

# UNITED STATES PATENT OFFICE.

SAM. BARKER, OF NEW YORK, N. Y.

## IMPROVEMENT IN PROCESSES FOR TREATING MOSS FOR MATTRESSES.

Specification forming part of Letters Patent No. 16,961, dated April 7, 1857.

*To all whom it may concern:*

Be it known that I, SAMUEL BARKER, of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Treating or Preparing Moss; and I do hereby declare that the following is a full, clear, and exact description of the same—that is to say:

My invention consists in preparing or treating the ordinary moss of commerce by saturating its fiber with certain metallic sulphates in connection with alkalies, and which will not be separated therefrom by washing, which increase its hardness and elasticity, and which render it indestructible by moisture or exposure to the weather, whereby it is capable of being employed to advantage in various upholstery-manufactures wherein hitherto only the best quality of curled animal hair could be used satisfactorily.

Animal hair, it is well known, has a tendency to become musty and to undergo a partial decomposition, as well as to contract vermin, for which reason preference is given, as a sanitary question, to various vegetable fibers, particularly for making mattresses and pillows, yet no substance had been heretofore found possessing in a sufficient degree to bring it into use the desirable qualities of the hair—viz., its durability and elasticity. The moss, however, as prepared by my process, resembling the best curled hair in those characteristics as closely as it does in appearance, I have styled it “muscan hair,” and as it does not gather moisture, like the crude or unprepared moss, nor generate vermin, it is for many purposes superior to curled hair, while it is also far less costly.

My treatment is as follows: I prefer to use sulphates of both characters—viz., a sulphate having a metallic base, as the sulphate of iron, and a sulphate having an alkaline base, as the sulphate of soda—and to the action of these the crude moss, having been cleaned by the usual machine from the dirt and bark with which it is admixed, is submitted in a liquor prepared by dissolving in one hundred gallons

of water fifty-six pounds of sulphate of iron, to which is then added sixty-five pounds of sulphate of soda, the whole being well mixed. In this the moss is to be kept immersed, say, from thirty-six to forty-eight hours, and when taken out is to be well washed in clear water, dried, and passed again through the cleaning-machine, when it will be ready for use.

It may be desirable to have the article dyed black to render it more uniform in appearance, and this is readily accomplished by steeping it for twelve hours in hot logwood-dye, and fixing the color by immersing it for six hours in a solution of nitrate of iron of the strength 4° Baumé. This dying may properly be performed before the moss is to be submitted to the sulphates, and if taken from the dye, without being dried, directly into the solution of sulphates, the time necessary for immersion in those may be considerably less, as the material has already been soaked through.

As a test of proper preparation, a given weight of the moss treated as above may be burned, when the ashes will be red, heavy, and not easily blown away, while the ashes of a like weight of clean crude moss will be much less in weight, white, and readily removed by the breath, and this difference will be manifest, even if the prepared moss be first thoroughly washed in boiling water and again dried before burning. Other metallic sulphates, as well as other alkaline matters, will effect in combination the same desired result—as, for instance, the sulphate of copper in connection with sulphate of soda, or with pure soda; but I have found that neither the metallic sulphate nor the alkaline matter alone will accomplish the purpose attained by my invention.

I claim—

The method of treating or preparing the moss of commerce to serve as a substitute for curled animal hair, substantially as set forth herein.

SAM. BARKER.

Witnesses:

S. H. MAYNARD,  
T. DUCEY.