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DETERGENT AND POLISHING MATERIAL.

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The invention relates to a material adapted to be used as a cleaning agent, or as a polishing agent.

An object of the invention is to provide an efficacious detergent, particularly adapted to cleanse the skin of grease, dirt and other materials which may be insoluble in soap and water, and which become firmly embedded in the skin.

Another object of the invention is to provide a cheap and highly efficient polishing material for metallic, glazed, enameled, or other surfaces.

The invention possesses other advantageous features, some of which, with the foregoing, will be set forth at length in the following description, where I shall outline in full the material of my invention and the method of preparing it.

The base of the material of my invention is vegetable ash, preferably the ash of rice hulls. The chemical composition of the ash derived from rice hulls is unique, and that derived from the open air combustion of rice hulls consists principally of the following ingredients in substantially the proportions given, to wit:

	Per cent.
SiO_2	93.49
Na_2O	1.53
SO_3	1.11
Cl	.63
MgO	.64
Fe_2O_3	.38
CaO	.35
P_2O_5	.55
Al_2O_3	.38

When the rice hulls are retorted, the analysis shows a higher percentage of compounds of chlorine approximately 3.4%. The ash consists principally of silicon dioxide in a very finely divided state. The ash as derived from the furnace or retort is an excellent polishing material for hard surfaces, such as metal, porcelain, enamel, glass and glazed surfaces. A small amount of the powder is placed on a soft cloth and rubbed over the surface to be cleaned and polished, resulting in the removal of all dirt or tarnish, or other accumulation on the surface, without scratching or injuring the surface.

The ash may be employed as the base of a very highly efficient detergent. Combined with a strictly neutral soap, or with soap to which has been added a slight excess of cocoanut, or other oil or saponifiable fat, (an amount slightly in excess of the free caustic inherent in all commercial soaps), the resultant compound has no deleterious effect on the most delicate skin. The effect of the detergent upon grease. dirt, stains, petroleum products, petrol-rubber compounds, etc. which may gather on the hands is much superior to that produced by an abrasive detergent. When used on the hands, the detergent is used with water, as in the manner of ordinary soap, or when made into a cream, water need be used only to slightly dilute it, or only to rinse the hands.

The ash may be combined with material to produce bar or cream soap, or soap powder. An efficient cream soap may be formed of 1 part (by weight) castile soap; 3 to 6 parts (by weight) ash; 6 parts water, or sufficient water to produce the desired consistency; ⅛ part cocoanut oil.

The cocoanut oil may be replaced by an equivalent part of paraffine, or a mixture of paraffine and cocoanut oil may be used.

An efficient soap powder may be formed of 1 part anhydrous soap chips, 6 to 12 parts ash. These are mixed together and pulverized to a fineness that will pass a screen having 200 apertures to the lineal inch.

Other varieties of detergent mixtures may be readily produced. I have found that the addition of finely divided chalk, or finely divided clay, to the cream soap mixture, in place of some of the ash, will produce a more creamy product and one from which the water will not settle.

To give a cream soap product consisting of hard soap, ash and water the desired consistency and to prevent the water from settling out, I have found it advisable to add tallow, peanut oil, cocoanut oil or other hard fat or similar product, which forms an emulsion with the water. An efficient cream soap may be made of 1 part hard soap, 2 parts tallow or its equivalent, 4 parts ash, 8 parts water.

The ingredients may be first mixed, then heated and vigorously agitated to emulsify the fats and the water.

I claim:

An emulsion for cleaning and polishing purposes consisting of ash of rice hulls, soap, a vegetable oil and water.

In testimony whereof, I have hereunto set my hand.

JUSTIN KAY TOLES.