

# UNITED STATES PATENT OFFICE.

JAMES PEARSON, OF RAYMOND, NEBRASKA.

## DETERGENT.

938,332.

Specification of Letters Patent.

Patented Oct. 26, 1909.

No Drawing.

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*To all whom it may concern:*

Be it known that I, JAMES PEARSON, a citizen of the United States, residing in Raymond, in the county of Lancaster and State of Nebraska, have invented new and useful Improvements in Detergents, of which the following is a specification.

This invention relates to process of making soap from a combination of the following chemical ingredients which added to water make a liquid soap, or when added to water and commercial bar soap make soft or jell soap, either of which work materially the same, being different in form only. For liquid soap we use water, sal-soda, borax, arrow root, soap bark, glycerin, alcohol, Spanish fly, and ammonia in the proportions and manner as hereinafter described. For soft or jell soap we use bar soap as a thickening or body for the liquid soap as hereinafter described.

In carrying my invention into effect I first take one ounce of soap bark and steep it in a quart of water for half an hour, thus making a decoction of soap bark. Pour off the decoction and add thereto seven pints of water (soft water being preferable). Add to the above one fourth of a pound of powdered borax, one and one half pounds of sal-soda and two ounces of arrow root. Heat the mixture to the boiling point, also stirring while it is thus heating and dissolving. When heated and dissolved, add 8 ounces of glycerin, one and one half dram fluid extract of Spanish fly and 6 ounces of alcohol. (It is best to mix the Spanish fly and alcohol a few minutes before they are poured into the solution.) (Wood alcohol may be used instead of grain alcohol as the effect is the same and it is cheaper.) Then add also one ounce of ammonia. (Chloroform may be used instead of ammonia.) Allow the entire mixture to boil for a few minutes slowly so as to assure a complete mixture of all the ingredients. After boiling as before men-

tioned allow it to cool and the result is a liquid soap which is an excellent detergent.

Should a soft or jell soap be more preferable in form shave three pounds of bar soap fine and let dissolve in the hot liquid, boil a little longer than would be necessary for liquid soap. The more bar soap that is added the harder will be the finished product. The adding of bar soap is not a feature of my claim, but simply a means of changing the form without altering the value as a detergent, to comply with various personal desires and necessities in handling or using.

In cases where persons desire to make a thickening or body for the liquid soap without using bar soap, it may be done by first boiling together tallow or other grease substances with lye according to the directions found upon various brands of lye, in amounts sufficient to equal the amount of bar soap demanded in the above receipts.

I claim:—

The described method of making soap which consists in steeping soap bark in a quart of water for a half hour; pouring off the resulting decoction and adding thereto 7 pints of water; adding  $\frac{1}{4}$  lb. of powdered borax,  $1\frac{1}{2}$  lbs. of sal soda and 2 oz. of arrow-root; heating the mixture to the boiling point, stirring the same during the heating and dissolving action; adding 8 oz. of glycerin,  $1\frac{1}{2}$  dram of fluid extract of Spanish fly, and 6 oz. of alcohol, and adding 1 oz. of ammonia, the mixture being finally subjected to a boiling action after which it is cooled.

In testimony whereof I have set my hand in the presence of two subscribing witnesses, at Raymond, Lancaster co., Nebraska, this ninth day of February, 1909.

JAMES PEARSON.

Witnesses:

G. J. MAUEL,  
A. G. MAUEL.