

UNITED STATES PATENT OFFICE.

WILLIAM V. WALLACE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SOAP COMPOSITIONS.

Specification forming part of Letters Patent No. **196,402**, dated October 23, 1877; application filed January 17, 1877.

To all whom it may concern:

Be it known that I, WM. V. WALLACE, of the city of Boston, county of Suffolk, and State of Massachusetts, have invented a new and useful Improvement in Hard Soap, which improvement is fully set forth in the following specification.

The object of my invention is to produce an improved hard soap of increased cleansing properties, and at a less cost than that of ordinary hard soap.

To this end I have compounded a new soap, which I now proceed to explain, and point out, in my claim.

The cleansing and bleaching qualities of crude carbonate of soda are well known. Its causticity softens and loosens dirt, grease, &c., while the sulphate properties are a superior bleacher.

Soap-makers, by the use of lime, obtain its caustic parts, and discard the residue, which is equal, on an average, to one-half of its bulk. By my process I incorporate powdered crude carbonate of soda—*i. e.*, soda-ash of commerce—into the body of the soap, and partly neutralize its too great causticity by the addition of Glauber's salts, and hold it in a firm body by a considerable proportion of resin, which should be freed from turpentine.

By adding soda-ash to ordinary soap, the thereby increased causticity tends to destroy the body of the soap, as well as to make the skin smart and burn in its use.

I overcome these obstacles by cooling it, so to say, with Glauber's salts, without deteriorating its cleansing powers, and building a tough body with resin, which is hardened by the carbonate parts of the ash, thus producing a superior soap for ordinary uses at a reduced cost.

To make my soap I proceed in the usual manner when making a mixed tallow and resin soap, and when the latter is ready to pour into the forms I continue the fire, adding soda-ash and Glauber's salts, in such proportions as are desired; or take, say, one hundred pounds of common yellow soap, of about twenty-five per cent. resin, fifty pounds of soda-ash, sixty-five pounds of Glauber's salts, and fifty pounds of resin, free from turpentine, with about six gallons of water, and boil till the whole saponifies, there being no residuum, and the result obtained will be, when cool, a solid soap of remarkable cleansing properties, and very superior for common uses.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The soap composition consisting of soap, resin, soda-ash, and Glauber's salts, in such proportions as to form a hard soap, substantially as described.

WM. V. WALLACE.

Witnesses:

B. T. STANDISH,
W. J. DRAPER.