Oct. 23, 1956 L. TOIVONEN 2,767,707

MASSAGING DEVICE

Filed May 27, 1955

Fig. 1.

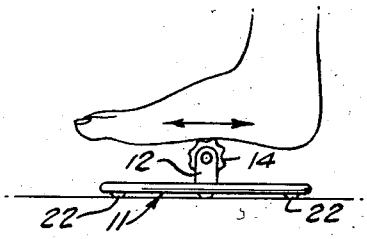


Fig. 2.

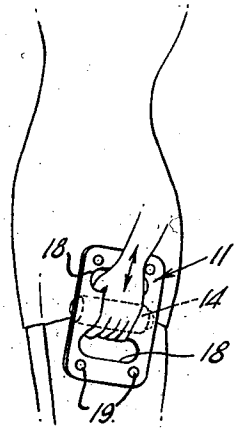


Fig. 3.

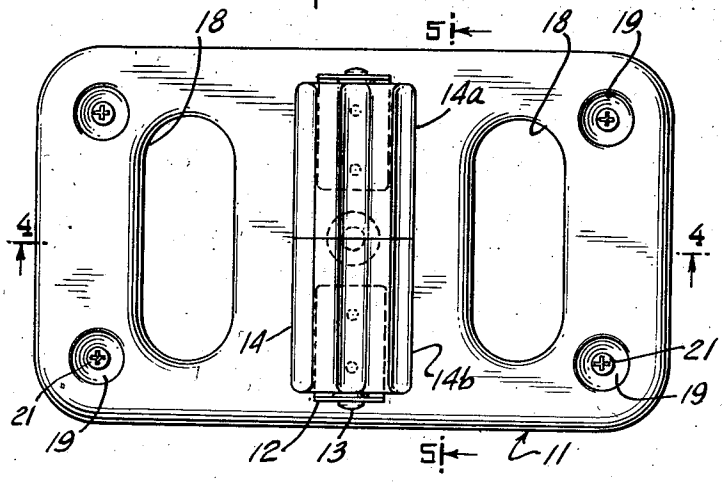


Fig. 7.

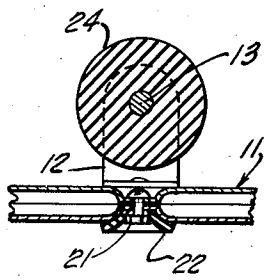


Fig. 5.

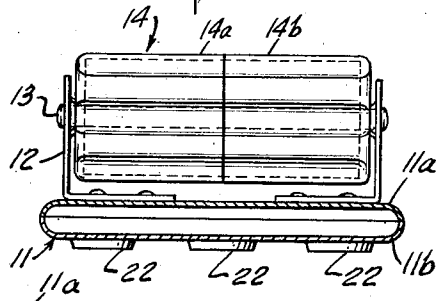


Fig. 4.

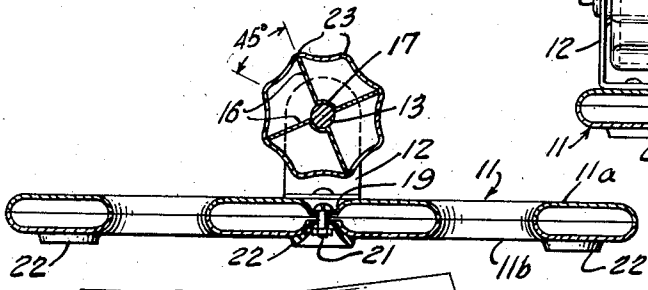
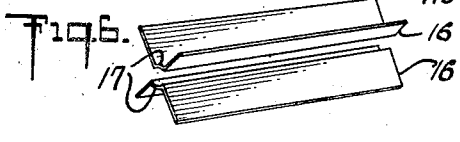


Fig. 6.



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MASSAGING DEVICE

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1 Claim. (Cl. 128—57)

This invention relates to massaging devices, and more particularly to massaging devices of the manually operable type.

The manually operable massaging devices of the prior art are of many and varied shape, each being arranged to provide a certain operative feature, or desired result. In many cases the structures are very complicated, bulky, costly to manufacture, or adapted for limited use.

The device of the present invention is extremely simple and rugged in design, is of light weight, and is very flexible in use. It is arranged to be used for massaging the bottom of a user's foot by an easy foot motion, or may be used for massaging other parts of the body, such as the legs, arms, etc. When used for foot massaging, the device of the invention will stay firmly positioned upon a flat surface, while when used for massaging other parts of the body, it may be easily grasped and maneuvered by the user, or another. In addition to simplicity, ruggedness, and flexibility, the device of the invention is adapted to provide a vibratory action to the muscles as they are being massaged.

The use of the device of the invention is helpful in relieving muscular aches and pains, in stimulating blood circulation, in kneading muscles, in exercising weak arches, and in general, producing a feeling of comfort, relaxation and well being.

The main object of the invention is to provide a manually operable massaging device which may be conveniently used for foot massaging, and for massaging other parts of the body.

Another object is to provide a massaging device which will remain firmly in position upon a flat surface, and which can be easily grasped and maneuvered by the user, or another, when used for massaging other parts of the body.

A further object is to provide a massaging device which is extremely simple and rugged in construction, is of light weight, is very flexible in use, is of low cost, and which is adapted to provide long and satisfied service.

These and further objects and features of the invention, will become more apparent from the description of the invention when read in connection with the appended drawing in which:

Fig. 1 illustrates an embodiment of the invention as used when massaging the bottom of the user's foot;

Fig. 2 illustrates the device of the invention as used for massaging another part of the user's body;

Fig. 3 is a plan view of the device of the invention;

Fig. 4 is a section view as seen from line 4—4 in Fig. 3;

Fig. 5 is a partial section view as seen from line 5—5 in Fig. 3;

Fig. 6 is a perspective view of cylinder bearing members used in the device of the invention; and

Fig. 7 is a partial section view of a variation of the device of the invention.

Referring now to the drawing, a massaging device illustrative of an embodiment of the invention includes a

base member **11**, to which is secured two L-shaped arms, or lugs, **12**, arranged perpendicular to the base member. A shaft **13** is supported at each end by the lugs **12**, the ends of the shaft being headed, or peened, on the outside of the lugs to thus fix the shaft against axial movement. A roller, or cylinder, **14** surrounds the shaft **13**, and is rotatably mounted thereon by means of a pair of supporting members **16**. The latter are V-shaped, and have a curved portion **17** extending along the region of the apex, the curved portion having a radius of curvature which conforms with the radius of shaft **13**. It will be seen that the supporting members **16** serve as bearings to provide full support for the cylinder along its entire length.

Base member **11** is preferably formed of two pieces of light weight metal sheet, **11*a*** and **11*b***, such as aluminum, and are made symmetrical, in a metal stamping operation. A pair of elongated openings **18** are provided on each side of the lugs **12**, as shown. The base member has five indentations **19**, each having a hole for reception of a fastening means, such as a bolt and nut **21**, for holding the two pieces of the base member together. Arranged in each indentation **19** on the bottom piece **11*b***, is a rubber washer **22**, which is held in position by the nut of fastening means **21**. The edges of each rubber project beyond the bottom surface of the base member to provide friction contacts with a flat surface on which the massaging device is placed for foot massaging, as illustrated in Fig. 1.

The cylinder **14** is preferably made of light weight metal sheet, such as aluminum, and is formed in two symmetrical cup-shaped parts **14*a*** and **14*b***, which may be made by the well known deep drawn process. A series of longitudinal ridges, or flutes, **23**, are provided in the surface of the cylinder, which flutes are spaced approximately 45° apart. By means of such flutes, the cylinder will provide a vibratory action as it is briskly rolled over the surface of the user's body.

By means of the above described construction, it will be seen that a massaging device according to the invention is provided, which is of simple design, of light weight, and of rugged construction. Once the cylinder **14** is assembled upon the shaft **13**, it can be moved only in a rotary direction, and the supporting members **16** will provide full length bearing means, so that the cylinder can be subjected to a relatively heavy load as it is being used in massaging. In assembling the device, it is recommended that a lubricant, such as a grease or heavy oil, be applied to the shaft so that the cylinder can be rotated with the least amount of effort.

In Fig. 7, a variation of an embodiment of the invention is illustrated. The only difference between the massaging device of this embodiment, and that described heretofore is that the cylinder **24** is made of a solid non-metallic material, such as rubber, cork, or wood. The device of the Fig. 7 embodiment, is for use in massaging, when a vibratory effect is not wanted, such as is produced by a fluted cylinder.

While the invention has been described by means of a specific embodiment, it will be apparent that certain changes in structure may be made without departing from the spirit of the invention, hence the invention is to be limited only to the degree set forth in the appended claim.

What is claimed is:

A massaging device comprising a base member made of two symmetrically formed rigid sheets, a hollow cylinder formed of two symmetrical cup-shaped parts having a plurality of longitudinal flutes on the surface, a pair of L-shaped arms affixed to the base member, a round shaft supported at its ends by the arms, a pair of cylinder sup-

porting members within the cylinder and being approximately the same length as the cylinder and having a curved portion extending along the region engaging the shaft, said base member having an elongated opening arranged on each side of the cylinder, fastening means to hold the base member together, and a rubber disc secured by each fastening means to project beyond the surface of the base member on the side opposite the L-shaped arms.

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