

# UNITED STATES PATENT OFFICE.

JONATHAN SCHARR, OF PHILADELPHIA, PENNSYLVANIA.

## SOAP COMPOUND.

SPECIFICATION forming part of Letters Patent No. 486,267, dated November 15, 1892.

Application filed January 28, 1892. Serial No. 419,580. (No specimens.)

### *To all whom it may concern:*

Be it known that I, JONATHAN SCHARR, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Soap Compounds; 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 cheap and effective soap compound that can be mixed with oil and used when preparing wool for carding and spinning.

In preparing wool for carding and spinning into yarn it is moistened with an oil solution for the purpose of making it soft and pliant and getting it into a workable condition for the carding and spinning machines. After the wool has been spun and woven into a fabric it is necessary to thoroughly wash it for the purpose of removing the oil thus introduced. As good oils are quite expensive, a mixture of cheaper grades is generally used for thus preparing the wool, necessitating the use of a very strong scouring solution when the washing process is reached. As a result, the wool has all of the natural oil scoured out of it and the fabric is made harsh and wiry, losing the soft smooth finish so desirable in goods of this class. The quality of the wool when treated with my soap compound before carding is much improved and the weight increased, besides the use of soda can be entirely dispensed with when washing the manufactured fabric.

To prepare my soap compound, I steep thirteen pounds of soap bark in one hundred gallons of water and boil the same for one hour. The soap bark is then removed from the liquid, after which thirty-three pounds of crude turpentine is added, the liquid is again brought to a boiling-point, and while slowly boiling one hundred and fifteen pounds of forty-eight per cent. refined soda, free from caustic, is added. When the soda is dissolved, I add ten pounds of sal-ammoniac, eight pounds of borax, and one pound of camphor. When the sal-ammoniac, borax, and camphor are dissolved, eight gallons of olein are added and the mixture allowed to boil slowly for one hour longer, after which I take twelve gallons of the liquid and mix it with twelve gallons of lard or any other good animal or vegetable

oil. This mixture is then heated thoroughly and twenty pounds of ninety-eight per cent. caustic soda added. It is then allowed to boil slowly for half an hour, after which, while still boiling, small quantities of the first mixture are added until all of it is in, after which the boiling is continued for about three hours longer, when the mixture will be thoroughly compounded and should measure about two hundred and twenty-five gallons. If it is less than this quantity, add water slowly while the mixture is boiling to make the two hundred and twenty-five gallons. The solution is now ready for use and can be mixed with any desired quantity of oil and used in the same way as oil is ordinarily used when preparing wool for carding and spinning. The quantity of the various ingredients making the soap compound may be varied in accordance with the quality of the articles, and the relative quantities of the soap compound and oil used of course necessarily vary with the kind of wool used, a harsh wiry wool requiring more and soft wool less oil. For ordinary purposes I have found that two parts of the soap compound, one part oil and one part water make a very good mixture.

The soap compound will saponify any kind of oil—animal or vegetable—even when cold, in the proportions of one of soap to two of oil.

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

1. The herein-described soap compound, consisting of soap bark, water, crude turpentine, soda, sal-ammoniac, borax, camphor, oil, and caustic soda, substantially in the proportions specified and prepared in the manner set forth.

2. A preparation for treating wool for carding and spinning, consisting of the herein-described soap compound made of soap bark, water, crude turpentine, soda, sal-ammoniac, borax, camphor, oil, and caustic soda prepared in the manner set forth and afterward mixed with oil, all substantially as and for the purpose described.

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

JONATHAN SCHARR.

Witnesses:

THOS. D. MOWLDS,  
JOHN I. GREEN,