O. ENGLUND.

MASSAGE BRUSH.

APPLICATION FILED APR. 12, 1915.

1,191,578. Patented July 18, 1916.

Fig. 1

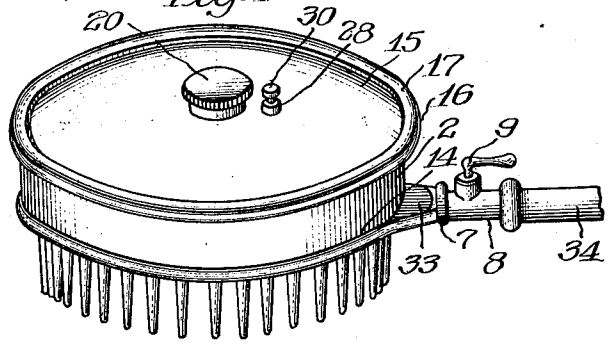


Fig. 2

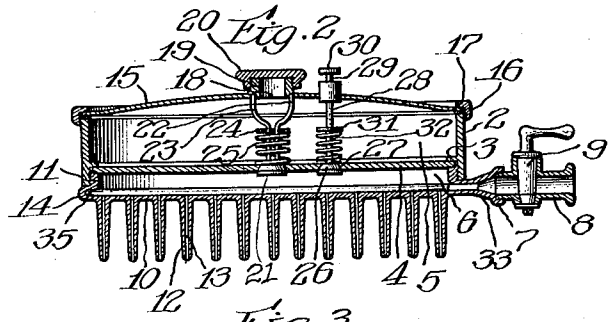
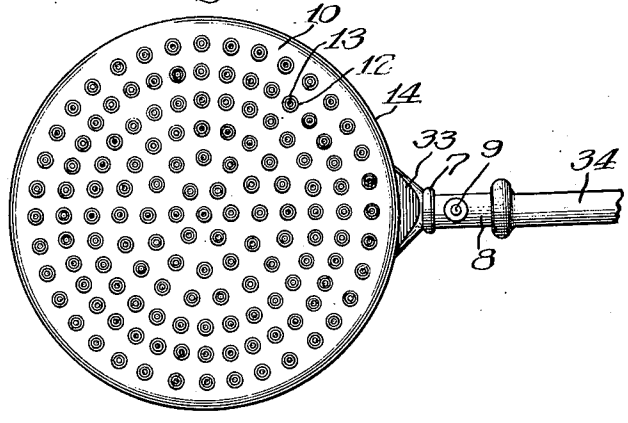


Fig. 3



Witness:

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UNITED STATES PATENT OFFICE.

OLOF ENGLUND, OF CHICAGO, ILLINOIS.

MASSAGE-BRUSH.

1,191,578. Specification of Letters Patent. Patented July 18, 1916.

Application filed April 12, 1915. Serial No. 20,657.

To all whom it may concern:

Be it known that I, OLOF ENGLUND, a subject of the King of Sweden, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Massage-Brushes, of which the following is a specification.

My invention relates to massage devices and has particular reference to a brush for shampooing and cleansing the hair and scalp.

The object of the invention is to provide a brush which feeds the water or shampoo mixture or both to the skin or the hair.

With this object in view the invention consists in the novel construction of brush and its combination and arrangement of parts, all as hereinafter described in detail, illustrated in the accompanying drawing and more particularly defined in the appended claims.

In the drawing—Figure 1 is a perspective view of a brush embodying my invention. Fig. 2 is a vertical section and Fig. 3 a bottom plan view.

In the several views the head or body of the brush consists of a cylindrical wall portion 2 having an interior annular flange 3 against which is secured a partition wall or false bottom 4 above which is formed a chamber 5 for a suitable shampoo liquid or the like and below which is a space 6 which communicates with a nozzle 7 having threaded engagement with a pipe fitting 8 the passage through which is controlled by a conventional stop cock or valve 9. The lower chamber 6 is formed by a brush bottom 10 having as an integral part an annular flange 11 exteriorly threaded as shown to engage corresponding interior threads on the member 2 and to bear against the bottom or plate 4 and hold it tightly against the flange or ledge 3. From the part 10 projects hollow fingers, spurs, or the equivalent of bristles, 12, each having a bore 13 therethrough which communicates with the chamber 6. The parts 10, 11 and 12 may be in one piece made out of rubber or other suitable material. Between the parts 10 and 11 an outwardly projecting bead 14 is formed, which forms a shoulder which may be brought in close contact with the lower edge of the member 12, or utilized for packing purposes if desired. The bead also lends to that appearance which is desired in articles of this class. The top of the chamber 5 is closed by a flexible diaphragm disk 15 the peripheral portion of which is clamped tightly against the upper edge of the member 2 by means of an interiorly threaded ring 16 having a flange 17 which bears against the disk 15. The member 2 is exteriorly threaded near its upper edge for the threads on the ring 16. In the center of the disk 15 is formed a fluid inlet opening 18 with an exteriorly threaded flange 19 onto which is screwed a knurled and interiorly threaded cap 20 which may be removed to fill the chamber 5. In the bottom or partition 4 and in line with the opening 18 is an opening 21 with inclined edges controlled by a valve 22. This valve may be held closed by the tension of the top 15 when made of spring metal, the valve being for this purpose connected with said top through a pair of wires 22 and 23 having their upper ends secured in any suitable manner to the top 15 or the flange 19. As shown in Fig. 2 these wires are curved toward each other a short distance below the opening 18 and then arranged parallel close together to form a stem adapted to support a spiral spring. At the upper end of this stem portion is secured a transverse bar 24 against which and the bottom 4 the ends of an expansion spring 25 are arranged to more positively hold the valve 22 closed. If the top or diaphragm portion 15 is made of, for instance, very flexible rubber or waterproofed cloth the spring 25 will be relied upon to hold the valve 22 normally closed and to also support the top 15 which is bulged upwardly as shown. The valve 22 is opened by pressing down upon the top 15 or the cap 20, which can be conveniently done with the hand holding the brush by placing the index or second finger on the cap while the body of the brush is held between the little finger and thumb. Pressure on the top 15 or its cap 20 not only opens the valve 22 but the air pressure forcibly expels liquid of comparatively heavy consistency through the opening 21. In the case of more volatile or thinner liquids designed to be fed into the chamber 6 to be mixed with water therein or fed through the "bristles" without water, it is often desirable to dispense with the forcible expulsion and to let the liquid drop in small quantities by the force of gravity alone. For this latter purpose a valve 26 is seated in an auxiliary opening 27 in the bot-

tom 4 and this valve has a stem 28 which projects up through the top 15 and is provided with any suitable stuffing box 29. On the stem 28 is a button or head 30 which when pressed downward will open the valve 26 without partly collapsing the chamber 5, flexing the top 15 or applying pneumatic force. On the stem 28 is a pin 31 against which and the bottom 4 bears an expansion spring 32 which surrounds the stem 28 in the same manner as the spring 25 surrounds the two-prong stem of the valve 22.

As shown in Figs. 1 and 3 the nipple 7 connects with the lower chamber 6 in a laterally flared or fan-shaped portion 33 which helps to distribute more evenly the inflow over the bottom 10 and makes it possible to have a very shallow space 6 regardless of the size of the pipe represented by the fitting 8, which latter is in Figs. 1 and 3 shown connected with a rubber tube 34 which may lead to any suitable faucet or source of water supply under pressure.

In Fig. 2 the curved head 14 is shown containing a narrow annular space 35 which may be extended outwardly by increased projection of the bead to vary the area of the bristle-holding portion 10. This space has substantially the same vertical depth as the space within the portion 33 which depth is sufficient in many cases for the water connection purposes, and in this and other respects my invention is not confined to the exact details of construction herein shown and described. For convenience the chamber 6 may be termed the water chamber and the chamber 5 the fluid chamber, or the chamber to contain medicating or massage fluid. The "bristles" are virtually flexible nozzles and any construction causing these bristles or fingers to lead the water to their tips will be an embodiment within the spirit of this invention.

I claim as my invention—

1. The combination with a brush head, of hollow "bristles" therefor, a water chamber in said head communicating with said bristles and connected with a source of water supply under pressure, a massage mixture chamber adjacent to said water chamber and having a capped inlet thereto, said mixture chamber being compressible to force liquid from said massage mixture chamber to said water chamber.

2. The combination in a brush, of tubular bristles, a back having a water chamber and a fluid chamber therein with a valve controlled opening therebetween, means for discharging a liquid from one chamber into the other either by the force of gravity and pneumatic discharging means or by air pressure.

3. The combination in a brush, of tubular bristles, a water chamber discharging through said bristles and having an opening for water under pressure leading thereinto, a fluid chamber in the head of said brush, said fluid chamber having a flexible wall, an opening between said chambers, and a valve controlling said opening and operable by pressure upon said flexible wall.

4. The combination in a brush, of tubular bristles, a back containing a water chamber adapted to be connected with a source of water supply and discharging through said bristles, a collapsible fluid chamber also in said back and normally closed to said water chamber, and means for discharging liquid from said fluid chamber to said water chamber by collapsing said fluid chamber.

In testimony whereof I have hereunto subscribed my name.

OLOF ENGLUND.