## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN PROCESSES FOR RESTORING FUNKY TOBACCO.

Specification forming part of Letters Patent No. 156,787, dated November 10, 1874; application filed August 12, 1874.

To all whom it may concern:

Be it known that we, Otho William Hahn and Gustavus T. Strecker, of Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Process of Treating Moldy and Funky Leaf-Tobacco; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our new process is for effectually removing mold and the funky smell from all sorts of leaf-tobacco, scraps, stems, and trash. These several grades of tobacco are very often packed in what is known as a soft condition, and the summer fermentation or sweat, when it sets in, will produce this moldy and funky condition, and reduce this class of tobacco, to a very large extent, almost to an unmerchantable condition, and the loss is usually very great in deteriorating the value and character of the tobacco. To restore this tobacco to its healthy condition is, therefore, a matter of vital importance to the tobacco packers, reprisers, and manufacturers. The plans hitherto adopted to remedy this moldy and funky condition have consisted in processes for steaming, greasing, and sweetening the tobacco; but these do not destroy the mold, and only temporarily cover the moldy and funky condition of these destroying elements, so as to merely disguise the tobacco so treated.

Our process will permanently restore funky and moldy leaf-tobacco, scraps, stems, and trash to their healthy original condition; and such process consists in treating this class of tobacco to a solution of pure crystallized carbolic acid, in the proportion of one part to two hundred parts of water, contained in a wooden vessel lined with sheet-zinc, or a glazed metal vessel. It is best to have the bundles, when so treated, separated, and immerse them well in such solution for about one-half to two minutes, or more, according to the degree of mold or funk in the tobacco. In taking the tobacco out of the solution it is well shaken, and swung

in the hand, to remove the liquid therefrom as thoroughly as possible.

The strength of the solution as indicated we have found to answer the purpose well, as the carbolic acid in the solution penetrates every part of the tobacco, eats out the vegetable for a solution for the solution of the solution.

table funguses, and takes away the odor which so much injures and depreciates the value of tobacco. This action of carbolic acid is very rapid, and very complete, and the solution must not be strong enough to injure the tobacco, but, when of proper consistency, will impart to the sickly faded leaf the rich color and appearance of tobacco which has not been

affected either by mold or funk.

It is necessary, however, to remove all the carbolic acid and its disagreeable odor from the tobacco, and to do this it is immersed or dipped several times in pure running water, and swung out to remove as much of the water as possible, and it is then hung up to dry, and when in proper order is ready for packing when the weather is favorable. The whole process need not take longer than three minutes.

The solution is renewed from time to time when it becomes too much impregnated with the decay and vegetable funguses of the tobacco, and this condition is determined by the very dark color and disagreeable funky smell

of the liquid.

Immediately after leaving the carbolic-acid bath the tobacco is washed out in pure water, which may be kept running in tanks for that purpose, to insure an entire removal of the carbolic acid, and to leave it in a sound condition, not only free from the funky smell, the result of the damp mold, but free from the odor of the acid, which transforms its condition, and gives it the dark rich color of the best tobacco.

The expense per thousand pounds of tobacco under our treatment for removing the mold and funk is not more than one dollar and fifty cents, while the saving to the packers, reprisers, and manufacturers is at least the difference between the value of tobacco condemned as moldy and funky in its packed condition and that sound and healthy in the farmer's barn. The carbolic-acid bath not only disinfects the rotten smell of the tobacco, and destroys the whitish moldy coating resulting from the damp of fermentation, but, after such preparation, the tobacco can be repacked without the least danger of fermenting and becoming funky, our process, in this respect, serving as a protection and safeguard against damp mold.

We claim—

The process herein described of treating leaf-tobacco, scraps, stems, and trash, to effectually remove the mold and funk therefrom

by submitting it to a solution of dilute pure crystallized carbolic acid of proper strength, and subsequently washing it in pure water.

In testimony that we claim the foregoing we have affixed our signatures in presence of two witnesses.

OTHO WM. HAHN. GUSTAVUS T. STRECKER.

Witnesses:

J. B. ELAM, B. Rose.