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ONE-PIECE MOULDED PLASTIC BRUSH

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Fig. 1.

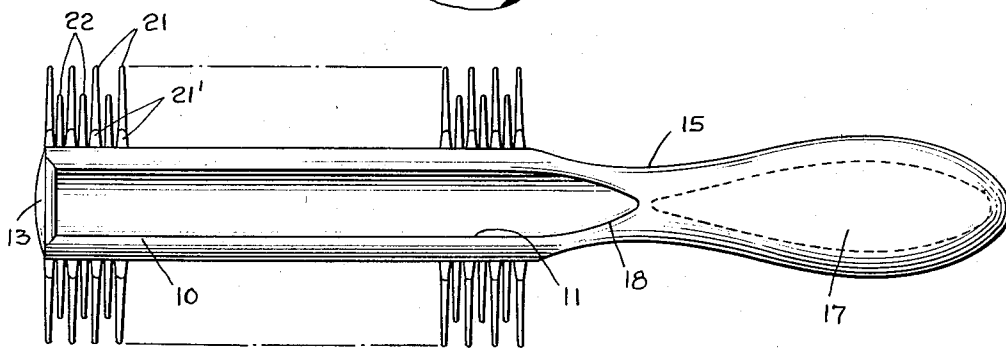


Fig. 2.

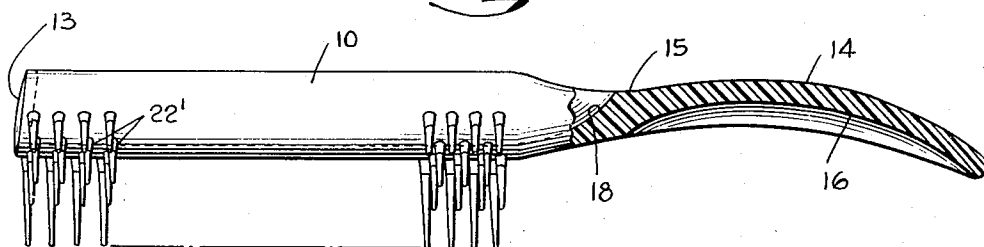
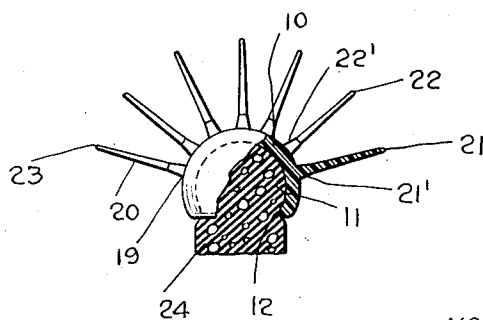


Fig. 3.



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ONE-PIECE MOULDED PLASTIC BRUSH

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1 Claim. (Cl. 15—114)

This invention relates to brushes including a brush head having radially disposed bristles in staggered relationship to each other extending longitudinally of the head with an integral handle member extending from one end of the head. More particularly, the invention deals with a brush of the character described, wherein the brush head is of hollow construction and substantially horseshoe-shaped in cross-sectional form to adapt the same for mounting of a sponge or other body therein.

The novel features of the invention will be best understood from the following description, when taken together with the accompanying drawing, in which certain embodiments of the invention are disclosed and, in which, the separate parts are designated by suitable reference characters in each of the views and, in which:

Fig. 1 is a plan view of a brush made according to my invention, showing only part of the bristles.

Fig. 2 is a side edge view of the brush showing only part of the bristles and showing part of the construction in section; and

Fig. 3 is an end view of the brush, with part of the structure broken away and in section and showing a sponge member mounted therein.

In the drawing, I have shown one adaptation of my invention, wherein the brush comprises an elongated hollow brush head 10 which, for the major part, is substantially U-shaped or horseshoe-shaped in cross-sectional form to provide therein an undercut chamber 11 defined by the contractions 12 of the side walls of said head. One end of the head is closed by an end wall 13 and extending integrally with the other end of the head is a handle member 14 which joins the head in a thick neck or shank portion 15.

It will appear, from a consideration of Fig. 2 of the drawing, that the handle member 14 is hollowed on its lower surface, as seen at 16, the handle member being convexly curved to form a rounded upper surface 17 to fit the palm of the hand in the use of the brush. It will appear, from a consideration of Fig. 1 of the drawing, that the chamber 11 is contracted into the neck 15, as seen at 18.

Extending integrally from the outer surface of the head 10 from a point at the largest diameter 19 of the rounded head are a plurality of circumferentially arranged resilient bristles 20, the bristles being in longitudinal staggered rows 21 and 22, part of the bristles of the rows 21 being indicated in Fig. 1 of the drawing, as well as part of the bristles in the staggered row 22. This arrangement positions the bristles over the full range of the bristle portion of the head so as to engage the closely arranged strands of hair in the head in the passage of the brush through the hair. It will appear, from a consideration of Fig. 3 of the drawing, that the outermost rows of bristles extend laterally beyond the inwardly contracted sides of the head 10 and these sides, or side edges, extend beyond the outermost row of bristles, this extension being downward, as viewed in Fig. 3 of the drawing. It will be noted that all of the bristles 20 in

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the rows 21 and 22 join the head 10 in enlarged portions, as at 21' and 22', thus providing a strong mounting on the head and at the same time facilitating free flexure of the bristles in the use of the brush.

It will be understood that the bristles taper outwardly to a slight extent to the free ends thereof, said free ends being preferably rounded to a slight extent, as indicated at 23 in Fig. 3 of the drawing.

By providing the undercut chamber 11 in the brush head 10, this chamber facilitates the mounting of an elongated sponge member or element 24 therein so that, in utilizing the brush as a shampoo stimulator, the sponge can be utilized for administering the shampoo medium as well as other fluids such as water in a rinsing operation. The brush also can be utilized as a massaging medium to stimulate the scalp. However, in normal brush uses, the bristle structure employed will pass freely through the hair and perform a brushing operation in a delightful and health producing manner.

It will be apparent that the brush, in its entirety, is of lightweight construction, the integral handle providing a desirable balance in the brush structure as a whole and further by virtue of the streamlining of the entire brush and particularly the bristles extending radially from the brush head in the longitudinal rows defined facilities cleaning the brush, so as to at all times, keep the brush in a usable state. This construction also facilitates removal of hair that might be caught in the bristles of the brush.

In moulding the brush of highly resilient plastic materials having a soft more or less wax-like surface, passage of the bristles through the hair act more effectively upon the hair, particularly when used by women in facilitating the combing of the hair into waves or curls and in positioning curls. The characteristics of the bristles are such as to set up an electrostatic engagement with the hair, causing the hair to follow through with the brush, thus more efficiently setting the hairs in the wave or curl which may be desired.

In the foregoing operation, the rounded contour of the bristle portion of the head in conjunction with the receding lower side walls of the head 10 proper facilitate the aforesaid movement of the brush through the hair in the positioning of curls.

By virtue of the aforesaid characteristics of the bristles, the bristles can be vigorously passed over the scalp in massage treatments, stimulating the scalp, thereby encouraging healthy scalp characteristics which can contribute largely to maintenance of healthy hair conditions and added growth. The softness as well as free flexibility of the bristles obviates any injurious effects to the scalp or the hair.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:

A one-piece moulded plastic brush, comprising an elongated hollow brush head, horseshoe-shaped in cross-sectional form, the wall thickness of said head being circumferentially uniform, a handle member extending integrally from one end of said head and joining the head in a contracted neck portion, said neck portion being of greater thickness than the wall thickness of said head, the outer surface of the head having longitudinally arranged rows of bristles radiating from the axis of said head and extending integrally from the outer surface of the head and spaced circumferentially thereof, the outer rows of bristles projecting substantially in their entirety beyond sides of the head, the longitudinally extending side edge portions of the brush head being contracted inwardly to form an undercut chamber, horseshoe-shaped in cross-section, extending longitudinally of the head, said chamber having a contracted end extending into the contracted portion of the neck, the other end of the

head having an end wall closing said end of the chamber, said side edge portions extending angularly to and well beyond said outermost rows of bristles, the handle member being longitudinally curved and concavo-convex in cross-sectional contour, the convex surface being exposed at the chamber surface of the head, and the concave surface extending to the contracted portion of said neck.

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