Aug. 22, 1933. B. B. LIPSNER 1,923,317

MASSAGE DEVICE

Filed May 16, 1928

Fig. 1

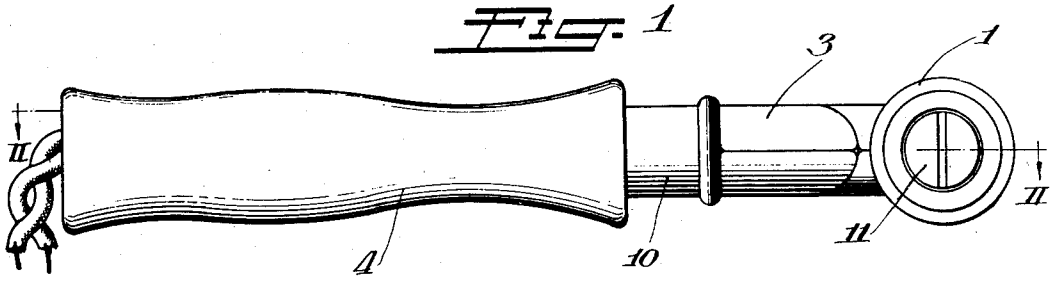


Fig. 2

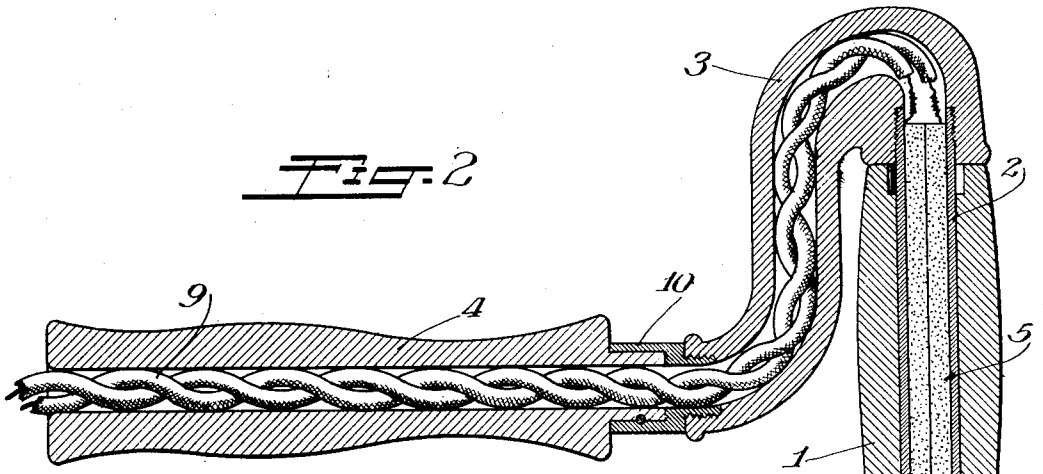


Fig. 3

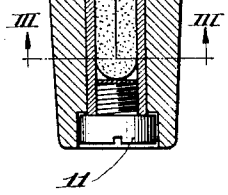
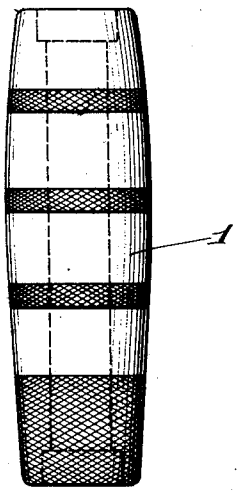


Fig. 4



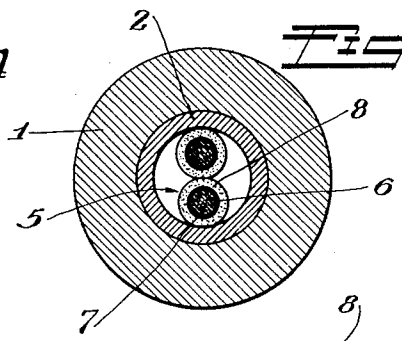
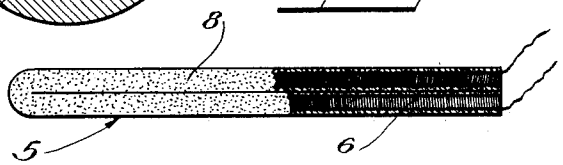


Fig. 5



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Patented Aug. 22, 1933 1,923,317

UNITED STATES PATENT OFFICE

1,923,317

MASSAGE DEVICE

Benjamin B. Lipsner, Chicago, Ill.

Application May 16, 1928. Serial No. 278,062

2 Claims. (Cl. 128—57)

This invention relates to massage devices, methods and preparations and has for its object the improvement in efficiency of such devices, methods and preparations for increasing the circulation of the blood and thereby reducing fatty tissue, removing and preventing wrinkles, alleviating goiter, hyperemia, toning the system as a whole and other like purposes.

I have found that if a fatty portion of the body, such as a double chin, is massaged with a heated roller or surface, especially in the presence of an oleaginous material which has previously been exposed to the action of ultra violet rays, the part so massaged is stimulated, thereby increasing the flow of blood and consequently augmenting the supply of oxygen by which the fattey materials are oxidized so that the fatty tissue is greatly reduced.

The exact cause of these effects is somewhat obscure, but it is believed that the action is in part due to the combined action of heat and massage and in part due to the action of the infra red rays given off by the warm massaging surface.

I have found that infra red rays have a pronounced effect on substances which have been subjected to ultra violet rays. On some substances this effect is visible. For example, Balmain's paint (alkaline earth sulphides) after exposure to ultra violet rays, will give off radiations of longer wave length and therefore visible. This phosphorescent effect is greatly enhanced if after such exposure the paint is exposed to infra red rays. The light given off is much more intense but continues for a shorter period than in the case where the infra red excitation is omitted.

While other substances, notably oils, such as sesame, which is the one I prefer to use, do not phosphoresce under such conditions, there is a very beneficial result not obtained when either a cold massaging surface or an oil not treated with ultra violet rays is used.

This action between the infra red rays from the massaging surface and the oils, etc. previously exposed to ultra violet rays, is believed to be very important, aiding the circulation and thereby aids in reducing fatty tissues, increasing metabolism and so on.

A further effect of ultra violet rays is to bring about a great increase in vitamine content of oils containing physterosterol and/or ergosterol and other substances, such as sesame oil. Moreover, those oils which contain such compounds have the property of being readily absorbed by the skin so that penetration to the tissue to be acted upon is obtained.

I have observed that when a warm massage roller is used, the part treated becomes flushed showing a greater flow of blood than normal. If the roller is cold, a large amount of massage is required to produce any such effect. On the other hand, if a preparation is used which has been previously treated to ultra violet rays, the flushed effect lasts in the case of the average individual for about three times as long as when no such preparation is employed. The same preparation, not previously subjected to ultra violet rays, gives little effect.

Other and further important objects and advantages of this invention will be apparent from the disclosures in the accompanying drawing and the following specification which sets forth the preferred form and nature of my device, method and preparation.

The device (in a preferred form) is illustrated on the drawing and hereinafter more fully described.

On the drawing:

Figure 1 is a side elevation of the device.

Figure 2 is a section on the line II—II of Figure 1.

Figure 3 is a section on the line III—III of Figure 2.

Figure 4 is a side elevation of the roller.

Figure 5 is a side elevation partly in section of the heating element.

As shown on the drawing:

The device comprises a massage roller 1 rotatably mounted on a hollow spindle 2 screwed into one end of a hollow goose-neck 3 to the other end of which is connected a hollow handle 4.

Within the spindle is a heating element 5 which conveniently consists of a coil of resistance wire 6, such as chromel, wound around an asbestos core 7 and then wrapped with asbestos 8. The ends of the resistance wires are connected to two flexible leads 9 passing through the goose-neck and handle for connection to the usual plug socket in the house wiring system.

The goose-neck may be of metal, but the handle should preferably be of some non-conductor of heat, such as wood, fibre or hard rubber, provided with a threaded nipple 10 to connect it to the goose-neck.

The hollow spindle 2 is of metal to allow ready passage of heat from the heating element 5 to the roller 1. The latter also is preferably of metal, such as aluminum, monel, or other non-corrosive alloy, to allow the heat transmitted to

it by the spindle to readily reach its surface and from thence be transferred to the part to be treated.

I have further found that the size of the clearance or air space between the spindle and the bore of the roller has a very important influence on the rate of heat transference from the spindle to the roller. As this layer of air has such a marked [illegible] effect, the clearance should be as small as possible.

The roller is held in place on the spindle by a large headed screw 11, the head of which fits into a recess at the end of the roller while the stem has threaded engagement with the bore of the spindle. The roller is recessed at both ends so that its position on the spindle may be reversed end for end. As shown in Figure 4 the roller is provided with one smooth and one knurled end and the position of the roller on the spindle depends on which of these ends it is desired to use.

A knurled surface produces a somewhat greater massaging action than a plain one and the selection of the knurled or plain end will depend on the degree of massaging effect required.

Obviously a fluted corrugated or other surface may be used as desired.

The temperature of the roller may vary over a considerable range, say from 100° to 130° F, but usually not above 120° F. and preferably between 110° and 120° F.

While a heated massage roller alone produces most useful results, these are greatly enhanced by the simultaneous application of certain oleaginous preparations, more especially those which have been treated with ultra violet rays. These preparations may be applied directly to the skin but are preferably applied to the roller of the massage device.

The best results I have found are to be obtained with vegetable oils, such as sesame oil, subjected to ultra violet rays for 5 seconds to 15 minutes, the preferred time of treatment being 5 minutes.

I have further found that it is advantageous to place the oil after such treatment in an air-tight container, opaque to ultra violet rays. Zinc forms an admirable material for such a container.

I am aware that numerous details of construction of the device and of carrying out the method and of making the preparation may be varied through a wide range without departing from the spirit of this invention, and I do not desire to limit the patent granted otherwise than as necessitated by the prior art.

I claim as my invention:

1. A massage device comprising a spindle, a handle connected to one end of said spindle and a roller on said spindle adapted to be reversed in position end for end on said spindle, one end of said roller having a knurled surface and the other end of said roller having a smooth surface.

2. A massage device comprising a tubular metal spindle, a hollow handle at right angles thereto, a hollow gooseneck connecting one end of said spindle to one end of said handle, an electrical resistance within the spindle and insulated wires passing through said handle and gooseneck connected to said resistance, said spindle carrying a roller having a knurled surface on one end and a smooth surface on the other end, said roller adapted to be reversed on said spindle.

BENJAMIN B. LIPSNER.