Dec. 11, 1951 R. SAMEL ET AL 2,577,921

MEANS FOR DYEING, BLEACHING, AND TREATING LIVING HAIR

Filed March 31, 1949

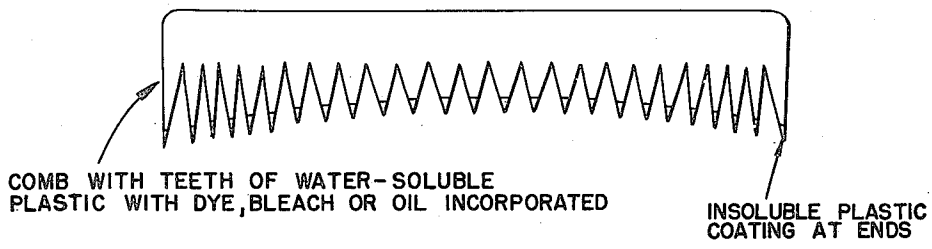


FIG. 1.

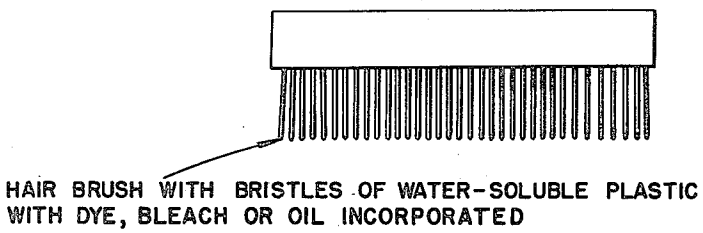


FIG. 2.

INVENTORS.
Ruth Samel and
Minna Wotzilka
BY Henry C. Parker
ATTORNEY.

Patented Dec. 11, 1951 2,577,921

UNITED STATES PATENT OFFICE

2,577,921

MEANS FOR DYEING, BLEACHING, AND TREATING LIVING HAIR

Ruth Samel and Minna Wotzilka, London, England, assignors to Ernest Norland, London, England

Application March 31, 1949, Serial No. 84,764
In Great Britain October 18, 1947

7 Claims. (Cl. 132—11)

1

This invention relates to improved means for dyeing, bleaching or treating living hair.

The invention mainly consists in a comb or brush for dyeing, bleaching or treating living hair made of a mass being cut to form a comb or cut into comparatively thin bars or rods suitably attached to a backing to form a brush. The elongated elements thus produced, when made into a comb or a brush, are free at one of their ends and mounted in a base at their other ends in generally aligned relationship. When the comb or brush is used for dyeing or bleaching the hair the said mass of methyl cellulose has incorporated in it a suitable dye or bleaching substance.

The invention also consists in the masses hereinafter referred to for dyeing, bleaching or treating the hair, used in the form of brushes and combs.

The accompanying single sheet of drawing illustrates, in Figure 1, a comb and, in Figure 2, a brush, as exemplificative of the present invention.

According to one mode of carrying the invention into effect, use is made of methyl cellulose serving as a carrier for the dye or bleaching substance or other compatible hair treating agent. In addition to being water soluble the methyl cellulose is chemically inert, and does not react with the dye or bleaching substance, and it is tough and elastic; it will not leave a residue of an undesirable nature on the hair. Moreover, the preparation of the dyeing mass in conjunction therewith can be carried out at ordinary temperatures as the dyes are likely to oxidize at elevated temperatures. The dyes employed are the usual oxidation dye-intermediates which are commonly used with hydrogen peroxide if it is desired to develop the colour more rapidly. In the case of bleaching combs or brushes use is made of urea-peroxide as the bleaching agent.

The methyl cellulose is gelatinized with water in which a polyethylene glycol may be added and in which a compatible wetting agent such as a sulpho-succinic ester may be dissolved, and the powdered dye or bleaching substance is admixed therewith. The mass is then rolled into sheets and dried by evaporation at room temperature, preferably in a vacuum. The dried sheets are then warmed to about 60° C. and pressed flat in a press where they are left to cool and then cut to the desired sizes of the combs, the teeth of which are formed by the saw-cut method.

The tips of the comb teeth may be dipped into a suitable varnish so that the dye does not come in contact with the scalp. Any of the oxidation

2

dye-intermediates may be used, alone or in admixture with one another to produce different shades. A small quantity of alkali such as sodium carbonate is also incorporated.

The following is one example for obtaining a suitable mass for dyeing the hair black: 59 grams of methyl cellulose (the carrier), 20 grams of para-phenylene diamine, or sulpho-para-amino-diphenylamine, 5 grams of sodium carbonate, 300 grams of water, containing 5 grams of Aerosol OT (dioctyl ester of sodium sulpho-succinic acid). The methyl cellulose is first gelatinized with water and the solid powders are mixed intimately with the gelatinized mass. The water is insufficient to dissolve more than a very small portion of the dyes.

The following are examples of compositions for brown and blonde hair: 60 grams methyl cellulose, 15 grams para-aminophenol, 5 grams para-tolylene diamine, 5 grams sodium carbonate, 300 grams of water (brown hair); 60 grams methyl cellulose, 20 grams sulpho-para-aminophenol, 5 grams sodium carbonate, 300 grams of water (blonde hair).

Referring to the method of using the comb it is to be pointed out that dyes require hydrogen peroxide only if a rapid development of colour is desired. The hair is wetted with water, the comb is applied to the hair, the dye mass dissolves superficially and the dye solution comes in contact with the hair. The hair may then be treated with a dilute solution of hydrogen peroxide.

In the case of bleaching combs containing urea peroxide the comb is applied to wet hair.

In the application of the invention to hair-setting the comb or brush is manufactured as above described, but using only the methyl cellulose and water, which has the properties of hair-setting when applied to wet hair. A water-soluble perfume may be added, if desired.

Compounds which have hair-waving properties may be incorporated in the carrier mass. The following is an example; 60 grams methyl cellulose, 10 grams sodium carbonate, 15 grams sodium bisulphite, 300 grams of water and 5 grams dioctyl ester of sodium sulpho-succinic acid.

The carrier mass of methyl cellulose may also have incorporated in it a suitable hair oil to which oil soluble vitamins may be added, if desired. The oil is liberated on to the hair or scalp when the comb or brush is applied to the wet hair or scalp. Here is an example: 60 grams methyl cellulose is mixed with an emulsion of 250 grams

water, 50 grams olive oil and 2.5 grams triethanol-amine. The method of manufacture remains the same as above described.

In the case of the manufacture of brushes the mass referred to is rolled into sheets and dried, whereupon comparatively thin bars or filaments are cut therefrom and attached to a suitable backing in manners well-known per se.

The back of the comb is preferably provided with a mounting of metal, plastic or other suitable material for the sake of convenient handling.

The masses hereinbefore described may also be shaped in the form of sticks or like solid bodies and be used as such for dyeing, bleaching or treating living hair.

We claim:

1. A device for treating living hair which comprises methyl cellulose in the form of a plurality of elongated elements free at one of their ends and mounted in a base at their other ends in generally aligned relationship and a compatible hair treating agent incorporated in the methyl cellulose, said methyl cellulose being soluble and capable of gelatinizing in water, whereby, when said elements are passed through hair, the hair is treated.

2. The device of claim 1 wherein the elements are spaced parallel and mounted in a single row, constituting the teeth of a comb.

3. The device of claim 1 wherein the elements are flexible and filamentary, constituting the bristles of a hair brush.

4. The device of claim 1 wherein a water-soluble dye is incorporated in the methyl cellulose as a hair-treating agent, said dye being adapted to dye hair when applied thereto.

5. The device of claim 1 wherein the plastic material comprises the following components in approximately the proportions by weight of 59 parts methyl cellulose, 5 parts sodium carbonate and 20 parts of a black phenylamine dye selected from the group consisting of para-phenylene diamine and sulfo-para-amino-diphenylamine.

6. The device of claim 1 wherein the plastic material is adapted to treat brown hair and

comprises the following components in approximately the proportions by weight of 60 parts methyl cellulose, 5 parts para-toluene-diamine, 15 parts para-aminophenol and 5 parts sodium carbonate.

7. The device of claim 1 wherein the plastic material is adapted to treat blond hair and comprises the following components in approximately the proportions by weight of 60 parts methyl cellulose, 20 parts sulfo-para-aminophenol and 5 parts sodium carbonate.

RUTH SAMEL.
MINNA WOTZILKA.

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