UNITED STATES PATENT OFFICE.

GEORGE F. MILLER, OF JACKSONVILLE, FLORIDA, ASSIGNOR OF ONE-HALF HIS RIGHT TO RICHARD H. CHINN, OF WASHINGTON, D. C.

IMPROVEMENT IN PREPARING THE FIBER OF PALMETTO-LEAVES FOR UPHOLSTERING PURPOSES.

Specification forming part of Letters Patent No. **193,668**, dated July 31, 1877; application filed January 10, 1877.

To all whom it may concern:

Be it known that I, GEORGE F. MILLER, of the city of Jacksonville, county of Duval and State of Florida, have discovered that the leaf of the palmetto-tree may be utilized for the manufacture of articles of merchandise made by upholsterers, and have invented a new and Improved Mode of Preparing the Leaves of the Palmetto Plant or Tree so that the same may be used in the manufacture of mattresses, beds, sofas, lounges, ottomans, cushions, and other similar articles of domestic use and commerce.

The object of my invention is to supply the trade with an article of manufacture which may be substituted for the same uses and purposes for which curled hair, moss, shucks, straw, grasses, or their equivalents, are generally used and applied.

I do hereby declare that the following is a full and exact description of my mode of preparing and manufacturing the palmetto fiber for the uses hereinbefore set forth.

My invention consists, first, in stripping the green palmetto blade or leaf longitudinally from the palmetto-stem, after which each portion of the leaf thus stripped from the stem is subdivided into fine strips or fibers until their condition is such that they may be made to curl properly, and otherwise fitted for use.

This process may be done either by hand, or, for greater expedition, by machines constructed for such purpose.

The fiber is then carefully dried in the sun, or in air-tight rooms heated for that purpose until free from moisture. This having been done, the fiber is then transferred to a bath, for the purpose of giving it strength and elasticity, as well as to bleach the same. This bath is composed of one pound of oxalic acid and half a pound of chloride of lime dissolved in twenty gallons of water, but I do not confine myself to these exact proportions. The oxalic acid gives a strengthening effect and elasticity to the fiber, while the chloride of lime effects the bleaching. In this bath the fiber is permitted to remain until it is completely divested of its natural green coloring matter, and has assumed a clear whiteness. The fiber is then carefully redried in the same manner as before, after which it is curled, spun, or twisted into a rope, and thereafter rolled up into bales, for the purpose of transportation, and ready for use.

I claim—

1. The process of preparing palmetto-leaf for upholstering purposes, by subjecting the fiber of said leaf to a bath of oxalic acid, chloride of lime, and water, substantially as described.

2. The process of preparing palmetto-leaf for upholstering purposes, to wit: First, separate the fibers of the leaf, then dry such fiber in the sun or in a heated air-tight room, then subject the fiber to a bath of oxalic acid, chloride of lime, and water, and then dry the same, substantially as described.

GEORGE F. MILLER.

Witnesses:

PHILIP WALTER,

GEORGE W. HODGES.