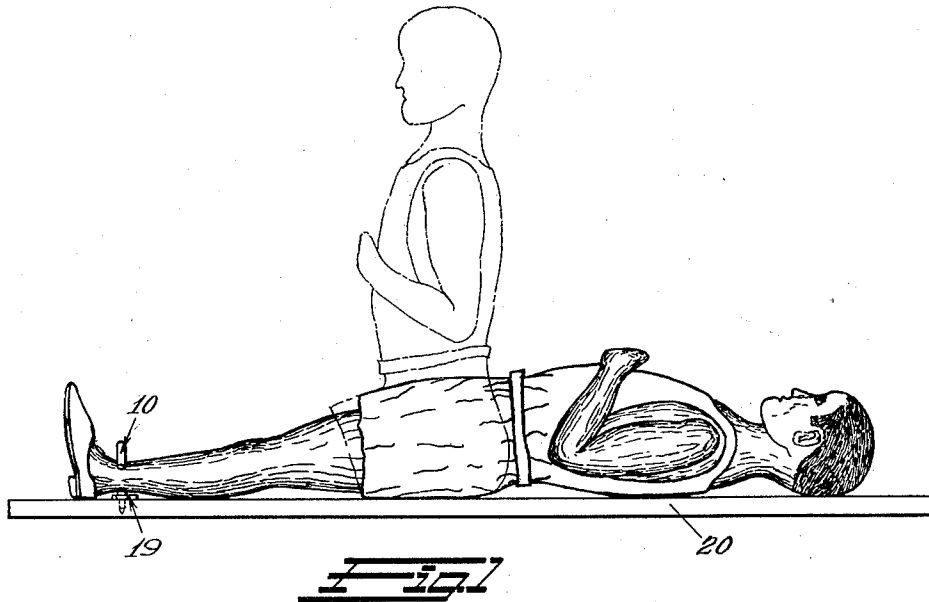
April 3, 1934.

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1,953,857

EXERCISING DEVICE

Filed May 21, 1932



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UNITED STATES PATENT OFFICE

1,953,857

EXERCISING DEVICE

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Application May 21, 1932, Serial No. 612,811

6 Claims. (Cl. 272-57)

This invention relates to a device for facilitating the exercising of the abdominal muscles and in reducing the waistline of persons who are overweight.

It is well recognized that in order to strengthen the abdominal muscles, to stimulate the action of digestive and eliminative organs of the human system, and to reduce the waistline of persons carrying an excess of flesh, that it is desirable to repeatedly bend the body at the waistline. One of the most beneficial exercises of this character is carried out when the person lies flat on his back and alternately raises the upper part of his body from said surface a number of times, and then raises the lower part of the body with respect to said surface, the bending taking place in each instance at the waistline. In order that the lower limbs may be maintained relatively straight when the person exercising raises the upper part of his body from the surface upon which he is reclining, it is necessary that some means be provided to maintain the lower part of the body in relatively close contact to said surface when the person exercising is raising the upper half of his body, and bending at the waist.

Heretofore tables have been proposed to facilitate this exercise, such tables including straps or bands extending across the table beneath which the person exercising must insert his ankles, when it is desired to raise the upper part of his body from the table. When the reverse exercise is taken, in which the upper half of the body remains in contact with the table and the lower half is raised from the table, it is necessary that the user withdraw his feet and ankles from beneath the strap. Inasmuch as the upper and lower halves of the body are raised from the table alternately as above stated, this requires that the feet and ankles of the user be repeatedly withdrawn from and inserted beneath the band or strap. The operation of inserting the feet and ankles beneath the strap is rather difficult of accomplishment because it generally is effected when the exercising person is lying prone on his back.

This invention aims to provide an exercising device of an extremely simple character that may be attached to the floor, on a table, or any flat surface upon which the exercising person may desire to recline, and that is of such construction that it may readily be brought into a desired position by the person using the same, and which may as readily be disconnected from the ankles of the exercising person as it may be brought into engagement therewith.

A further object of the invention is to provide a device for facilitating the exercising of the abdominal muscles, that is of a rigid character and thus capable of being attached to a flat surface upon which the exercising persons may recline at a single point.

A still further object of the invention is to provide a device for facilitating exercising of the abdominal muscles that is formed from a single rigid element shaped to provide oppositely opening hooks arranged to engage the angles of the exercising person.

Another object of the invention is to provide a device for facilitating the exercising of a person by bending at the waist when the person is lying prone upon a flat surface which may readily be attached to any surface, is light in weight, compact so that it may be carried in the baggage of a person when travelling, and that at the same time is of such extreme simplicity that it may be manufactured and sold at a very low cost.

Still another object of the invention is to provide a device for facilitating the exercise of the abdominal muscles that is constructed from a single bar or strip of metal, the mid-portion of which is formed to facilitate the attachment of the device on table, floor or the like, the ends of which are shaped so as to provide hooks which may very readily be brought into engagement with the ankles of the person using the device in its intended manner.

Still another object of the invention is to provide a device for facilitating exercising, that is of a rigid character, but is provided with means to prevent chafing of the ankles of the user and to provide such means by the simple expedient of telescoping rubber or similar resilient tubes upon the rigid bar from which the device is constructed.

Still further objects of the invention will appear as a description thereof proceeds with reference to the accompanying drawing in which:

Figure 1 is a view showing the manner in which the device of the present invention is used in facilitating the exercising of the abdominal muscles of the person, stimulating the functioning of the abdominal organs and in reducing the waistline of the person using the device.

Figure 2 is a fragmentary view on an enlarged scale of the device as seen from the left hand end of Figure 1.

Figure 3 is a side elevational view looking toward either side of Figure 2.

Like reference characters indicate like parts throughout the several views.

Essentially the present invention includes a relatively rigid member 10 consisting essentially of a rod or bar 11 preferably constructed of a suitable metal, said rod or bar being bent between
 5 its ends to provide a portion 12 by which it may be secured upon a suitable supporting surface. Further portions 13 and 14 extend away from the portion 12 and form therewith a letter U.
 10 The ends and legs of the U thus formed, are curved outwardly in opposite directions to provide hooks 15 and 17 which open in opposite directions with respect to the portion of the latter bar by which the device is to be attached to the support.

The portions 13 and 15, and 14 and 16 are provided with covering of suitable material to prevent chafing of the ankles of the user of the device. An extremely simple way of providing such covering is by telescoping sections of rubber
 20 tubing upon said portion. Sections of such tubing 17 and 18 slipped upon the portions 13 and 15 and 14 and 16 respectively being illustrated in the drawing. Preferably the rubber tubing selected has an internal diameter substantially exceeding the external diameter of the
 25 preferably cylindrical rod or bar 11 upon which the tubing is disposed, the space between the rod or bar and the surrounding walls of the rubber contributing greatly to the softness and resilience
 30 of the cover for the portions before referred to. The rubber tubing is maintained in position by virtue of the fact that it is telescoped upon the bar including the curved hooks 15 and 16 so that it is unnecessary to provide any means to retain
 35 said sections of tubing upon the ends of the bar of which the device is formed.

A device 10 is preferably provided with a bracket 19 to facilitate its attachment to a flat supporting surface 20. The bracket may assume
 40 any convenient form, but preferably is formed from a sheet of metal return bent at 21 to provide a portion 22 contacting with surface 20 and a portion 23 overlying said portion 22. Portion 23 is bent or corrugated at 24 to provide a bearing
 45 for the portion 12, which, in assembled relation, is disposed beneath the corrugation 24, as illustrated in the drawing. The bracket 19 may be provided with two openings 25 through which
 50 screws 26 may be passed to secure it rigidly to the support. It will be observed that the corrugation 24 and the cooperating plate 22 provide a pivotal mounting for the device 10 so that it may be folded flatwise upon the support 20 when not in
 55 use, and may be conveniently brought into a position approximately at right angles to the supporting surface, as by the toe of the person using the device and seeking to bring it into a position where his ankles may readily be engaged beneath the hooks 15 and 16 thereof.

In the use of the present invention the device is secured to a flat supporting surface 20 which may be the floor, table or the like. Normally the device may lie flatwise upon the said surface. When a person desires to take the exercises, for
 65 the facilitation of which the device of the present invention is provided, said person lies flat upon his back as illustrated in Figure 1 of the drawing, and with his toes, or otherwise causes the device to assume a position at right angles to the supporting surface for his body. The cor-
 70 rugation 24 and the portion 22 of the bracket may, if desired, cooperate in such a way that considerable friction is exerted on the portion 12 of the rod or bar from which the principal
 75 part of the device is formed so that when said

rod or bar assumes an upright position it will be frictionally maintained in said position so that the person desiring to exercise can conveniently bring his ankle beneath the oppositely opening
 80 sections 15 and 16. With his ankles in this position the person can conveniently exercise the abdominal muscles by raising the upper part of the body to the dotted line position shown in
 85 Figure 1, the device constituting the invention serving to maintain the lower limbs of the exerciser relatively close to the supporting surface. The device may be used with benefit to the person exercising by having the shoulder and arm muscles participate as the muscles of the waist
 90 and abdomen are exercised. The person exercising may sway the body rhythmically from the hips, the swaying movement being resisted in one direction by any suitable means, for example, a spring or elastic cord grasped by the hands and
 95 connected to surface 20 at or near stirrup-like member 10. The tendency of the person exercising to slide forwardly on surface 20 could be checked by engaging the ball or arch of each foot in hooks 15 and 17. Flexing of the knees
 100 as the upper portion of the body is swayed from the hips would exercise the large muscles of the legs simultaneously with the exercising of abdomen, waist, and shoulders. When it is desired to raise the lower limbs from the supporting surface on which the exerciser rests to perform the
 105 usually employed alternative exercise, the ankles of the user may very readily be disengaged from beneath the hooks while said user is in a prone position, and when it is again desired to raise the upper half of the body, reengagement be-
 110 tween the ankles and the device of the present invention may readily be again accomplished in the manner just described. It will thus be seen that with the device of my invention, means is provided for exercising in a beneficial way,
 115 practically all of the major muscles simultaneously or in turn, the simple apparatus provided being ready without change and adjustable from a sitting position to permit the forms of exercise to be carried out in any sequence desired by the
 120 patient.

While I have illustrated a specific bracket for securing the device 10 to the supporting surface and the exercising person, it should be understood that various arrangements for rigidly, or
 125 preferably, pivotally attaching said device to the supporting surface may be employed. It may be held by placing it beneath a table leg, the foot of a bed, or an open door. In view of the simplicity of the construction it may be manu-
 130 factured and sold at a very low cost. At the same time, the device is portable and may readily be attached to any surface in the manner above described, or by any readily detachable connection well known in the art.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiment is therefore to be considered in all respects as illustrative and not restrictive, the
 140 scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced
 145 therein.

What is claimed and desired to be secured by United States Letters Patent is:—

1. A device to facilitate exercising the abdominal muscles consisting in a rigid member 150

and means to attach it upon a flat surface, said rigid member being formed so as to provide a pair of oppositely opening hooks to engage the ankles of the exercising person.

cles consisting of a bracket designed for attachment upon a flat surface, and means formed to engage the ankles of a user pivotally attached to said bracket so that said means may lie flat on said surface or be readily raised to extend at approximately a right angle to said surface.

5 2. The combination defined in claim 1 in which said hooks are provided with coverings to prevent chafing of the ankles of the user.

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5. The combination defined in claim 4 including rubber tubing loosely sleeved upon said means to mitigate chafing of the ankles of the user.

10 3. A device to facilitate exercising the abdominal muscles comprising a unitary rigid rod formed at its mid-portion to provide means to facilitate its attachment upon a flat surface, and having a pair of hooks at opposite sides of said portion forming for ready engagement with the ankles of a person lying on said surface.

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6. The combination defined in claim 4 in which said means consists of a rigid metal rod bent between its ends to provide a bearing for said bracket and formed at its ends to provide oppositely opening hooks,

15 4. A device for exercising the abdominal mus-

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