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PREPARATION FOR APPLICATION TO THE SKIN AND TOILET SOAP

Reginald Wyatt Lawson, London, England

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4 Claims. (Cl. 252—1)

The invention relates to preparations for application to the skin, such, for instance, as toilet powders, face creams, face powders and toilet soaps or for use in tooth paste or other solid or liquid preparations.

The primary object of the invention is to produce an impalpable powder from natural silk.

A further object of the invention is to form an impalpable powder of such a degree of fineness that it can be added to various preparations whilst retaining its pulverulent nature and without dissolving in the preparations when this is in the nature of a soap, cream or liquid.

Another object of the invention is to reduce silk fibre, without dissolving, to an impalpable powder and adding such powder to preparations for application to the skin.

According to the present invention silk, after being freed of all foreign and deleterious matter, and degummed in any known manner, is treated for a suitable length of time in a solution of a suitable alkali so as to reduce its resistance to grinding. This treatment solely serves to weaken the fibres as a preliminary step to grinding and is to be distinguished from processes in which silk is actually dissolved in alkali. At the end of the treatment with alkali the solution is neutralised by the addition thereto of a suitable quantity of acid, such as hydrochloric acid or dilute sulphuric acid. The product obtained is then water washed and dried, and reduced to the form of an impalpable powder in a suitable grinding apparatus, such as a mill of the pestle and mortar type.

The powder so obtained when added to a preparation for application to the skin will exert a soothing effect on the skin.

The time during which the silk is subjected to the action of alkali will vary according to the condition of the material under treatment, being 24 to 96 preferably about 48 hours. The alkali, if sodium hydroxide or potassium hydroxide is employed, may be of a strength of 1 in 10, and 10 liquid ounces of alkali of this strength may be used with each ounce of silk, for cold treatment. By raising the temperature, both the strength of alkali and the time of treatment may be reduced. For example 1 oz. of silk is subjected to the action of 1 in 50 water-solution of sodium hydroxide, this mixture being then boiled for from 10 to 40 minutes.

The following are examples of the use of the powdered silk as well as the proportions of the ingredients which may be used in each case.

In the case of a face cream there may be added to the cream an equal quantity of powdered silk, whilst in the case of a toilet powder or a dusting powder this may consist of 50% of powdered silk, 25% of starch, and 25% of talcum. Again, in the case of a toilet preparation consisting of glycerine and rose water, which may be used in the proportions generally adopted, the quantity of powdered silk which may be added to a pint of glycerine and rose water may vary from one sixteenth to one eighth of an ounce.

I claim:

1. A method of reducing natural silk to the form of an impalpable powder consisting in freeing the silk of all foreign and deleterious matter and degumming the same, subjecting the resulting purified silk to the action of an aqueous solution of an alkali metal hydroxide so as to soften the silk but without dissolving the same, neutralising the resultant product by means of an inorganic acid, water washing the neutralised product, drying the washed product, and grinding the dried product to an impalpable powder.

2. A method of reducing natural silk to the form of impalpable powder, consisting in freeing the silk of all foreign and deleterious matter and degumming the same, subjecting the resulting purified silk to the action of an alkali metal hydroxide so as to soften the silk but without dissolving the same, neutralising the resultant product by means of an inorganic acid such as hydrochloric acid or dilute sulphuric acid, water washing the resultant product, drying the washed product and grinding the dried product to an impalpable powder in a mill of the pestle and mortar type.

3. A method of reducing natural silk to the form of an impalpable powder, consisting in freeing the silk of all foreign and deleterious matter and degumming the same, subjecting the resulting purified silk at ordinary temperature to the action of a 10% water solution of sodium hydroxide in the proportion of 1 ounce of silk to 10 liquid ounces of sodium hydroxide for a period of from 24 to 96, preferably about 48, hours so as to soften the silk but without dissolving the same, neutralising the resultant product by means of hydrochloric acid or dilute sulphuric acid, water washing the resultant product, drying the washed product and grinding the dried product to an impalpable powder.

4. A method of reducing natural silk to the form of an impalpable powder consisting in freeing the silk of all foreign and deleterious matter and degumming the same, mixing a 1 in 50 water solution of sodium hydroxide with the purified silk in the proportion of 1 ounce of silk to 10 liquid ounces of sodium hydroxide, boiling the mixture for from 10 to 40 minutes so as to soften the silk but without dissolving the same, neutralising the resultant product by means of an inorganic acid, water washing the resultant product, drying the washed product and grinding the dried product to an impalpable powder.

REGINALD WYATT LAWSON.