

# UNITED STATES PATENT OFFICE.

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## DETERGENT COMPOUND.

SPECIFICATION forming part of Letters Patent No. 583,431, dated May 25, 1897.

Application filed November 12, 1896. Serial No. 611,867. (No specimens.)

*To all whom it may concern:*

Be it known that I, HENRY J. ENNIS, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Soaps; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to produce a compound to be added to ordinary laundry soap to increase its detergent qualities and to render it antiseptic, so that soiled clothing, if treated in water to which a quantity of my compound has been added, will be not only thoroughly cleansed and purified, but will be disinfected and rendered antiseptic and proof against germs. My compound is also useful for scrubbing floors and for cleansing sinks and outhouses.

To make my compound, I take about one ounce of unslaked lime and about one ounce of powdered sulfur, to which I add about a pint of hot water. In another vessel I place four ounces of ammonia and about one ounce of borax, to which I add a pint of water. The object of this procedure is to form sulfid of calcium. It is clear, however, that it is difficult to employ the sulfur and lime in such proportions that the sulfur will completely combine with the calcium, and vice versa, and it may be stated, therefore, that it is immaterial that the resulting composition contains a slight excess of either of these ingredients. When the lime has been thoroughly slaked, I draw off the solution of sulfid of lime which

results from the described process and add to it a pound of ordinary laundry soap, and finally the dissolved borax and the ammonia are added and the mixture boiled until it is thoroughly mixed and dissolved and assumes the consistency of putty, when it is placed in vessels or bottles and is kept ready for use.

When a small quantity of this compound is added to water in which the clothes are soaked, they will be thoroughly cleansed and purified without rubbing, excepting at the much-soiled places, and the result is not only a saving in the cost of soap and labor, but the clothes are permeated with a powerful disinfectant and rendered proof against the invasion of disease germs and parasites, and when the clothes are rinsed and dried they will be found sweet and clean and free from odor.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. A detergent compound, consisting of calcium sulfid and ammonia, as set forth.

2. A detergent compound, consisting of calcium sulfid, ammonia and borax, as set forth.

3. A detergent compound, consisting of a solution of sulfid of lime, ammonia, borax and laundry soap, in about the proportions specified.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY J. ENNIS.

Witnesses:

SAML. A. DRURY,  
THOMAS A. KASEY.