

UNITED STATES PATENT OFFICE.

WILLIAM SYKES, OF GLENHAM, NEW YORK.

IMPROVED PROCESS FOR REMOVING VEGETABLE MATTER FROM WOOL.

Specification forming part of Letters Patent No. **56,291**, dated July 10, 1866.

To all whom it may concern:

Be it known that I, WILLIAM SYKES, of Glenham, in the county of Dutchess and State of New York, have invented a new and Improved Process of Removing Vegetable Matter from Wool and Woolen Goods; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same.

The object of this improvement is to effect the speedy removal of vegetable matters which adhere to the fibers of wool, thus cleansing the wool and rendering it pure preparatory to being passed through the machinery employed in manufacturing the wool into cloth or fabrics of any kind.

I make a solution of sulphuric acid in water of a strength from 4° to 10° by Twaddle's hydrometer, and in this solution I steep or soak the wool for from eight to forty-eight hours, according to the apparent condition of the wool prior to soaking. If the wool is full of vegetable matter I soak it longer than if there is but little vegetable matter in it. I also use the acid solution either warm or cold, as desired, the warm solution having a quicker or more powerful effect in removing the vegetable

matter. After it has sufficiently soaked in the above solution I remove it and, either before or after the drying operation, I soak the wool in a bath of saturated lime-water for a short time, which has the effect to preserve the fulling qualities of the wool intact.

I find this method of treatment for the removal of vegetable matter superior to the use of soda-ash, as it is cheaper and does not require after-treatment with Irish moss; but the fiber of the wool is left intact and in a fit condition for manufacture.

I am aware that the acid-bath has been used, and also that soda or potash for the purpose of neutralizing the acid has been applied. I do not therefore claim such; but

What I claim as new, and desire to secure by Letters Patent, is—

The described process, consisting in plunging the wool into an acidulous solution, followed by treatment with lime-water and subsequent drying.

The above specification of my invention signed by me this 12th day of April, 1865.

WILLIAM SYKES.

Witnesses:

CALEB BENNETT,

GEORGE SANDERSON.