

UNITED STATES PATENT OFFICE.

JOEL W. W. MARTIN, OF NEWINGTON, CONN., ASSIGNOR TO JESSE OAKLEY,
E. BENEDICT OAKLEY, AND JOHN A. OAKLEY, OF NEW YORK, N. Y.

PROCESS AND MATERIAL FOR FULLING AND SCOURING.

SPECIFICATION forming part of Letters Patent No. 225,154, dated March 2, 1880.

Application filed July 25, 1879.

To all whom it may concern:

Be it known that I, JOEL W. W. MARTIN, of Newington, in the county of Hartford and State of Connecticut, have invented a new and
5 useful Improvement in Processes of Fulling and Scouring, of which the following is a specification.

The invention relates to the art of fulling and scouring articles and fabrics of every nature and description.

It consists in applying a soap compound in a powdered form in a novel manner and relation to produce a new and improved result.

Scouring and fulling as heretofore practiced
15 have involved the necessity of employing skilled labor, and have, notwithstanding, been a source of loss and inconvenience.

The customary method has been for the scourer or fuller to prepare a compound of a
20 liquid nature, consisting of soap and an alkali, the latter being added with water or other fluid just before the scouring or fulling is attempted.

Where mills in which rollers or percussive
25 agents of any kind are employed the compound is spread or poured upon the fabric or article while dry, according to the judgment of the operator, when it is subjected to the action of the rolls or hammers. If by any accident or inadvertence the compound is applied
30 in too great haste, or if it has been improperly or imperfectly mixed, the goods become what is known as "sloppy," and are, in consequence, impaired in quality and appearance. When
35 "flocks" are being used the liquid nature of the compound tends to cause them to collect in lumps or spots, unless it is applied in the most exact form and manner.

To obviate these, as well as other objections
40 to the method now generally employed, and to provide a safer, simpler, and more effectual method, are the objects of the invention.

As hereinbefore stated, the method heretofore practiced has, in the case of rotary or per-
45 cussive mills, involved the application of the

liquid compound to the article or fabric while it is in a dry state. Instead of this I dampen the article or fabric before it is put in the mill, and, having done so, sift or sprinkle a dry powdered soap compound upon the dampened
50 surface, applying it evenly to form a coating of any desired thickness. By so doing I produce a heavy dead lather of the most effective and desirable character, the union of which with the article or fabric is much more suc-
55 cessfully effected, and produces, as a consequence, a better result than where the liquid is employed. If there is any tendency to "sloppiness," it is readily corrected, whenever the emergency arises, by an additional appli-
60 cation of the powder. The tendency of the goods to become sloppy is also greatly reduced by the employment of the powder by reason of the fact that they may be worked much drier, to accomplish which care will be exercised to
65 dampen them enough to take the powder without making them too wet.

Where desired, instead of employing water to dampen the article or fabric, a solution of water and either sal-soda, soda-ash, pearl-ash,
70 salts of ammonia, or potash in any proportion may be used. This, however, will not usually be necessary, but may be resorted to where the occasion requires it.

What I claim as my invention, and desire
75 to secure by Letters Patent, is—

The process of fulling or scouring hereinbefore described, which consists in dampening the material or article and then sifting or other-
80 wise applying a soap compound in a powdered form, substantially as set forth.

In testimony that I claim the foregoing improvement in processes and materials for fulling and scouring, as above described, I have hereunto set my hand this 17th day of July,
85 1879.

JOEL W. W. MARTIN.

Witnesses:

GEORGE G. MECKLEM,
FRANK G. WOOD.