

G. A. SCOTT.
Brush.

No. 238,444.

Patented March 1, 1881.

Fig. 1.

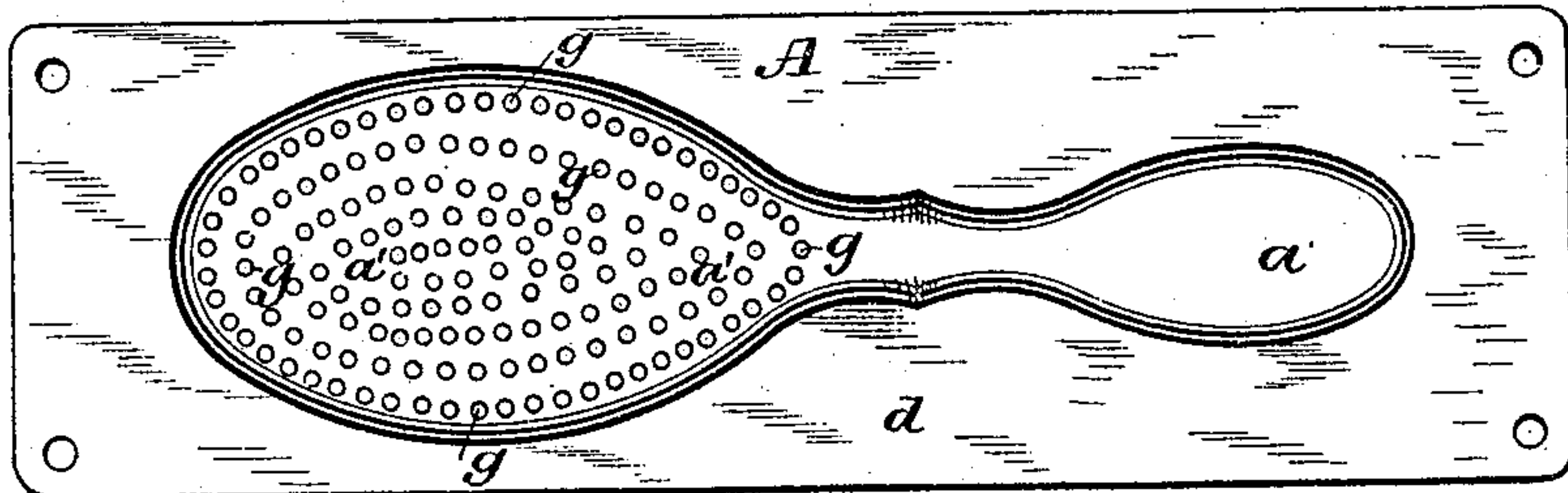


Fig. 2.

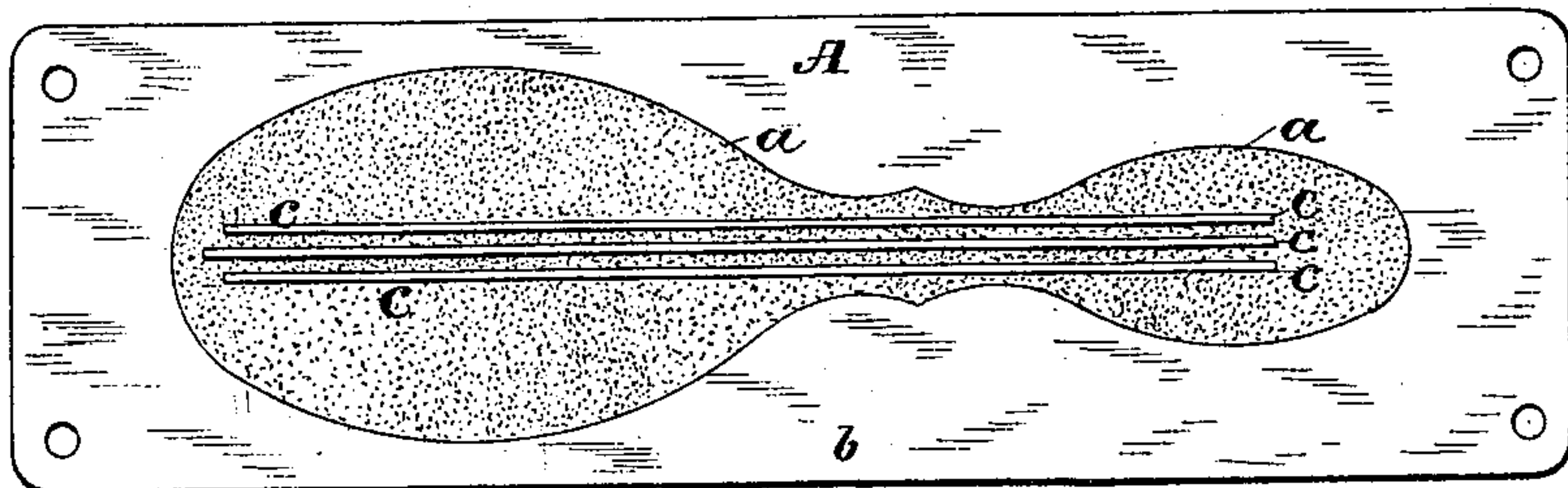
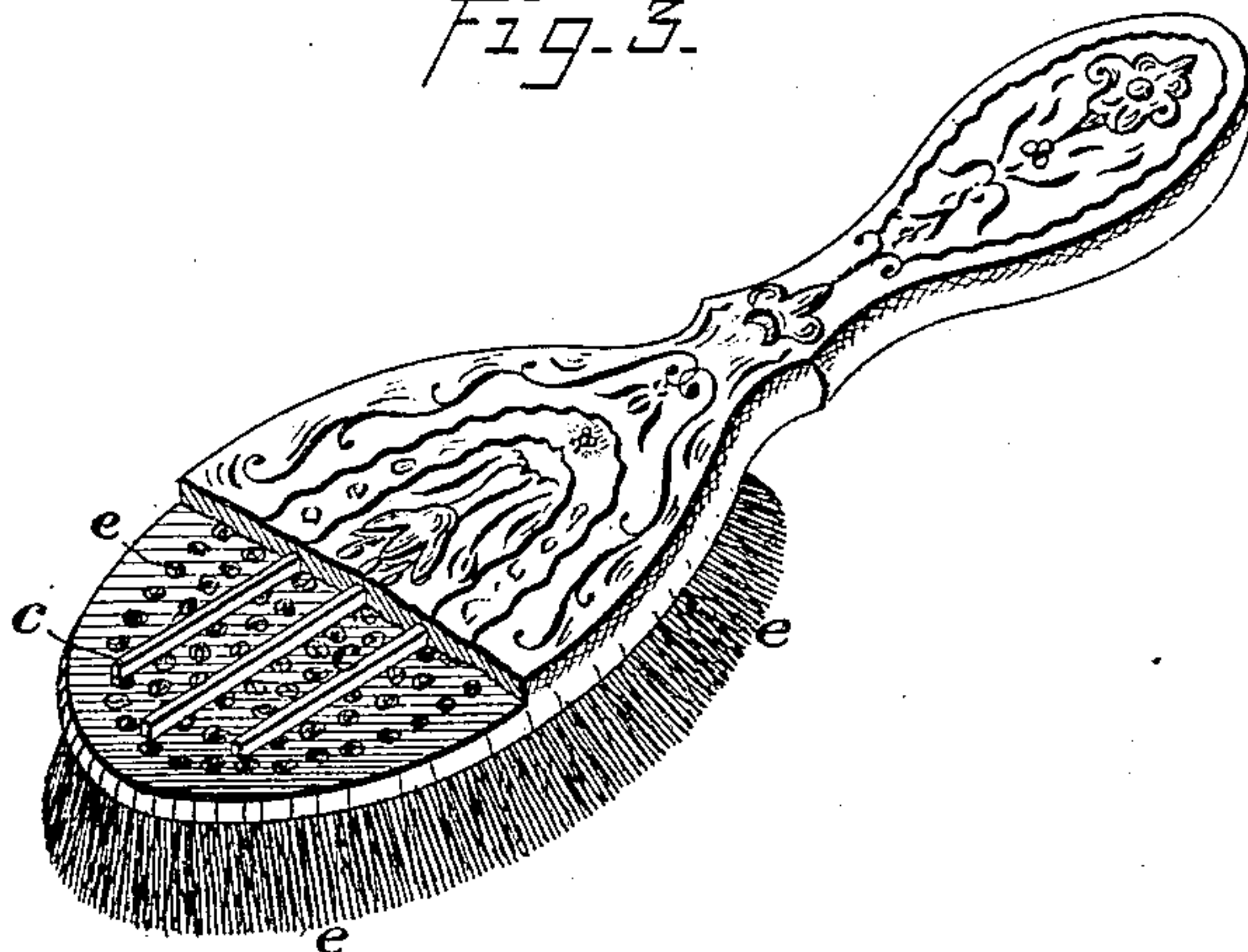


Fig. 3.



WITNESSES

Geo. E. Hutchinson.

J. A. Rutherford.

INVENTOR.

Geo. A. Scott,

by James L. Norris.

Att'y.

UNITED STATES PATENT OFFICE.

GEORGE A. SCOTT, OF NEW YORK, N. Y.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 238,444, dated March 1, 1881.

Application filed November 29, 1879.

To all whom it may concern:

Be it known that I, GEORGE AUGUSTUS SCOTT, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Brushes, of which the following is a specification.

This invention relates to that class of brushes the handles and backs of which are formed of plastic material by molding the same into the required shape at the same time the bristles are inserted and fixed.

The object of the invention is to secure within the interior of such a brush one or more natural or artificial magnets, which, according to the belief of many persons, founded upon a theory of magneto-therapeutics which has become widely prevalent, have the effect of rendering brushes to which they are applied advantageous in use for relieving headache, preventing baldness, and other similar purposes.

It has been common to form the backs of brushes containing magnets and the like of two parts—one having the bristles affixed therein, and the other having one or more recesses to receive the magnet or magnets, or equivalent—the said two parts being glued or cemented together with the magnets or other article in contact with the inner ends of the bristles or wires inserted among the bristles; but owing to the requirement that the brush shall be frequently wetted with water, in order to secure its full therapeutic effect, the glue or cement joint has been an insecure means of attaching the two parts together, on account of the tendency of the water to dissolve or decompose said glue or cement, and also because the expansion and contraction of the two parts, resulting from their absorption of water and subsequent drying, has strained and more or less disrupted the joint, causing the parts to warp and separate at their edges, thus admitting water to the inclosed articles, and even to come entirely apart. Even when the two parts are secured together by screws, they are still warped and cracked as a result of the contraction and expansion above referred to.

A brush having a solid composition back in one piece, braced by embedded wires, has also been made; but of course such a brush has no magneto-therapeutic effect.

My invention consists in a brush the back of which is composed of a solid molded material surrounding and inclosing one or more magnets in contact with a portion of the brush-bristles, said back being without joints or seams, so that the inclosed magnets are held firmly in place and protected from moisture, as hereinafter particularly described.

In the accompanying drawings, Figure 1 is a plan, showing the interior of the lower half of the mold or die used for manufacturing brushes of plastic material according to my invention. Fig. 2 shows a similar view of the upper half of said die or mold, with three bar-magnets placed in the position they occupy in the plastic material. Fig. 3 is a perspective view of the brush with part of the back removed to show the position of the magnets.

Like letters indicate corresponding parts in the several figures.

I carry my invention into practice as follows—that is to say, the plastic material designed to form the upper part of the back and handle of the brush having been placed in the cavity *a*, provided for it in the upper half, *b*, of the mold or die A, Fig. 2, I press the magnet or magnets *c* into said plastic material flush with the exposed surface of said material. The cavity *a'* in the lower half, *d*, of the mold or die, Fig. 1, receives the bristles *e*, the inner ends of which are inserted through the perforations *g*, so as to extend into the cavity *a'*, projecting through or into the plastic material with which said cavity is filled. The cavities *a* and *a'* are each extended to receive plastic material for forming the upper and lower parts, respectively, of the handle of the brush. When the two halves or portions are placed in the mold, as above described, and the two parts of the mold are then brought together in the obvious operation of completing the brush, the magnets become fully inclosed and surrounded by the plastic material, and when the two parts of the mold are pressed closely and forcibly together, by means of suitable clamps or screws passing through the respective corners of the said parts of the mold, the adjacent surfaces of the two portions of plastic material join and become agglomerated together, so that the back of the brush then becomes one mass, without seams

or joints, and is therefore not liable to the objections hereinbefore enumerated as attending brushes the backs of which are made of two parts joined together.

5 In the drawings I have shown the magnets extending into the handle of the brush; but this, though desirable, is not essential.

As a plastic material I ordinarily use a composition of very fine sawdust and shellac, the
10 mode of manufacture of which is well known; but any other suitable plastic substances may be used.

After the plastic material has been firmly clamped in the mold it is left to set and solidify or dry a suitable time, according to the nature of the material used, and may then be removed, drawing the bristles through the perforations in the mold.
15

The brush, constructed as described, is applicable as a hair, tooth, flesh, or horse brush, 20 in the latter case promoting a smooth and glossy coat of the animal.

What I claim is—

As a new article of manufacture, a brush the back of which is composed of a solid molded material, surrounding and inclosing one or 25 more magnets, in contact with a portion of the brush-bristles, the said back being without joints or seams, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of the subscribing witnesses. 30

GEO. A. SCOTT.

Witnesses:

W. F. ASPMALL,

J. A. RUTHERFORD.