

E. S. SAIGHMAN.
 MASSAGE APPLIANCE.
 APPLICATION FILED JULY 18, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

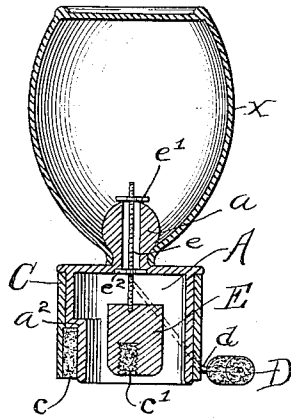


Fig. 3.

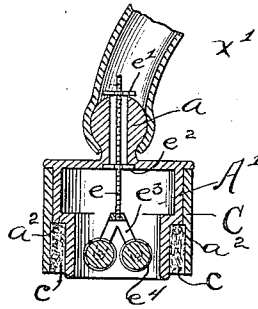


Fig. 5.

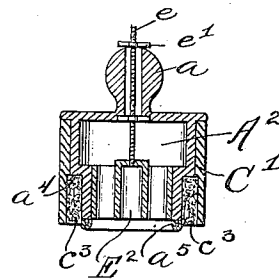


Fig. 2.

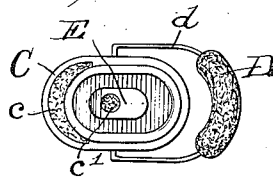


Fig. 4.

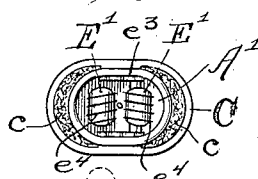


Fig. 6.

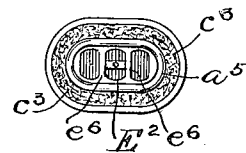


Fig. 7.

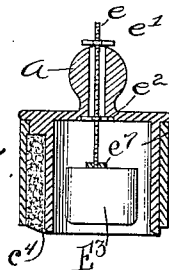


Fig. 9.

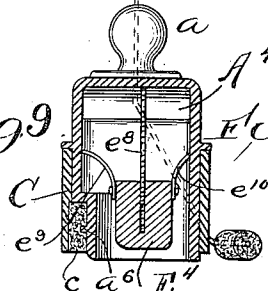


Fig. 10.

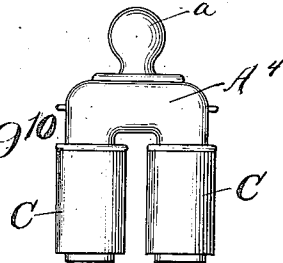


Fig. 8.

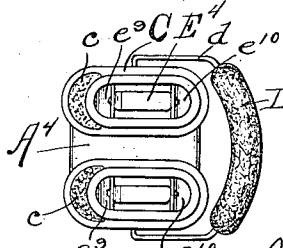
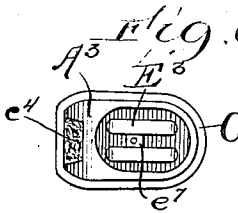


Fig. 11.

Witnesses
 Ray White
 Harry R. White

Inventor
 Edward S. Saighman,
 By Charles S. Atty.

No. 816,748.

PATENTED APR. 3, 1906.

E. S. SAIGHMAN.
MASSAGE APPLIANCE.
APPLICATION FILED JULY 18, 1904.

2 SHEETS—SHEET 2.

Fig. 12

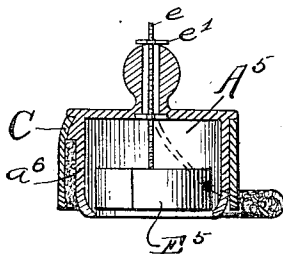


Fig. 14

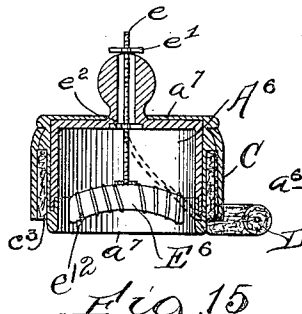


Fig. 16

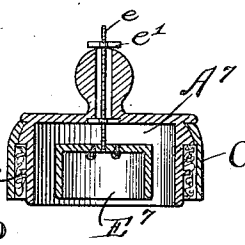


Fig. 13

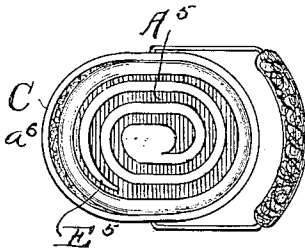


Fig. 15

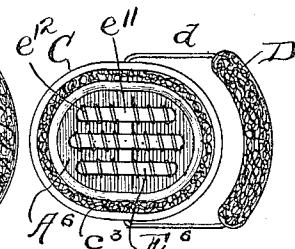


Fig. 17

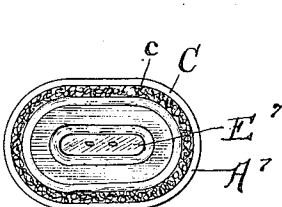


Fig. 18

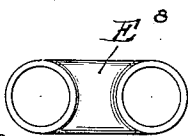


Fig. 19

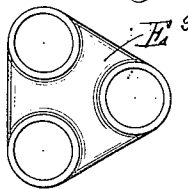


Fig. 20

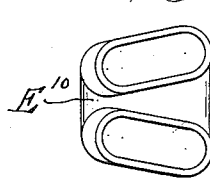


Fig. 25

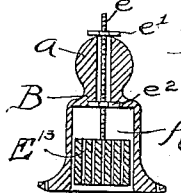


Fig. 21

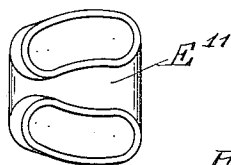


Fig. 22



Fig. 26

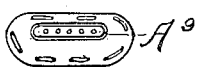
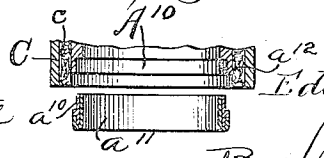


Fig. 24



Fig. 27



Witnesses,

Ray White

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UNITED STATES PATENT OFFICE.

EDWARD S. SAIGHMAN, OF CHICAGO, ILLINOIS.

MESSAGE APPLIANCE.

No. 816,748.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed July 18, 1904. Serial No. 216,937.

To all whom it may concern:

Be it known that I, EDWARD S. SAIGHMAN, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Massage Appliances; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in massage appliances, and more particularly to an appliance or applicator adapted to operate upon more or less wrinkled surfaces for the purpose of eradicating the wrinkles.

Heretofore in massage-applicators of various kinds resort has been had sometimes to suction devices, and sometimes (as in my former applications for United States Patents "Massage-applicators," filed January 2, 1904, Serial No. 187,453, and "Method and apparatus for treating the skin and subjacent tissues," filed May 31, 1904, Serial No. 210,361), hot and cold applications have been used in massage treatment. In the use of massage for the purpose of removing the wrinkles it is desirable and necessary to apply as much tension as possible transversely the wrinkles and simultaneously draw the blood thereto by suction and aided by thermal applications. The applicators now in use are not well adapted for this purpose owing to their construction and shapes and method of application.

The object of this invention is to provide an apparatus for the purpose described whereby an applicator moved longitudinally of the wrinkle acts to apply pressure transversely thereof and is also adapted to be applied at any temperature intermediate the extremes of temperature to which the skin can be beneficially exposed.

A further object of my invention is to provide, in connection with the applicator, means for wiping or drying the surface after each movement of the applicator and to afford in one instrument having any desired cross-sectional form attachments capable of ready insertion or removal and affording means for applying the treatment described.

The invention consists in the matters hereinafter described, and more fully pointed out and defined in the appended claims.

In the drawings, Figure 1 is a vertical sec-

tion of a device embodying my invention. Fig. 2 is a bottom plan view of the same with the suction device omitted. Fig. 3 is a vertical section of an applicator of a slightly different form and showing a hose for connection with the suction device, not shown. Fig. 4 is a bottom plan view of the same. Fig. 5 is a view similar to Fig. 3, but showing a different attachment for the application of pressure and tension. Fig. 6 is a bottom plan view of the same. Fig. 7 is a view similar to Fig. 1, showing a different tension device therein and with the wiper omitted. Fig. 8 is a bottom plan view of the same. Fig. 9 is a vertical section of one form of a double applicator. Fig. 10 is an end view of the same. Fig. 11 is a bottom plan view of the same. Fig. 12 is a vertical section of an applicator having a resilient spiral tension device therein. Fig. 13 is a bottom plan view of the same. Fig. 14 is a view similar to Fig. 12, showing a different form of the tension. Fig. 15 is a bottom plan view of the same. Fig. 16 is a section similar to Fig. 14, showing an interior cup acting as a tension device. Fig. 17 is a bottom plan view of the same. Fig. 18 is a bottom plan view of a double applicator similar to that illustrated in Figs. 9 to 11, but having circular mouths or a double-tension device. Fig. 19 is a bottom plan view of a similar appliance having three mouths or openings at the bottom. Figs. 20, 21, and 22 are similar bottom plan views showing various arrangements of the mouths or openings adapted to apply pressure at the desired angles and any of which are capable of being substituted in any of the cups as a tension device. Fig. 23 is a vertical section of another form of my invention. Fig. 24 is a bottom plan view of the same. Fig. 25 is a vertical section of a device embodying my invention and having narrow openings in which is adjustably seated a tension device. Fig. 26 is a bottom plan view of the same. Fig. 27 is a fragmentary sectional detail illustrating a construction whereby different or any shaped bottom openings may be provided and in which the edges are resilient.

As shown in said drawings, A in Figs. 1 and 2 indicates a suction-cup, which may be constructed of metal or any desired material having high thermal conductive power, such as metal, glass, or hard rubber. Said cup, as shown, is provided with a neck or nipple *a*, adapted to afford connection with the bulb and through which the air is ex-

hausted to the cup. The bottom or mouth of the cup may assume any suitable form, dependent upon the character of the surface to be treated and the nature of the treatment applied. As shown, said cups at their mouths are each rounded on the front outer edge and rear inner edge to adapt the same for moving over the surface treated without endangering abrasion. As shown, the cup on its front side is provided with an external downwardly-directed shoulder a^2 , and a rubber or other resilient band C is engaged around the cup, thereby affording a recess at the front of the cup below said shoulder, adapted to receive cotton-wool, sponge-rubber, or other absorbent material c , whereby moisture can be applied to the surface treated simultaneously with the application of heat and transverse tension.

Pivoted on the cup at the rear of the same by means of a resilient yoke d , which conveniently may be formed of wire, is a wiper or drier D, comprising a roll of any suitable absorbent material carried on said yoke and adapted to be swung upwardly toward the bulb or downwardly into engagement with the surface treated at the will of the operator.

Within the cup is adjustably secured a tension and pressure device capable of operating upon the surface to afford lateral tension simultaneously with the application of suction, heat, moisture, and longitudinal pressure and massage. These interior tension devices may assume many different forms hereinafter described, dependent upon the character of the surface to be treated and the nature of the treatment indicated.

As shown in Figs. 1 and 2, a shoe E, shaped to correspond approximately to the horizontal section of the cup, but much smaller and the bottom having a relatively flat under surface transversely and slightly upwardly rounded at the ends and is rigidly secured in advance of its centre upon a threaded rod e , which extends through the suction-aperture in the top of the cup and is supported in place by bar-nuts $e' e^2$, which engage in the top of the cup and on the top of the nipple a and acts to support said shoe at the desired height within the cup. Said shoe is thus rigidly held at the adjusted height in the cup and exerts a smoothing pressure upon the wrinkled surface drawn upwardly into the cup by suction, and inasmuch as the skin is drawn up between the shoe and the sides of the cup the pressure and tension is lateral of the line of movement of the cup. As shown, a recess is provided in the bottom near the front of said shoe adapted to receive cotton-wool, sponge-rubber, or other suitable absorbent material c' , adapted to apply moisture and heat to the treated surface, as before described with respect to the cup. Said recess may, if preferred, be cylindrical and

threaded to aid in retaining the material in place.

The cup A' , as shown in Figs. 3 and 4, is constructed as before described, with the exception that downwardly-directed shoulders a^2 are provided both at the front and rear of the cup, adapted to contain absorbent pads c , retained in place by a resilient band C, as before described. As shown, also, a tube x' , adapted to be connected with any suitable means for exhausting the air from the cup, is connected with the nipple a in lieu of the bulb X. (Shown in Fig. 1.) As shown, also, in lieu of the shoe E, before described, a yoke e^3 is rigidly engaged upon a threaded rod e , similar to that before described, provided with nuts $e' e^2$, whereby the same is adjusted vertically and rigidly secured in the cup. Journaled in said yoke transversely of the cup are rollers E' , each of which is provided on its periphery with a spiral rib e^4 , which may be formed of a raised surface on the roller or a wire, thread, or other suitable flexible material wound about the roller and secured thereto and which when the device is pushed over the surface to be treated acts to apply pressure and tension laterally of the direction of motion of the cup.

In the construction illustrated in Figs. 5 and 6, in which the downwardly-directed shoulder a^4 is shown extending entirely around the cup A^2 , a resilient edge or rim of rubber a^5 is provided at the mouth of the cup, which may be vulcanized thereto or otherwise secured in place, and a layer or band of absorbent material c^3 and a resilient band C' , such as before described, is engaged above the same. Said cup is manifestly capable of being used in connection with the tension and pressure devices before described. As shown, however, the cup is provided with a pressure and tension shoe E^2 , carried upon the threaded rod e , as before described, and similarly adjusted within the cup, and which is shown provided with vertical apertures extending therethrough, the side walls of which are concave and which provide transverse ribs e^6 and curved side ribs.

In the construction illustrated in Figs. 7 and 8 the cup A^3 is substantially identical with the cup shown in Figs. 1 and 2, with the exception that the same is made somewhat thicker on the front side of the same and upturned to afford an upwardly-rounded nose extending to a vertical recess in the front of the cup, in which is secured absorbent material c^4 , such as before described, retained in place by the resilient band C. Within the cup is shown two parallel tension and pressure shoes E^3 , similar to that within the cup A, which are connected at their tops by a transverse bar e^7 , in which the threaded rod e is rigidly engaged and which afford means for rigidly but adjustably supporting the same within the cup.

In the construction illustrated in Figs. 9, 10, and 11 the cup A^4 is shown double or U-shaped, provided with the nipple a , connected in the bend thereof. As shown, said cup affords two communicating comparatively narrow cups substantially identical with the construction shown in Figs. 1 and 2, and each when the band C is secured in place affords a recess at the front adapted to contain absorbent material c , as before described. If preferred, a rib a^8 may be provided, which projects into said recess and aids in holding said absorbent material in position. Within each of said cups, as shown, is supported a shoe E^4 similar to the shoe E , before described, and in the top of which is adjustably secured a thread-shaft e^8 , which bears against the top of the cup and is adjusted as to height by screwing said rod into or out of the shoe. At each end of the shoe and permanently attached at the top thereof are springs e^9 and e^{10} , which bear against the front and rear of the cup and act to hold the shoe in place.

In the construction illustrated in Figs. 12 and 13 a cup corresponding with the cup A , before described, but nearly circular in form, is shown, within which, supported upon the threaded rod e , which rigidly engages at its center, is a resilient spiral E^5 , which when adjusted to proper height acts to apply pressure to the surface raised within the cup by suction and owing to its spiral form and resiliency acts to massage the same during the operation of the cup, exerting tension and pressure in all directions.

In the construction illustrated in Figs. 14 and 15 the cup A^6 is constructed of metal or other suitable material and invested with rubber a^7 or like material, which may be vulcanized thereon, if preferred, and, as shown, has a downwardly-directed shoulder a^8 , extending around the cup, adapted when the band C is secured in place to afford a recess for the absorbent material c^3 , as before described. Said cup is so constructed to afford firm but resilient lip edges, which afford yielding pressure upon the surface treated. Within the cup may be provided with any of the pressure-tension devices before described; but, as shown, the threaded rod e , as before described, carries at its lower end a grid E^6 , comprising parallel rounded bars e^{11} , concave longitudinally on their under sides and rigidly connected together above their bottoms. About each of said bars is spirally wound a wire or thread e^2 , affording a desirable medium acting to press the surface laterally, while conveying moisture thereto.

In the construction illustrated in Figs. 16 and 17 the cup A^7 is similar in form to the cup A^6 , but is shown without the vulcanized material, and within the same is a cup E^7 , having rounded edges. This cup is secured upon a rod e , as before described, and acts when the air from the cup A^7 is exhausted to

press the included surface downwardly, pinching the skin and subjacent tissues between its edges and the edges of the cup A^7 .

The construction illustrated in Figs. 18 to 22, inclusive, illustrates various forms of the tension and pressure device indicated by E^8 , E^9 , E^{10} , E^{11} , and E^{12} , adapted to be carried within the cup, or, if preferred, the cups themselves may be constructed as shown in said figures. In Fig. 18 a double device is shown having circular downwardly-opening mouths. In Fig. 19 three downwardly-opening mouths are provided, arranged each at an apex of a triangle. In Fig. 20 the mouths on the device are oblong and arranged oblique. In Fig. 21 the mouths are curved and arranged oblique, and in Fig. 22 the mouth is the shape of a horseshoe.

In Figs. 23, 24 the cup A^8 is constructed in the form of a pencil, having a small orifice and is provided on the front side thereof with a tube C^2 , shown as integral therewith and adapted to contain the absorbent material c^5 , similar to that before described. In the cup A^9 (illustrated in Figs. 25 and 26) the mouth of the cup is extended peripherally to afford a relatively broad smoothing contact with the surface treated. The edges thereof are turned upwardly and provided with elongated apertures therein. Said cup, as shown, is provided with a long narrow opening therein, and seated therein is a tension-shoe E^{13} , closely apertured and adapted when the wrinkled portion of the skin is drawn upwardly within said cup to apply pressure thereto.

If preferred, any of the various forms indicated for the mouth of the cup may be provided by constructing the cup as indicated in Fig. 27, in which the cup A^{10} is provided with an interior and circumferential shoulder a^{12} , affording a seat adapted to receive a complementally-shaped upper rim a^{10} of a removable mouthpiece a^{11} . Said mouthpieces, as shown, are constructed of metal coated with rubber or enamel or other suitable material adapted to afford a smooth or non-corroding finish. These mouthpieces may of course afford any desired conformation, and any of the tension devices herein shown may be used in connection therewith, affording advantageous forms for applying tension and pressure to the surface treated.

The operation is as follows: Whatsoever form of cup is used the wrinkle or wrinkles are smoothed out by applying the mouth of the cup longitudinally over the wrinkled surface treated. The tension or spreading device within the cup should previously be adjusted to a height to be brought into a positive contact with the treated surface when maximum inward pressure is obtained, thus acting to massage the surface drawn within the cup during the treatment. In applying hot or cold applications to the surface treated

the drier D is turned upwardly, as shown in Fig. 9, and the cup is dipped into water or medicament of the desired temperature until the apparatus attains the same temperature.

5 The absorbent material carries a considerable quantity of this fluid, and the heat of the same and the heat of the rest of the apparatus is transferred to the treated surface during the application when used. During the

10 treatment the drier is turned downwardly into contact with the skin treated, thus taking up the moisture as the cup passes over the skin. When interior rollers E' are used as spreaders or tension devices within the

15 cup, a smoothing action is effected, as before described, inasmuch as the spiral ribs e^1 e^2 thereon act to force the tissue laterally of the travel of the cup, thus exerting simultaneous pressure and a drawing action upon the skin

20 highly beneficial for the purpose stated. The cups are ordinarily constructed of or invested with a material affording a smooth contact for the skin and of such a nature as to avoid discoloration. This also is true of the

25 spreaders or tension devices used.

Obviously whatever the form of the cup any of the various internal shoes or tension devices may be employed. I have shown but a few typical forms for said devices, as it

30 is evident any conformation whereby a spreading action is effected upon the skin within the cup is included in my invention. So, too, other means may be employed for adjustably but rigidly supporting the tension

35 devices at the most effective point to afford a maximum action upon the inclosed area.

Any different means may be provided for applying moisture or medicament to the surface treated during the operation or for thermally affecting the same, and many details of construction and application may be varied without departing from the principles of this invention.

I claim as my invention—

45 1. The combination with a suction-cup, of a shoe carried therein and means adjustably supporting said shoe above the mouth of the cup and adapted to regulate the pressure of the shoe upon the surface treated.

50 2. The combination with a suction-cup, of a shoe therein positioned to contact with the surface treated, means acting to regulate the tension of the shoe upon said surface and absorbent material engaged in the walls of said

55 cup.

3. In a suction-cup, a threaded rod extending upwardly through the suction-aperture, a bar-nut engaging above and below the same and adapting the same for adjustment

60 vertically in the cup and means carried on the rod acting to exert tension and pressure upon the surface included within the cup.

4. A suction-cup provided with a recess in the side walls thereof, absorbent material in

65 said recess, a shoe in said cup and means for

adjusting said shoe with respect to the mouth of the cup.

5. A narrow suction-cup, a shoulder in the side walls thereof, a band inclosing the cup and forming a recess below said shoulder, a

70 shoe in said cup and means adjustably engaged in the top of said cup adapted to adjustably support said shoe.

6. A cup for the purpose specified comprising a rigid structure affording a relatively long narrow mouth having inclined

75 edges, means on said cup affording a recess at the front of the same and moisture-carrying means in said recess.

7. In a suction-cup having a narrow 80 mouth and having the bottom inclined outwardly and upwardly at the top and an inwardly and upwardly inclined surface at the rear thereof, a shoe rigidly but adjustably supported therein, above the mouth of the

85 cup and means adapting the same for carrying moisture to the surface treated.

8. The combination with a suction-cup of conducting material having an oblong mouth and a downwardly-opening recess at the front

90 end of the cup, of an absorbent material in said recess adapted to deliver moisture in the path of the cup, a wiper carried at the rear of the cup and acting to dry the surface after treatment, and a shoe acting within the cup

95 to stretch the skin laterally of the travel of the cup.

9. In a device of the class described, a cup, a longitudinally-apertured nipple on the top of said cup, means engaged thereon adapted

100 to exhaust air from the cup, a resilient band around said cup affording a recess to the walls thereof, absorbent material in said recess and a vertically-adjustable shoe in said cup.

10. In a massage suction-cup, a shoe suspended centrally therein above the mouth of

105 the cup, a rod adjustably engaged therein and in the top of the cup adapted to adjust the shoe, a band inclosing said cup and absorbent material intermediate said band and

110 the cup.

11. The combination with a suction-cup adapted for thermal applications and having a constricted mouth of a rotary shoe located in and above the mouth, means holding the

115 same from upward movement and means applying moisture in advance of the cup.

12. The combination with a massage suction-cup having a restricted mouth adapted for thermal applications and having a recess

120 in the front side thereof, a moisture-carrying medium in said recess, a wiper pivoted on the cup and carried at the rear thereof and a spiral shoe rigidly supported in and above the mouth of the cup.

125

13. In a massage suction-cup, a yoke adjustably engaged therein and rollers journaled on said yoke adapted to exert lateral pressure on the surface treated.

14. A massage suction-cup provided with

130

an outwardly-directed shoulder thereon, a
band engaged on said shoulder and depend-
ing below the same to near the bottom of the
cup, absorbent material in the recess thus
5 formed, and a shoe adjustably engaged in
said cup.

15. A rigid massage suction-cup having a
restricted mouth of less width than length, a
recess at the front of the cup, an absorbent
10 material therein, a resilient band engaging
around the cup and affording the outer wall

for said recess, a wiper adjustably supported
at the rear of the cup and an adjustably-sup-
ported shoe within the cup adapted to apply
tension to the skin.

In testimony whereof I have hereunto sub-
scribed my name in the presence of two sub-
scribing witnesses.

EDWARD S. SAIGHMAN.

Witnesses:

C. W. HILLS,

W. W. WITHEBURY.