

# UNITED STATES PATENT OFFICE.

ALEXANDER McKAY, OF WATERFORD, NEW YORK.

## BLEACHING-SOLUTION.

SPECIFICATION forming part of Letters Patent No. 309,970, dated December 30, 1884.

Application filed May 16, 1884. (No specimens.)

*To all whom it may concern:*

Be it known that I, ALEXANDER McKAY, a citizen of the United States, residing at Waterford, in the county of Saratoga and State of New York, have invented certain new and useful Improvements in the Bleaching of Cotton and Woolen Goods, or either of them; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Heretofore such goods have been generally bleached by steeping them in a solution of chloride of lime and then passing them through the souring-vat of dilute sulphuric acid or submitting them to the vapor of sulphur, by which means, in operation, it is found that the goods have acquired a harsh feeling to the touch, and that frequently they acquire a yellowish tint or spotted appearance, especially after washing in a soapy fluid.

The object of my invention is to meet these objections and difficulties, which I do substantially as follows: I take Irish or Iceland moss, say one part of two pounds, in about thirty parts of water; boil this about two hours, by which means I extract the soluble principles of the moss. I then add to the extract about three times the weight of the moss in fuller's-earth, when this my improved compound solution is ready for use, to be used at once or diminished in strength, as may be necessary to counteract the injurious effects of the chlorine solution, as above mentioned.

In operation with my process, I then pour my compound solution of fuller's-earth and extract of Irish or Iceland moss in the dilute chloride of lime, in which the goods are to be placed for being steeped and bleached, when the process is continued in the ordinary manner; and when the goods are completely bleached by the aid of my improved process they present a uniform texture, soft to the touch, with fiber less harsh than results from the ordinary process, and they also present, when my compound solution is used, a more uniformly white and better bleached appearance and finish.

In application I have found my improved process of bleaching to be especially adapted to knit goods, giving a uniform finish, softness of fiber and texture, and a uniformly white appearance, and keeping the same after repeated washings.

Having fully described my invention, what I desire to claim and secure by Letters Patent is—

An improved bleaching-fluid consisting of the ordinary solution of chloride of lime to which has been added a mixture of fuller's-earth and decoction of Iceland or Irish moss, substantially as described.

ALEXANDER McKAY.

Witnesses:

COLE H. DENIO,

WILLIAM W. MORRILL.