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J. W. GIBBS.

ELECTRIC ROLLER FOR MASSAGE AND THERAPEUTICAL PURPOSES.

(Application filed Apr. 17, 1899.)

(No Model.)

Fig. 1.

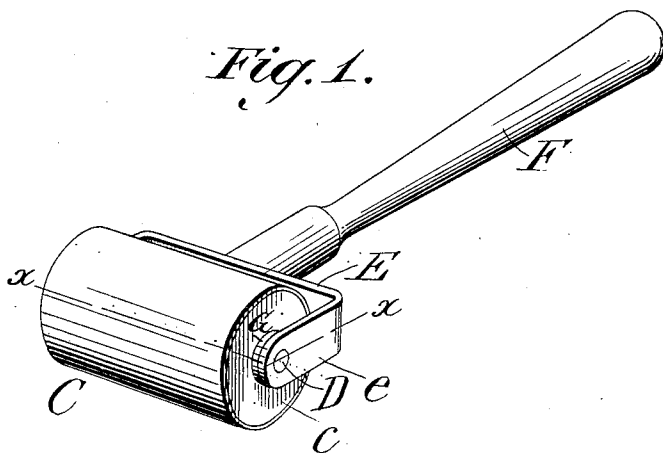


Fig. 2.

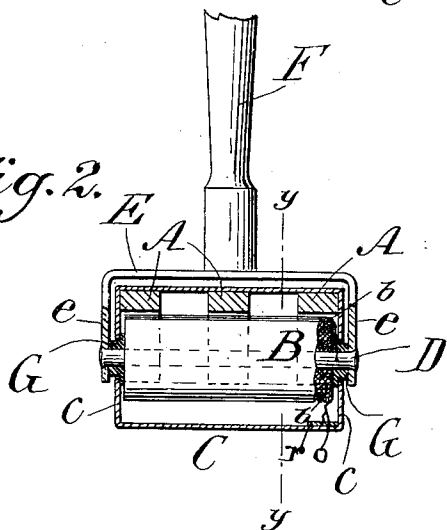
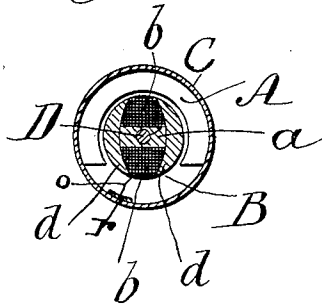


Fig. 3.



WITNESSES

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ELECTRIC ROLLER FOR MASSAGE AND THERAPEUTICAL PURPOSES.

SPECIFICATION forming part of Letters Patent No. 707,508, dated August 19, 1902.

Application filed April 17, 1899. Serial No. 713,243. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILSON GIBBS, a citizen of the United States, and a resident of New York city, county of New York, and State of New York, have invented certain new and useful Improvements in Electric Rollers for Massage and Therapeutical Purposes, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

My invention relates to improvements in electric rollers for therapeutical and massage purposes; and the object thereof is to provide an efficient and durable appliance for supplying a current of electricity to the human body to act as a curative agent for various ailments, further objects being to increase or diminish flesh, tone up the general system, and improve the complexion. These objects are attained by use of the invention comprised in my improved appliance, which will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view illustrating the exterior of my improved appliance. Fig. 2 is a longitudinal sectional elevation taken on a line xx of Fig. 1, and Fig. 3 is a cross-sectional elevation taken on a line yy of Fig. 2.

In the practice of my invention I employ a magneto-generator comprising a magnetic field composed of a series of magnets A and an armature B. The said magnets are secured within a revoluble metallic cylinder C, which embodies the roller proper, and the armature B is attached to a stationary axle or shaft D, which is secured at its respective ends to the arms e of a bifurcated holder E, which is composed of metal and forms part of a metallic handle F, whereby electrical connection between the armature B, and the said handle is maintained.

Secured around the shaft D, at each end thereof, is a collar G. These collars act as bearings and are composed of adapted insulating material, and the heads or end walls c of the cylinder C are journaled thereon, thus insulating said cylinder and roller from the stationary armature B and permitting it

to revolve freely around the armature for the purpose of generating electricity by induction.

The armature B, as illustrated in the accompanying drawings, comprises a metallic core a , an adapted wire winding b , and metallic longitudinal strips d . From one pole of this armature extends a wire which makes connection with the holder E and through the holder with the handle F, and from this handle to the operator's hand. From the other pole of the armature extends a second wire o to the plate r , which is connected to the end of the wire and which freely slides in contact with the inner surface of the cylinder, thus completing the circuit through the body of the person being treated. I do not confine myself, however, to any specific form of armature nor to materials comprised in its construction, as it is obvious that under the scope of my invention I am entitled to the use of any adapted materials and mechanical and structural variations. The correlative arrangement of all the several parts of the appliance are also susceptible of differential, but analogous assemblage. For instance, the elements of the structure may be located at an angle to the plane in which they are shown, if desired.

In use a current of electricity is generated by induction, and to make the circuit it is simply necessary for the patient to grasp the handle of the appliance and make contact between the roller and any portion of the body. Then by rotating the same in continuous alternative backward and forward directions a current is caused to pass through the body, which is adapted to increase or diminish the flesh as physical conditions of the patient or user may require. It is well known that beneficial results are obtained by the use of slight currents of electricity regularly taken. Where an abnormal condition exists—fat or otherwise—electricity thus applied will reduce the abnormal parts. Where the contrary condition exists—namely, an abnormal thinness—and one is deficient in adipose or muscular tissue, it will develop. It is a well-known fact that electricity and massage will both develop and reduce. All depends upon existing conditions. The current primarily produces a modification of the

muscular tissue, and by reason of the correlation of the nerves and muscles general healthfulness of the skin and an improved condition of the blood will follow, the flow of the latter being increased, thus involving augmented nourishment and an increased capacity to eliminate deleterious matter from the general system.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An electric roller of the class described, embodying a stationary armature attached to a stationary shaft, and a revoluble magnetic field surrounding the same and carried within and by a revoluble metallic cylinder comprising the roller proper, and a holder forming an operating-handle and electrically connected to said stationary armature-shaft, said cylinder having insulated bearings upon said shaft, substantially as shown and described.

2. An electric roller of the class described, embodying a stationary armature in electrical connection with an operating-handle, and a revoluble magnetic field incased within and carried by a revoluble metallic cylinder surrounding said armature, said cylinder comprising the roller proper and being insulated from the stationary armature, substantially as shown and described.

3. An electric roller of the class described, embodying a revoluble metallic cylinder comprising the roller proper, a field-magnet carried by and contained therein, a stationary armature within said field-magnet, a metallic handle in electrical connection with the said armature, and insulated bearings for said cylinder, substantially as shown and described.

4. As a therapeutical appliance, the combination of a stationary armature attached to a stationary shaft and in electrical connection therewith, a metallic handle in electrical connection with said shaft, a revoluble magnetic field surrounding said armature, a revoluble metallic cylinder forming the roller proper and inclosing the said magnetic field and in electrical connection therewith, insulated collars upon and carrying said stationary shaft, and bearings carried by said cylinder and operating upon said collars, substantially as shown and described.

5. In a device for applying electricity superficially, the combination of a mechanical generator of electricity and a roller for contact with the body, the construction being such that the motion of the roller causes the operation of the generator of electricity.

6. In a device for the therapeutic application of electricity, the combination of a hollow roller-shell, and means for generating a current of electricity within said roller-shell,

and also means for electrically connecting the said electricity-generator with the shell.

7. In a device for the therapeutic application of electricity, the combination of a roller, and means for generating electricity mechanically said electricity-generating means being constructed and arranged to be operated by the motion of the roller, and means for electrically connecting the said electricity-generator with the roller.

8. In a device for the therapeutic application of electricity, the combination of a hollow roller-shell, and means for generating a current of electricity within said roller-shell contained within said shell, and also means for electrically connecting said electricity-generator with the shell.

9. In a device for the therapeutic application of electricity, the combination of a roller, and means for generating a series of induced currents of electricity mechanically, contained within said roller, said electricity-generating means being constructed and arranged to be operated by the motion of the roller and means for electrically connecting the electric generator with the roller.

10. In a device for the therapeutic application of electricity, the combination with a movable roller-shell, of a relatively stationary part forming one member of the electricity-generating system, of another member of the generator of electricity secured to said shell, to cause the operation of the generator of electricity by the motion of the shell and means for electrically connecting the said generator with the shell.

11. In a device for the therapeutic application of electricity, a roller, a coil of wire contained within the same, and means to set up in said coil an induced current of electricity by the motion of the roller and means for electrically connecting the coil with the roller.

12. In a device for the therapeutic application of electricity, the combination of a roller, a coil of wire located adjacent to the roller, means to set up a series of induced currents of electricity in said coil by the motion of the roller and means for electrically connecting the said coil with the roller.

13. In a device for the therapeutic application of electricity, a roller, and a coil of wire, and means to set up in said coil an induced current of electricity by the motion of the roller contained in said roller.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 13th day of April, 1899.

JOHN WILSON GIBBS.

Witnesses:

BELLE C. LEVY,
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