

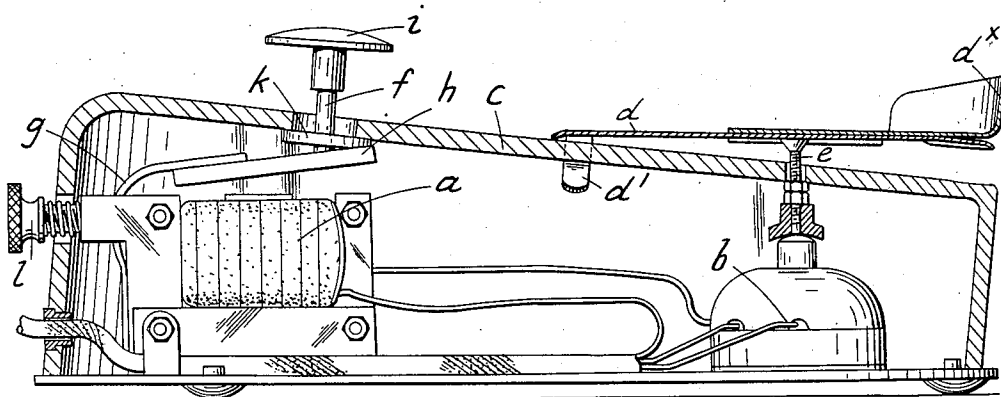
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ELECTRIC FOOT MASSAGE APPLIANCE

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ELECTRIC FOOT MASSAGE APPLIANCE

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4 Claims. (Cl. 128—24)

This invention has reference to devices for massaging the feet and the object is to provide a simple appliance which will enable a patient to massage his feet without assistance or attendance.

The appliance comprises a foot rest or support provided with a projecting vibrator which is actuated electro-magnetically, the excitation circuit of the electromagnet being controlled by a switch that is operable by the foot of the patient.

In a convenient arrangement, which is shown in sectional elevation in the accompanying drawing, an alternating current coil *a* and the control switch *b* are arranged inside the foot rest or support *c*, the top of which slopes downwardly from the front to the rear. On the lower end of said rest or support is pivoted a plate *d* having a rear flange *d'* to receive the heel of the patient, and projecting from the underside of this plate is an arm or rod *e* which bears on the push button of the spring-opened switch *b*, the spring of which tends to raise the plate which, when depressed by the pressure of the heel, closes the switch. Projecting through the higher or forward end part of the rest or support is a rod *f* which is secured to the armature *h* of the electromagnet, the said armature being carried by a blade spring *g*, and this rod *f* is provided at its upper end with a knob or domed pad *i* forming the vibrator which in use taps the sole of the foot. On the rod *f* there is provided an India rubber buffer *k* which functions to prevent contact of the armature with the top of the foot rest or support and may also close the aperture around the rod *f* to exclude dust or other foreign matter.

The pivoted heel plate may be adjustable toward and away from the vibrator according to the part of the foot that it is desired to treat but in the example illustrated the heel flange *d'* is formed on a cooperating upper plate slidable along the plate *d* which is connected to the rest or support in this instance by downwardly bent prongs *d'* that extend through holes in the top of the said rest or support with sufficient play to permit the plate *d* to rock upon its downwardly turned forward end. Said upper flanged plate is guided in the plate *d* by having its edges turned down and under the latter.

The action of the vibrator may be modified in various ways, as for instance by varying a resistance in the coil circuit altering the effective mass of the coil core, or adjusting the spring armature as by means of a thumb screw *l* so as to limit the stroke of the armature.

The knob or domed pad *i* may be detachably secured to the rod *f* as by screwing thereon so that different sizes or shapes thereof will be easily interchangeable.

Two such foot massaging appliances may be combined in one structure so that both feet can be treated at the same time, or two such appliances may be provided with connecting devices, such as lugs engaging in sockets, so that they can be held together side by side.

By tapping the coil and providing a suitable plug or selector switch, the appliance can be adapted for most alternating current voltages.

What I claim is:—

1. An electric foot massage device or appliance, comprising a foot rest or support provided with an upwardly projecting vibrator actuated electro-magnetically upon which a part of the foot placed on said rest may directly bear, and a switch operable by another part of the foot bearing on a portion of the rest thereabove for controlling the excitation circuit of the electromagnet simply by pressure of said another part of the foot upon said rest portion.

2. An electric foot massage appliance according to claim 1, wherein an alternating current coil with spring armature and the said control switch are arranged inside the foot rest or support, and a pivoted heel plate depressible by the heel of the foot against spring action so as to close the switch is mounted upon the rear of the rest or support, and a rod secured to the spring armature of the coil and carrying the vibrator with an end pad thereon projects through the forward part of the top of said rest or support.

3. An electric foot massage appliance according to claim 1, wherein an alternating current coil with spring armature and the said control switch are arranged inside the foot rest or support, and a pivoted heel plate adapted to be depressed by the heel of the foot against spring action to close the switch is mounted upon the rear of the rest or support, and a rod secured to the spring armature of the coil and carrying the vibrator with an end pad projects through the forward part of the top of said rest or support, the pivoted heel plate having a flange at its rear end and the said plate, or a flanged portion thereof, being adjustable towards and from the vibrator pad.

4. An electric foot massage device, comprising a foot rest or support, a vibrator element projecting upwardly through said rest or support at its forward end, a heel plate pivoted to said rest or support at its rear end, means including a

magnetic coil and armature for actuating the vibrator electromagnetically, a pressure switch controlling the excitation circuit of the electromagnetic means, and a connection between the
5 heel plate and said switch for closing the latter by pressure of the heel of the foot under treatment against spring action holding it normally

open; the said vibrator element being connected to the armature of the electromagnetic means and said armature being supported upon a spring having associated adjustment means for varying the extent or stroke of its vibrations.

5

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