

[54] **EXERCISING DEVICE**

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[58] Field of Search 272/57 D, 80;
36/2.5 A, 32 R

[56] **References Cited**

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[57] **ABSTRACT**

An exercising device for attachment to the feet in the form of a shoe having weight receiving bores in the soles thereof.

5 Claims, 9 Drawing Figures

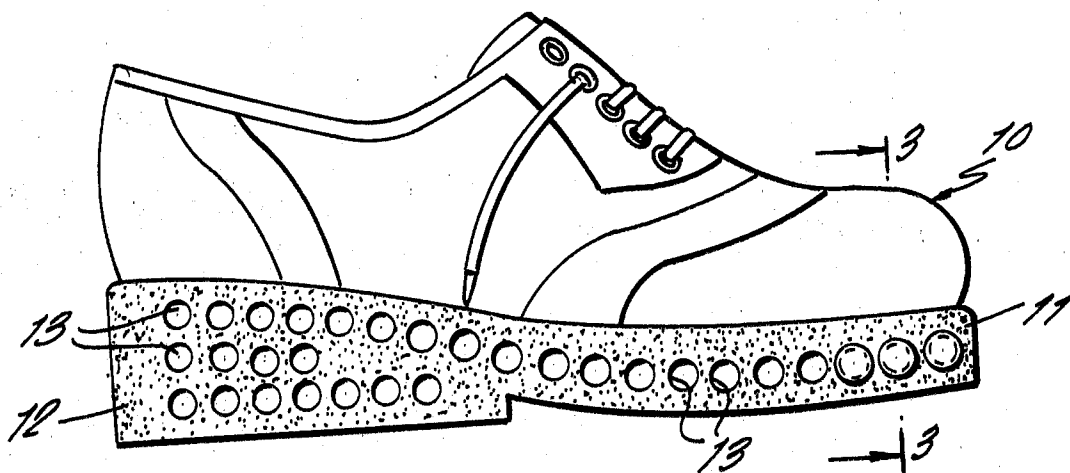


FIG. 1

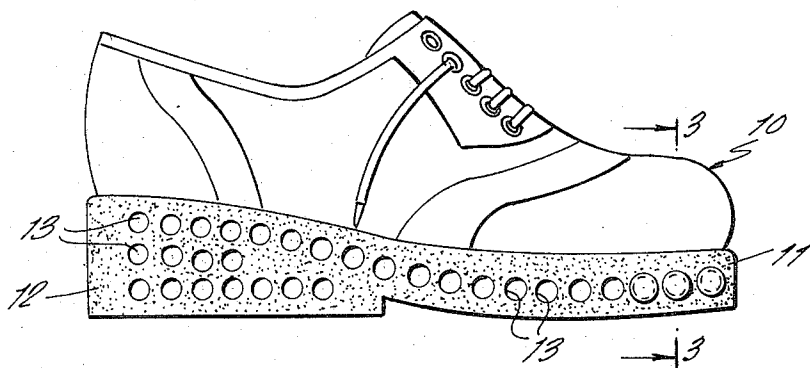


FIG. 2



FIG. 4

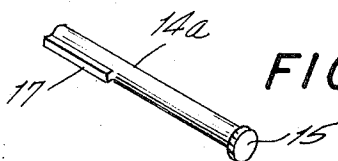
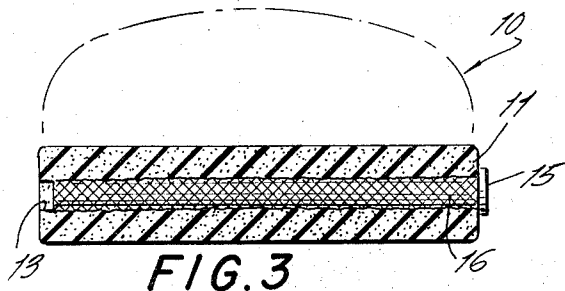


FIG. 5

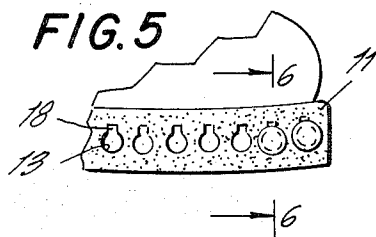
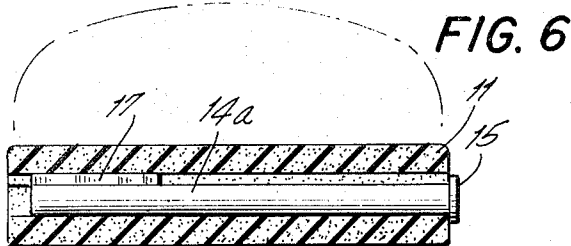


FIG. 7

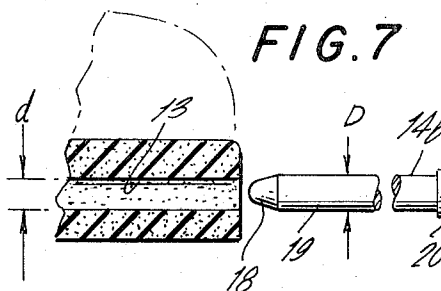


FIG. 8

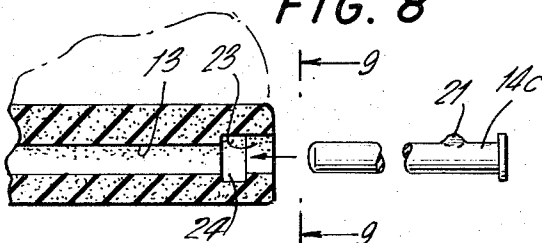
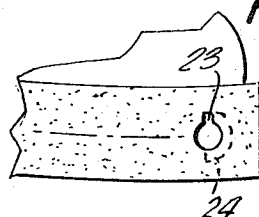


FIG. 9



EXERCISING DEVICE

BACKGROUND OF THE DISCLOSURE

It is well-known to attach weights to portions of the body for exercising or reducing purposes. Where weights have been used in conjunction with a person's legs or feet they have generally restricted the wearer's mobility. As a result, exercises involving the legs or feet have had to be performed for a period of time at a given place.

An object of the present invention is to provide an exercising device which may be worn as a shoe without endangering the wearer's walking or running activities.

Another object of the present invention is to provide an exercising device in the nature of a shoe which is easily adjustable as to the severity of exercise task.

A further object of the present invention is to provide an exercising shoe which can be worn for prolonged periods of time both for exercising and weight reduction.

SUMMARY

In one preferred form of the present invention an exercising shoe is provided with a resilient sole and heel of substantial thickness. Transverse bores, spaced from each other, are cut in the sole and heel to receive rod shaped weights. Locking means are provided to prevent the rods from accidentally coming out of the bores during use.

DESCRIPTION OF THE DRAWING

In the accompanying drawing, forming part hereof identical parts have been given the same reference numerals, in which drawing:

FIG. 1 is a view in side elevation of a complete embodiment of the present invention.

FIG. 2 is a somewhat isometric view of one form of weight according to the present invention.

FIG. 3 is a cross sectional view taken on line 3—3 in FIG. 1.

FIG. 4 is another form of weight useful in the present invention.

FIG. 5 is a fragmentary view of an exercising shoe adapted to receive the weight of FIG. 4.

FIG. 6 is a cross sectional view taken on line 6—6 of FIG. 5.

FIG. 7 is a somewhat exploded view partly in section showing still another form of weight retaining structure.

FIG. 8 is a view similar to FIG. 7 of a further weight retaining assembly.

FIG. 9 is a view taken on line 9—9 in FIG. 8 looking in the direction of the arrows.

GENERAL DESCRIPTION

Referring to the drawing and particularly to FIG. 1, reference numeral 10 indicates an exercising shoe according to the present invention. The shoe 10 is provided with a sole 11 of substantial thickness. It is preferred to make the sole of some resilient material such as crepe rubber, cork, neoprene or the like. The heel portion 12 of the shoe 10 is also of substantial thickness and of the same resilient material as the sole. Heel and sole may be integral as shown in FIG. 1.

A plurality of spaced transverse bores 13 are formed in the sole 11 and heel 12. The bores 13 are of a diame-

ter which will receive rod-like weights 14 one of which is shown in FIG. 2.

The weight 14 consists of an elongated cylindrical body portion 15 and an enlarged head 16. The body portion 14 is knurled as indicated at 16 in FIG. 2 to prevent the weight from slipping out of the bore 13 while the shoe is in use. To further prevent accidental displacement of the weights, the bores 13 may have a slightly smaller diameter than the outside diameter of the weights. It will be apparent that if the weights 14 should slip even part way out of the bores 13 the person wearing the exercising shoes could trip and be injured.

The head 15 of the weights 14 are flat and rest against the side of the sole 11 or heel 12 when the weights are in place, as shown in FIG. 3. The weight heads 15 are used to remove the weights 14 from the bores when it is desired to alter the number or arrangement of weights to be used.

Any suitable metal may be used for the weights 14 such as lead, iron, copper or alloys of these metals. In addition, the person using the shoes may wish to start with only some of the weights inserted and add others as his abilities increase. Alternately, more weight may be desired in the heel area than at the front of the shoe or vice versa.

Referring to FIGS. 4, 5 and 6 there is shown another weight locking structure in which the weight 14a is provided with a laterally extending key 17. A keyway 18 slightly smaller than the key 17 is cut into the bores 13 as shown in FIG. 5. When the weight 14a is forced into the bore 13 the resilient material will close slightly behind the key and prevent the weight from accidental longitudinal movement.

The embodiment shown in FIG. 7 employs a somewhat bullet shaped weight 14b having a rounded nose portion 18, a cylindrical body 19 and a flanged head 20. The bore 13 is of a size so that its inside diameter d is slightly smaller than the outside diameter D of the weight 14b. The weight 14b is forced into the bore 13 to increase the heaviness of the shoe 10 and the resilient material of the sole and heel retain the weight in place.

The weight securing structure of FIGS. 8 and 9 is of the bayonet slot type. The weight 14c is provided with a nub 21 which projects outwardly of the body portion 22 of the weight. The bore 13 in the shoe 10 is formed with a nub receiving recess 23 at one end and an enlarged cavity 24 communicating with the inner end of the recess 23. After the weight 14c is pushed into the bore it is rotated a few degrees whereupon the nub 21 will become secured within the cavity 24 and prevent accidental displacement of the weight during use.

The exercise shoes described above may be used for a wide variety of purposes. Persons desiring to build up their leg muscles may wear them for prolonged periods of time during normal activities. Alternately, they may be used while running or jogging to make the exercise more strenuous. Since each weight is independent of the others, the person using the exercising shoe may start with only a few weights in place and increase them gradually over a period of time and athletic improvement.

Having thus fully described the invention, what is claimed as new and desired to be protected by United States Letters Patent is:

1. An exercising device comprising a shoe body, a sole and a heel of resilient material carried by the shoe

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body, a plurality of spaced transverse bores in the sole and heel and elongated weights receivable within said bores to increase the weight of the exercising device.

2. A device according to claim 1 in which the bores are slightly smaller in inside diameter than the outside diameter of the weights and the weights include an elongated knurled body portion.

3. A device according to claim 1 in which the bores are formed with a key receiving slot and the weights are provided with an outwardly extending key receivable in

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said slot.

4. A device according to claim 1 in which the weights are bullet shaped and the bores have an inside diameter slightly smaller than the outside diameter of the weights.

5. A device according to claim 1 in which the weights are provided with an outwardly extending detent and the bores are formed with a bayonet slot to receive the said detent.

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