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PROCESS OF MAKING PERFUMED OR MEDICATED TRANSPARENT SOAPS.

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The object of my invention is to produce transparent soap containing a very high percentage of perfume, natural or artificial, or of disinfectant, or of other chemical ingredients of medicinal value (such as capsicum, menthol, camphor, iodine or the like), without alteration in the detergent or transparent character of the soap or the added perfume or disinfectant or chemical ingredient hereinbefore referred to, which is retained in the soap. Practically I produce a transparent solidified perfume having detergent properties.

According to this my invention, I add to the hot soap a mixture of equal parts of methylated spirit and one or a mixture of the above named perfumes, medicaments or disinfectants, and then a soluble form or derivative of cellulose, for example, viscose, for the purpose of forming on the surface of the soap, when the soap becomes dry by exposure to air, a film or coating, which causes the perfume or disinfectant or chemical ingredient, hereinbefore referred to, in the soap to be retained. In my invention I use terpeneless oils, aromatic alcohols, esters or other natural or artificial perfumes or chemical ingredients hereinbefore referred to, to make a perfumed or medicated or disinfectant transparent soap, or a solid perfume having detergent properties. In order to achieve the objects above named, I have, after numerous experiments, found that the harder, purer and brighter the fats, and purer and brighter the oils, lyes and solvents respectively employed, the harder, clearer and purer will be the soap.

The proportion of essential oils, synthetic perfume, or other suitable chemical ingredient hereinbefore referred to which can be incorporated, is in direct relation to the hardness of the soap.

In the process of manufacture, steps must be taken to prevent crystallization and ensure that the soap remains colloidal. The pan is preferably enamelled inside, and must be absolutely clean, as must all other utensils also. No appreciable carbonate, sulphate, or silicate of soda or of potash, or sugar, must be present, nor any inert or crystallizable substances, such as calcium carbonate or sulphate, china clay, talc, and the like.

The fats and oils may be saponified by any of the well-known processes, the resulting soap being dried, and dissolved in industrial methylated spirit, or the requisite quantity of caustic soda may be dissolved to a concentrated lye in industrial methylated spirit, and saponification effected by means of this, in which case the soap may be utilized immediately for making my transparent soap after allowing to stand for two hours.

The component parts I find best for the base of such a soap are:

	Parts.
Tallow	55
Coconut oil (Cochin)	25
Palm oil (bleached)	10
Rosin (pale)	10
	100

Preferably such a soap as prepared above is transferred to an iron or steel enamelled pan fitted with a closed steam coil or to a steam jacketed pan, or better, to an ordinary iron still, with a condenser attached, to recover part of the solvent and perfume composition, when added. This has no influence on the working temperature, but may prevent accident. For every 100 lbs. of soap, as hereinbefore described, 25% of industrial methylated spirit is put in the pan with the soap, steam turned on, and the mixture heated up to 80° C., then raised gradually to 97° C. When the soap reaches 97° C., allow to boil for a few minutes, then shut off steam, add 10 lbs. of pure glycerine (sp. gr. 1260) per 100 lbs. soap, stir well in, and allow to stand for two hours, when it will cool to about 80° C. (it should not be allowed to cool below 72° C.). Samples must be taken from time to time to ascertain the consistency and transparency.

The soap is now ready for addition of the perfume, disinfectant, or other natural or artificial perfumes or chemical ingredients, hereinbefore referred to, suitable for admixture with a colloidal soap, such as essential oils, terpeneless oils, aromatic alcohols, aldehydes, phenols, esters, or other natural or artificial perfumes, coal tar derivatives, or other chemical substances, hereinbefore referred to, (with the exception of essential oils rich in terpenes, artificial or synthetic products of a crystallizable nature, or aromatic gums, or balsams). Any quantity, say 33 per cent. of such a perfume as just described or of disinfectant, or of other

chemical of medicinal value, is mixed with a small quantity, from 1% to 5% of a soluble form or derivative of cellulose, for example, viscose, cellulose acetate, butyrate, or aceto butyrate. Cellulose acetate is specially suitable, owing to its ready solubility in most essential oils, alcohols and esters. The predetermined perfume medicament or disinfectant mixed with the same proportion by weight of methylated spirit and the cellulose acetate in the proportions described form a mixture, the whole of which on being warmed up to 80° C., is then added to the hot soap, stirred well in, and left in the still or pan for only a few minutes. When cooled to about 72° C., the soap is run off into frames or moulds, and left to cool slowly—the longer the cooling takes, the more transparent will be the soap.

I claim:

1. A process of making transparent soap and providing the same homogeneously with a protective film when dry, comprising the steps of adding to a hot transparent soap mixture a large quantity of non-crystallizable odorous fluid products and methylated spirit in equal parts and a small quantity of a film-forming soluble cellulose derivative; heating the resultant mixture to about 80° C.; partially cooling said mixture to about 72° C.; running the partially-cooled mixture into frames to form tablets; and leaving it to cool slowly in air, whereby the soluble film-forming cellulose derivative will appear as a thin coating over the soap tablets to retain the odorous products therein until liberated by washing with water, whereafter the coating is re-formed by drying in air.

2. A process according to claim 1, in which the odorous products and methylated spirit are added in the proportion of about 33%, and the soluble film-forming cellulose derivative in the proportion of 1 to 5%.

3. A process of making transparent soap and providing the same homogeneously with a protective film when dry, comprising the steps of adding to a hot transparent soap mixture a large quantity of non-crystallizable odorous fluid products and methylated spirit in equal parts and a small quantity of cellulose acetate; heating the resultant mixture to about 80° C.; running the partially-cooled mixture into frames to form tablets; and leaving it to cool slowly in air, whereby the cellulose acetate will appear as a thin coating over the soap tablets to retain the odorous product therein until liberated by washing with water, whereafter the coating is re-formed by drying in air.

4. A process according to claim 1, in which the odorous fluid products include aromatic terpeneless oils and armoatic non-crystallizable fluid products.

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