

# UNITED STATES PATENT OFFICE.

ALBERT R. STANTON, OF UTICA, NEW YORK.

## IMPROVEMENT IN SOAP COMPOUNDS.

Specification forming part of Letters Patent No. **153,986**, dated October 31, 1876; application filed August 10, 1874.

*To all whom it may concern:*

Be it known that I, ALBERT R. STANTON, of Utica, in the county of Oneida and State of New York, have invented a new and useful Improvement in Soap-Making Compound, of which the following is a specification:

My invention relates to that class of concentrated soap compounds that may be made into soft soap by the addition of water while in a heated state; and it consists in preparing said compound from sesamum-oil cake, or the seeds of the sesamum plant after the oil has been extracted, by mechanically mixing this product with certain chemicals, substantially as hereinafter more fully explained, and pointed out in the claim.

To prepare my improved compound, I take of sesamum-oil cake, seventy-five parts; of caustic soda, nine parts, and of water, sixteen parts. These ingredients are boiled together, producing an article of crystallized appearance, that is used to a limited extent in woolen-mills under the name of "Diamond Soap," and which, separately considered as an article of manufacture, I do not claim.

This so-called "Diamond Soap" forms the basis of my improved compound, in order to prepare which I take of sal-soda, twenty pounds; of biborate of soda, five pounds; of muriate of ammonia, five pounds; and of the diamond soap, seventy pounds, and proceed as follows: The "Diamond Soap" is first passed between two iron rollers, by which it is crushed and broken into fine particles. The other ingredients are ground to a fine powder, and thoroughly mixed together. All the ingredients are then put into a box or other suitable vessel, and thoroughly mixed with a shovel. The mixture is next passed between the iron rollers four of five times, the rollers being set closer together each time, until the mixture comes through in an unbroken sheet like paper. The compound is then ready to be weighed and boxed.

In making soap with this compound, one pound of the compound cut into thin shavings, so as to dissolve quickly, is put into two gallons of pure soft water, and brought to a boil. When it reaches the boiling-point a thick creamy froth will rise to the top, and will quickly boil over if not kept well stirred, which stirring must be continued and the mixture kept boiling gently until all the froth has disappeared from the top and the soap is made. The soap is then poured into a barrel

or other suitable vessel, and allowed to stand until cold, when it is ready for use.

I am aware that soap compounds have been made before by using bar-soap or hard soap as a basis, in combination with sal-soda, borax, spirits of ammonia, spirits of turpentine, &c., and I do not therefore claim, broadly, a concentrated soap compound made from a basis consisting of a ready-made solid soap mixed mechanically with the ingredients herein specified. But I am not aware that a concentrated soap compound for ordinary laundry or household purposes has ever been made having sesamum-oil cake, or the waste product of expressed sesamum seeds, for its basis, which, besides cheapness, adds certain desirable qualities to the compound that are not possessed by similar soap compounds made from a different basis.

The "Diamond Soap," in its rough state, is unfit for laundry use on account of its brittleness and granulated state, (it having the appearance of irregular lumps of coarse brown sugar;) besides which it dissolves very slowly in water. Hence it has heretofore been used only (and that to a very limited extent) in woolen-mills, because it possesses the property of "setting" colors and not shrinking woolens—two qualities which would make it most desirable as a laundry-soap. By treating this rough soap in the manner described, I produce an article that may be used in the laundry and household as ordinary concentrated soap compound; the moringin of the oil-cake (which gives to the "Diamond Soap" the quality of "setting" colors) being transformed, by the saponification, into moriugic acid, which readily dissolves in water, and contributes to my improved soap compound all the desirable qualities found in the rough "Diamond Soap," free from any of the disadvantages which render this unfit for use in the laundry or household.

Having thus described my improvement, I claim and desire to secure by Letters Patent of the United States—

A concentrated soap compound adapted for household and laundry purposes, consisting of sesamum-oil cake soap, sal-soda, biborate of soda, and muriate of ammonia, in about the proportions set forth, as a new article of manufacture.

Witnesses: ALBERT R. STANTON,  
ELI OVERTON,  
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