No. 862,101. PATENTED JULY 30, 1907.

P. E. OSWALD.

HAIR DRYING COMB.

APPLICATION FILED APR. 16, 1907.

Fig. 1

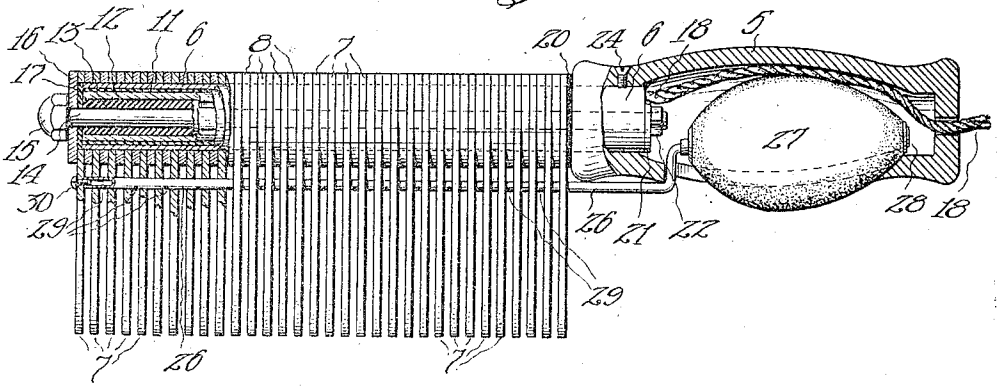


Fig. 2

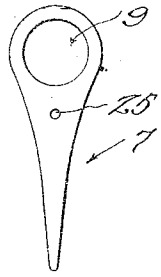


Fig. 3

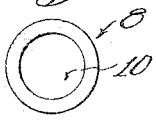
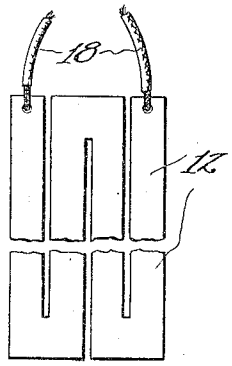


Fig. 4



Witnesses
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UNITED STATES PATENT OFFICE.

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HAIR-DRYING COMB.

No. 862,101. Specification of Letters Patent. Patented July 30, 1907.

Application filed April 16, 1907. Serial No. 368,581.

To all whom it may concern:

Be it known that I, PAUL E. OSWALD, a citizen of the United States, residing in Los Angeles, county of Los Angeles, and State of California, have invented new and useful Improvements in Hair-Drying Combs, of which the following is a specification.

My invention relates to a comb for use in drying wet hair, in which the teeth are heated by an electric current, and the object is to provide means in the back of the comb for heating the teeth, whereby, when they are drawn through the wet hair they will dry the same; another object is to provide means for forcing air through the hair at the same time the heating means are being used, whereby the moisture is more quickly dissipated.

Heretofore in electrically heated drying combs a casing bent in a cylindrical form has been used to form the back of the comb, and the teeth have been riveted to such casing, and when air was applied these teeth were made hollow, thereby requiring teeth of considerable size and the air was forced through the casing and teeth. In this construction the heating coil in the back of the comb is surrounded by an air chamber formed by the casing, and moisture can easily reach the heating coil. In case the operator was careless and dipped the comb into water while using the same the coil would be short circuited and burn out. The air chamber surrounding the coil causes a loss of heat. Making the teeth separate from the back also results in a loss of heat. Causing the air to be delivered at the end of the teeth results in cooling the ends of the teeth thereby resulting in a loss of efficiency. In my improved comb these defects are avoided, and a more efficient drying comb is produced.

In the drawings: Figure 1 is a side elevation partly in section of my improved comb. Fig. 2 is a view of one of the teeth. Fig. 3 shows a spacing washer. Fig. 4 shows a detail of the heating element.

In the drawings 5 is a handle preferably hollow and made of wood. In this handle is secured a cylindrical tube 6 on which are mounted teeth 7 which are separated by washers 8. These teeth are of metal preferably of aluminium as that is a light and strong metal and a fairly good conductor of heat. They are stamped from sheet metal or cast as desired. The upper portion is semi cylindrical exteriorly and the lower portion tapers to a point as shown in Fig. 2. In the upper portion is a hole or bore 9 which just fits upon tube 6. The washer has a like bore 10, and in the formation of the comb there is a washer between each two teeth. Within the tube 6 and in contact therewith is a lining 11 of insulating material which is preferably of clay, as the same can be rendered plastic and easily formed into shape. Below the outside lining and in contact therewith is the heating element 12, which may be of wire if desired, but I prefer to take compressed graphite or sheet metal of the desired length and cut slits in the same as shown in Fig. 4, and form the same around the insulating sleeve 13, which surrounds the binding rod 14 in the center of the tube when formed for use. In assembling the parts rod 14 would be provided with a head 15, a washer 16 would then be threaded upon the rod and then an insulating washer 17 and then the insulating sleeve would be placed upon the rod. The heating element would then be formed around the insulating sleeve with the terminal wires 19 connected thereto, the outside lining would then be put on, when the same would be slipped into the tube, snugly fitting the interior thereof. A tooth and then a washer would alternately be threaded upon the exterior of the tube until the required number of teeth were used. An insulating washer 20 would then be slipped upon the outside of the tube. A metallic washer 21 with apertures therein for the passage therethrough of the terminal wires would then be threaded upon the bolt, and then a nut 22 would then be screwed upon the end of the bolt until the washers 16 and 21 were in firm contact with tube 6. The tube would then be inserted in the handle and pressed so as to bring all the parts in close engagement, when the tube would be secured in the handle by the screw 24. By this form of construction it will be seen that the teeth and washers form the outside of the back of the comb, and that each tooth is a unitary body and that they taper downwardly to the point, thereby giving a tooth of great strength and providing a body which keeps a uniform heat on that edge of the tooth which contacts with the damp hair as it is being drawn therethrough, thereby providing a uniform heat to such contacting edge.

Where it is desired to use air in connection with my comb I perforate the teeth below the washers by a perforation 25, in which perforations are received a tube 26, the inner end of which is connected to a rubber bulb 27 having a check valve 28 on the end thereof which permits the air to pass into the bulb. This rubber bulb is preferably housed in the hollow handle. Between the teeth, tube 26 is provided with ports 29 which are preferably placed between every second tooth and projecting downwardly, the outer end of the tube is closed by screw 30 which passes through the outer tooth and screws into the end of the tube thereby closing the same and holding the tube in place. As the comb is being used the bulb can be squeezed to force the air out through the hair. As the tube will become more or less heated the air will also be more or less heated, thereby being better adapted to carry off moisture. It will be seen by this construction that it is impossible for moisture to penetrate to the heating

element even though the back of the comb is immersed in water, and that all danger of short circuiting the heating element is avoided.

Having described my invention what I claim is:—

1. A drying comb comprising a handle; a metallic tube secured in said handle; triangular shaped teeth separated by washers mounted upon said tube; a rod passing through said tube; closure plates for the ends of said tube on said rod; an insulating sleeve on said rod; a heating element around said sleeve; a thin insulating lining within said tube and in contact therewith and with said heating element; and wires secured to said heating element.

2. In a drying comb a triangular shaped tooth having a perforation in the upper portion thereof; in combination with a heating element passing through said perforation.

3. In a drying comb a handle; a metallic tube secured in said handle; teeth separated by washers mounted upon said tube, said teeth having apertures therein below said tube; a rod passing through said tube; closure plates for the ends of said tubes on said rod; an insulating sleeve on said rod; a heating element around said sleeve; a thin insulating lining within said tube and in contact therewith and with said heating element; wires secured to said heating element; a perforated tube passing through the perforations in the teeth below the tube; a rubber bulb secured upon the end of said tube; and a check valve in the end of said bulb.

In witness that I claim the foregoing I have hereunto subscribed my name this 8th day of April, 1907.

PAUL E. OSWALD.

Witnesses:

G. E. HARPHAM,

F. A. MANSFIELD.