

United States Patent Office.

RAMON ANTIGÜEDAD, OF NEW YORK, N. Y.

Letters Patent No. 105,160, dated July 12, 1870.

IMPROVEMENT IN THE MANUFACTURE OF TOBACCO-PAPER

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

To all whom it may concern :

Be it known that I, RAMON ANTIGÜEDAD, of the city and county of New York and State of New York, have invented certain new and useful Improvements in the Manufacture of Tobacco-Paper; and I do hereby declare the following is a full and exact description thereof.

In the patents issued to myself and P. M. Consuegra, dated 2d February, 1869, we have set forth a manufacture in which tobacco alone is employed as the material, and the treatment may be so conducted as to retain in the paper all the strength of the tobacco.

I have now discovered that the paper may be made materially stronger and more perfect, without the loss of its good qualities, by the addition of a material which is neutral in its effect on the taste or smell when the paper is used in cigarettes or otherwise.

I use the fibrous material obtained from the *musa textilis* of the Philippine islands and adjacent regions, and commonly known in commerce as "manilla."

I prepare the tobacco, as described in our previous patents, without any necessity for washing or rejecting any waters.

I prepare the manilla by a separate treatment down to a certain point, and afterward treat the two materials together, and work them out in a mingled pulp. I use from ten to thirty per cent. of manilla, and the remainder of tobacco-stems or leaves.

The manilla requires the longest treatment. I boil it in an alkaline liquor, formed first as a weak solution of lime, commonly known as milk of lime, and afterward saturated with soda-ash.

The boiling should be continued about twenty hours, varying somewhat with the condition or character of the materials. It is then washed in cold water, changing the water as much as may be necessary until all but the very slightest trace of alkali is removed.

The common rag-engine of a paper-mill may be used with good effect for this preliminary washing.

Having by this means partially reduced the tough fiber of the manilla, and extracted by the ordinary means the grit and other foreign matter, I am ready to mingle it with the tobacco, previously boiled some six hours in a small quantity of water, and proceed to beat, grind, and brush the mingled material to produce a fine and uniform pulp.

This pulp is afterward treated in the ordinary manner, using the Fourdrinier or any other form of machine.

I can, if preferable, in any instance, to save time, introduce the manilla material in the form of previously-manufactured manilla-paper. It is only important that in such case the manilla-paper shall not have been sized with any material which will give taste or smell to the product.

The tobacco-paper thus produced is fine and strong. It will bear wetting and handling, and will conform to all the requirements of a good paper for all smoking purposes.

A high degree of toughness is imparted by the manilla, without sensibly depreciating its smoking qualities.

In running out this improved paper, the sheets of previously-manufactured paper, described in our previous patent as run between the sheet of pulp and the felt, may be introduced as a safeguard against possible accidents, if desired. But I have not in my experiments found it necessary, and believe that it may be safely dispensed with altogether.

I claim—

The toughened tobacco-paper herein described, formed of pure tobacco with the strength retained, with the addition of a neutral toughening material, prepared and combined in the manner and for the purposes herein set forth.

In testimony whereof I have hereunto set my name in presence of two subscribing witnesses.

Witnesses: RAMON ANTIGÜEDAD.

WM. C. DEX,

R. ROULSTON.