

# UNITED STATES PATENT OFFICE.

AUGUST LUHN, OF BARMEN, GERMANY.

## DETERGENT COMPOUND.

SPECIFICATION forming part of Letters Patent No. 645,600, dated March 20, 1900.

Application filed May 6, 1898. Serial No. 548,287. (No specimens.)

*To all whom it may concern:*

Be it known that I, AUGUST LUHN, a citizen of the German Empire, residing at Rittershausen, Barmen, in the Empire of Germany, have invented a new Detergent Composition; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a detergent composition, and more especially to a soap manufactured in flakes or shreds ready for use. As is well known, soaps are usually sold in cakes or bars which have to be cut up by the consumer before being used. To save the consumer the time and inconvenience of cutting the soap, it has been attempted by the soap-manufacturers to sell the soap already prepared for use either in the form of flakes or in a pulverized condition.

As is well known, the cleansing properties of soap can be greatly increased by the addition thereto of turpentine or sal-ammoniac, which are of a volatile nature and can only be used in connection with soap when the soap is in the form of cakes or bars.

This invention has therefore for its object to provide an improvement in the manufacture of soap to be sold in flakes or shreds, whereby the volatile ingredients of the soap are retained and the cleansing qualities not impaired by exposure to the atmosphere.

The invention therefore consists in the combination of a detergent compound comprising soap containing a cleansing auxiliary of a volatile nature, such as turpentine or sal-ammoniac divided into flakes or shreds, and in a coating for the same comprising powdered soap void of volatile ingredients, whereby the flakes or shreds are closed against the evaporation of the turpentine or sal-ammoniac contained therein.

In carrying out my invention I utilize a soap with which is incorporated turpentine or sal-ammoniac in any of the well-known or preferred manners, although the process most preferred is as follows: Into two hundred parts of boiling water dissolve one hundred and eighty

parts caustic soda and add thereto two hundred parts of a white chemically-pure soap having incorporated therein by absorption as ingredients turpentine or sal-ammoniac and add to this solution two hundred to three hundred parts of granular soap. The paste thus obtained is heated to about 195° Fahrenheit and is then drawn into vats, where it is cured and hardened by agitation, this operation lasting from twelve to fifteen hours. Parts of the mass which cannot be passed through the sieves of the mill and are in granular condition are utilized as above stated.

The turpentine or sal-ammoniac is incorporated into the white chemically-pure soap by absorption—that is, the particles of the soap absorb as much of the liquid as they can contain—this operation preferably being performed by admitting the liquid into a vat containing the soap, the surplus liquid being drawn off when the operation of absorption is complete.

The hardened mass is divided into flakes or shreds, which are of great solidity, and the flakes or shreds are coated with about two hundred parts of pulverized or powdered soap composed of pure caustic soda and the essential elements of a neutral soda-soap mixed, saponified, cured, and pulverized in the well-known or in any preferred manner, the latter being coated thereon gradually and adhered thereto by pressure, whereby the pores of the flakes or shreds are closed by the pulverized or powdered soap which adheres thereto to prevent the volatilization or evaporation of the turpentine or sal-ammoniac.

The detergent composition manufactured as heretofore stated is well adapted for its purpose and can be used as easily and conveniently without losing its cleansing qualities as any of the numerous so-called “soap-powders” at present on the market, while it has the merit of cheapness and chemical purity.

What I claim is—

As an improved article of manufacture, the combination of a detergent composition comprising soap divided into flakes or shreds, and containing a cleansing auxiliary of a volatile

nature, such as turpentine or sal-ammoniac,  
of a coating for the same comprising powdered soap adhered thereto, whereby pores of  
the flakes or shreds are closed against the vola-  
5 tilization or évaporation of the turpentine or  
sal-ammoniac, substantially as described.

In witness whereof I have hereunto set my

hand in presence of two subscribing witnesses.

AUGUST LUHN.

Witnesses:

T. H. STRAUSS,  
A. STRAUSS.