UNITED STATES PATENT OFFICE.

WILLIAM V. WALLACE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SURFACE-COATINGS TO HARD SOAP.

Specification forming part of Letters Patent No. 143,601, dated October 14, 1873; application filed June 27, 1873.

To all whom it may concern:

Be it known that I, WILLIAM VIRGIL WALLACE, of Boston, county of Suffolk and State of Massachusetts, have invented a new and useful mode of preserving, in a practical and marketable condition, manufactured hard soap, when mixed with a considerable proportion of soda or its equivalent; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in applying a surface-coating to manufactured hard soap, when the same has been mixed or filled with a considerable quantity of soda or its equivalent, to prevent, in the process of drying, alkaline formations on the surface of the soap, and the natural crumbling and deterioration which result.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I use about fifty parts of ordinary resin soap, forty parts of beef tallow, and ten parts of wax or spermaceti; place in a vessel and apply heat. When entirely melted add water till it ap-

proaches the consistency of sirup. The soap to be coated is dipped in this mixture and placed upon racks to dry. The proportions of tallow and wax should vary in accordance with the strength of the alkali in the soap with which it is mixed. There should be sufficient tallow to prevent a surface crystal or powder formation, but not more than the alkali of the mixture will cause to be readily dissolved in water. Wax or spermaceti is added to stiffen the whole when cold. This mixture is applied while warm.

Pure tallow soap melted and reduced with water may be used with more waste and less satisfactory results.

What I claim as my invention, and desire to secure by Letters Patent, is—

The application of a surface-coating to hard soap, when the soap is mixed or filled with soda or its equivalent, for the purpose herein described.

WILLIAM VIRGIL WALLACE.

Witnesses:

GUILFORD WHITE, GEO. E. AFSLEY.