UNITED STATES PATENT OFFICE.

LEWIS W. SPENCER, OF NEW YORK, N. Y., ASSIGNOR TO PETER LORILLARD, OF SAME PLACE.

PROCESS FOR MANUFACTURING PLUG-TOBACCO.

Specification forming part of Letters Patent No. 106,882, dated August 30, 1870.

To all whom it may concern:

Be it known that I, Lewis W. Spencer, of the city and county of New York, in the State of New York, have invented a certain new and Improved Method of Manufacturing Plug-Tobacco; and I do hereby declare that the following is a full and exact description thereof.

My new method produces the tobacco in a condition more nearly homogeneous throughout its entire mass than any previously known

to me.

I will describe the method in detail.

First, I press the properly-prepared leaf into thin sheets of the width of the finished plug, and of an indefinite length. I prefer to produce the compression by strong rollers, and to make the thin layers in great lengths, wound up on small removable rollers; but this may be varied. It is only essential that, instead of compressing the tobacco directly from the leaf into a mass of about the proper thickness for the finished plug, I press it into a sheet only one-fourth or some other small proportion of the thickness of the finished plug. These sheets are of so slight thickness that the compression is very equal throughout their mass, and the tobacco is very nearly uniform in its structure. Now, by a subsequent pressure between the same or similar rollers placed farther apart, and with proper provisions for feeding in the several thin sheets superposed one upon the other, I compress these four or whatever may be the required number of these thin sheets together, and unite them in one nearly homogeneous mass. This makes my improved plug. When, as I prefer, the thin dense layers are wound on rollers. I provide means for holding a number of these spools in a proper position relatively to a single feeding-apron, so that while one roll, as it unrolls, lays its thin dense sheet of tobacco directly upon the feeding-apron, the second roll lays its sheet upon the first, the third upon the second, and so on.

I provide suitable means for cutting off the tobacco as it issues from the press in proper lengths to form the finished plug. The plugs may be subsequently wrapped and subjected to the ordinary finishing pressure, as usual.

I find it important, with all common qualities and conditions of tobacco, to interpose a thin sheet of muslin, or an equivalent dividing fabric or material, between the several coils of the thin layers when they are wound up. As the rolls are unwound I provide means for taking away the muslin, preferably gathering spools driven by a friction-belt, which tends to give a higher velocity, so as to be certain to take up all the slack.

The ordinary methods of manufacturing plugtobacco compress the material densely on the upper and lower faces, but leave the middle much less perfect. My plan, by subjecting the middle portions to separate and independent compressions in the form of thin layers, insures a nearly absolute uniformity of density, and, in short, a similarity of structure throughout the entire thickness which, so far as I am aware, has never been attained by any previous means.

I do not, in this application, claim the precise machine, or any of the parts thereof, which I prefer to employ, nor the improved product or article of plug-tobacco produced, considered simply as an improved article, because these I have made the subjects of separate applications for Letters Patent, filed simultaneously with this; but

I claim—

The method herein described of forming plug-tobacco, by first compressing the material into thin dense layers, only a little more than one-fourth or other given proportion of the thickness, and then applying and powerfully compressing these thin layers together to form the finished plug, the several operations being conducted substantially in the manner and with the effect herein set forth.

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

L. W. SPENCER.

Witnesses:

WM. C. DEY,

A. HOERMANN.