

UNITED STATES PATENT OFFICE.

JOSEPH J. COMSTOCK AND JAMES ABORN, OF PROVIDENCE, R. I.

IMPROVEMENT IN THE MANUFACTURE OF IMITATION HAIR-CLOTH.

Specification forming part of Letters Patent No. **103,018**, dated May 17, 1870.

To all whom it may concern:

Be it known that we, JOSEPH J. COMSTOCK and JAMES ABORN, both of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Manufacture for Coverings for Furniture, &c.; and we do hereby declare that the following specification is a full, clear, and exact description thereof.

Our invention resides in the discovery that the woody fiber of the stalk of the wild-plantain tree, chiefly indigenous to the Spice and Philippine Islands, and known in commerce under the name of "Manila hemp," can be usefully employed as a substitute for animal hair for the weft of fabrics to be used as coverings for furniture, and other uses for which the so-called hair-cloth is suitable.

The woody fiber above designated, and which in this specification is to be distinguished from genuine hemp, which can be manufactured into paper, and spun into yarn, should be cut into lengths, say, of thirty-six inches, and treated by immersion in some liquid which will render it soft and pliable. We have found a strong solution of castile-soap in hot water to answer the purpose well.

The length of time which it should remain in the softening liquid will vary in different cases; but the rule should be to allow it to be immersed until it has become thoroughly soft

and pliable. It is then to be woven by single fibers in a loom furnished with a cotton or linen warp, the loom being of the same construction as that used for weaving hair-cloth. The fabric, when taken from the loom, should next have its superfluous fibers singed off or sheared, and it should afterward be dyed and calendered by processes well known to manufacturers of cloth.

The fabric, when completed, though produced at much less cost, is, for every useful and ornamental purpose, equal to hair-cloth. It is quite as durable as hair-cloth, and, because it is more pliable, wears more evenly, and is better suited for a covering for furniture.

What we claim as our invention, and desire to secure by Letters Patent, is—

The new manufacture which results from the use of the fiber of the stem of the wild-plantain tree, as a substitute for animal hair, in the manufacture of fabrics for purposes for which hair-cloth is suitable, substantially as herein specified.

JOSEPH J. COMSTOCK.
JAMES ABORN.

Witnesses:

ORVILLE PECKHAM,
EDW. D. BROWN.