United States Patent Office.

SIGMUND METZGER, OF MANNHEIM, GERMANY.

STAINING AND GLAZING VEGETABLE FIBER, &c.

SPECIFICATION forming part of Letters Patent No. 231,077, dated August 10, 1880. Application filed July 10, 1880. (No specimens.)

To all whom it may concern:

Mannheim, Germany, have invented a new and useful Improvement in the Means for Staining 5 and Glazing Vegetable Fiber as a Substitute for Animal Bristles and Horse-Hairs, of which the following is a specification.

Mexican fiber or tampico has long been used as a substitute for bristles and horse-hair. It 10 has, however, not been possible until now to give it the peculiar gloss and smoothness of horse-hair or bristles.

My process is as follows: After the fiber of the tampico or Mexican fiber has been stained 15 black it is put into a bath of sulphuric acid and then into a soda-bath. While the fiber is still wet it is subjected to strong rubbing, produced by hand or by an apparatus suitable for this purpose. The fiber thus receives a deep

| black and perfect gloss and smoothness, which 20 Be it known that I, Sigmund Metzger, of | it never loses, and is rendered, in appearance, equal to bristles or horse-hair.

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

The method of producing a gloss and smoothness on Mexican fiber or tampico by a bath of sulphuric acid and one of soda, and exposing them to rubbing, substantially for the purpose and in the manner as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SIGMUND METZGER.

Witnesses: Jos. Trutker,

RUD. S. GERBER.