HEAD MASSAGING DEVICE

Field of the Invention

The present invention relates to a head massaging device.

Background of the Invention

Massaging of the human body is well known and is used to achieve numerous different effects. For example massaging may be used in physiotherapy for pain relief or to assist in the healing of damaged muscles or tendons. Massaging is also a well established technique for relieving stress and tension and providing physical relaxation, stimulation and pleasure.

Massaging is predominantly performed by direction hand/finger manipulation although hand held massaging tools are also known. These tools can be broadly categorised into powered (e.g. electrically powered) and manual tools.

Of the manual massaging tools very few have been made specifically for massaging the head and scalp. One tool that is known comprises four small wooden spheres connected to a larger central and raised wooden sphere by short wooden rods. The largest sphere acts as a handle to push and rub the smaller spheres against the body. These spheres can be applied to the head to massage the head and scalp.

Summary of the Invention

The present invention was devised with a view to providing an alternate form of head/scalp massaging device.

According to one aspect of the present invention there is provided a head massaging device including: a plurality of resilient fingers, said fingers each having a free end and an opposite end, said opposite ends being coupled together;

vibrating means coupled to said opposite ends of said fingers whereby vibrations generated by said vibrating means are transmitted from said opposite ends through said fingers to said free ends, said fingers defining a head receiving space for receiving a head, said space extending between said free ends and said opposite ends and having an opening at one end formed by a juxtaposition of said free ends of said fingers, said opening being smaller than said head, and at least a portion of said head receiving space having a circumference which exceeds a circumference of said opening whereby, in use, when said device is lowered onto said head so that said head enters said head receiving space through said opening, said free ends of said fingers apply pressure to and thus massage said head.

According to a further aspect of the present invention there is provided a head massaging device including at least:

a plurality of resilient and pliable fingers, said fingers each having a free end and an opposite end;

vibrator coupled to said opposite ends whereby vibrations generated by said vibrator are transmitted along said fingers from said opposite ends to said free ends; and

said fingers defining a self-supporting head-receiving space for receiving a head, said space extending between said free ends and said opposite ends and having a self-maintained opening at one end formed by a juxtaposition of said free ends of said fingers, said opening being of a circumference smaller than a circumference of said head, whereby said head can fit inside said space with said free ends in contact with said head, and at least a portion of said head-receiving space having a circumference which is greater than said circumference of said opening whereby, in use, when said device is lowered on to said head so that said head enters said head-receiving space through said opening, said free ends of said fingers apply pressure to and thus massage said head.

Preferably the device further includes a handle for receiving opposite ends of said fingers and which is disposed said vibrating means, said handle facilitating gripping and manipulation of said massaging device.

According to a further aspect of the present invention there is provided a head massaging device including at least:

a plurality of resilient fingers, said fingers each having a free end and an opposite end;
a vibrator coupled to said opposite ends whereby vibrations generated by said vibrator are transmitted along said fingers from said opposite ends to said free ends; and,
a handle for receiving said opposite ends and in which is disposed said vibrator;
each of said fingers having a transversely extending portion immediately adjacent the handle, each said transversely extending portion being followed by a contiguous portion extending downwardly and inwardly from said transversely extending portion, said contiguous portion terminating in said free end, said intermediate length and continuous length of said fingers together defining a head-receiving space for receiving a space, said space extending between said free ends and said opposite ends and having an opening at one end formed by a juxtaposition of said free ends of said fingers, said opening having a circumference smaller than a circumference of said head, and at least a portion of said head-receiving space having a circumference which exceeds said circumference of said opening whereby, in use, when said device is lowered on to said head so that said head enters said head-receiving space through said opening, said free ends of said fingers apply pressure to and thus massage said head.

Preferably said fingers are electrically conductive.

Preferably said fingers comprise copper wire.

Preferably the fingers are pliable to that the size and shape of the opening can be varied.

Preferably the free end of each finger is smoothly terminated.

Preferably each free end is terminated in a bulb or ball like structure.

Preferably the free end of each fingers terminates in a resin bulb or ball like structure.

Preferably the fingers are made of wire.

Preferably the fingers are electrically conductive.

Preferably the fingers are made of copper wire.

Preferably the head massaging device comprises between four and twenty four fingers.

Preferably the opposite ends of the fingers are connected together.

Preferably the connected opposite ends of the fingers terminate in or otherwise form a handle for gripping and manipulating the massaging device.

Brief Description of the Drawings

An embodiment of the present invention will now be described by reference to the accompanying drawings in which:

Figure 1 is a schematic representation of an embodiment of the head massaging device.

Detailed Description of the Preferred Embodiments

The head massaging device 10 includes a plurality of resilient fingers 12 defining a head receiving space 14 having an opening 16 at one end formed by the relative juxtaposition of the respective free ends 18 of the fingers 12. The opening 16 is smaller than the size of the head so that in use when the device 10 is lowered onto the head so that the head enters the space through the opening 16, the free ends 18 of the fingers 12 apply pressure to, and thus massage, the head.

The fingers 12 are pliable so that the size and shape of the openings 16 can be varied to suit different people. That is, the fingers 12 can be bent to ensure that the opening 16 is of a size so that the free ends 18 contact the head/scalp of a person when the device 10 is lowered onto the head with the head entering the space 14 through opening 16.

The characteristics of resilience and pliability of the fingers 12 can be achieved by making

the fingers 12 from wire. Copper wire is particularly well suited because of its wide availability and low cost. It may be beneficial for the wire making up the fingers 12 to be electrically conductive, which of course will follow if the wire is made from copper.

To provide an enhanced massaging effect and to eliminate any prospect of scratching the scalp the free ends 18 are smoothly terminated. This can be achieved by terminating the free end of each finger in a bulb or ball like structure. This structure can be formed integrally with the fingers 12. Alternately, bulb or ball like structures can be fixed or otherwise attached to the free ends 18. One way of doing this is to dip the lower ends of the fingers 18 into a resin then lift the fingers 12 out of the resin so that as the resin flows down each of the fingers 12 it collects and forms a droplet depending from the free ends 18 which upon hardening forms the bulb or ball like structure.

Opposite ends 20 of the fingers 12 are coupled or connected together to form part of a handle 22 for gripping and manipulating the device 10. When the fingers 12 are made of wire, the ends 20 can be simply twisted and otherwise wound together. A plastic housing 24 is slipped over the ends 20 to complete the handle 22 and make it easier to grip.

By making the fingers 12 pliable, the device 10 can be easily packaged and stored in a flat rectangular box by simply flattening half of the fingers 12 on opposite sides of the handle 22. When it is desired to use the device 10 the fingers 12 are simply spread out about the handle 22 from the flat condition.

The housing 24 which receives the free ends 20 of the fingers 12 defines a cavity 25 in which is disposed a vibrating means (e.g. a vibrator) 26 and battery 28. The vibrator 26 can be in the form of any commercially available battery powered vibrating motor. A switch 30 is provided on the handle 22 for selectively opening and closing an electric circuit 32 coupling the battery 28 to the vibrator 26. In this particular embodiment, the ends 20 of fingers 12 are wedged between the outside of the vibrator 26 and an inside surface of the housing 24. When the switch 30 is operated to close the circuit 32, an electric current is fed from the battery 28 to the vibrator 26 causing it to vibrate. The vibrations are transmitted along the fingers 12 from the ends 20 to the free ends 18. The

housing 24 is provided with a removable end cap 34 to allow replacement of the battery 28.

Now that embodiments of the massaging device 10 have been described in detail it will be apparent to those skilled in the relevant arts and numerous modifications and variations can be made without departing from the basic inventive concepts. For example, the illustrated embodiments depict device 10 having eight fingers 12. However the device 10 can be made with any number of fingers with the preferred minimum number being four and preferred maximum number being twenty four. Further, the fingers 12 may be made from plastics, synthetic materials or composites. It is also stressed that the pliability of the fingers 12 is not an essential characteristic of the device 10. If the fingers 12 are made solely from a plastics material then they will still have the resilient characteristic as required but not the preferred feature of pliability. In either instance the opening 16 and space 14 are self supporting to the extent they substantially retain their pre-application shape after removal of the device 10 from a user's head. In yet a further variation, each finger 12 can be made as a dual or multi component element having at least a first lower element which includes the free ends 18 being made from a resilient material and a second upper component that can provide the feature of pliability. For example, each finger 12 can be made from the first lower length of plastics material which includes the free end 18 and an upper length say of wire joined to the lower length (for example by an adhesive or epoxy resin) leading to the handle 22 to provide the characteristic of pliability to the finger 12. This then allows the finger 12 to be flattened for storage and opened up for use as well as allowing reshape and resizing of the opening 16. Also, there are numerous alternatives for smoothly terminating the free end 18 of each finger 12. For example, a plastic or metal sleeve having a smooth end can be applied and otherwise affixed to the free end 18 of each finger provided there is a smooth termination. Alternately, the free end 18 of each finger may simply be machined or otherwise worked to provide a smooth termination.

Further, rather than having the ends 20 of fingers 12 wedged between the vibrator 26 and the inside of housing 24, other types of mechanical coupling of the vibrations generated by the vibrator 26 can be incorporated. For example, the vibrator 26 can be arranged to transmit vibrations directly to the handle 22, or housing 24 with the ends 20 coupled to the handle 22 or housing 24 to receive those vibrations.

All such modifications and variations are deemed to be within the scope of the present invention the nature of which is to be determined from the above description and the appended claims.

CLAIMS

1. A head massaging device including a plurality of resilient fingers, said fingers each having a free end and an opposite end, said opposite ends being coupled together; vibrating means coupled to said opposite ends of said fingers whereby vibrations generated by said vibrating means are transmitted from said opposite ends through said fingers to said free ends, said fingers defining a head receiving space for receiving a head, said space extending between said free ends and said opposite ends and having an opening at one end formed by a juxtaposition of said free ends of said fingers, said opening being smaller than said head, and at least a portion of said head receiving space having a circumference which exceeds a circumference of said opening whereby, in use, when said device is lowered onto said head so that said head enters said head receiving space through said opening, said free ends of said fingers apply pressure to and thus massage said head.

2. The device according to claim 1, wherein said fingers are pliable so that the size and shape of said opening can be varied.

3. The device according to claims 1 or 2 wherein said fingers are made of wire.

4. The device according to any one of claims 1-3, wherein said device includes from four to twenty four said fingers.

5. The device according to any one of claims 1-4 further including a handle for receiving opposite ends of said fingers and which is disposed said vibrating means, said handle facilitating gripping and manipulation of said massaging device.

6. A head massaging device including at least:

a plurality of resilient and pliable fingers, said fingers each having a free end and an opposite end;

vibrator coupled to said opposite ends whereby vibrations generated by said vibrator are transmitted along said fingers from said opposite ends to said free ends; and

said fingers defining a self-supporting head-receiving space for receiving a head,

said space extending between said free ends and said opposite ends and having a self-maintained opening at one end formed by a juxtaposition of said free ends of said fingers, said opening being of a circumference smaller than a circumference of said head, whereby said head can fit inside said space with said free ends in contact with said head, and at least a portion of said head-receiving space having a circumference which is greater than said circumference of said opening whereby, in use, when said device is lowered on to said head so that said head enters said head-receiving space through said opening, said free ends of said fingers apply pressure to and thus massage said head.

7. The device according to claim 6, wherein each said free end of each said finger is smoothly terminated.

8. The device according to claim 7, wherein each said free end is terminated in a bulb or ball-like structure.

9. The device according to any one of claims 6-8, wherein said fingers are made of wire.

10. The device according to any one of claims 6-9, wherein said fingers are electrically conductive.

11. The device according to claim 10, wherein said fingers are made of copper wire.

12. The device according to any one of claims 6-11, wherein said device includes from four to twenty four said fingers.

13. The device according to any one of claims 6-12, wherein said opposite ends of said fingers terminate in or form a handle for gripping and manipulating said massaging device, said handle further housing said vibrator.

14. A head massaging device including at least:

a plurality of resilient fingers, said fingers each having a free end and an opposite end;

resilient and pliable fingers, said fingers each having a free end and an opposite end;

vibrator coupled to said opposite ends whereby vibrations generated by said vibrator are transmitted along said fingers from said opposite ends to said free ends;

and a handle for receiving said opposite ends and in which is disposed said vibrator;

each of said fingers having a transversely extending portion immediately adjacent the handle, each said transversely extending portion being followed by a contiguous portion extending downwardly and inwardly from said transversely extending portion, said contiguous portion terminating in said free end, said intermediate length and continuous length of said fingers together defining a head-receiving space for receiving a space, said space extending between said free ends and said opposite ends and having an opening at one end formed by a juxtaposition of said free ends of said fingers, said opening having a circumference smaller than a circumference of said head, and at least a portion of said head-receiving space having a circumference which exceeds said circumference of said opening whereby, in use, when said device is lowered on to said head so that said head enters said head-receiving space through said opening, said free ends of said fingers apply pressure to and thus massage said head.

15. The device according to claim 14, wherein said fingers are pliable so that the size and shape of said opening can be varied.

16. The device according to claims 14 or 15, wherein each said free end of each said finger is smoothly terminated.

17. The device according to claim 16, wherein each said free end is terminated in a bulb or ball-like structure.

18. The device according to any one of claims 14-17, wherein said fingers are made of wire.

19. The device according to any one of claims 14-18, wherein said fingers are electrically conductive.

20. The device according to claim 19, wherein said fingers are made of copper wire.

21. The device according to any one of claims 14-20, wherein said device includes from four to twenty four said fingers.