UNITED STATES PATENT OFFICE.

HARVEY G. ROBERTSON, OF ASHEVILLE, NORTH CAROLINA.

IMPROVEMENT IN SOAP.

Specification forming part of Letters Patent No. **217,410**, dated July 8, 1879; application filed May 29, 1879.

To all whom it may concern:

Be it known that I, HARVEY G. ROBERTSON, of Asheville, in the county of Buncombe and State of North Carolina, have invented certain new and useful Improvements in Soap, of which the following is a specification.

The object of the present invention is to provide an improved soap, which will obviate the necessity of hand-labor or machine-work in washing clothes and various fabrics, and which will not injure the color of the same, however delicate.

To this end my invention consists of a compound composed of ordinary soap, hydrate of potash, sal-soda, borax, chloride of ammonium, alum, spirits of turpentine, and water.

I employ the above-named ingredients in various proportions, according to the purpose for which it is to be employed; but for general use I have found the following proportions to answer well in practice, viz: best commercial soap, eleven pounds; hydrate of potash, one-half pound; sal-soda, three and one-half pounds; borax, one pound; chloride of ammonium, two ounces; alum, two ounces; spirits of turpentine, five fluid ounces; water, seven gallons.

In carrying out my invention, the soap is first sliced or shaved very thin and placed in a vessel containing five gallons of the water to be employed, and the hydrate of potash and sal-soda added. The chloride of ammonium, alum, and borax are then placed in another vessel containing the remaining two gallons of water, and both vessels are placed over a good fire, and the contents raised to and kept at a boiling temperature until the ingredients are completely dissolved. After the ingredients are thoroughly dissolved the contents of the last-mentioned vessel are thoroughly commingled, after which the compound is removed from the fire and the spirits of turpentine added thereto, and the whole thoroughly commingled by agitation and allowed to cool, after which the soap will be ready for use.

I have sometimes found it advantageous to add honey to the compound during its preparation, which prevents the evaporation of the water in the soap and increases its cleansing properties, and also common salt, which tends to harden the soap; but these substances are not absolutely necessary, and hence I do not limit myself to a compound containing such substances.

I have given above the proportions of the ingredients which I have found to prove most advantageous in practice; but the proportions may be varied, as before mentioned, and good results obtained; hence I do not limit myself to the specific proportions set forth.

In using my improved soap, the clothes or fabrics to be washed are thoroughly soaked in water for twelve hours, or thereabout, which can be conveniently done during the night. The soap is then thoroughly applied to the clothes or fabrics and rubbed into the same, and said clothes or fabrics are boiled for about twenty minutes, and afterward rinsed in two waters, and then blued and dried as usual, when they will be found to be much whiter than when washed by the ordinary soaps in the ordinary manner.

The alum in the compound serves to set the color of the fabric being washed and prevent it from running, and also acts to harden and toughen the soap, and prevent it from wasting rapidly when used.

What I claim is—

The herein-described soap, consisting of ordinary soap, hydrate of potash, sal-soda, borax, alum, chloride of ammonium, spirits of turpentine, and water.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

HARVEY G. ROBERTSON.

Witnesses:
W. R. WHITSON,
E. W. HERNDON.