

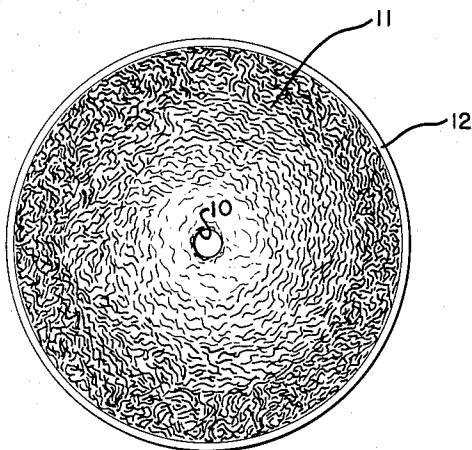
July 12, 1966

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TOBACCO MANUFACTURE

Filed Nov. 1, 1957



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## TOBACCO MANUFACTURE

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Filed Nov. 1, 1957, Ser. No. 693,809

9 Claims. (Cl. 131-8)

This invention relates to the art of manufacturing prepared tobacco products and is more particularly concerned with an improved cigar or cigarette and the method by which such novel and improved cigar or cigarette is produced.

It is an object of this invention to produce a cigar or cigarette in which a smaller amount of tobacco can be employed to produce the same amount of final product.

It is a further object of this invention to produce a cigar or cigarette in which the burning characteristics of the tobacco is modified.

It is a further object of this invention to produce a cigar or cigarette in which the effort required to draw air through the product is reduced.

It is further object of this invention to produce a cigar or cigarette having a superior tactile appeal and greater resistance to handling than the regular commercial product.

It is a further object of this invention to produce a cigar or cigarette in which the tobacco is distributed in a non-uniform manner with the greatest concentration of tobacco at or near the exterior of the product and in which the concentration of tobacco progressively and gradually decreases from the exterior to the central portions.

It is a further object of this invention to enable a cigar or cigarette to be produced in a shape other than cylindrical.

This invention is predicated upon the physical law that in any rotating object, the centrifugal force required to keep any given element of the object in a circular path varies directly with the distance of such object from the axis of rotation.

To execute this invention the cigar or cigarette is first completed in the normal commercial manner and then inserted in a suitable sleeve or tube the interior contour of which determines the final exterior contour of the finished product. The interior of such sleeve or tube will usually be cylindrical, although it can be made in any desired section such as oval, rectangular, or square. This sleeve and the contained cigar or cigarette are preferably arranged with a common axis and rotated about this common axis. The time of rotation and the speed of rotation must be decided for each individual situation taking into account the final result desired, the radius of the tobacco product, the physical state of the tobacco and its moisture content.

The sole figure of the drawings is an end view of a cigarette treated by the process involving the instant invention. This cigarette comprises a paper 12, a tobacco filler 11 and a central opening 10. The increase in density of the tobacco filler from the axis to the periphery of the cigarette is apparent in this drawing.

As a specific example of the practice of this invention a commercial cigarette was enclosed in a sleeve and rotated about its longitudinal axis at a speed of eighty thousand revolutions per minute for a period of five minutes. This produced a cigarette having properties distinguishable from the untreated cigarettes. The use of higher rates of rotation would further radically alter the properties of cigars and cigarettes finally producing an article in which the bulk of the tobacco would be concentrated in the region immediately adjacent the exterior of the article and a very low concentration of tobacco at the axis of rotation.

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I claim:

1. The process of improving cigarettes comprising rotating such cigarettes about an axis approximately coinciding with the longitudinal axis of the cigarette to produce by the effect of centrifugal force a non-uniform distribution of tobacco throughout the cigarette, the concentration of tobacco being least at the axis of rotation and becoming substantially greater as the distance from the axis of rotation increases.

2. The process of improving cigars comprising rotating such cigars about an axis approximately coinciding with the longitudinal axis of the cigar to produce by the effect of centrifugal force a non-uniform distribution of tobacco throughout the cigar, the concentration of tobacco being least at the axis of rotation and becoming substantially greater as the distance from the axis of rotation increases.

3. The process of producing a cigarette having a central axial region having a low concentration of tobacco as compared to the remainder of the cigarette, said low concentration central region serving to permit the ready passage of air and products of combustion and distillation, comprising rotating said cigarette about an axis substantially coincident with the longitudinal axis of the cigarette sufficiently rapidly to displace a substantial amount of tobacco from the central portion of the cigarette.

4. The process of producing a cigar having a central axial region having a low concentration of tobacco as compared to the remainder of the cigar, said low concentration central region serving to permit the ready passage of air and products of combustion and distillation, comprising rotating said cigar about an longitudinal axis substantially coincident with the axis of the cigar sufficiently rapidly to displace a substantial amount of tobacco from the central portion of the cigar.

5. A prepared tobacco product from the group consisting of cigars and cigarettes, said prepared tobacco product being characterized by a non-uniform distribution of tobacco, the concentration of tobacco being greatest on the exterior and progressively continuously decreasing radially from said exterior to the central portion of the product, said product having a longitudinally uniform distribution of tobacco.

6. A novel cigar characterized by a non-uniform distribution of tobacco, the concentration of tobacco being greatest on the exterior and progressively continuously decreasing radially from said exterior to the central portion of the cigar, said cigar having a longitudinally uniform distribution of tobacco.

7. A novel cigarette characterized by a non-uniform distribution of tobacco, the concentration of tobacco being greatest on the exterior and progressively continuously decreasing radially from said exterior to the central portion of the cigarette, said cigarette having a longitudinally uniform distribution of tobacco.

8. A novel cigarette characterized by a radial non-uniform and a longitudinal uniform distribution of tobacco, the concentration of tobacco being greatest on the exterior and progressively continuously decreasing radially from said exterior to the central portion of the cigarette, said cigarette having a longitudinally uniform distribution of tobacco, this non-uniform concentration of tobacco having been obtained by rotating the cigarette about an axis substantially coinciding with its longitudinal axis at a speed sufficient to radially displace a significant portion of the tobacco.

9. A novel tobacco product characterized by a radial non-uniform and a linear uniform distribution of tobacco, the concentration of tobacco being greatest on the exterior and progressively continuously decreasing radially from said exterior to the central portion of

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the tobacco product, said tobacco product having a longitudinally uniform distribution of tobacco, this non-uniform concentration of tobacco having been obtained by rotating the tobacco product about an axis substantially coinciding with its longitudinal axis at a speed sufficient to radially displace a significant portion of the tobacco.

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