

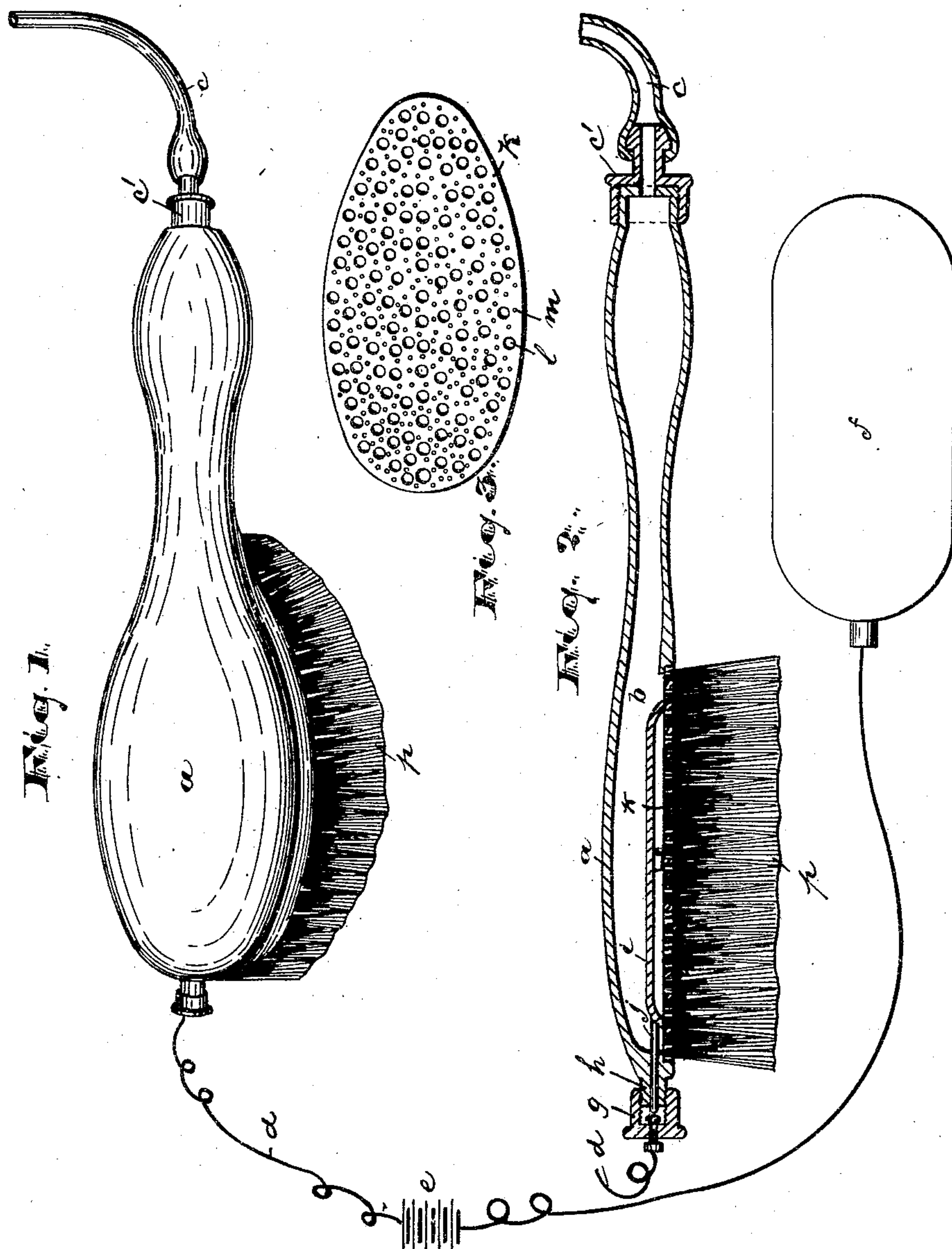
No. 631,623.

Patented Aug. 22, 1899.

C. DIEHL.
ELECTRICAL FOUNTAIN BRUSH.

(Application filed July 20, 1899.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES DIEHL, OF PHILADELPHIA, PENNSYLVANIA.

ELECTRICAL FOUNTAIN-BRUSH.

SPECIFICATION forming part of Letters Patent No. 631,623, dated August 22, 1899.

Application filed July 20, 1899. Serial No. 724,443. (No model.)

To all whom it may concern:

Be it known that I, CHARLES DIEHL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Electrical Fountain-Brushes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to provide a brush in which electrical fluid may be forced in connection with flowing water into contact with the scalp or flesh to produce medicinal or curative effects, to secure a more perfect circulation of the blood in the body and the benefits derived therefrom, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the electrical fountain-brush and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views, Figure 1 is a perspective view of the fountain-brush, showing the same connected to a battery and foot-plate. Fig. 2 is a sectional view of the brush. Fig. 3 is a plan in detail of a bristle-plate.

In said drawings, *a* indicates the body of the brush. This is of any desired shape or size and may have the shape commonly employed in connection with tooth, bath, hair, or horse brushes. The body of the brush is hollow to form a water-chamber *b* and has at one end open communication with a water-supply tube *c*, the water-supply tube being fastened to the brush-body in any suitable manner. At the opposite end of said brush from the tube connections *c'* or at any other suitable point therein is attached an electrical conducting wire *d*, in metallic connection with a battery *e* and indirectly with a foot-plate *f* or button, so that the electrical fluid will be

directed through the body of the operator or patient or any portion thereof, as may be desired. I prefer to attach the said wire *d* to a removable non-conducting cap *g*, secured upon a protuberance *h* of the body; and within the said brush is arranged a terminal plate *i*, which is connected by means of a wire *j* with the wire attached to the said cap, so that there will be a continuous electrical connection of the plate with the battery or electrical machine. The said plate *i* lies within the chamber *b* in a plane substantially parallel with a perforated plate *k*, upon which the bristles are secured, the said plate *k* having large and small perforations *l m*, the former to receive the bristles and the latter to permit the passage of water, which is formed into a spray. Said plate *k* fits into said body *a* and closes the chamber *b* therein and is held in place on said body, and thus becomes part of said body, by screws or other means. The water being brought into contact with the electrical plate and being itself a conductor of electricity, when the foot is placed upon the foot-plate *f* or said plate is in contact with any other part of the body a flow of electricity to the body with the spray is effected. When the water is turned on and the electrical current is in active movement and the operator is in contact with the terminals, the water and electrical fluid come together in contact with the flesh, the electrical fluid passing through the body and producing the curative effects desired, and the water, while serving as a conducting agent, serving to cleanse the body or scalp or other part to which the same is applied.

To facilitate the flow of electricity to the body, I prefer to employ fine flexible metallic wires preferably of solid silver. These are commingled with the bristles *p*. I may multiply these wires and bring them into connection with the drawing-in wires by which the said bristles are held in connection with the bristle-plate and connect the drawing-in wire with the battery-wires, and I may dispense with the interior metallic plate.

Having thus described the invention, what I claim as new is—

1. The electrical fountain-brush herein described, comprising a fountain-brush having water-supply tubing attached thereto and

having spraying perforations by which the water is directed through the bristles, and electrical connections by which the electricity is conducted to the water passing out from said perforations, substantially as set forth.

5 2. The electrical fountain-brush herein described, having in connection therewith means for conducting water and electricity to the bristles thereof, substantially as set forth.

10 3. The electrical fountain-brush herein described comprising a hollow body perforated to receive bristles and permit the passage of water, said bristles being in part metallic bristles, arranged in said perforations, a drawing-in metallic wire, a metallic connection thereof extending outside of the brush-body to engage battery-wires, substantially as set forth.

15 4. The electrical fountain-brush herein described, comprising a hollow brush-body having a connection to receive a water-supply tube, and an electrical conducting-wire, a plate having bristle perforations and smaller

water-spraying perforations, said plate closing the water-chamber, bristles carried by said plate, an electrical terminal arranged in said hollow brush-body and adapted to contact with the water therein, and electrical connections for conducting electricity to said terminal, substantially as set forth.

5. The combination with the brush having a water-passage therethrough, of an electrical terminal lying in the channel or passage for the water, substantially as set forth.

6. The brush herein described, having water and electrical supply connections whereby water and electricity may be supplied through said brush simultaneously to the body, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of July, 1899.

CHARLES DIEHL.

Witnesses:

CHARLES H. PELL,
CHRISTIAN DIEHL.