



# UNITED STATES PATENT OFFICE

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## FOOT HEALTH EXERCISER

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### 1 Claim. (Cl. 128—57)

The present invention relates in general to a device for correcting foot troubles and more particularly to a foot exerciser.

One of the objects of the present invention is to provide a device of this character which may be used while the patient is sitting down.

Another object is to provide a device of this character, which promotes an improved circulation of blood in the feet, builds up fallen arches, strengthens muscles and ligaments, not only within the feet themselves but throughout the legs as well.

Our device also has for its object to correct so-called heel rotation and generally strengthen the feet.

A further object is to provide a device of this character that may be adjusted to accommodate different sizes and shapes of feet.

There are other objects of our invention, which, together with the foregoing will be described in the detailed specification which is to follow, taken in conjunction with the accompanying drawing.

Generally speaking, to carry out an embodiment of our invention, we provide a rectangularly shaped frame in which three peculiarly shaped cylinders or rollers are adjustably and rotatably mounted. The shape of these rollers is such as to conform to the normal shape of the foot so as to bring about exercise and massage of the foot in the proper manner.

Referring now to the drawing:

Fig. 1 is a top plan view of an embodiment of our foot exerciser invention.

Fig. 2 is a side elevation thereof.

Fig. 3 is a detailed perspective of one of the adjustable roller supports.

The reference character 1 generally designates a rectangularly shaped frame of wood or other suitable material, comprising side members 2 and end members 3. The frame 1 supports rollers 4, 5, and 6, of wood or other suitable material, each of which is rotatably mounted within the frame by pivot pins 7 threaded into metal inserts 9, suitably affixed within a recess in the rollers. Each of the pins 7 is adapted to penetrate any one of the openings 10 within metal bearing blocks 11 which fit slidably within recesses 8 in the side members 2. The openings 10 provide for various adjustments of each of the rollers 4, 5, or 6, so as to accommodate different types of feet, the metal bearing blocks 11 being removed and then slid into the recesses 8 after positioning pins 7 into the suitable openings 10. Each of the side members 2 is adapted to be provided with metal brackets 12 which, in turn may contain

frictional contact material for the purpose of providing non-skiddable supports for the frame 1.

The roller 4 is generally concave in formation of the shape shown in Fig. 1 and has been given the peculiar form for the purpose of exercising the astragalus or ankle and the os calcis or heel structure, equalizing the body weight distribution and tending to correct the so-called rotating heel. The roller 5 might be described as generally convex in shape, and has been given the form shown in Fig. 1 so as to exercise and strengthen the inner and outer arches. The end roller 6 is generally concave shape and is adapted to give a gentle but forceful exercising of the tarsal or ankle, metatarsal arches, the phalange bones of the foot and the metatarso-phalangeal joints of the toes.

In use, the patient assumes a sitting position on a chair and places the naked foot upon the device, which rests on the floor, and after the rollers are suitably positioned to conform generally to the shape of the foot by moving them within the bearing blocks 11, the treatment is given by the patient moving the feet back and forth over the rollers, putting sufficient weight thereupon to bring about a gentle but forceful massage and exercising of the entire foot structure. Not only is the foot massaged so as to stimulate circulation, but all the muscles thereof are exercised as well as the knee cap and other bones of the leg and ankle. The continued and periodical use of this device will take care of practically all foot troubles including inward and outward rotation of the heel and fallen arches, inflammatory swelling of the bursa over the great toe joint, which is commonly called a bunion and other foot ailments. The increase in circulation and general stimulation of the nerve structure by the use of this device within the feet is such as to restore and maintain a general healthy condition of the feet, ankles and legs.

Our invention may be variously modified without departing from the spirit and scope thereof, as set forth in the appended claim.

We claim:

A surgical device strengthening the foot muscles comprising a stationary support, a plurality of rollers rotatably mounted in said device, each roller having a stub shaft at each end, a bearing block cooperating with each stub shaft having a plurality of bearing holes therethrough, and openings in said support in which each bearing block is slidably mounted.

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