

## LOUIS S. ROBBINS, OF NEW YORK, N. Y., AND JOHN A. SOUTHMAYD, OF ELIZABETH, NEW JERSEY.

Letters Patent No. 87,433, dated March 2, 1869.

## IMPROVEMENT IN THE MANUFACTURE OF FLOCK FROM BAMBOO OR CANE-FIBRE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, Louis S. Robbins, of the city, county, and State of New York, and John A. Southmand, of Elizabeth, Union county, State of New Jersey, have invented a new and useful Improvement in the Manufacture of Flock from Cane or Bamboo; and we do hereby declare that the following is a full and clear description thereof, which will enable others skilled in the art to make and use the same.

It is well known that large quantities of what is commercially known as flock, is used in the manufacture of woollen goods, and that the article is obtained from the cropping or shearing of cloth or woollen rags, which are first ground, and reduced, by a suitable machine, to a short fibre.

After many experiments, we have ascertained that we can prepare flock, of superior quality, from the fibre of cane or bamboo, and at a trifling cost, as compared with that produced from any previously-known article.

The operation consists, first, in removing the joints from the cane or bamboo, then splitting and grinding it longitudinally, which separates the fibre to such an extent as admits of the silicious and resinous matter being rapidly and thoroughly removed by the subsequent treatment. It is then placed in a suitable vessel, when it is boiled from five to six hours in caustic alkali,

of about 6° Baumé, or until all the silicious and resinous matter is removed from the fibre. This operation may be performed under pressure or in open kettles.

After the boiling in caustic alkali has been completed, the fibre is then ready for washing, and it is placed in a rag-engine, provided with revolving knives, and so arranged, that while the cleansing-process is being performed, the fibre is gradually brought into a suitable condition for the purpose specified. It is next dried, and passed through a machine, provided with pickers, which opens and separates the fibre, and prepares it for the practical operation of flocking.

What we claim as new, and desire to secure by Let-

ters Patent, is-

The process for preparing flock from the fibre of cane or bamboo, the same consisting in first removing the joints, then splitting, grinding, boiling, and preparing the fibre of the cane, substantially as herein described.

Also, every use and application of said flock.

LOUIS S. ROBBINS. JOHN A. SOUTHMAYD.

Witnesses:

NATHANIEL GILL, CHARLES NETTLETON.