

B. H. ROBB.
Galvanic Brush.

No. 221,612.

Patented Nov. 11, 1879.

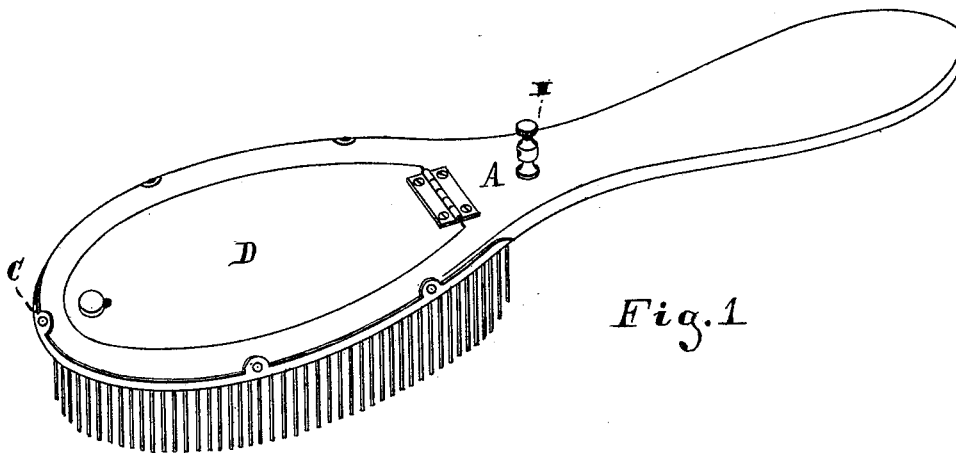


Fig. 1

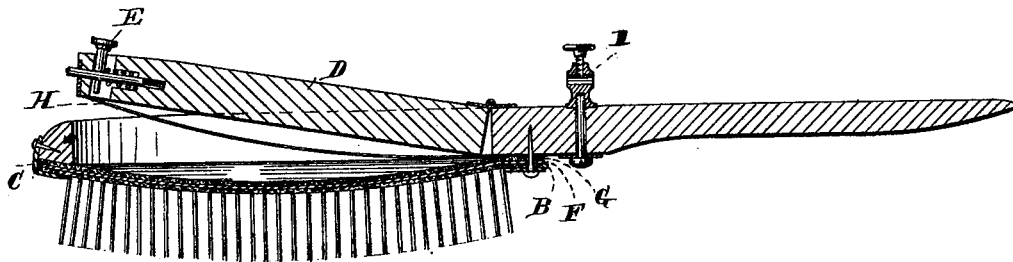


Fig. 2

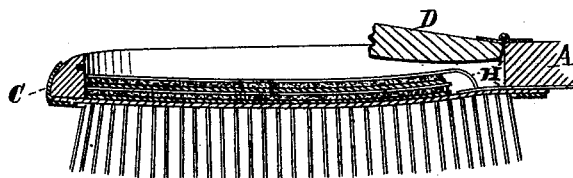


Fig. 3

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BYRON H. ROBB, OF NEWPORT, KENTUCKY.

IMPROVEMENT IN GALVANIC BRUSHES.

Specification forming part of Letters Patent No. **221,612**, dated November 11, 1879; application filed August 30, 1879.

To all whom it may concern:

Be it known that I, BYRON H. ROBB, of Newport, in the county of Campbell and State of Kentucky, have invented a new and useful Improvement in Galvanic Brushes, of which the following is a specification.

The object of this invention is a galvanic brush to be used for the relief of nervous complaints, the brush being also adapted for use in combination with a more powerful battery when desired.

The invention consists of a wire brush having a chamber in its head or stock-piece to receive alternate plates of zinc and copper with paper, felt, or other absorbent material between them, said pile being in connection with a metallic binding-post, so that the brush, when the felt or absorbent material is moistened with an acid, will form a galvanic battery of itself, and may, when desired, be connected with a battery of greater power. The said binding-post is arranged at a point where it can be conveniently touched with the hand while using the brush.

It also consists in a provision of a hinged door in the back of the described brush, so that the felt or other absorbent material can be readily removed and replaced after being moistened, and the plates removed for polishing or replaced by new ones after becoming too much oxidized to be effective.

In the accompanying drawings, Figure 1 is a perspective view of my brush, and Fig. 2 is a longitudinal vertical section of one form. In this the plates and felt are not removable, and the acid is to be poured in upon the felt. Fig. 3 is a similar section of my approved form of brush. In this form any desired number of plates may be used, which are also removable.

Referring to the parts, A is the back of the brush. It has a rubber or other suitable facing, B, retained in place upon the back A by a flanged metal plate, C. The face B is studded with metal pins passed through it, leaving the pin-heads upon the inside. A brush constructed with a back, as A, in one piece, a rubber facing studded with metal pins, and held to the back by a flanged metal piece, as

C, is well known and will not be further described.

I will now describe the novel features of my brush: My back A has an opening cut entirely through it, which opening is closed by a hinged door, D. The door has a spring-catch, E, at its front end. Resting upon the heads of the metal pins is a plate, F, of zinc, and upon this is a piece of felt cloth, paper, or other absorbent, which is designated by letter G. This, as shown in Fig. 2, may be of the same size as face B and zinc plate F, and permanently secured in place. H in Fig. 2 is a plate of copper. It fits into the opening in the back of the brush, and has one end extended toward the handle. Through this extended end the post I passes. The post extends up through the handle in a position to be touched by one of the fingers while using the brush. It is also perforated to receive a wire from a battery, which is held to the post by the set-screw in its top.

In the preferred form of my brush shown in Fig. 3 the back D is made thinner to leave a larger chamber within the back of the brush. This chamber contains a voltaic pile. The upper plate, H', is curved at the inner end, and rests upon its severed extended end, which is, like the plate H, connected to a post, as I. (Not shown in Fig. 3.) This plate may, of course, be in one piece, as in Fig. 2, but curved at the inner end to reach the top of the pile; but I prefer to make it in two pieces for ready removal with the other plates and felt. The inner end should have sufficient curve to be pressed down firmly upon the part that is connected with the post by closing door D.

To use my brush the door D is thrown open, and if it is of the form shown in Fig. 2 acid is poured in to moisten the felt G, or if of the preferred form, Fig. 3, the pile is removed, the felt cloth taken out, and, after being moistened, replaced and the pile returned to the brush and door D closed. Now, if the brush is applied to the body while a finger is kept upon post I, the circuit will be closed, and a current of electricity will pass through the body. If a stronger current is required the

post I is connected to the wire of a galvanic battery, which is left long enough to permit a free use of the brush upon the affected part. The opposite wire of the battery is held by one hand while the brush is used with the other.

For all nervous complaints the galvanic current can be applied with much better results by my brush than by any other means, as the current is distributed more evenly without irritation, and may be more conveniently applied to the affected parts.

I claim—

1. The back A and pin-retaining facing B, in combination with plates F and H, felt G, and binding-post I, in convenient position to be touched with the hand in using the brush, substantially as specified.

2. A brush provided with metallic pins held in contact with one pole of a galvanic pile, as described, in combination with a binding-post, I, held in contact with the opposite pole and in convenient position to be touched with the hand in using the brush, substantially as shown and described.

3. The back A, pin-studded facing B, and door D, in combination with a voltaic pile and binding-post, I, in convenient position to be touched with the hand in using the brush, substantially as specified.

BYRON H. ROBB.

Witnesses:

H. H. KIMBALL,
M. RUMBAUGH.