

UNITED STATES PATENT OFFICE.

SAMUEL COBURN, OF STAMFORD, CONNECTICUT.

IMPROVEMENT IN THE MANUFACTURE OF DETERGENTS.

Specification forming part of Letters Patent No. **50,336**, dated October 10, 1865; antedated September 30, 1865.

To all whom it may concern:

Be it known that I, SAMUEL COBURN, of the town of Stamford, county of Fairfield, and State of Connecticut, have discovered and made a new and useful Improvement in the Composition of Detergents; and I do hereby declare that the following is a full and exact description thereof.

The nature of my discovery and improvement consists in combining with soda (now principally used in the manufacture of soaps) a small proportion of ammonia, whereby I greatly enhance the detergent power or effect of the soda.

In the preparation of said improved detergent I proceed as follows: I take of oxide of calcium or caustic lime about six parts, carbonate of soda about twelve parts, and carbonate of ammonia about one part. These ingredients may be advantageously ground into powder or otherwise intimately mixed, though this is not essential.

To make a detergent fluid, I take of this compound nineteen pounds, and of water ninety-six pounds, or in about that proportion, and dissolve the former in the latter. I suffer the water thus charged to stand until the sediment has subsided, usually about twelve hours. I then decant the natant fluid, and to economize so much of the same as shall remain with the sediment, I add about one-fourth of the said quantity of water, and after the sediment has again subsided, I again decant and use the fluid in subsequent operations, making a proper allowance therefor.

In place of the aforesaid salt of ammonia, an equivalent in quality and quantity of ammoniacal liquor, and in place of the carbonate of soda a like equivalent of oxide of sodium or caustic soda may be substituted, and in place

of the foregoing compound its ingredients may be introduced successfully into the water, and substantially the same results obtained.

The fluid thus composed can be used to profit and advantage, as follows, viz:

First, for toilet purposes, as shaving, washing hands, face, &c., and removing grease-spots from clothing.

Second, for ordinary family washing, either with or without soap. It economizes time and labor, and in a great degree supersedes attrition, whether mechanical or otherwise, now so generally used. The clothes, when properly handled, will come out of the operation clean and in a satisfactory condition. I declare it to be my unqualified belief, resulting from considerable experience in my own family, that by the use of this fluid at least one-half of the expense of washing clothes by the ordinary method can be saved.

Third, also in the manufacture of soap. The use of this fluid for this purpose greatly expedites and promotes saponification and improves the quality of the product.

It is hardly necessary for me to remark that I do not claim to have made any improvement in the detergent power of either ammonia or soda used separately; but

What I do claim as my discovery and improvement, and desire to secure by Letters Patent, is—

The combination, for the purpose aforesaid, of soda with ammonia, by the means and in the manner substantially above stated.

Dated at Stamford this 16th day of July, A. D. 1864.

SAMUEL COBURN.

In presence of—

EDWIN SCOFIELD, Jr.,
THEODORE W. SMITH.