# UNITED STATES PATENT OFFICE.

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## MASTICABLE TOBACCO PREPARATION.

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*To all whom it may concern:*

Be it known that I, CARLETON ELLIS, a citizen of the United States, residing at White Plains, in the county of Westchester and State of New York, have invented certain new and useful Masticable Tobacco Preparations; and I do hereby declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to masticable tobacco preparations and consists in a tobacco preparation adapted for chewing purposes and having the fibers of the tobacco therein contained severally and thoroughly sealed with a water-proofing waxy body, all as more fully hereinafter set forth and as claimed.

In the cure of the habit of tobacco chewing it has proved very difficult to break off the practice suddenly, the system not tolerating the discontinuance of a supply of nicotin without considerable distress, manifesting itself as an almost irrepressible inclination towards resumption of the practice. Nicotin is a very active body physiologically and in chewing tobacco it is the alkaloid itself which is administered to the system, not its relatively less toxic decomposition products, as in the smoking of tobacco. Once habituated to this powerfully toxic substance, the human system finds great difficulty in dispensing with it. In abruptly ceasing the practice of chewing tobacco, the chewer not only misses the habit of masticating, but the familiar taste, and, which is much more important to him, the familiar physiological effects. Nor has it hitherto been possible for him to cease gradually. It is not feasible to dilute his plug tobacco in any way or weaken its strength materially. Other fibers than tobacco do not chew as well or in the same way; washed or weakened tobacco fibers have a taste and a physical consistency which are not liked; while soluble diluents like molasses, licorice and similar materials soon dissolve out. Nor, from force of habit, is it generally possible for him to chew less often or use a smaller chew. For the foregoing reasons the cure of the tobacco chewing habit has proved difficult to the physician's skill.

It is the object of the present invention to provide a means and devise a way whereby gradual discontinuance of the tobacco chewing habit may be made feasible. To this end, plug tobacco is made of the usual admixtures giving the desired flavors and physical consistency to the plug; but the tobacco contained therein is sealed away to a greater or less extent from the saliva by the use of water-proofing waxy or gummy bodies of a solid but masticable nature impregnating or covering the individual fibers of such tobacco. The degree of this accessibility to saliva may be made as great or as little as may be desired, rendering it possible to provide a series of plugs of graduated strength, each progressively less available than its predecessor. Using such a graduated series of plugs, the cure of the tobacco habit may be made as slowly progressive as desired and grave systematic disturbances, such as follow sudden discontinuance of chewing, may be completely avoided.

When an unwaxed tobacco fiber is exposed to the saliva it is of course immediately wetted throughout its extent and the pressure of the teeth in mastication forces out an amount of nicotin solution proportional to its surface and volume. If it be waxed with a masticable body of a waxy nature however, it is not wetted except at the places where mastication displaces the wax and exposes a tobacco surface, nor is the nicotin solution formed save at such places, while the progress of mastication continually tends to recover exposed places while exposing fresh surfaces. The result is that such a waxed fiber is much less available as to the saliva than is an unwaxed; or, which is the same thing, the same amount of tobacco, as in a chew of convenient size, serves for a longer period of time before exhaustion. In other words, the chewer secures less nicotin from a plug of the same size in the same time; the mastication of the same-sized plug is spread over a time as long, possibly, as that required for several ordinary plugs. The advantage of this in "tapering off" is obvious. The chewer has the familiar taste of the tobacco, even that of the brand he prefers, he has the familiar mastication and he has the familiar physiological effects, but the last in less degree.

Bodies of a generally waxy nature like those customarily used in chewing gum are of course unobjectionable in chewing, which is not the case with the foreign fibers sometimes added to tobacco in making plugs; and they (the gums and waxes) are generally liked by the chewer. In and of themselves, they are often used in attempts to reform the tobacco chewing habit; but they have proved of little utility in this direction, satisfying merely the mechanical craving but giving neither the desired taste nor the desired physiological effects. Any of these bodies of a generally waxy nature, singly or admixed, may be used in the present invention. Gum chicle, soft paraffin, beeswax, ceresin, spruce gum, and balsam of tolu, and many other normally solid but masticable substances of a generally waxy nature are well adapted to the present purpose as being impermeable to water while soft and plastic in the mouth.

Any form of tobacco fiber customarily employed in plug tobacco may be waxed as described and the waxed tobacco may be used with sugar, licorice and other condiments customarily employed in making the various brands of plug tobacco, or it may be employed as loose

fiber. For very slowly available plugs however, I prefer a maximum of wax and a minimum of tobacco; and in such cases, the tobacco fiber is preferably very short and granular as permitting better distribution through the mass of wax, and an evener availability than is possible with long fiber. In the treatment of the tobacco habit in the manner described, the final plugs used are always preferably composed mostly of wax, with very fine, granular tobacco, such as snuff, evenly distributed throughout the mass. In the last stages of the cure, the wax should have merely enough fine tobacco to give the desired taste without an appreciable amount of nicotin.

In making moderately available tobaccos, the tobacco fiber is impregnated with wax to a greater or less degree and is then made up with the customary admixture into plug tobacco, or is left loose or more or less compressed for fine cut. The impregnation and sealing for large amounts of wax, is performed by thoroughly incorporating the wax with the fiber while said wax is softened or made fluid by heat; with less amounts of wax, in order to secure an even distribution, the wax is emulsified or preferably dissolved in a volatile solvent, such as one of the light petroleum hydrocarbons, which, naturally, must be of a deodorized grade; the solution worked into the fiber, and then the solvent removed by evaporation. With articles which are mostly wax, as stated, convenience dictates that the tobacco be as finely granular as possible in order to secure even distribution, and uniform products.

For slightly diminishing availability tasteless vaseline may be used. For fine cut tobacco, a suitable amount of wax for making a comparatively quickly available article, is about five ounces per pound of tobacco. This may be dissolved in ten fluid ounces of warm deodorized benzene. Soft paraffin, such as is readily plastic at the temperature of the mouth, is suitable for this purpose. The tobacco is thoroughly impregnated with the wax solution, by mixing and squeezing, and is finally dried, best in a solvent recovery apparatus, being finished by exposure to a temperature sufficient to melt the particles of paraffin distributed through the tobacco. Tobacco so treated may now be sold as it is, or it may be further treated in the ordinary ways to make plug tobacco, being admixed with licorice extract, molasses flavoring material, and the like. A less quickly available tobacco is prepared by mixing six pounds of tobacco with ten pounds of soft paraffin or gum chicle, whichever gum is employed being softened by heat to make it plastic. Kneading the tobacco and gum or wax together thoroughly, makes a mass in which, with these relative proportions, each fiber is thoroughly protected by a film of wax, as well as being interiorly protected by penetrating wax particles against too quick action of saliva, while at the same time, said mass in most of its characteristics is substantially like ordinary chewing tobacco. When articles still less quickly available are desired, the proportion of wax may be increased to several times that of the tobacco. In such cases, short fiber or granular tobacco is best employed, as mixing better. Snuff is eminently suitable.

A suitable mixture of snuff and wax of the character just described may be made by taking ten pounds of paraffin, ceresin or gum chicle, melting or softening the same by heat and then thoroughly stirring in five pounds of dry snuff together with such flavoring bodies as may be desired. Less snuff and more wax may be employed in making articles to be successively used in curing the habit. For instance, after using a snuff-and-wax composition in the proportions just stated until a chewer's system has become habituated to that amount of tobacco, a composition may be used in which the relative proportion of snuff to wax is diminished to 1:3. After a due time, a composition having the ratio of 1:5 may be employed, and so on, until the chewer is able to use wax alone without systematic distress. A series of graded tobacco articles of this nature, in tablet or other convenient form, may be conveniently assembled in a single package, the series beginning with a waxed tobacco article relatively strong, as described, and ending with a waxed tobacco article relatively weak. Such a shaped mass of wax and snuff is also useful in curing the snuff-chewing habit, the same amount of snuff being much less available than when used without the wax and its chewing lasting over a much longer time.

What I claim is:—

1. A chewing gum comprising a mixture of tobacco and a masticable waterproof waxy body, solid at ordinary temperatures.

2. A chewing gum comprising a mixture of finely comminuted tobacco and a masticable waterproof waxy body, solid at ordinary temperatures.

3. A chewing gum comprising a mixture of snuff and a masticable waterproof waxy body, solid at ordinary temperatures.

4. A chewing gum comprising a mixture of comminuted tobacco and chicle.

In testimony whereof I affix my signature in the presence of two witnesses.

CARLETON ELLIS.

Witnesses:
FLETCHER P. SCOFIELD.
H. M. MARBLE.