

# UNITED STATES PATENT OFFICE.

ANDREW J. WOODWORTH, OF PENN TOWNSHIP, CHESTER COUNTY, PA.

## IMPROVEMENT IN PROCESSES OF MAKING SOAP.

Specification forming part of Letters Patent No. **177,607**; dated May 16, 1876; application filed March 10, 1876.

*To all whom it may concern:*

Be it known that I, ANDREW J. WOODWORTH, of Penn township, in the county of Chester and State of Pennsylvania, have invented certain new and useful Improvements in Soap; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the manufacture of soap for general or toilet use; and it consists in mixing the ingredients hereinafter named, in the manner, and in or about the proportion, hereinafter stated.

The base or vehicle of my improved soap is a bleaching compound manufactured from caustic soda and vegetable oil of any kind, mixed in any suitable proportions. This, when properly made, is of the consistency of hard soap.

In manufacturing hard soap I use of this bleaching compound six (6) pounds, shaved up fine, and boiled in one (1) gallon of water until dissolved. While this is being done I mix or dissolve in separate vessels one (1) pound of whiting with one quart of water; two (2) ounces of starch in one pint of water; two (2) ounces of glue in one pint of water. When all is well dissolved, I add them to the first mixture, which is kept boiling constantly, and stir all well together. I then add four (4) ounces of washing-soda; one (1) ounce of spirits of turpentine; one (1) ounce of spirits of ammonia; one (1) ounce of spirits of wine. This compound I continue to stir, while boiling, for about five minutes, when it is done and ready to be molded.

If desired for toilet use, oil of bergamot or other essential oil may be added in any suitable quantity.

It will be observed that I use the bleaching

compound herein described, which forms the base or vehicle of my improved soap, as a compound, and do not use the articles of which it is composed separately. This is for the reason that this compound, when shaved up fine, will mix more readily with the other ingredients, thus greatly expediting the process of manufacture, and saving more labor and fuel, than if its two component parts (caustic soda and vegetable oil) were mixed directly or at once with the water, starch solution, and other ingredients. The whiting serves the triple purpose of giving "body" or substance to the soap, of improving its color, and of giving it a fine, almost impalpable, "grit," which is very desirable for cleansing purposes.

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

The herein-described process of making soap, consisting in, first, dissolving a bleaching compound, consisting of caustic soda and vegetable oil, in water by boiling; then dissolving, in separate vessels, whiting and water, starch and water, and glue and water; then adding these separate solutions to the dissolved bleaching compound, and mixing; then boiling and stirring the mixture; then adding, while stirring, washing-soda, spirits of turpentine, spirits of ammonia, and spirits of wine; and then boiling the complete compound, after which it is poured into suitable molds; all substantially in the manner and for the purpose, and in about the proportions, hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ANDREW J. WOODWORTH.

Witnesses:

JOHN B. THOMPSON,  
WM. BAGGER.