## United States Patent Office.

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## PROCESS OF MANUFACTURING SNUFF TABLETS.

SPECIFICATION forming part of Letters Patent No. 639,366, dated December 19, 1899.

Application filed April 26, 1899. Serial No. 714, 568. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM LOFLAND DUDLEY, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Processes for the Manufacture of Snuff Tablets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it relates to make and use the same.

My invention contemplates the manufacture of snuff in tablet or lozenge form, presenting to the dealer, and particularly to the consumer, a more convenient and satisfactory article than anything of similar nature heretofore produced or known to the trade. A snuff tablet of this character has long been a desideratum of snuff and tobacco manufacturers, dealers, and consumers, chiefly because of the great convenience to be thereby afforded the latter class in partaking of the article and in readily apportioning the quantity used.

25 Previous attempts to manufacture snuff in tablet form have utterly failed, owing to the supposed necessity of employing a foreign binding agent in the process of manufacture, which invariably has impaired the flavor and odor of the resulting compound or rendered the tablets hard and day.

the tablets hard and dry.

By my invention I overcome the aforesaid difficulties and produce an unadulterated snuff tablet, the excellence and flavor where35 of depend solely upon the quality of tobacco used as a basis of manufacture and care with which the several steps of my improved process are carried out.

Those skilled in the manufacture of snuff are aware that in the preparation thereof the tobacco is first subjected to a longer period of fermentation than is necessary for other tobacco products, is flavored, subjected to extreme heat in the drying or cooking process, then ground, and finally stored and subjected to a final sweating process before it is ready for the market. These several steps in the manufacture of snuff impart to it certain characteristics which differentiate it from other forms of manufactured tobacco and render it liable to be impaired by subse-

quent treatment, which would be innocuous when applied to smoking or chewing tobaccos.

My invention, which takes into consideration the peculiarities and characteristics of 55 the snuff to be treated, avoids the use of a binder and employs only a neutral fluid, such as water or alcohol, which may be completely eliminated in the final steps of the process without change or deterioration in the ar- 60 ticle treated, and also maintains the heat which is applied for evaporation of said neutral fluid at a temperature which will not induce any change in the material operated upon.

I will now proceed to describe my invention more fully, so that others skilled in the art to which it appertains may apply the same.

To begin with, the ordinary powdered snuff is thoroughly mixed with a small percentage 70 (preferably about two-fifths of its weight) of pure water or alcohol until its molecules are sufficiently moist to stick and yet sufficiently dry to permit rubbing same through a fine sieve, (about No. 16, for example,) the pur- 75 pose of this step in the process being to granulate the snuff. When thus granulated, the mass is subjected to a moderate degree of heat (approximating 140° Fahrenheit) until the added water has been driven off or evaporated 80 and the granulated snuff reduced to its original consistency, and, finally, the product, obtained substantially as aforesaid, is compressed by any approved means into tablets of predetermined dimensions and weight.

The proportions above enumerated have been found to produce results which are highly satisfactory, although they may be varied within certain limits without departing from the spirit of my invention, so that I 90 do not confine myself to the precise and unvarying proportions or degrees of heat above mentioned. It is, however, important, first, that the snuff employed be duly moistened by the addition of a neutral fluid or one which 95 will in no wise impair its natural flavor or odor for the purpose of converting same from a powdered to a molecular condition; secondly, it should be rubbed through a sieve of suitable gage for the purpose of thorough 100 granulation in order to insure cohesion when finally pressed into tablets; thirdly, the snuff

thus granulated must then be restored to approximately its original degree of moisture by subjecting same to a suitable degree of heat, which evaporates the moistening fluid 5 originally added, leaving the mass in dry but granular form, and it is essential that the heating at this step of the process should be sufficient for purposes of evaporation, but it is also important that the snuff be not over-10 heated, as in this case the product would be powdery and harsh to the mouth of the consumer, and, fourthly, and as a final step, the granulated dried body of snuff is compressed in tablet form by any approved means, in 15 which form it is retained by the natural cohesion of its granular particles without the use of a special binding agent. The tablet thus produced will have an outer or protective shell or surface and an interior or body 20 of granular character, so that when the tablet is crushed the resultant mass will have the granular form into which it has been converted during the process and before compression in contradistinction to the smooth 25 snuff flour of commerce.

The snuff tablet itself forms the subject-

matter of my application Serial No. 730,380, pending simultaneously herewith, the same being a divisional application filed September 13, 1899.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

The method herein described for forming compressed snuff tablets, which consists in 35 first reducing the snuff to a molecular mass by means of a small percentage of water or other neutral fluid, second, granulating the same by passing it through a sieve, then depriving the granular mass of the added fluid 40 by subjecting it to a moderate degree of heat, and finally compressing the granulated snuff into tablets, substantially as and for the purposes specified.

In testimony whereof I affix my signature, 45 in presence of two witnesses, this 20th day of April, 1899.

WILLIAM LOFLAND DUDLEY.

Witnesses:
A. B. HILL,
GEO. I. WADDEY.

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