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SHAVING CREAM

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This invention relates to a shaving cream of the brushless type.

It has for its primary object the production of a brushless shaving cream which will be efficient and pleasant in its action without presenting many of the difficulties and objections of the usual type of such creams which contain saponaceous and alkaline, or alkali forming ingredients.

I have found that the alkyl ethers of cellulose, such as the methyl and dimethyl ethers, form admirable bases for an improved shaving cream. These ethers in their dry state resemble paper pulp, but upon treatment with water, will swell to form colloidal dispersions of any desired viscosity, depending upon the concentration used.

The cellulose ether dispersions, thus formed, are, under ordinary conditions, chemically inert and neutral in reaction so that the necessary materials may be added thereto to form a brushless shaving cream of great efficiency. These additional materials may be added to the cellulose ether base without interaction or decomposition because of the inert and neutral properties referred to above.

These water suspensions of cellulose ethers are not subject to bacterial contamination, making the use of antiseptics unnecessary in the finished cream and assuring the keeping qualities of the said cream after packaging.

It is known that cellulose ether dispersions of this character are powerful emulsifying agents. I have also found them to be possessed of high lubricant power. Emulsions with fats and oils may be readily formed by simple stirring, without the use of an emulsifying machine. Solutions of the ethers are of low surface tension, will froth and foam readily upon shaking and I have found them to be possessed of excellent detergent qualities particularly when combined with other materials which act synergistically to give the most desirable finished product.

I have found the following process of preparation and the disclosed ingredients to give the best results.

The required amount of cellulose alkyl ether is prepared by soaking with hot water and allowing the mixture to stand for approximately twelve hours. This forms a viscous mucilaginous mass which is placed in a vessel provided with suitable means for continuous stirring. Glycerine is then added and following the addition of the glycerine, sodium lauryl sulphonate is added in small amount. The sulphonate increases the wetting and detergent action of the cellulose ether base which by itself gives a somewhat slower action. To this mixture is then added mineral oil in the form of either soft or liquid petrolatum and small amounts of menthol

and oil of bergamot and coloring matter are then added, these ingredients being intended to give the resultant product the necessary pharmaceutical elegance as to skin treatment, perfume and color. A small amount of water is then added in order to bring the mixture to a smooth homogeneous creamy product of desired appearance and texture.

If desired the stirring may be increased and by such violent agitation a spongy or foamy mass is produced by entrainment of fine air bubbles. By this means various variations of the texture may be produced in order to meet individual requirements.

A preferred formula is found to be as follows:

	Parts
Cellulose alkyl ether.....	73.70
Glycerine.....	5.00
Sodium lauryl sulphonate.....	1.00
Mineral oil.....	15.00
Menthol.....	.10
Oil of bergamot.....	.20
Water.....	5.00
Color as desired.	

In place of the menthol, borax or boric acid may be used and any suitable perfume oil which will give the required odor and a slight color to the finished product may be substituted for the oil of bergamot. Cetyl alcohol, glycol or alcohol or other suitable emollient may be used in place of the glycerin.

A 10% suspension of the cellulose ether in water has been found to be the most satisfactory base.

The finished product may be packaged in the usual form of collapsible tube.

The brushless shaving cream thus formed is equally efficient in hard water and salt water and in either cold or hot water. It is non-toxic, emollient and non-irritating to the skin. It contains no soap, thus avoiding any hydrolysis to free alkali with its consequent irritating action. The strong emulsifying and unctuous properties of the cellulose ethers permit rapid emulsification of the oil or fat globules on the skin and form a smooth lubricant for shaving purposes when the cream is spread upon the face. The presence of the higher alcohol sulphates and sulphonates promotes rapid wetting of the hair, preventing piling up of the cream upon the razor and facilitating quick rinsing and cleaning of the razor.

I claim:

1. A shaving cream prepared by continuously stirring an aqueous dispersion of cellulose ether, adding to such dispersion, alcohols, mineral oil, perfume and water and continuing such stirring

until the mixture has become a homogeneous creamy mass.

2. A shaving cream having the following formula:

5	Cellulose ether-----	Parts
	Glycerine-----	73.70
	Sodium lauryl sulphonate-----	5.00
	Mineral oil-----	1.00
	Menthol-----	15.00
10	Oil of bergamot-----	.10
	Water-----	.20
		5.00

3. A shaving cream containing an aquaphilic alkyl cellulose ether as the base thereof.

4. A shaving cream containing methyl cellulose as the base thereof.

5. A shaving cream containing dimethyl cellulose as the base thereof.

6. A shaving cream containing an aqueous dispersion of not greater than a 10% suspension of an alkyl cellulose ether as the base thereof. 5

7. A shaving cream comprising an aquaphilic alkyl cellulose ether, glycerine, mineral oil and sodium lauryl sulphonate. 10

8. A shaving cream containing an aqueous dispersion of not greater than a 10% suspension of methyl cellulose as the base thereof.

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