

# UNITED STATES PATENT OFFICE.

WM. McCORD, OF NEW YORK, N. Y.

## IMPROVEMENT IN SOAPS.

Specification forming part of Letters Patent No. 9,152, dated July 27, 1852.

*To all whom it may concern:*

Be it known that I, WILLIAM McCORD, of the city, county, and State of New York, have invented a new and useful Improvement in Soap; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of the invention and its nature is the manufacture of a cheap ammoniacal soap, which is well known to be exceedingly valuable for the removal of grease, oil, &c., with less injury to the color of goods than when the alkalies of potash and soda are alone used with the fatty or oleaginous matters of which soap is composed.

I am well aware that soft soap has been used containing ammonia, and that a patent has been granted for the same as combined with other substances; but the main ingredient which I employ along with ammonia I believe has never been used before. This ingredient is kaolin, or china-clay. In other soaps which have been made containing some ammonia this volatile alkali soon evaporates. The clay which I use absorbs the ammonia, prevents it from evaporating, and yet allows it to give out its good alkaline qualities when used for washing.

Liebig, in his Agricultural Chemistry, in the fifth chapter, on the assimilation of nitrogen, states that aluminous soils absorb ammonia from the atmosphere, and prevent its escape by virtue of their chemical properties. He also states that these clays give out their ammonia by every shower of rain, and convey it in solution to the soil. It is this property of kaolin, or china-clay, which makes it so beneficial in soap when combined with ammonia, which is thus retained in the soap, but is given out in the water—an object which is a desirable one, but not hitherto obtained. It is this useful and new combination that I claim.

The way in which I combine my new ingredients and manufacture my soap I will explain as follows: In making common soap, when

it is made in the usual way and ready to be run into the coolers, I take about twenty-five pounds of kaolin, or china-clay, and mix it with water to a cream-like consistency, and then add it to the aforesaid soap, stirring it all well up in the kettle. The soap at once thickens up, and is then run out from the kettle into the coolers. When it has become cold enough to allow a person's hand to be held in it without scalding I add ten pounds of aqua-ammonia, stirring all well together, and when well mixed I run the whole composition into the molds. When it becomes of a suitable hardness it is cut into bars and used like other bar-soap. I refer to the common soap-making kettle.

This soap retains its ammonia, is cheaper than any common brown soap, and has detergent qualities of a very superior and peculiar character.

I am well aware of "fuller's-earth" being used for a soap from time immemorial; also of various clays having been used for detergent purposes.

I am also aware that ammonia has been employed in soap, and a patent has been issued, in which it forms one of the ingredients; but in all cases, so far as I have seen it used, it has never been held in good combination with the other ingredients in the soap, but has, owing to its volatile nature, soon evaporated. As combined with the clay by my process, the ammonia is retained in the soap and does not evaporate.

What I therefore claim, and desire to secure by Letters Patent, is—

The combination of ammonia or carbonate of ammonia with kaolin or other equivalent aluminous mineral in the composition of a soap, substantially as herein set forth.

WM. McCORD.

Witnesses:

S. H. WALES,  
O. D. MUNN.