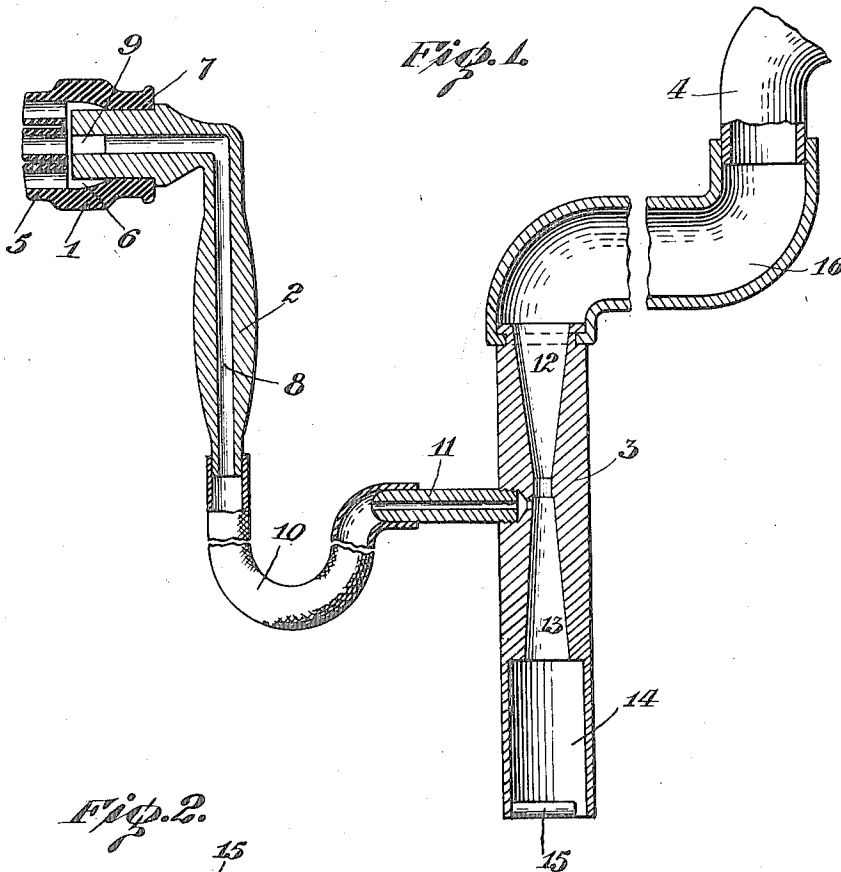
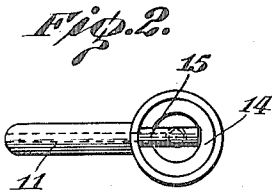
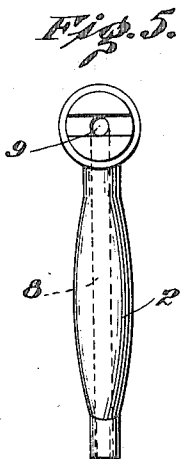
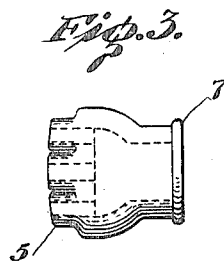
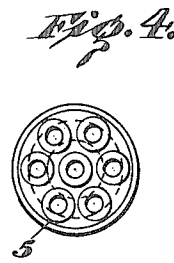


L. DE FLOREZ.
 MASSAGE APPARATUS.
 APPLICATION FILED FEB. 19, 1913.

1,196,344.

Patented Aug. 29, 1916.



Witnesses:
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UNITED STATES PATENT OFFICE.

LUIS DE FLOREZ, OF SHORT HILLS, NEW JERSEY.

MASSAGE APPARATUS.

1,196,344.

Specification of Letters Patent.

Patented Aug. 29, 1916.

Application filed February 19, 1913. Serial No. 749,358.

To all whom it may concern:

Be it known that I, LUIS DE FLOREZ, a citizen of the United States, and resident of the town of Short Hills, in the county of Essex, State of New Jersey, have invented certain new and useful Improvements in Massage Apparatus, of which the following is a specification.

My invention relates to apparatus for the massaging and cleansing of the skin, and is adapted to be used alone or in conjunction with various forms of massage creams now commonly used.

The principal objects of my invention are, first to produce an apparatus of this type which shall be simple, not likely to get out of order and easily and cheaply operated with the means at the disposal of any user; second to produce an apparatus which shall be operated by suction, whereby a cleaning effect is exerted, so constructed that a massaging and cleaning effect may be obtained at the same time and that an excess of vacuum in the instrument shall cause an automatic shutting off of the air inlets so as to prevent injury to the skin, and third to combine the cleaning portion of my improved apparatus with a pump of simple form which is not likely to clog in taking through it thick substances, such as cream, etc., and which may be operated to produce a relatively high vacuum from an ordinary water faucet.

In the drawings which form a part of the specification, Figure 1 is a sectional view of my improved apparatus, shown assembled and attached to the operating faucet. Fig. 2 is a plan view of the pump shown in the drawing in the form of an aspirator or jet pump; Fig. 3 is a side view of the flexible massaging member; Fig. 4 is an end view thereof, and Fig. 5 is a side view of the rigid supporting or hollow member.

Referring to Fig. 1, it will be seen that the apparatus consists essentially of a flexible massaging member 1, a rigid supporting member 2 and a pump or aspirator 3, which is attached to a water faucet or similar source of power 4. The flexible massaging member 1, consists of a hollow shell upon which is formed a plurality of tubular extensions 5, shown in the drawings as being seven in number, although the number may be increased or diminished according to the size of the apparatus desired. These tubular extensions are rounded at their ends to

form an easy and comfortable contact with the skin, and are so proportioned that an excess of vacuum will cause them to collapse, thus shutting off the air supply to the pump. I find that using a wall a $\frac{1}{16}$ th of an inch in thickness and an aperture of $\frac{1}{8}$ th of an inch with the ordinary rubber used for such purposes, will produce the desired results.

Inside of the flexible massage member is formed a relatively large chamber 6, which thus forms a cushion and prevents a too rigid bearing of the flexible member upon the skin. Entering chamber 6 through a neck 7 of the flexible member, is one end of the rigid supporting hollow member 2. This member is formed with a tube 8 there-through, which tube terminates in a slot 9 in the end of the rigid member which enters the flexible member 1. The purpose of the slot is to form a passage which shall be constantly open from the hollow tubular extensions to the interior of the supporting member, irrespective of the position of the surface of the flexible member, so that in the event that by reason of excessive pressure upon the surface operated upon, or by reason of a high vacuum, the surface of the flexible member is brought into contact with the supporting member, and an air passage will nevertheless be formed through the slot. The other end of the rigid hollow member 2 is connected by means of a rubber tube 10, or any other suitable medium to the air inlet tube 11 of the pump 3.

The pump or aspirator 3 is operated on the injector or jet principle, and consists of a solid cylindrical member having two oppositely disposed conical bores 12 and 13—bore 12 being slightly smaller at its innermost extremity than bore 13 and being a slightly less sharp cone. At or near the meeting point of bores 12 and 13 is located the inlet tube 11. Below the solid portion of the aspirator is a tubular portion 14, having a baffle plate or pin 15, which insures the filling of the tubular portion 14 with water. The upper end of aspirator 3 is attached by means of a hose 16 to a water faucet 4.

The operation of my improved device is as follows: The water flowing from faucet 4 through tube 16 enters bore 12 of the aspirator and passes out through bore 13 thereof, thus producing a vacuum in the air inlet pipe 11 and the apparatus attached there-

to, to wit, the hose 10, rigid member 2, and flexible member 1. The rigid member 2 is grasped in the hand and the flexible member is applied to the skin, being moved about slightly to produce a massaging action. If the vacuum is too high, the tubular extension 5 of the flexible member 1, will, owing to their form and their contact with the skin, collapse, thus cutting off the air supply and preventing too much suction being applied to the skin.

While I have described one form of my invention, it is obvious that it may be greatly varied without departing from its spirit, and, for this reason, I do not intend to be confined to the particular form shown and described. It is obvious, for instance, that the nature and form of the pump may be changed, or other means for producing a vacuum substituted therefor, and it is also obvious that the configuration of the various parts may be altered without producing any essential change in the apparatus.

What I claim and desire to secure by Letters Patent is—

1. In a massage apparatus, a hollow flexible member having a plurality of flexible, tubular extensions, and a rigid slotted cylindrical supporting member adapted to enter and support the flexible member.

2. In a massage apparatus, a hollow flexible member having a plurality of tubular extensions formed thereon, a rigid cylindrical supporting member therefor having a passage therethrough and a slot communicating with the passage formed in the end nearest the flexible member.

3. In a vacuum massage apparatus, a hollow flexible member having a relatively large cushioning chamber therein, a support having a passage therethrough entering said chamber and secured against further inward movement, and a plurality of tubular massaging members extending from the chamber walls.

4. In the massage apparatus, the hollow flexible member having a plurality of tubular extensions formed thereon, a rigid cylindrical supporting member therefor having a passage therethrough and a slot communicating with the passage formed in the end nearest the flexible member, and means for creating a suction therethrough.

In witness whereof I have hereunto signed my name in the presence of two witnesses this 17th day of February, 1913.

LUIS DE FLOREZ.

Witnesses:

RAMSAY HOGUET,
WALTER S. JONES.