

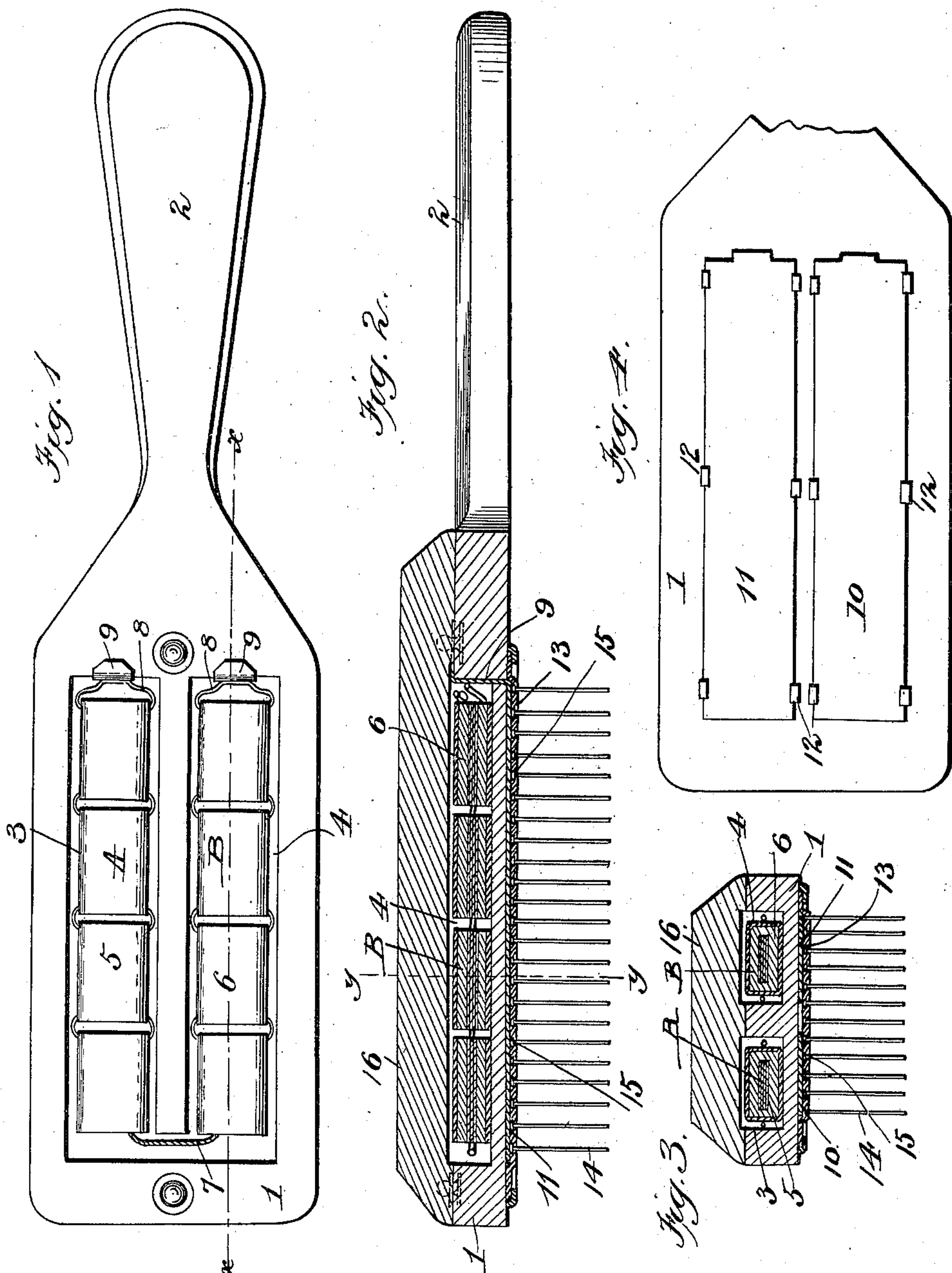
No. 627,295.

Patented June 20, 1899.

A. H. BURCHARD.  
ELECTRIC HAIR BRUSH.

(Application filed Dec. 31, 1898.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ALONZO H. BURCHARD, OF COLORADO SPRINGS, COLORADO, ASSIGNOR OF  
ONE-HALF TO JAMES O. SMITH, OF SAME PLACE.

## ELECTRIC HAIR-BRUSH.

SPECIFICATION forming part of Letters Patent No. 627,295, dated June 20, 1899.

Application filed December 31, 1898. Serial No. 700,815. (No model.)

*To all whom it may concern:*

Be it known that I, ALONZO H. BURCHARD, a citizen of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented new and useful Improvements in Electric Hair-Brushes, of which the following is a specification.

My invention relates to electric brushes in which the bristles are of conducting material and the electric circuit made or established by the said bristles coming in contact with the flesh or hair of a person using the brush.

The object of the invention is to simplify the construction of such brushes and to otherwise improve the same, whereby they shall possess superior advantages with respect to efficiency in use.

The invention consists in the novel construction and combination of parts herein-  
after fully described and claimed.

In the accompanying drawings, Figure 1 is a plan view of an electric brush constructed in accordance with my invention, the cover to the back being removed to show the sectional or jointed battery. Fig. 2 is a central longitudinal section. Fig. 3 is a transverse section on the line *y y*, Fig. 2. Fig. 4 is a bottom plan view, the bristles and the non-conducting strip being removed.

In the said drawings the reference-numeral 1 designates the body of the brush, and 2 the handle, which may be made of any suitable non-conducting material—such, for instance, as hard rubber. Formed in the back of the brush are two longitudinal recesses 3 and 4 to receive the sections 5 and 6 of a galvanic battery. This battery consists of a number of zinc and copper plates separated from each other by felt or other suitable material, which is to be saturated with exciting material, as usual. The said plates are connected or jointed together by suitable conductors, and the two sections are connected together at one end by an insulated conductor 7. The opposite ends of the said sections are not connected to each other, but are provided with conducting-loops 8, which are connected with lugs 9, which extend through the back of the brush, and are formed integral with metallic

conducting-plates 10 and 11, extending longitudinally along the front of the body 2 and secured thereto by means of clips 12. These conducting-plates are separated from each other, so as to be out of contact. Secured to the said front is a strip 13 of soft rubber or other suitable non-conducting material, through which the bristles 14, of wire or other conducting material, pass. These bristles, at their inner ends, are provided with heads 15, which are located between said strip and front of the body and contact with the said plates 10 and 11, the heads of the bristles at one side of the brush contacting with plate 10, while those at the other side contact with the plate 11.

The numeral 16 designates the cover to the back of the brush.

The operation is as follows: The battery is excited by means of a suitable acid, with which the felt is saturated, and when the bristles are placed in contact with the scalp, body, or other portion of a person an electric circuit will be made or established as follows: from the positive pole of the battery (marked A) to the lug 9 of plate 10, to said plate to the bristles at one side of the brush, and from thence through the hair or flesh of the person to the bristles at the opposite side of the brush to the plate 11, lug 9 thereof to the negative pole of the battery marked B.

Having thus fully described my invention, what I claim is—

In an electric brush, the combination with the body and the bristles and non-conducting strip and the battery and connections, of the positive and negative conducting-plates interposed between the front of the brush and the non-conducting strip and the clips for holding said plates in place, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALONZO H. BURCHARD.

Witnesses:

M. S. WITHERS,  
E. W. BALFOUR.