

UNITED STATES PATENT OFFICE.

EDWIN ELI JOHNSON, OF SAN MARTIN, CALIFORNIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO M. J. POPE, OF ST. LOUIS, MISSOURI, AND ONE-HALF TO FRANK D. THORNE, OF NEW YORK, N. Y.

DETERGENT.

984,566.

Specification of Letters Patent. Patented Feb. 21, 1911.

No Drawing.

Application filed January 25, 1906. Serial No. 297,866.

To all whom it may concern:

Be it known that I, EDWIN E. JOHNSON, a subject of the King of Great Britain, residing at the city of San Martin, in the county of Santa Clara and State of California, have invented certain new and useful Improvements in Detergents, of which the following is a specification.

This invention relates to detergent compounds, especially those designed for toilet purposes, such as cleaning and washing the hands, etc., and shampooing the hair.

My object has been to provide an article that will have the advantage of being in powdered form, and at the same time be composed of such ingredients that its use will not injure the skin. My compound will also be antiseptic in its nature, and can, moreover, be used where the ordinary strong washing powders would be harmful and their use undesirable.

In the manufacture of my improved compound I make use of the following components in the proportions named opposite each:

Comminuted maize-----	100 lbs.
Powdered soap-----	50 lbs.
Irish moss (carrageen)-----	4 oz.
Paraffin wax-----	8 oz.
Sodium benzoate-----	4 oz.
Borax (sodium biborate)-----	4 oz.
Turpineol-----	½ oz.
Water in sufficient quantity to dissolve the Irish moss, usually about-----	1 qt.

In order properly to compound the ingredients above specified, I proceed as follows: The Irish moss is placed in a suitable receptacle composed of reticulated material, as, for instance, a bag made of cheese cloth, and is then boiled in about a quart of water. This causes the moss to dissolve and assume a thick mucilaginous or paste-like form. I prefer to boil it in a cloth bag, as the bag can be squeezed from time to time and the mucilaginous mass forced out into any convenient receptacle. It is not necessary to dissolve all of the moss, but if three quarters thereof is exhausted, that will be sufficient. The mucilage thus prepared by dissolving the moss is allowed to cool, after which it is gradually and thoroughly mixed with about 10 lbs. of the comminuted maize, the whole

being kept in powdered form and not allowed to cake or become lumpy. This powder is then spread out in shallow trays, and allowed to dry in the sun or in a warm room, due care being taken to prevent its being baked, after which it is sifted to remove any cakes or lumps that may have formed. The paraffin wax is melted, and about 10 pounds of the comminuted maize are gradually mixed in with it while in said molten condition, an ordinary druggist's pestle being used thoroughly to mix the two substances. The borax, sodium benzoate, and turpineol are then mechanically mixed together with about one pound of the comminuted maize, after which the mixture is sifted. The products resulting from the three steps taken as above described, are then thoroughly mixed with the rest of the comminuted maize, and the powdered soap. This last mixing is merely a mechanical agitation, and any of the well-known mixing machines of which there are a number on the market, are adapted for that purpose. After being thus mixed, the compound is given a final sifting, and is then ready to be packed and shipped.

When it is desired to use my compound, the hands or other parts to be cleansed can be wet and a small quantity, drawn from any suitable soap canister, placed or sprinkled thereon. The water acts on the soap in the usual manner, and the greater part of the cleansing operation is performed thereby. The borax, being easily dissolved, also assists in the cleansing process, and as both it and the sodium benzoate are antiseptics, a very valuable feature is thus introduced, and my compound can, accordingly, be safely and advantageously used on hands that are cut or chapped. These two substances also serve as a counter irritant to allay any soreness that might result from the soap getting into cuts. The paraffin serves as a lubricant, and as a mechanical collector of dirt, and the Irish moss serves as a kind of binder or adhesive to hold the different ingredients together and so that they will not roll off the hands like so many grains of sand. The turpineol serves as a perfume. The comminuted maize, having absorptive properties, serves to absorb any moisture to which the compound may be exposed when standing near a washstand, and

thus keeps the powder dry and prevents caking. Further, as it is insoluble in water, it is not dissolved like the other ingredients, but is only softened to a slight degree. As
5 the hands are rubbed it serves as a mild but efficient abrasive, helping to remove both dirt and waste cuticle, but as it is not sharp, hard, or rough, like most abrasives, it will not scratch or injure the skin. It is chemi-
10 cally innocuous so that no harm can result if small particles of it enter cuts or breaks in the skin.

The article which is herein designated as comminuted maize is known to the trade as
15 "cones", and is merely finely pulverized maize or Indian corn.

Having thus described my said invention, what I claim and desire to secure by Letters-Patent is:

20 1. A detergent composed of one hundred

parts comminuted maize, 50 parts powdered soap, one-fourth part Irish moss, one-fourth part borax, one-fourth part sodium benzoate, one-half part paraffin wax, and one-thirty-second part of turpineol.

2. A detergent composed of comminuted maize, powdered soap, Irish moss, paraffin, borax, sodium benzoate, and turpineol, substantially in the proportions stated, but not chemically combined.

3. A detergent composed of comminuted maize, powdered soap, Irish moss, borax, sodium benzoate, and paraffin wax.

In testimony whereof I have affixed my signature in presence of two witnesses.

EDWIN ELI JOHNSON.

Witnesses:

H. J. BENSON,

H. SCHANZLIN.