

# UNITED STATES PATENT OFFICE.

PETER SCHMID, OF BASEL, SWITZERLAND.

PROCESS OF RENDERING JUTE AND LIKE FIBROUS MATERIAL WOOLLY.

990,012.

Specification of Letters Patent. Patented Apr. 18, 1911.

No Drawing.

Application filed July 25, 1910. Serial No. 573,653.

*To all whom it may concern:*

Be it known that I, PETER SCHMID, a citizen of the Swiss Republic, and resident of Basel, Switzerland, have invented new and  
5 useful Improvements in Processes for Rendering Jute and Like Fibrous Material Woolly, of which the following is a full, clear, and exact specification.

It is known to render woolly jute and like  
10 fibrous material by means of caustic lyes. On the other hand, it is known to treat jute fibers thus previously prepared after washing with concentrated emulsions obtained by a more or less complete saponification of  
15 olive-oil with potash lye.

The subject of the present invention is a process for rendering woolly jute and like fibrous material, which rests upon the observation that by the substitution for said emul-  
20 sion baths, of soap foam baths the fibrous material thus treated by the latter gets a finer, more wool-like touch or gripping. The following examples illustrate the process for treating in this way decorticated  
25 jute or like fibrous materials.

Example 1: The jute is treated according to its nature and to the desired degree of bleaching with a solution of hypochlorite of 5 degrees Bé., or more during 10 minutes till  
30 up to 4 hours. It is then pressed out to eliminate as well as possible the hypochlorite out of the material. Then the material is laid during 5 minutes or more in caustic lye of 30 degrees and pressed out again.  
35 Thereupon, it is treated during 5 minutes or more or less in a soap foam bath, which is prepared with 10 grams soap or more or less for every liter of water. After this treatment, the material is washed in warm water of about  
40 50 degrees centigrade, wrung out and dried. There will thus be obtained a bleached, woolly jute, the touch or gripping of which comes very near to that of wool as regards the fineness or softness.

15 Example 2: The jute is treated as in Example 1, with the difference, however, that the treatment with hypochlorite is effected after that with caustic lye.

0 Example 3: The treatment of the jute takes place as under 1, but in such a way, that the jute is first treated with caustic lye,

then boiled in soap foam and finally submitted to the action of the hypochlorite.

Example 4: The process is conducted as in Example 1 without, however, using a  
55 bleaching bath of hypochlorite.

Example 5: The jute is treated with a solution of caustic lye of about 36 degrees Bé. during 5 minutes or longer, then wrung out, washed in water and dried. Afterward it  
60 is treated in soap foam during 5 minutes or more, washed again and dried.

In all the examples the washing may be effected with acidulated water instead of pure water in order to give also to the ma-  
65 terial a crashing touch or grip. The treatment in a soap foam bath may be accelerated or improved by use of a suitable electric current, as this is already known for the degumming of silk by means of soap foam.  
70 Instead of hypochlorite, other bleaching agents may be employed. In an analogous manner, the caustic lye may be replaced by similarly acting agents. Instead of pressing out the material between presser plates  
75 for example, I may use for this purpose a centrifugal drum or the like.

What I claim is:

1. The herein described process of rendering fibrous material of a vegetable origin  
80 woolly, which comprises the subsection of said material to the action of caustic lye, the suitable removal of said lye, and the subsection of said material to the action of a soap foam bath to impart said woolly  
85 quality, substantially as described.

2. The herein described process of rendering fibrous material of a vegetable origin woolly, which consists in subjecting said material to the action of a bleaching agent,  
90 then to the action of caustic lye, removing said lye and subjecting said material to the action of a soap foam bath, substantially as described.

In witness whereof I have hereunto signed  
95 my name this 14th day of July 1910, in the presence of two subscribing witnesses.

PETER SCHMID.

Witnesses:

GEO. GIFFORD,  
ARNAUD BRAUN.