

PATENT SPECIFICATION (11)

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(54) IMPROVEMENTS IN OR RELATING TO EXERCISING APPARATUS

(71) We, HOME HEALTH PRODUCTS LIMITED, a British Company of, 103 Stourbridge Road, Halesowen, Worcestershire, do hereby declare the invention for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to exercising apparatus in particular, but not exclusively, designed for use in exercising the leg and thighs thus promoting loss of excess fat in addition to improving the muscles therein.

It is an object of the present invention to provide a new or improved exercising apparatus.

According to the present invention we provide exercising apparatus comprising a base member presenting a surface part, which in use of the apparatus supports at least part of a foot of a person, elongate resilient means attached at one end by first attachment means to said base member, the other end of said resilient second means being attached to attachment means by means of which the resilient means can be attached to the ankle, foot or other part of a leg to be exercised, the resilient means allowing the foot of the leg to be exercised to be moved completely away from the base member and the second attachment means being of a nature such that it does not impose any restriction on movement of the leg the movement of which in use of the apparatus, is restricted only by the resilient means.

Preferably, said base member presents a substantially planar surface part, the surface part being provided with non-slip means for supporting the foot.

The resilient means may comprise a length of rubber or rubber-like material or a helical spring. The first attachment means connects one end of the length of rubber or helical spring to the base, the second attachment means connects the other end of the length of rubber or helical spring to the ankle, foot or other part of the leg to be exercised of the person using the apparatus.

The first attachment means may attach the

resilient means to the base member in a manner such that the resilient means is readily detachable from the base member.

The second attachment means may comprise a noose in which the ankle, or other part of the leg to be exercised may be placed, an elongate member from which the noose is formed being attached to the resilient means.

Preferably, the second attachment means may comprise two nooses one of which is adapted to go round the ankle or lower part of the leg to be exercised, the other being adapted to go round the instep of the foot of the leg to be exercised.

The base member of the exercising apparatus may have a further surface part also adapted to support at least part of a foot of a person, the two surface parts being symmetrically arranged on opposite sides of the attachment of the resilient means to the base member.

A second elongate resilient means attached at one end by first attachment means to said base member the other end of the second resilient means being attached to second attachment means by means of which the second resilient means can be attached to the ankle, foot or other part of a leg may also be provided, the arrangement being such that the first resilient means is attached to one leg and the second resilient means is attached to the other leg in order that both legs may be exercised in turn without transferring the resilient means from one leg to the other.

Preferably the underside of the base member is provided with non-slip means to prevent relative movement between the base member and the surface on which it is placed.

It is a further object of the present invention to provide exercising means as or described in combination with an exercise means for promoting blood circulation in a user's bottom and which also exercises the hip region of the body.

According to this aspect of the invention we provide exercising apparatus as hereinbefore described wherein said base member has a third central surface part with at least one raised formation, the arrangement being

such that in use of the exercise apparatus the base member is inverted so that said raised formation engages the ground and the person sits on the base member and by a rocking action of the hips forces the base member to rock from side to side, the raised formation acting as a fulcrum.

Preferably said base member has two raised formations situated in diametrically opposite relationship and are equi-distant from the centre of said base member.

One embodiment of the present invention will now be described, by way of example only, with reference to the accompanying drawings wherein:—

Figure 1 is a plan view of the exercising apparatus;

Figure 2 is a side elevation of the exercising apparatus in inverted position.

Referring firstly to Figure 1, the exercising apparatus comprises a base member 10 having first surface part 11 and a second surface part 12, each of the surface parts 11 and 12 being provided with non-slip material, or alternatively the upper surface of the base member 10 may be provided with a non-slip finish.

Resilient means 13 which is herein shown as a length of rubber or which may alternatively comprise a helical spring, for example, is provided with first attachment means 14 comprising a split ring which is also engaged in a through bore in the bolt 15, the bolt 15 being secured by a nut 16 to the base member 10.

The other end of the resilient means 13 is provided with a D-ring 17 to which is attached two cords 20 and 21, the outer end of each being provided with a ring 18 and 19 respectively.

The cords are threaded through their respective rings to form nooses as shown in Figure 1. One noose is preferably placed around the user's ankle of the leg to be exercised, and the other around the foot of the leg to be exercised. The user then places one foot on the first or second surface part (depending which leg is attached to the resilient means) and the exercising leg is then moved in a sideways, forwards, upwards, or backwards direction or in any other desired direction against the force of the resilient means, the further the foot of the exercising leg is moved away from the centre of the base member 10, the greater the returning force exerted by the resilient means thus the greater the effort required to move it to such a position. Such exercising has been found to be beneficial particularly to the thigh muscles and assists in reducing fatty tissue in this region.

In the case where two resilient means are provided on a single base member then one resilient means is attached to one foot and the

other to the other foot of the user and each leg may be exercised in turn.

Two raised formations 22 and 23 each having an arcuate upper surface are secured to a central third surface part of the base member 10.

Referring now to Figure 2, the exercising apparatus is shown in an inverted position, the raised parts 22 and 23 being in contact with the ground (only 23 is shown). The side 24 of the base member may be provided with a thin pad of rubber-like material or neoprene which acts not only as a non-slip surface but also provides a slight cushion on which the user may sit.

In use of the apparatus in the inverted position, the user sits on the cushion 25 and rests his or her heels on the ground and by rocking the hips and upper parts of the legs, the user can cause the base member 10 to rock about the fulcrum provided by the raised formations 22 and 23 and thereby exercise not only his or her legs, but also the hip region. Such rocking action promotes blood flow in the user's bottom and helps to reduce fatty tissue in this region.

WHAT WE CLAIM IS:—

1. Exercising apparatus comprising a base member presenting a surface part which in use of the apparatus supports at least part of a foot of a person, elongate resilient means attached at one end by first attachment means to said base member, the other end of the resilient means being attached to second attachment means by means of which the resilient means can be attached to the ankle, foot or other part of a leg to be exercised, the resilient means allowing the foot of the leg to be exercised to be moved completely away from the base member and the second attachment means being of a nature such that it does not impose any restriction on movement of the leg the movement of which in use of the apparatus, is restricted only by the resilient means.

2. Exercising apparatus as claimed in claim 1 wherein said base member presents a substantially planar surface part provided with non-slip means for supporting the foot.

3. Exercising apparatus as claimed in claim 1 or claim 2 wherein said resilient means comprises a length of rubber or rubber-like material.

4. Exercising apparatus as claimed in claim 1 or claim 2 wherein said resilient means comprises a helical spring.

5. Exercising apparatus as claimed in any one of the preceding claims wherein said resilient means is attached to the base member in a readily detachable manner.

6. Exercising apparatus as claimed in any one of the preceding claims wherein said second attachment means comprises a noose adapted to surround part of the leg, ankle, or

such that in use of the exercise apparatus the base member is inverted so that said raised formation engages the ground and the person sits on the base member and by a rocking action of the hips forces the base member to rock from side to side, the raised formation acting as a fulcrum.

Preferably said base member has two raised formations situated in diametrically opposite relationship and are equi-distant from the centre of said base member.

One embodiment of the present invention will now be described, by way of example only, with reference to the accompanying drawings wherein:—

Figure 1 is a plan view of the exercising apparatus;

Figure 2 is a side elevation of the exercising apparatus in inverted position.

Referring firstly to Figure 1, the exercising apparatus comprises a base member 10 having first surface part 11 and a second surface part 12, each of the surface parts 11 and 12 being provided with non-slip material, or alternatively the upper surface of the base member 10 may be provided with a non-slip finish.

Resilient means 13 which is herein shown as a length of rubber or which may alternatively comprise a helical spring, for example, is provided with first attachment means 14 comprising a split ring which is also engaged in a through bore in the bolt 15, the bolt 15 being secured by a nut 16 to the base member 10.

The other end of the resilient means 13 is provided with a D-ring 17 to which is attached two cords 20 and 21, the outer end of each being provided with a ring 18 and 19 respectively.

The cords are threaded through their respective rings to form nooses as shown in Figure 1. One noose is preferably placed around the user's ankle of the leg to be exercised, and the other around the foot of the leg to be exercised. The user then places one foot on the first or second surface part (depending which leg is attached to the resilient means) and the exercising leg is then moved in a sideways, forwards, upwards, or backwards direction or in any other desired direction against the force of the resilient means, the further the foot of the exercising leg is moved away from the centre of the base member 10, the greater the returning force exerted by the resilient means thus the greater the effort required to move it to such a position. Such exercising has been found to be beneficial particularly to the thigh muscles and assists in reducing fatty tissue in this region.

In the case where two resilient means are provided on a single base member then one resilient means is attached to one foot and the

other to the other foot of the user and each leg may be exercised in turn.

Two raised formations 22 and 23 each having an arcuate upper surface are secured to a central third surface part of the base member 10.

Referring now to Figure 2, the exercising apparatus is shown in an inverted position, the raised parts 22 and 23 being in contact with the ground (only 23 is shown). The side 24 of the base member may be provided with a thin pad of rubber-like material or neoprene which acts not only as a non-slip surface but also provides a slight cushion on which the user may sit.

In use of the apparatus in the inverted position, the user sits on the cushion 25 and rests his or her heels on the ground and by rocking the hips and upper parts of the legs, the user can cause the base member 10 to rock about the fulcrum provided by the raised formations 22 and 23 and thereby exercise not only his or her legs, but also the hip region. Such rocking action promotes blood flow in the user's bottom and helps to reduce fatty tissue in this region.

WHAT WE CLAIM IS:—

1. Exercising apparatus comprising a base member presenting a surface part which in use of the apparatus supports at least part of a foot of a person, elongate resilient means attached at one end by first attachment means to said base member, the other end of the resilient means being attached to second attachment means by means of which the resilient means can be attached to the ankle, foot or other part of a leg to be exercised, the resilient means allowing the foot of the leg to be exercised to be moved completely away from the base member and the second attachment means being of a nature such that it does not impose any restriction on movement of the leg the movement of which in use of the apparatus, is restricted only by the resilient means.

2. Exercising apparatus as claimed in claim 1 wherein said base member presents a substantially planar surface part provided with non-slip means for supporting the foot.

3. Exercising apparatus as claimed in claim 1 or claim 2 wherein said resilient means comprises a length of rubber or rubber-like material.

4. Exercising apparatus as claimed in claim 1 or claim 2 wherein said resilient means comprises a helical spring.

5. Exercising apparatus as claimed in any one of the preceding claims wherein said resilient means is attached to the base member in a readily detachable manner.

6. Exercising apparatus as claimed in any one of the preceding claims wherein said second attachment means comprises a noose adapted to surround part of the leg, ankle, or



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foot of the leg to be exercised, an elongate member from which the noose is formed being attached to the resilient means.

5 7. Exercising apparatus as claimed in claim 6 wherein said second attachment means comprises two nooses one of which is adapted to go around the ankle, and the other to go around the foot of the leg to be exercised.

10 8. Exercising apparatus as claimed in any one of the preceding claims wherein said base member has a further surface part adapted to support at least part of a foot of a person, the two surface parts being symmetrically arranged on opposite sides of the attachment of the resilient means to the base member, and wherein a second elongate resilient means is provided, said second elongate resilient means being attached at one end by
20 first attachment means to said base member the other end of the second resilient means being attached to second attachment means by means of which the second resilient means can be attached to the ankle, foot or other
25 part of a leg, the arrangement being such that, in use, the first resilient means is attached to one leg and the second resilient means is attached to the other leg.

9. Exercising apparatus as claimed in any one of the preceding claims wherein said base member has a third central surface part provided with at least one raised formation, the surface of which remote from said base member is of arcuate form. 30

10. Exercising apparatus as claimed in claim 9 wherein said base member has two raised formations situated in diametrically opposite relationship and situated equidistant from the centre of the base member. 35

11. Exercising apparatus substantially as hereinbefore described with reference to and as illustrated in Figures 1 and 2 of the accompanying drawings. 40

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SPECIFICATION NO 1604537

By a direction given under Section 30 of the Patents Act 1977 this application proceeded in the name of
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THE PATENT OFFICE

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