Oct. 22, 1963 O. N. NORDGREN 3,107,665

MASSAGE DEVICE

Filed May 3, 1961

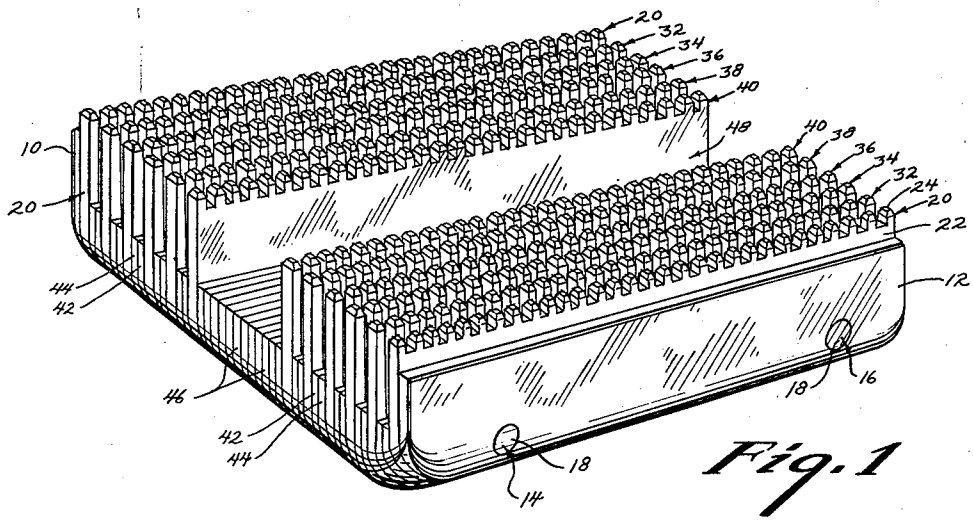


Fig. 1

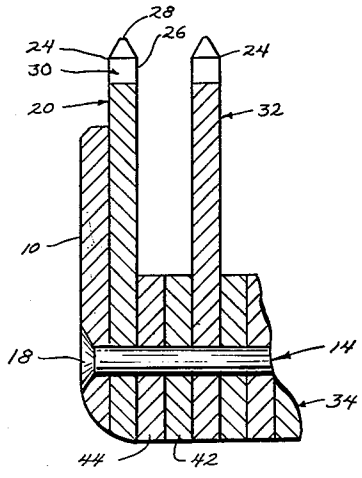


Fig. 2

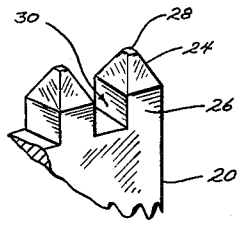


Fig. 3

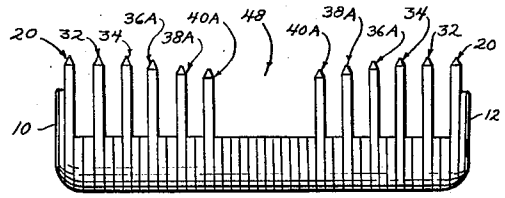


Fig. 4

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MASSAGE DEVICE

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My invention relates to the field of muscle massaging implements and more particularly to a massage device that is hand operated.

The massaging treatment of body muscles with various implements to stimulate circulation and to soothe and relax the muscles has long been practiced. The principal object of my invention is to provide a massage device which will stimulate circulation in the muscles and which will tend to relax the muscles to which it is applied.

A further object of my invention is to provide a massage device that will withdraw body heat from the muscles to stimulate circulation in the muscles.

A still further object of my invention is to provide a massage device with a plurality of contact surfaces to create a heat differential between different points in the muscle.

A still further object of my invention is to provide a massage device that will accommodate palpation of the muscle underneath the massage device as the device is being pressed and rolled over the muscle.

A still further object of my invention is to provide a massage device that will perform its desired function with regard to the muscle without irritating the skin.

A still further object of my invention is to provide a massage device that will be safe to use in even the hands of an inexperienced masseur.

A still further object of my invention is to provide a massage device that is economical of manufacture, durable in use and refined in appearance.

These and other objects will be apparent to those skilled in the art.

My invention consists in the construction, arrangements, and combination, of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, specifically pointed out in my claims, and illustrated in the accompanying drawings, in which:

FIG. 1 is a perspective view of my device with the muscle contact portions thereof exposed to view;

FIG. 2 is a partial sectional view of my device showing its detailed construction;

FIG. 3 is a partial perspective view of my device showing the detailed shape of the muscle contact portions; and

FIG. 4 is an end elevational view of a modified form of my device showing the differences in the height of the muscle engaging portions.

I have used the numerals 10 and 12 to designate the side plates of my device. Elongated rivets 14 and 16 extend through plates 10 and 12. Countersunk heads 18 on each of the rivets prevent the removal of the plates 10 and 12 therefrom. A plurality of blades and spacer plates are mounted on rivets 14 and 16 in between side plates 10 and 12. A blade 20 is adjacent each of the side plates 10 and 12. Blades 20 have a greater depth than the side plates and portions 22 thereof extend beyond the top edge of the side plates as viewed in FIG. 1. Portion 22 terminates in a plurality of spaced apart teeth 24. Each of the teeth 24 has a base 26 which is rectangular in cross section and the upper portion thereof terminates in a tapered, pyramid-shaped point. The extreme tips 28 of the teeth can be slightly blunted. Spaces 30 separate teeth 24 from each other.

Blades 32, 34, 36, 38 and 40 are similar to blade 20

and are also mounted on elongated rivets 14 and 16 and the adjacent blades are separated from each other by two spacer plates 42 and 44. Each of the blades 20, 32, 34, 36, 38 and 40 is identical in size and shape. The two inner blades 40 are separated by twelve spacer plates 46 to create a substantial space 48 therebetween. The width of space 48 is substantially the same as each battery of blades on either side thereof. All the spacer plates have a depth less than any of the blades or side plates.

In FIG. 4 I have shown a device that is similar in all respects to the device in FIG. 1 except that blades 36A, 38A and 40A, which correspond to blades 36, 38 and 40, respectively, become progressively shorter in depth, so that blade 38A is shorter than blade 36A, and blade 40A is shorter than blade 38A. All of the plates and teeth of my device are comprised of metal and are preferably of an aluminum alloy which provides an absence of weight and also a good conductor of heat.

The normal operation of my device is as follows: My device is grasped in the hand with the bottom edges of the blades and plates against the palm so that teeth 24 are exposed. The teeth 24 are then placed in engagement with the muscle to be massaged and a gentle pressing of the muscle by the teeth can then be intermittently induced by the hand. Some lateral force can also be exerted on the device during the pressing operation which enables the muscle to completely envelop the tapered portion of teeth 24 and to move into the spaces therebetween, if necessary. The effect of this intermittent pressing and disengagement of the muscle by these plurality of teeth is that body heat is dissipated from many parts on the surface of the skin to create a heat differential between these points and the adjacent areas. This action stimulates circulation within the muscle in addition to the massaging action of the teeth on the muscle.

The opening 48 is of special value when areas of the body, such as the spinal area, are being massaged. The opening 48 accommodates the spinal column, which is not palpated, and the two batteries of blades on either side of the opening are used on the adjacent musculature in the manner described. The blades of decreasing depth shown in FIG. 4 of the drawings assist in enabling the batteries of blades to conform to the shape of some of these areas of the body where opening 48 accommodates a non-palpated portion. The presence of a plurality of teeth and the specific shape of the teeth assists in successfully withdrawing body heat into my metallic device from many spaced apart points on the surface of the muscle being massaged.

Thus, from the foregoing, it is seen that my device will accomplish at least all of its stated objectives.

Some changes may be made in the construction and arrangement of my massage device without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

1. In a massage device, a first group of elongated blades having a predetermined width, a second group of elongated blades having a width equal to that of said first group, a group of spacer plates in between said first and second groups of blades to create an opening therebetween of a width equal to the width of said first group, said spacer plates being of a lesser depth than the first and second groups of blades, means for holding said groups of blades and said spacer plates in a unitary structure, and a plurality of muscle massaging teeth elements on said blades.

2. In a massage device, a first group of transversely spaced metallic elongated blades, a second group of

transversely spaced metallic elongated blades, a group of spacer plates in between said first and second groups of blades to create an opening therebetween having a transverse width more than the width of the transverse space between any pair of adjacent blades, said spacer plates being of a lesser depth than the first and second groups of blades, means for holding said groups of blades and said spacer plates in a unitary structure, and a plurality of muscle massaging teeth elements on said blades.

3. In a massage device, a first group of elongated blades, a second group of elongated blades having a width substantially equal to the width of said first group, a group of spacer plates in between said first and second groups of blades to create an opening therebetween of a width substantially equal to the width of said first group, said spacer plates being of a lesser depth than the first and second groups of blades, means for holding said groups of blades and said spacer plates in a unitary structure, and a plurality of muscle massaging teeth elements on said blades; said groups of plates being comprised of an aluminum alloy for heat conducting purposes.

4. In a massage device, a first group of elongated blades, a second group of elongated blades having a width substantially equal to the width of said first group, a group of spacer plates in between said first and second groups of blades to create an opening therebetween of a width substantially equal to the width of said first group, said spacer plates being of a lesser depth than the first and second groups of blades, means for holding said groups of blades and said spacer plates in a unitary structure, said groups of blades being comprised of a plurality of elongated, parallel individual blades, at least a portion of the adjacent individual blades in each group becoming progressively deeper as the distance from said opening increases, and a plurality of muscle massaging teeth elements on said blades.

5. In a massage device, a first group of transversely spaced elongated blades, a second group of transversely spaced elongated blades, a group of spacer plates in between said first and second groups of blades to create an opening therebetween having a transverse width more than the width of the transverse space between any pair of adjacent blades, said spacer plates being of a lesser depth than the first and second groups of blades, means for holding said groups of blades and said spacer plates in a unitary structure, and a plurality of muscle massaging teeth elements on said blades.

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