B. HARVEY.

ELECTRIC HAIRBRUSH.

APPLICATION FILED SEPT. 2, 1921.

1,436,957. Patented Nov. 28, 1922.

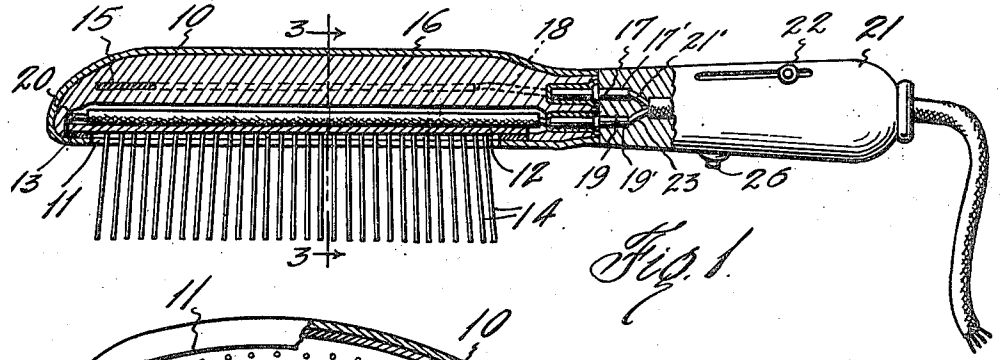


Fig. 1.

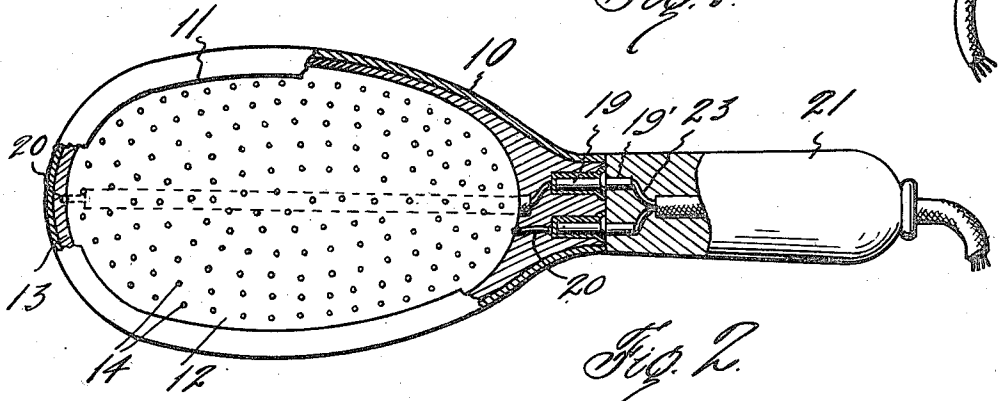


Fig. 2.

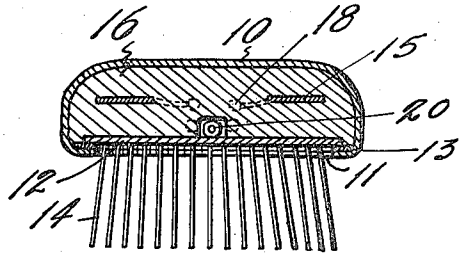


Fig. 3.

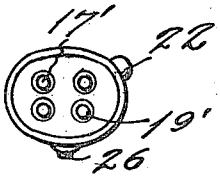


Fig. 4.

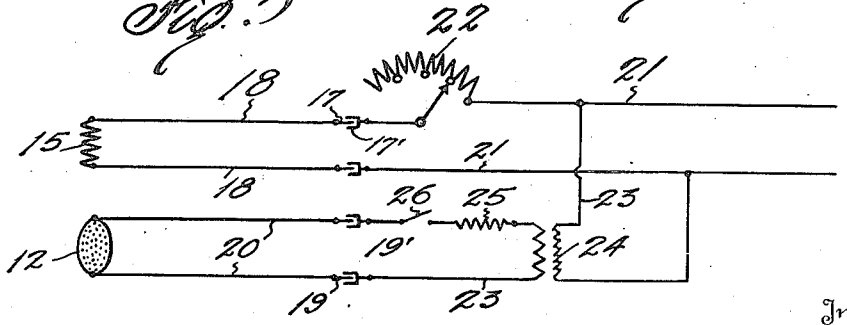


Fig. 5.

Inventor

Birdie Harvey.

By Jack A. Ashley.

Attorney

Patented Nov. 28, 1922. 1,436,957

UNITED STATES PATENT OFFICE.

BIRDIE HARVEY, OF DALLAS, TEXAS.

ELECTRIC HAIRBRUSH.

Application filed September 2, 1921. Serial No. 497,932.

To all whom it may concern:

Be it known that I, BIRDIE HARVEY, a citizen of the United States of America, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Electric Hairbrushes, of which the following is a specification.

This invention relates to new and useful improvements in electric hair brushes.

The object of the invention is to provide a hair brush of a superior type and capable of being used to treat the human scalp, said brush being particularly advantageous in the process of straightening "kinky" hair and the like. Another object of the invention is to provide a brush which may be electrically heated to various degrees of heat, and also one in which an electrical current may be passed over the bristles thereof, for electrically treating the hair and scalp.

A construction designed to carry out the invention will be hereinafter described together with other features of the invention.

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawings, in which an example of the invention is shown and wherein:

Fig. 1 is a longitudinal sectional view of a brush constructed in accordance with my invention,

Fig. 2 is an underside view of the same, a portion being in section,

Fig. 3 is a cross-sectional view taken on the line 3—3 of Fig. 1,

Fig. 4 is an end view of the detachable handle connection, and

Fig. 5 is a circuit diagram.

In the drawings the numeral 10 designates a brush body or back member which is preferably formed of a suitable metal such as aluminum, copper, or the like, and finished in a suitable manner. The under side of the back is provided with an enlarged opening 11 which may conform to the contour of the back. A plate 12 mounted within the back, which is hollow, is exposed thru the opening. The plate is larger than the opening and is supported on insulating material 13 placed around the margin of the opening. By this arrangement an electrical current circulated over the plate will not pass to the back.

Bristles 14 formed preferably of small gauge steel wire are mounted in the plate in substantially the same order as the bristles of an ordinary wire hair brush. Any flexible element capable of conducting an electrical current and functioning as a bristle, may be used. Within the back a suitable electrical heating element 15 is embedded in insulation 16 which is secured in the back in a suitable manner.

Terminal pins 17 embedded in the back are connected with the heating element 15 by circuit wires 18. A second pair of terminal pins 19 are connected with circuit wires 20, one of which is connected with one end of the plate 12 and the other of which is connected with the other end of the plate.

A detachable handle 21 is arranged with sockets 17′ and 19′ respectively in its inner end. The pins 17 enter the sockets 17′, while the pins 19 enter the sockets 19′. The back is constructed in a water-tight manner so that it may be detached from the handle and immersed in hot water for cleansing. When the brush is not in use the handle may be detached.

Circuit wires 21′ lead into the handle and a rheostat or other current modulating device 22 mounted in the handle is connected with said wires, which latter are connected with the sockets 17′. By this device the current passing to the heating element may be controlled and the heat regulated. It is not necessary that the device be mounted in the handle, and where variable heat is not desired the device may be omitted entirely. Other electrical circuit wires 23 lead thru the handle to the sockets 19′. A suitable transformer or voltage reducing unit 24 together with a resistance coil or element 25 are interposed in the circuit passing over the wires 23. A switch 26 is mounted in the handle and connected with one of the wires 23 for controlling the bristle circuit.

In using the brush the device 22 is manipulated to permit the electric circuit to pass thru the heating element 15. When the heating element has been energized for a sufficient period the back of the brush and the bristles will be properly heated, so that in brushing the hair, the heat will be imparted to the latter. The degree of heat may be regulated by the device 22. In certain hair treatments it is desirable to electrify the hair and scalp by a low voltage current. By operating the switch 26 the

electric circuit to the bristles is closed and the hair and scalp receive the benefit of this electrical contact.

Various changes in the dimensions and construction as well as modifications may be made without departing from the spirit of the invention.

What I claim, is:

1. In an electric hair brush, a back member, flexible metallic bristles carried by the back, an electrical heating element insulated in the back, means for supplying an electrical current to the element, and means for supplying a separate electrical current to the bristles.

2. In an electric hair brush, a back member, flexible metallic bristles carried by the back, an electrical heating element insulated in the back, means for supplying an electrical current to the element, means for supplying a separate electrical current to the bristles, and a detachable handle connected with the back member.

3. In an electric hair brush, a back member, a supporting plate exposed on the under side of the back member, flexible metallic bristles carried by the plate, said plate insulated from the back, a heating element in the back insulated from the plate, means for supplying an electric current to the heating element, and means for supplying a separate electric current to the plate and bristles.

4. In an electric hair brush, a back member, a plurality of flexible metallic bristles, a heating element in the back member insulated from the bristles, and means for supplying separate electric currents to the bristles and the element.

5. In an electric hair brush, a back member, a plurality of flexible metallic bristles, a heating element in the back member insulated from the bristles, means for supplying separate electric currents to the bristles and the element, and a handle attached to the back member and insulated from the heating element and the bristles.

6. In an electric hair brush, a back member, a conducting plate exposed on the under side of the member, said plate being insulated from the member, flexible metallic bristles carried by the plate, an electrical heating element insulated in the member, terminals extending from the member, separate circuit connections between the terminals and the element and the bristles, a detachable handle having sockets receiving the terminals, and separate circuit connections for the element and the bristles extending from said sockets.

In testimony whereof I affix my signature.

BIRDIE HARVEY.