

# UNITED STATES PATENT OFFICE.

CHRISTEN PETER ANDERSEN, OF COPENHAGEN, DENMARK.

## DETERGENT.

SPECIFICATION forming part of Letters Patent No. 421,223, dated February 11, 1890.

Application filed September 6, 1889. Serial No. 323,192. (No specimens.) Patented in Denmark February 10, 1885, No. 1,871; in Sweden April 26, 1886, No. 689; in Germany June 22, 1886, No. 36,043; in France June 22, 1886, No. 176,982; in England June 29, 1886, No. 8,528; in Austria-Hungary February 6, 1888, No. 65,483, and in Norway June 16, 1888, No. 207.

To all whom it may concern:

Be it known that I, CHRISTEN PETER ANDERSEN, a subject of the King of Denmark, residing at Copenhagen, in the Province of Zealand and Kingdom of Denmark, have invented certain new and useful Improvements in Detergent Dye Compounds, (which said improvements have been patented by me in the following-named countries, to wit: in Denmark, Patent No. 1,871, dated February 10, 1885; in Norway, Patent No. 207, dated June 16, 1888; in Sweden, Patent No. 689, dated April 26, 1886; in Germany, Patent No. 36,043, dated June 22, 1886; in Austria-Hungary, Patent No. 65,483, dated February 6, 1888; in England, Patent No. 8,528, dated June 29, 1886, and in France, Patent No. 176,982, dated June 22, 1886;) 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.

My invention has relation to solid soap compounds or compositions; and it consists in the peculiar detergent compound or composition hereinafter described and claimed, which possesses the peculiarity that it cleanses and dyes the fabrics subjected to its use at the same time and by the same operation, or, in other words, is a combined cleansing and dyeing compound possessing peculiar qualities and adapted for general household use.

This composition consists of the following ingredients, in about the proportions stated, viz: pure white soap, (preferably so-called "Marseilles soap" or "castile-soap,") one hundred parts; water, a suitable quantity to dissolve the same; quillaia-bark, twelve and one-half parts; hæmatin, forty parts, and bicarbonate of potash, two parts, the several proportions above given being by weight. To these ingredients are (in some cases, as hereinafter specified) added the following: aniline, (of suitable color,) ten parts, and bitartrate of potash, (cream of tartar,) two parts, also by weight.

To prepare this compound, I proceed as follows: I first prepare a strong decoction of

quillaia-bark (*Quillaia saponaria* or *Q. brasiliensis*) by boiling twelve and one-half parts of the bark in a suitable quantity of water, strain the decoction, and then dissolve therein (by boiling over a slow fire) one hundred parts of pure white soap, which is preferably first cut up into small pieces or thin shavings to cause it to dissolve readily. When the soap has all been dissolved, I add forty parts of hæmatin in crystals, stir the composition well, and then add slowly, while stirring, two parts of bicarbonate of potash. After all these ingredients have become thoroughly dissolved and mixed by diligent stirring the vessel containing the compound is removed from the fire, when the contents may be poured into suitable molds and left to harden, after which the hardened composition may be cut up into cakes of suitable size and shape (like soap) and is then ready for use.

The substance hæmatin, which forms one of the ingredients of my composition, is a commercial product obtained by mixing hæmatoxylin derived from logwood with ammonia or some other strong alkali and oxygenating the mixture in the open air.

This composition is particularly adapted to the cleaning and dyeing or restoring of fabrics of dark colors, (such as black, or deep shades of blue, brown, or green.) Where the composition is to be used for cleansing and restoring fabrics or articles of the lighter shades, the proportion of hæmatin is reduced or omitted altogether, and in its place I use ten parts of aniline of the particular color which it is desired to restore.

In using aniline I also dispense with the bicarbonate of potash, which is used with the hæmatin, and substitute two parts of bitartrate of potash or cream of tartar. In other respects the manner of mixing, cooling, and otherwise treating the mixture is the same, the proportion of hæmatin being simply varied according to the shades which it is desired to restore or produce.

To use this compound, a suitable quantity is dissolved in water and applied to the article or fabric which is to be cleansed or re-

stored by brushing or rubbing it into the fabric with a brush or cloth. A few brushings or rubbings will, in a majority of cases, be found sufficient to thoroughly cleanse and  
5 brighten up the fabric, and at the same time restore it to its original color.

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

10 The herein-described detergent dye compound, composed by mixing a decoction of

quillaia-bark with soap, hæmatin, and bicarbonate of potash, in about the proportions set forth.

In testimony that I claim the foregoing as 15 my own I have hereunto affixed my signature in presence of two witnesses.

CHRISTEN PETER ANDERSEN.

Witnesses:

P. R. MATHIASSEN,  
F. ANDERSEN.