June 27, 1950 A. J. STRELECKY 2,512,904

FOOT EXERCISER

Filed Sept. 12, 1947

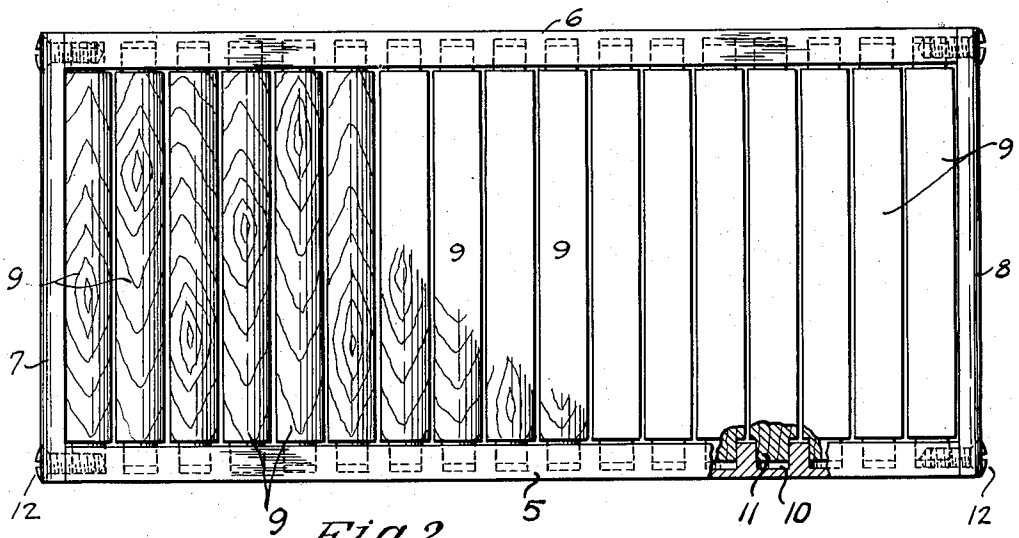


Fig. 2.

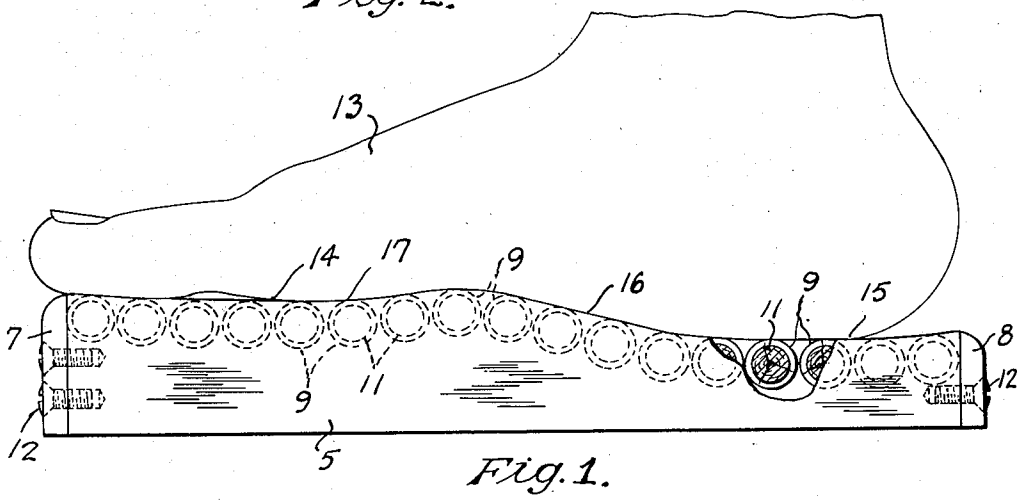


Fig. 1.

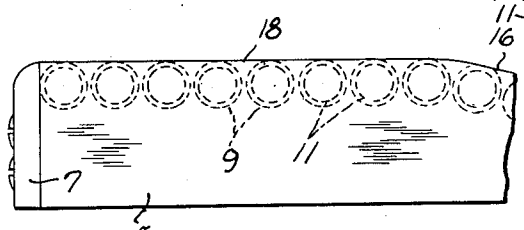


Fig. 4.

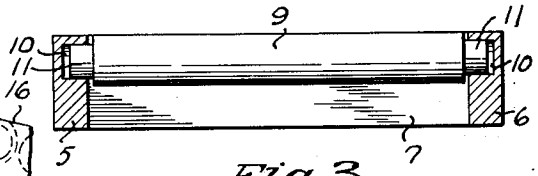


Fig. 3.

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FOOT EXERCISER

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3 Claims. (Cl. 128—57)

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This invention relates to a device for correcting foot troubles, and more particularly to an exerciser, and has for an object to provide a simple and effective device for exercising and massaging the muscles of the foot, particularly to increase the circulation in the foot, in the treatment of conditions caused by poor circulation.

It is also an object to provide a device of this character which will effectively massage and exercise the muscles of the foot uniformly across the foot, and particularly for exercising the arch portion of the foot and the forward part or metatarsus portion, as well as the toes and the portion immediately in back of them.

With the foregoing and other objects in view, I have devised the construction illustrated in the accompanying drawings forming a part of this specification. It is, however, to be understood the invention is not limited to the specific details of construction and arrangement shown, but may embody various changes and modifications within the scope of the invention.

The preferred form of the device is shown in the drawing, in which

Fig. 1 is a side elevation of the device showing it in use and with a portion broken away to more clearly show the construction;

Fig. 2 is a top plan view;

Fig. 3 is a transverse section, and

Fig. 4 is a side view of the front portion showing a slight modification.

The form of the device as shown comprises a frame including spaced upright side members 5 and 6 connected by transverse end members 7 and 8. The side members comprise upright rectangular bars provided on their inner sides with a series of bearings for a series of transverse rollers 9. The lower edge is preferably straight to rest on a floor and the top edge curved to correspond with the arrangement of the rollers. In the arrangement shown the bearings comprise a circular socket 10 drilled from the inner side of the bar to receive a reduced end bearing 11 of the roller, but the other forms of bearing could be used if preferred, those shown being a very simple and inexpensive form. The transverse end members 7 and 8 are plates of suitable thickness secured to the opposite ends of the upright side members 5 and 6 by any suitable means, such as the screws 12, to retain the side members in their proper spaced relation, and by removal of these end members the side members are released to permit easy removal of the rollers and facilitate renewal or assembly, as desired. The tops of the rollers may be somewhat above or below the top

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edges of the side members 5 and 6, although it is preferred to locate them so that the top surface or highest part of the rollers is in substantially the same plane as the top edges of the members, as shown. It is also preferred that the rollers be arranged with the plane joining their top edges curved to substantially fit the curvature of the sole of the foot, indicated at 13, this shape comprising a higher portion 14 at the front, a lower portion 15 at the rear, and an intermediate inclined portion 16 joining them. The front portion 14 may also be slightly curved or dipped, as shown at 17 in Fig. 1, but it may be substantially straight, as shown at 18 in Fig. 4, this form of side member 5a, however, also including the lower portion 15 and the inclined portion 16 joining the higher front and lower rear portions, as shown in Fig. 1.

The rollers 9 are straight or cylindrical rollers and preferably of substantially uniform diameter throughout their lengths, and also are of relatively small diameter and positioned closely together as shown, to provide relatively close supporting or massaging surfaces throughout the length and breadth of the foot. Also the relatively smaller diameter of the rollers gives a greater or more acute bend to the surface of the foot in contact with the rollers to produce a greater exercising and massaging effect. Although the size of the rollers may be somewhat varied, they are preferably in the neighborhood of about ½'' diameter, as this has been found in practice to give a more effective exercising and massaging effect, and about four inches long, although the device is not limited to these dimensions. The rollers may be of any suitable material, such as wood or metal or other suitable material, but wooden rollers have proven very satisfactory.

In use, the device is placed on the floor and the bottom or sole of the foot placed on it, as shown in Fig. 1, and after placing the user's weight on this foot it is moved back and forth over the device in a direction longitudinally of the foot. This effectively massages and exercises the muscles for the entire length of the foot, although the main object is to massage the central or arch part of the foot, but it will of course massage also the forward or metatarsus portion, as well as the toes and the portion immediately back of the toes. The straight rollers or rollers of uniform diameter give a uniform massage for the full width of the foot, and there is no spreading of the foot or massaging of the center portion to the detriment of (practically no massaging

action on) the outer side portions or portions on opposite sides of the central portion. This device has been found to be particularly beneficial in increasing circulation in the foot in the treatment of conditions caused by poor circulation. It gives a general exercising and massaging of the muscles of the foot, and as it does increase circulation is beneficial in cases of cold feet, particularly when the cold feeling is due to poor circulation. In short, as it increases circulation it benefits any adverse condition caused by poor circulation.

Having thus set forth the nature of my invention, I claim:

1. A device for massaging the muscles and sole of a foot comprising a frame forming a support to rest on a floor, a plurality of parallel rollers rotatably mounted in the support, said rollers being of substantially uniform diameter throughout and of relatively small diameter of the order of about one-half inch so as to give a relatively sharp bend to the surface of the foot in contact therewith, said rollers being located relatively close together and sufficient in number so that their top surfaces together form a supporting surface for substantially the entire bottom or sole of the foot during the massaging operation, and said rollers also being arranged so that the top edges of the rollers in the front portion of the device are in a higher plane than those in the rear portion and the top edges of the intermediate rollers are in an inclined plane joining those of the front and rear portions.

2. A device for massaging the muscles and sole of a foot comprising a frame to rest on a floor and including laterally spaced side members and connecting end members, a plurality of rollers extending transversely between and rotatably mounted in bearings at their opposite ends in the side members, said rollers being substantially straight and of substantially uniform diameter throughout and also of relatively small diameter so as to give a relatively sharp bend to the surface of a foot in contact therewith, said rollers being sufficient in number and located relatively close together so that their top surfaces together form a supporting surface for substantially the whole bottom or sole of the foot during the massaging operation, and being also arranged so that the top edges of the rollers in the front portion of the device are in a higher plane than those in the rear portion and the top edges of the intermediate rollers are in an inclined plane joining those of the front and rear portions.

3. A device for massaging the foot muscles comprising a stationary support, a plurality of parallel rollers rotatably mounted in the support, said rollers being substantially straight and of substantially uniform diameter throughout and also of relatively small diameter so as to give a relatively sharp bend to the surface of a foot in contact therewith, said rollers being sufficient in number and located relatively close together so that their top surfaces together form a supporting surface for substantially the whole bottom or sole of the foot during the massaging operation, and being also arranged so that the top edges of the rollers in the front portion of the device are in a higher plane than those in the rear portion and the top edges of the intermediate rollers are in an inclined plane joining those of the front and rear portions.

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