

UNITED STATES PATENT OFFICE.

STEPHEN W. WOOD, OF CORNWALL, NEW YORK.

MANUFACTURE OF TOBACCO.

SPECIFICATION forming part of Letters Patent No. 267,764, dated November 21, 1882.

Application filed January 18, 1882. (No specimens.)

To all whom it may concern:

Be it known that I, STEPHEN W. WOOD, of Cornwall, county of Orange, and State of New York, have invented new and useful Improvements in the Manufacture of Tobacco, and also a new article of manufacture thereof; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of the first part of my invention is the production of composite leaves or sheets, in whole or in part, of tobacco, which may be used with advantage as wrappers for cigars; and the second part of my invention consists of a new article of manufacture of composite tobacco leaves or sheets or wrappers.

The specific improvements which constitute my entire invention are set forth in the claims at the close of this specification.

In order that my invention may be fully understood, I will proceed to describe the best mode at present known to me of manufacturing my said new manufacture, leaving it to others to modify the same as circumstances or the requirements of the trade render expedient.

I prefer to manufacture the body of my composite tobacco wrappers of the refuse stems of the tobacco-leaves which have hitherto sold at a very low price.

One practical method of producing my composite leaves or sheets from the stems or refuse pieces of tobacco is to cut the stems or refuse into pieces, say, half an inch long, and then to soften them in water or other suitable liquid to remove the brittleness therefrom.

They are then subjected to the action of a beating or pulping engine, the same as that employed in reducing rags or other fiber to pulp in the manufacture of paper, until the fiber thereof is sufficiently disintegrated or separated and reduced to the proper consistency of pulp, so that sheets or leaves may be formed therefrom having the appearance of the natural leaves of tobacco. The preliminary cutting of the stems is not essential, but it enables the pulping operation to be performed more rapidly. In reducing stems or refuse pieces of tobacco to pulp, a sufficient quantity of water is placed in the beating or pulping engine so that by the action of the beaters therein the whole mass may be kept pass-

ing repeatedly between these beaters until reduced to pulp, or the fibers thereof sufficiently disintegrated to form leaves or sheets therefrom. The pulp thus prepared may then be passed into a stuff-box, also similar to that used in the manufacture of paper, and thence pumped in sufficient quantity upon the wire cloth of a paper machine (or other perforated surface) where the surplus water may be allowed to drain off, or may be partially extracted therefrom by pressure or in any other convenient manner. The pulp thus spread upon the wire-cloth and partially freed from the water in which it was reduced and rendered sufficiently strong may be transferred to a felt web and subsequently passed between rollers, thereby compressing and uniting the pulp into sheets or leaves of even thickness the same as paper, and still further pressing the moisture therefrom until sufficiently dry to receive the surface covering or finishing hereinafter described.

Whenever leaves or sheets are made from the stems or refuse leaves of tobacco, the action of the beating or pulping engine, together with the water employed in reducing the same to pulp, of necessity extracts much of the color and flavor of the tobacco therefrom, and when subjected to the rollers to compress the pulp into sheets or leaves still more of the strength and flavor is expressed therefrom, and the color rendered still lighter.

To restore in whole or in part the strength and flavor of tobacco to the leaves or sheets thus made from pulp and to darken the color thereof, so that they may closely resemble in strength of flavor and general appearance the natural leaves of tobacco, a suitable quantity of the leaves of tobacco is pulverized or reduced to a finely-divided condition, and is sifted or spread evenly over the surface of these leaves or sheets before they are completed and when still moist, after which the sheets are compressed between rollers or by other means, so that the finely-reduced leaves are caused to adhere to or penetrate the surface of the sheets or leaves formed from the pulp, and to impart strength of flavor and color thereto, and the moisture still remaining in the sheets or leaves will absorb or extract sufficient of

the strength from the finely-prepared tobacco covering or mixture to permeate these leaves or sheets upon which it is spread or into which it is forced, thereby coloring and restoring wholly or partially the flavor to them, substantially and evenly throughout.

The composite leaves or sheets produced by applying the reduced or finely-prepared tobacco to the surface of leaves or sheets made from pulp imparts to them a strong tobacco flavor and appearance much like leaves of tobacco in their natural state, which have a rough, gum-like surface.

A still different and equivalent method of strengthening the flavor and deepening the color of the leaves or sheets made from pulp may be employed, if preferred, which may be described as follows:

The stems or refuse pieces of tobacco may first be reduced to pulp and subsequently dried or partially dried, so as to receive and be incorporated or mixed with the finely-prepared tobacco in its natural state, and the mixture may be spread evenly upon the fine wire-cloth or felt web, and may be sufficiently dampened to cause the mass to adhere under suitable pressure, thus forming therefrom the artificial leaves or sheets containing the required tobacco flavor and color throughout; or the finely-prepared tobacco may be applied to the pulp after being spread upon the wire-cloth preparatory to being passed between rollers to compress the pulp into compact sheets of even thickness. To add to the appearance of these artificial leaves or sheets and to make them resemble more closely leaves of tobacco in their natural state, that they may be useful as wrappers for cigars, veins may be formed therein by grooving one of the pressure-rollers, so that in the operation of pressing the sheets

the pulp may be forced into these grooves, thereby forming the veins and closely imitating the natural leaves of tobacco.

For convenience, the composite leaves may be cut or formed in the process of manufacture into the required rectangular or other shape for cigar-wrappers, thereby avoiding the usual loss in cuttings, and materially expediting the manufacture of cigars.

It is not essential that these composite leaves or sheets should have their bodies made from the stems or refuse pieces of tobacco, as any other suitable substance might be employed and coated or mixed, as hereinbefore described, with finely-prepared tobacco; but it is believed that the stems of tobacco are more suitable for the purpose, and are preferred, because they contain more or less of the strength and flavor of tobacco, and cannot be objectionable.

Having thus fully described my invention, what I claim is—

1. The process, substantially as before set forth, of manufacturing composite tobacco wrappers by pulping the material for the body of the wrapper, collecting the same in a sheet upon a perforated surface, and combining the same with natural tobacco in a finely-prepared state after the sheet is so far formed as to receive it and become incorporated therewith.

2. As a new article of manufacture, composite tobacco wrappers having a body made of pulp, combined with finely-divided natural tobacco applied to the surface of the sheets, substantially as before set forth.

STEPHEN W. WOOD.

Witnesses:

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