

UNITED STATES PATENT OFFICE

JOHN T. HOGE AND ROBERT D. SCHULTZ, OF ZANESVILLE, OHIO.

IMPROVEMENT IN SOAPS.

Specification forming part of Letters Patent No. 166,609, dated August 10, 1875; application filed May 21, 1875.

To all whom it may concern:

Be it known that we, JOHN T. HOGE and ROBERT D. SCHULTZ, of Zanesville, in the county of Muskingum and State of Ohio, have invented certain new and useful Improvements in Soap; and we do hereby 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 pertains to make and use it.

Our invention relates to the manufacture of bar-soap, and consists in the addition or compounding of indigo with any soap, preferably, however, with that grade or class of soaps known to the trade as family or laundry soaps.

By the addition or compound of indigo, as above mentioned, not only are imparted to the soap the peculiar virtues of indigo, but also are imparted thereto the following novel and peculiar properties and characteristics: For instance, if indigo be mixed or compounded with yellow-colored soap, the product will be a soap which, after a slight exposure, will become of a peculiar green color. If cut or fractured, the interior of the cake will be found to be yellowish in color, and this changes rapidly upon exposure to the green color heretofore mentioned. In ordinary use for washing purposes, owing to the gradual wear upon the cake, sufficient exposure will result to constantly maintain a green color.

It will be apparent that the green color obtain by the mixture of the yellow soap with indigo is owing to the result of mixing the colors yellow and blue, which produces green. Blue or a bluish soap may be obtained by the mixture of indigo with a white or whitish soap; and in the same manner, by the mixing of indigo with soaps of different colors, a variety of shades and colors of soaps may be made, possessing the peculiar qualities as described in the case of the green soap above mentioned.

The advantages of our invention are, first, an increased virtue of the soap itself by the addition to its deterative qualities of the peculiar properties of indigo, whereby is obviated the necessity of any separate or independent use of indigo for laundry purposes;

second, the peculiar green, blue, or other color is imparted to the soap without the addition of any poisonous, injurious, or destructive coloring matter; third, the peculiar color of the soap imparted by the addition of indigo cannot be imitated or otherwise obtained without the addition of deleterious matter; and, moreover, this peculiarity of color serves as a brand or distinguishing characteristic, by which soap made after this manner may be recognized in the market from any other; fourth, the peculiar property of the soap upon cutting or fracturing, of changing by oxidation from a color resembling the soap before the addition of indigo, to a color resulting from its compound with indigo.

It is found that by the addition of certain perfumes, or other substances—such as mirbane—this property of changing color, as above described, may be destroyed, while at the same time a uniform color is fixed alike throughout the entire cake or mass.

Although we consider it desirable not to destroy this property of changing color, as above described, nevertheless, if so desired, this may be done without departing from the spirit of our invention.

It will appear obvious that several specific methods may be adopted for mixing or compounding indigo with soap compounds, as hereinbefore mentioned. A good one, however, and one which is preferred, is the following: Take of a solution of indigo—preferably an alkaline solution—the proportion of, say, two quarts of said indigo-solution to one thousand pounds, more or less, of the soap compound, and mix the two thoroughly together during the finishing process. The quantity of indigo, however, may be varied as may be found desirable or necessary.

What we claim is—

1. The process, substantially as described, of making bar-soap of a green, blue, or other color, consisting in the addition or compounding of indigo with the common ingredients employed in making yellow, white, or other colored soaps, whereby the blue color of the indigo, uniting with the color of the soap, gives a product having a third or resultant color.

2. A soap and indigo compound, substantially as and for the purposes herein described, having the inherent property upon exposure and oxidation of changing its color to a color that is the resultant of the combination of the blue color of the indigo and the color of the soap before the compounding of indigo therewith.

In testimony that we jointly claim the foregoing we have hereunto set our hands.

JOHN T. HOGE.
ROBT. D. SCHULTZ.

Witnesses:

GEO. L. PHILLIPS,
H. S. HARDING.