UNITED STATES PATENT OFFICE.

CHARLES TOPPAN, OF SALEM, ASSIGNOR TO THE CANTON MANUFACTURING COMPANY, OF BOSTON, MASSACHUSETTS.

PROCESS OF SCOURING WOOL.

SPECIFICATION forming part of Letters Patent No. 338,806, dated March 30, 1886.

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To all whom it may concern:

Be it known that I, CHARLES TOPPAN, of Salem, in the county of Essex and State of Massachusetts, have invented an Improvement in the Art or Process of Scouring Wool, of which the following is a specification.

This invention relates to a new art or process of scouring wool by means of a detergent compound consisting of the expressed oil of mustard-seed, petroleum or other mineral oils, and alkali dissolved in warm water to form a solution, as hereinafter more fully described, and set forth in the claims.

I have ascertained that the expressed oil of mustard-seed, petroleum or other mineral oils, and alkali form a rapid solvent for the grease or animal oil contained in wool, and that wool scoured by this process is more pliable and has greater strength and elasticity, and requires less oil to prepare it for spinning, and can be spun considerably finer, and is more susceptible to receive and retain colors or dyes.

In carrying out my invention I proceed about as follows: Take four parts, by measure, of expressed oil of mustard-seed; three parts, by measure, of paraffine-oil; one part, by measure, of vacuum-oil, (that is, petroleum-oil distilled in a vacuum,) and four parts, by measure, of caustic alkali, mixed together. I then add one-half ounce of this compound to each gallon of water contained in any suitable vessel, boiler, or keir, then heat the solution to a temperature of 120° to 130° Fahrenheit, then immerse the wool in the solution from five to ten minutes, then remove the wool and pass it between rolls to expel the surplus liquid, then immerse the wool in a warm weak solution of carbonated alkali for about two minutes, then rinse the wool in pure cold water, then express the water therefrom, and dry the wool in any suitable manner.

Wool scoured by this process will not turn yellow when carried a long time in stock, as this process of scouring bleaches the wool, so that it will remain white in the manufactured goods or fabrics, which I find are not attacked by moths.

Heretofore it has required by the soda process from twenty to thirty minutes to scour wool, and in order to get the tags and more greasy portions clean it has required such an energetic action of the soda as to attack the cleaner portions of the wool and materially injure its fiber. These defects and objections are fully obviated by my process, and at the same time other desirable qualities are imparted to the wool, which, in being manufactured, tend to reduce the expense, and save time and labor.

Having thus described my invention, what I claim is—

1. In the process of scouring wool, immersing the same in a warm solution of expressed oil of mustard-seed, petroleum products, and alkali, as described.

2. In the art or process of scouring wool, immersing the same in a warm solution of expressed oil of mustard-seed, paraffine-oil, vacuum-oil, and alkali, as described.

CHARLES TOPPAN.

Witnesses:
SYLVENUS WALKER,
T. A. JOHNSTON.