Dec. 19, 1939. V. SOMMER ET AL 2,183,726

APPARATUS FOR THE TREATMENT OF THE SKIN OR THE LIKE

Filed Feb. 17, 1939

Fig. 1.

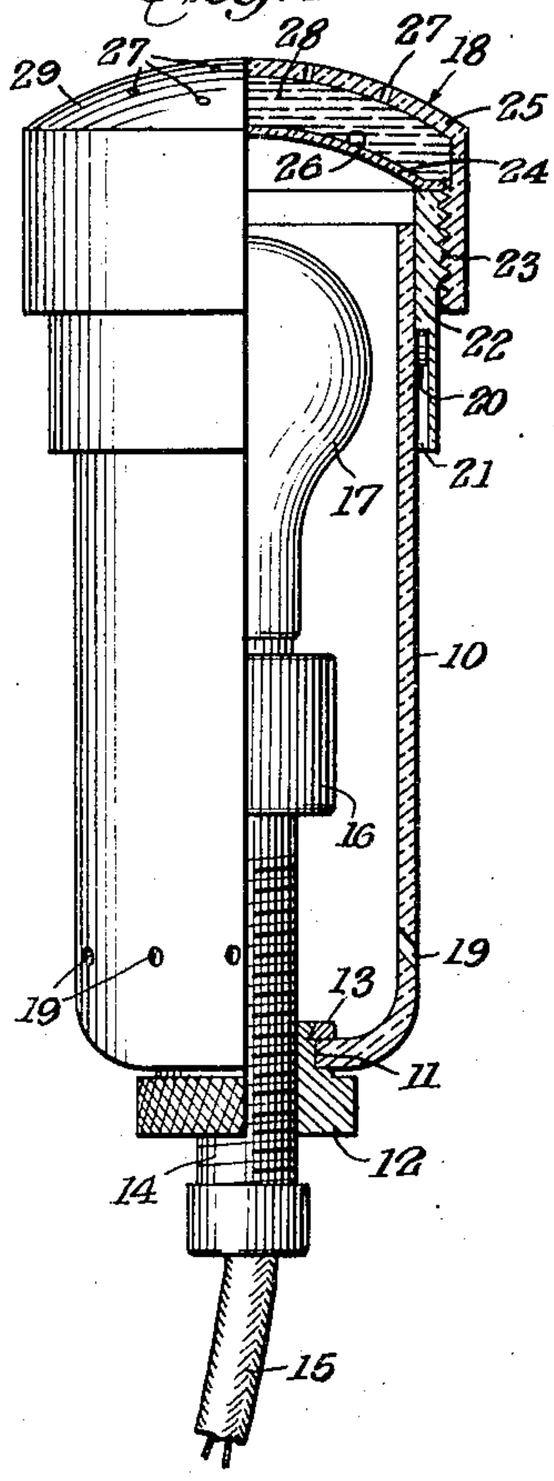


Fig. 2.

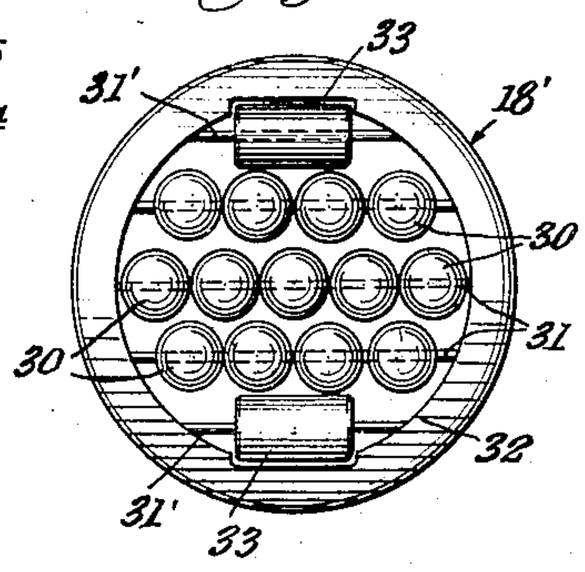


Fig. 4.

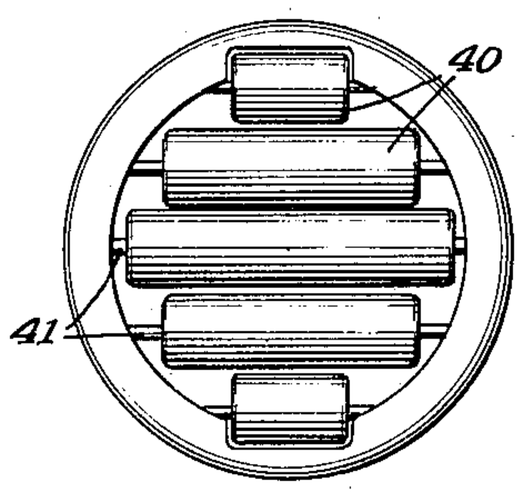


Fig. 3.

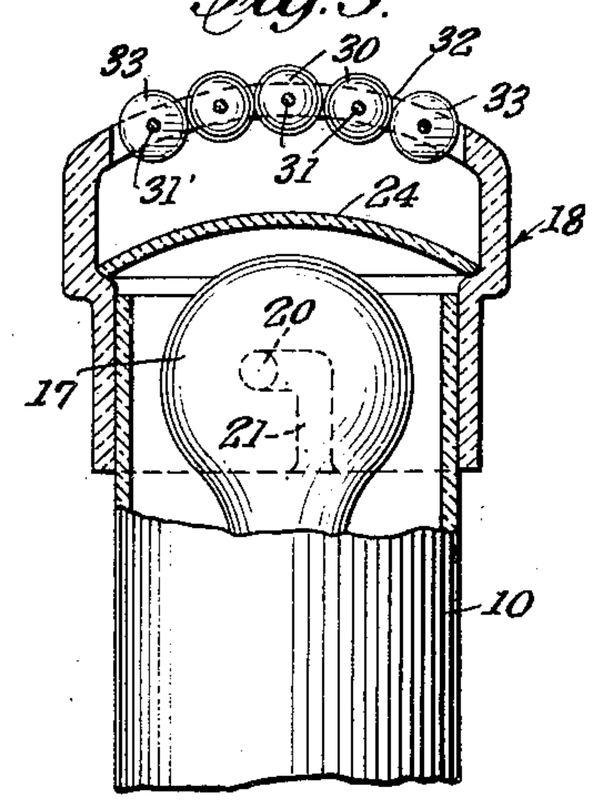


Fig. 5.

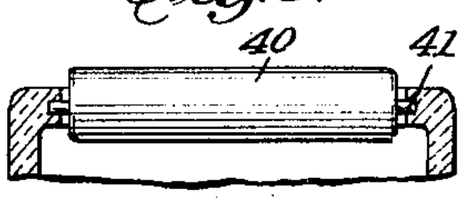


Fig. 6.

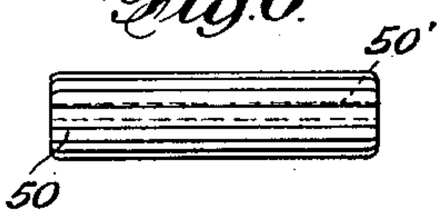


Fig. 7.

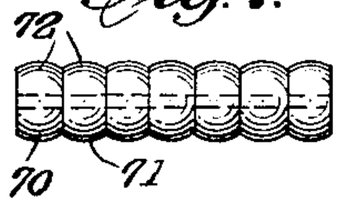


Fig. 8.

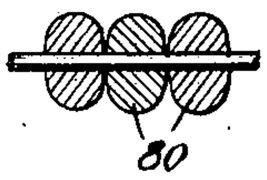


Fig. 9.

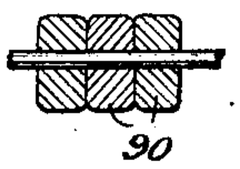
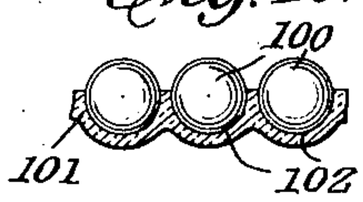


Fig. 10.



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APPARATUS FOR THE TREATMENT OF THE SKIN OR THE LIKE

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Application February 17, 1939, Serial No. 256,980

4 Claims. (Cl. 128—24.1)

This invention relates generally to massaging apparatus and is particularly a combined stroking, heat and light transmitting unit for massaging or like purposes.

It is an object of the present invention to provide an economical, efficient and practical apparatus of the above nature, which includes a removable exuder through which skin food, such as creams, may be discharged while the apparatus is in contact with the skin to be treated and by manipulation of the apparatus is then worked into the skin.

A further object of the present invention is to provide a massage head which may be exchangeably located on a handle forming a housing for a light and heat source, which head may include a plurality of elements for the mechanical treatment of the skin preferably after the exuder has been employed.

Still a further object of the invention contemplates the provision of a housing which is employable as a handle and which is adapted to adjustably receive therein a light source and which carries a head including a light filter emitting only desired rays for use during the skin treatment.

It is still another object of the invention to further provide in the latter head rolling instrumentalities for performing the massaging treatment. Said rolling instrumentalities may be selected according to the structure and texture of the skin to be worked upon.

It is a further object of the present invention to make these rolling instrumentalities heat and light transmitting in order to impart heat and desired light rays to the skin which is being treated.

Another object of the invention is to provide rolling instrumentalities having variously shaped surfaces conformable with the desired degree of treatment required.

Yet another object of the invention is to provide resilient means for supporting the rolling instrumentalities in the head to accommodate said instrumentalities in the creases and hollows of the skin being treated and to permit varying pressure to be applied to the skin.

The invention in its general aspect contemplates the provision of a suitable skin treating unit which is capable of applying a skin food to the skin surface to be treated and substantially simultaneously massaging and stretching the skin to permit the food to enter the pores of the skin, while heat and beneficial light rays also simultaneously act upon the skin area and pores under treatment.

Other objects and advantages are set forth in the ensuing specification which taken with the accompanying drawing makes clear the nature of the invention. But the disclosure is illustrative only and the features of the apparatus are to be regarded as new to the full extent indicated by the broad terms in which the appended claims are expressed.

On the drawing:

Fig. 1 is a side elevational view, partly in section, showing an apparatus made in accordance with the invention.

Fig. 2 is a top view of a massaging head employable in the invention.

Fig. 3 is a side elevational view, partly in section of the upper portion of apparatus having applied thereto the head shown in Fig. 2.

Fig. 4 is a top view of a modified head for the said apparatus.

Fig. 5 is a sectional view of the head at a portion thereof.

Figs. 6 and 7 are plan views and

Figs. 8, 9 and 10 are sectional views of massaging elements in modified forms.

Referring now particularly to the drawing which shows some of the examples by which the invention may be realized, the numeral 10 indicates a housing made of any suitable material. Housing 10 is preferably elongated in form and provides a handle for operating the device. At one end of the handle there is provided a perforation 11 through which projects a knurled bushing 12, the said bushing being held securely to the handle 10 by means of a nut 13 or any other securing means. The bushing 12 and nut 13 are adapted to threadedly engage a sleeve 14 through which a cable 15 extends for connection with a socket 16 to which a suitable electric lamp 17 is attached in the conventional manner. The cable 15 is connected to an electrical source of power not shown.

The lamp 17 is preferably a combined heat and light transmitting device. The lamp 17, socket 16 and part of the sleeve 14 project within housing 10 and the lamp or bulb 17 is adjustably arranged relative to the head 18 removably fixed at the other end of the handle 10, by threaded movement of the sleeve 14.

It is understood that other suitable means can be employed for adjustably and relatively arranging the heat and light emitting device 17 with respect to the head 18.

The wall of housing 10 may be provided with

suitable air openings 19. Movable in longitudinal direction and secured by such means, as for example, by a pin 20 and a bayonet slide 21 is a sleeve or ring 22 having an external thread for threaded engagement with the external thread of the flange 23 of head 18.

Secured in head 18 and spaced from the surface 29 thereof is a partition 24 forming a light filter. Said partition 24 is preferably made of a translucent material having preferably a red or blue color for transmitting the beneficial rays emitted from device 17 as hereinafter further stated.

The space between partition 24 and wall 25 of head 18 provides a receptacle or reservoir 26 for any suitable skin food, as for example, oil, creams, etc.

Wall 25 is provided with one or more perforations 27, through which the said kin food may be extruded during operation of the device. Wall 25 is preferably arcuate in shape and made flexible so that it may follow the contour of the applied skin surface. The flexibility of the wall 25 further permits the skin food 28 within reservoir 26 to be extruded in adequate quantities through the openings 27.

The device 17 influences the skin food 28 through partition 24 facilitating the application of the skin food 28, and at the same time heating the wall 25 which in turn conducts the heat to the applied skin surfaces. The wall 25 is also translucent, so that the rays of light from device 17 through partition 24 may pass therethrough.

A further advantage of the arrangement shown in Fig. 1 and hereinabove described with respect to the head 18 and particularly the reservoir 26 resides in the fact that being situated above the heat and light device 17 the skin food is readily heated and becomes less viscous thereby readily flowing through the opening 27 for application to the skin to be treated. The flexibility of the surface 29 is regulatable by tightening and loosening the head portion 23, 25; tightening thereof creates a regulating pressure upon the skin food, thereby rendering the wall 25 less flexible, while loosening the head section 23, 25 will diminish the pressure within the reservoir 26 and make the surface 29 more flexible.

It is known, that when heat is applied to the skin, the pores therein open up. Therefore the skin food will readily be injected within the pores and can be readily worked in by massaging action of the surface 29 against the skin. At the same time the beneficial light rays will enter the pores and act upon the skin texture.

It is to be observed that the massaging of the skin and injecting the skin food within the open pores while the skin is under heat and light treatment results in a very efficient treatment of the skin causing the same to be thoroughly worked upon.

In the treatment of certain types of skin texture, it may be advisable to utilize a more rugged massaging surface or a plurality of such surfaces. To this end the head 18' may be provided with a plurality of centrally disposed rolling elements 30. These rolling elements may comprise spherical members 30 rotatable on an axis 31. These axes may be resilient and/or flexible to provide a certain "give" during the massaging treatment.

Fig. 2, besides showing the spherical members 30, also provides a stationary massaging rim 32 in which are mounted the axes 31. There may also be provided the axis 31' upon which are rotatably mounted the rollers 33.

As clearly shown in Fig. 3, the members 30 and 33 are arranged on a spherical plan thus forming an arcuate surface for mechanical massaging treatment for the skin.

Of course, it is understood that the members 30 and rollers 33 are made of translucent material so that they may readily transmit heat and light therethrough to the skin to be treated.

Figs. 4 to 9 disclose various modifications of massaging elements and members. In Fig. 4 all the members 40 comprise rolling devices substantially in the form of cylinders supported on shafts 41.

In Fig. 6 the rollers 50 are grooved or fluted as indicated at 50'; in Fig. 7 the rollers 70, 71 etc. have flat adjacent ends producing a wavy surface 72.

In Fig. 8 the massaging elements 80 are substantially elliptical in cross section; whereas in Fig. 9 the elements 90 are polygonal.

It is to be noted that the heretofore described massaging elements or members (Figs. 2 to 9) are mounted on an axis to rotate thereabout thereby producing substantially a pulling action on the skin during the massaging treatment.

In Fig. 10 the massaging elements 100 are spherical and are mounted for universal movement in a socket 101 having pockets 102. Any suitable means may be employed for retaining said elements therein. The socket 101 is also made of translucent material so that said elements 100 may readily transmit heat and light to the skin and simultaneously bring about a pulling and pressing effect to the latter when the massaging apparatus is in operation on the skin, thereby an excellent working on the skin is obtained which with respect to the massaging technic is most desirable. Where the socket 101 is employed the partition 24 may be eliminated Again the socket 101 may be provided with perforations 29 for permitting extrusion of the skin food in the above-mentioned manner; of course, in this instance the partition 24 will then form a suitable bottom for the aforesaid reservoir 26.

The operation of the apparatus may be readily understood from the above description. The construction of the apparatus is such that the heads 18, 18' are interchangeable so that the apparatus can readily be adapted for the treatment intended. Where the skin is tender or sufficient blood circulation is present then a smooth surface massaging head would perform the required service. However, where the skin is relatively tough or the blood circulation poor, a more rugged massaging surface, such as for example those shown in Figs. 2 to 10, may be employed to obtain best results.

The apparatus may further be used in connection with the treatment of the human body, for instance, to alleviate rheumatic pains, sinus disorders or the like.

Having thus described certain embodiments of this invention, it would be evident to those skilled in the art that various changes and further modifications may be made therein without departing from the spirit or scope as defined by the appended claims.

We claim:

1. An apparatus for the treatment of the skin or the like comprising a housing forming a handle, a removable head for said housing, a translucent partition in said head, a device within said housing for emitting heat and light to said skin,

and a reservoir in said head for holding skin treating matter, said partition forming a wall of said reservoir, the surface of said head being provided with means for discharging said matter and massaging the same into the skin while said skin is under heat and light treatment through said device.

2. An apparatus of the character described, comprising an elongated housing forming a handle, a device for emitting heat and light rays positioned in said housing, and a removable massaging head placed on said housing, said head including a plurality of universally movable massaging elements, and a holder for said elements, said holder being made of translucent material to permit said heat and light rays to pass therethrough, said elements being centrally arranged with respect to said device.

3. An apparatus of the character described, comprising an elongated housing forming a handle, a device for emitting heat and light rays positioned in said housing, and a massaging head placed on said housing and displaceable with respect to said device, said head including a plurality of universally movable massaging elements, and a holder for said elements, said holder being made of translucent material to permit said heat and light rays to pass therethrough, said elements being centrally arranged with respect to said device.

4. An apparatus of the character described, comprising an elongated housing forming a handle, a device for emitting heat and light rays positioned in said housing, a massaging head placed on said housing and displaceable with respect to said device, said head being provided with a central opening and a stationary rim, a plurality of rotatable massaging elements disposed in said opening, and holding means for said elements laterally fixed at said rim, said elements being made of translucent material to permit said heat and light rays to pass therethrough.

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