ABSTRACT OF THE DISCLOSURE

Disclosed is a massage device having skin contacting rollers alternating in size and disposed on parallel shafts in staggered relationship so that large diameter rollers are separated from each other by smaller diameter rollers, and so that the large rollers on one shaft fit between large rollers on the adjacent shaft and opposite and in line with smaller rollers on said adjacent shaft.

The invention relates to a massage apparatus, particularly a foot roller, with rotatable wheel discs which are mounted between two parallel lateral parts on parallel shafts, alternating with intermediate discs of smaller diameter, and which are staggered in placement with respect to the discs of the next adjacent shaft.

FIGURE 1 is a plan view of the massage apparatus.

FIGURE 2 is a side view of the apparatus of FIGURE 1.

For the massaging of fatigued and aching feet or soles it is possible, as shown in the drawing, for individually rotatable parts C and D to be compactly positioned on shafts A placed one behind the other, and to support these shafts in two side parts B in such a way that they can be placed on the floor with one longitudinal side of the side parts, the rotatable parts then projecting beyond the other longitudinal side of the side parts, so that the rotatable parts can be moved freely to and fro in the direction of rotation by one or both feet when the user is seated. In particular, this to-and-fro movement can be performed by both feet, as desired, either in the same direction simultaneously or with the feet moving past each other simultaneously, i.e. by each foot in the direction opposite to that in which the other moves, since each rotatable part in itself can be rotated to and fro.

The massaging effect is due to the fact that in the to-and-fro movement of the feet resting on the floor, each of the rotatable parts, which are then moved in the direction of rotation, is rolled against the sole of the foot and thus massages the sole. The compact positioning of such rotatable parts on successive shafts and over a width sufficient to enable both feet to be placed on the floor (width of shafts) provides a new type of apparatus for the massage of the soles of both feet.

When the feet are moved to and fro, the rotatable parts compactly mounted on the shafts can only act on the soles of the feet, by rolling over them to that extent to which they project or extend from the system of adjacent and successive parts. For massage purposes the rotatable parts can be caused to project and extend from one another to any desired extent and in different degrees by adopting different dimensions and shapes for the rotating parts, by making them of the same or of different material, by the way in which the same or different rotatable parts are arranged adjacent and in succession on the individual shafts, and also by the use of concentric or eccentric rotatable parts, and likewise by selecting the appropriate number of shafts, the appropriate distance between these latter, and by providing them at the same height or at different or variable heights in the two side parts. The intensity of the massaging effect can also be regulated by the speed at which the feet are moved to and fro.

Wood is the most suitable material for the rotatable parts, and also for the side parts, owing to its favorable thermal properties.

The drawing shows an example of the new massage apparatus, to one-half the actual size, with larger cambered wheel-like rotatable parts D alternating in both directions with smaller disc-like rotatable parts C, so that the massaging effect, as regards intensity and direction, remains constant over the entire area.

The advantages offered by the new massaging apparatus, by comparison with the facilities hitherto available for the massaging of feet or soles, are as follows:

(1) In the to-and-fro movement of both feet, carried out when the user is comfortably seated, the compact arrangement of rotatable parts act on the entire foot and "knead" it so intensively that a noticeable massage effect is obtained even after the apparatus has only been used for a short time. It can be manufactured more cheaply than the electrical massage apparatus with which a similar massaging effect on the soles of the feet is obtained, besides being stronger, presenting no danger and being usable independently of electric plug-sockets, and not being subject to breakdowns. All that the user is required to do is to remove his footwear. The massaging operation can be effectively carried out when the user is still wearing his or her socks or stockings.

(2) The to-and-fro movement of the feet can be carried out easily and naturally, on the easily rotatable parts of the massaging apparatus, when the user is comfortably seated, so that the to-and-fro movement of both feet on the massaging apparatus can also be performed by invalids or bedridden persons for the purpose of strengthening the debilitated muscles of the feet and legs or as a type of substitute for walking, in order to prevent further weakening of the foot and leg muscles.

(3) Pregnant women and corpulent or aged people for whom it is difficult, if not impossible, to bend down, and particularly those suffering from pains or afflictions in the feet, can carry out sole- and foot-massage operations conveniently and without any danger or supervision.

(4) Hairdressers and saleswomen, whose feet hurt as a result of the long periods of standing necessitated by their occupation, can easily massage their aching feet for short periods during their lunch-hour or breaks, and then continue their work refreshed.

(5) Holes can be made, without detracting from the strength of the apparatus, in the side parts by which the successive shafts of the new massaging apparatus are held together, so that the apparatus can also be held with both hands and used for roller-type massage operations on other parts of the body, such as the back or the thighs.
I claim:

1. Massage apparatus comprising, support means, a plurality of shafts, the longitudinal axes of which are parallel, journaled a fixed distance apart on said support means, a plurality of independently rotatable rollers concentrically mounted close together on said shafts, said rollers being of at least two different diameters, the large diameter rollers on one shaft being mounted opposite and aligned with smaller diameter rollers on an adjacent shaft and between large rollers on said adjacent shaft so that said rollers alternate in diameter on each shaft and are staggered on one shaft with respect to the adjacent shaft, the difference in diameter between said large and smaller rollers and the width of said rollers being such that all rollers contact the skin.