J. PETERSON.

METHOD OF PACKING AND PRESERVING PLUG TOBACCO.

APPLICATION FILED APR. 11, 1921.

1,398,569.

Patented Nov. 29, 1921.

2 SHEETS—SHEET 1.

Fig. 1.

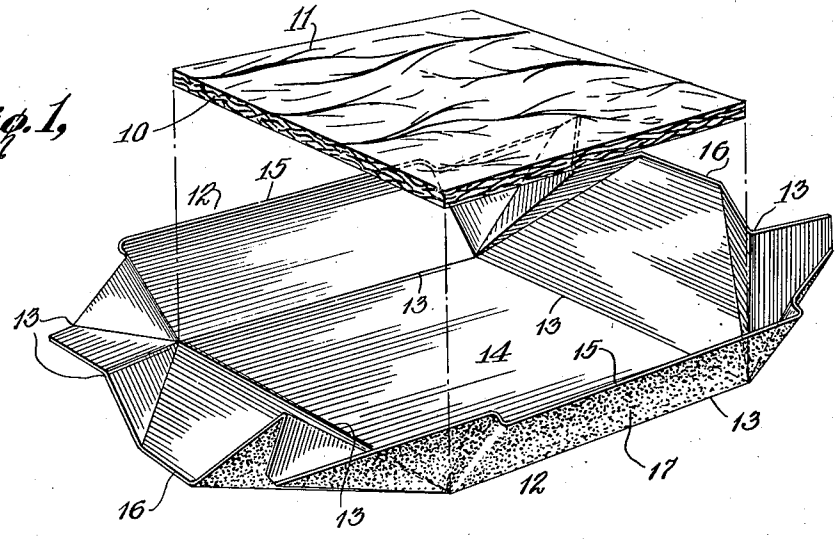


Fig. 2.

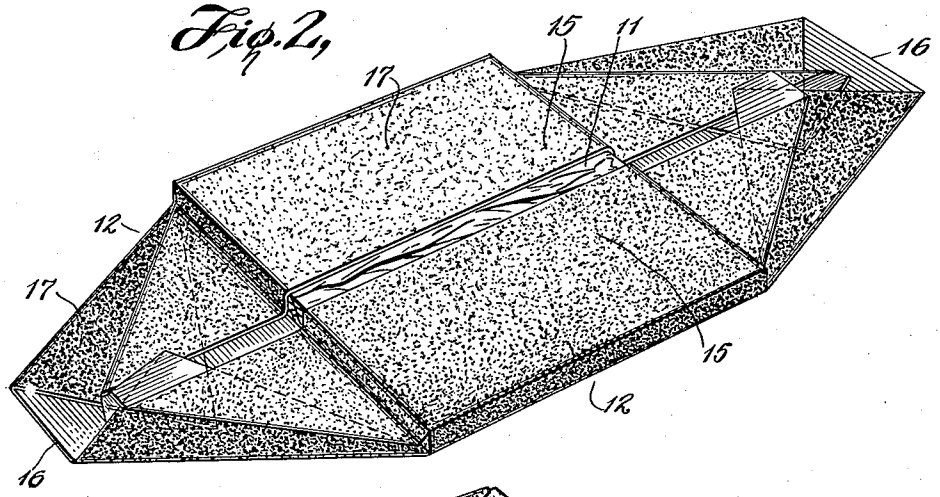
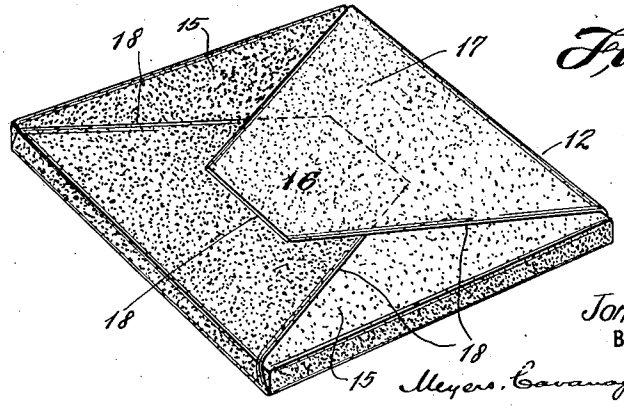


Fig. 3.



INVENTOR

Jonathan Peterson

BY

Meyers, Cavanagh, Whitehead & Hyde

ATTORNEYS

J. PETERSON.

METHOD OF PACKING AND PRESERVING PLUG TOBACCO.

APPLICATION FILED APR. 11, 1921.

1,398,569. Patented Nov. 29, 1921.

2 SHEETS—SHEET 2.

Fig. 4,

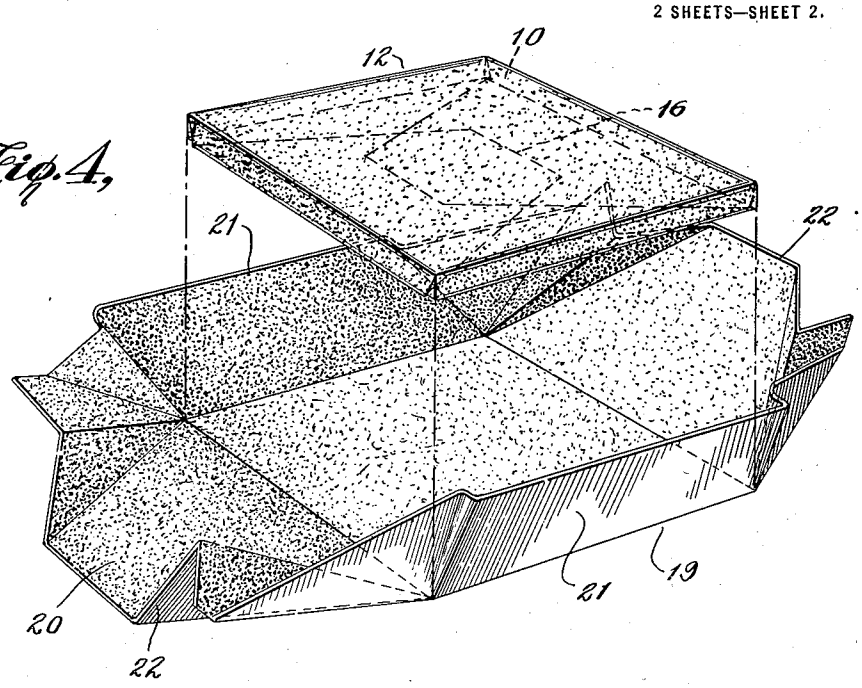


Fig. 5,

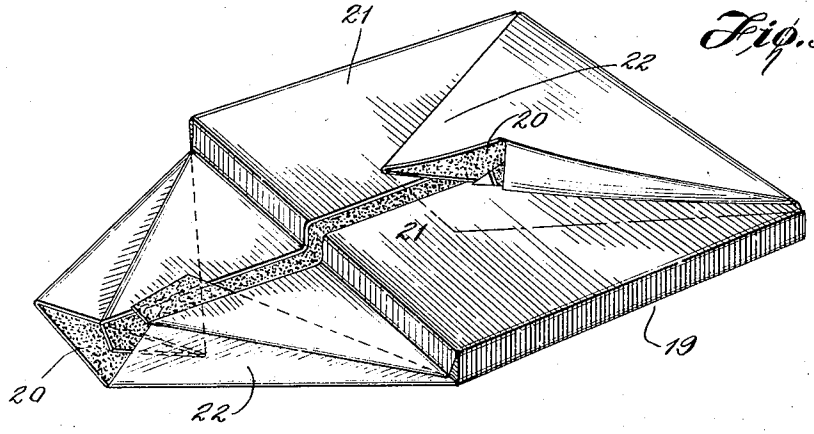
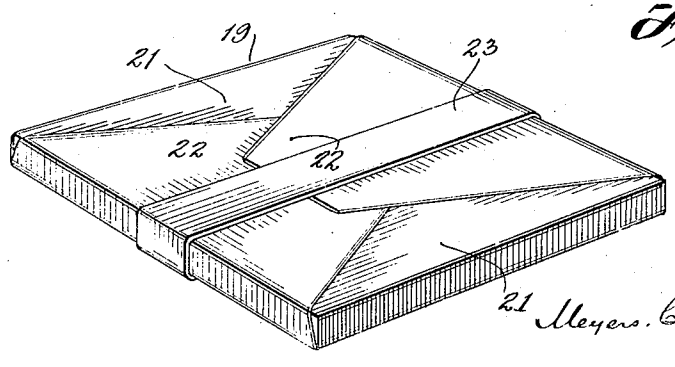


Fig. 6,



INVENTOR

Jonathan Peterson

BY

Meyers, Cavanagh, Whitehead & Hyde

ATTORNEYS

UNITED STATES PATENT OFFICE.

JONATHAN PETERSON, OF BROOKLYN, NEW YORK, ASSIGNOR TO COMBINATION MACHINE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

METHOD OF PACKING AND PRESERVING PLUG-TOBACCO.

1,398,569. Specification of Letters Patent. Patented Nov. 29, 1921.

Application filed April 11, 1921. Serial No. 460,602.

To all whom it may concern:

Be it known that I, JONATHAN PETERSON, a citizen of the United States, and resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Methods of Packing and Preserving Plug-Tobacco, of which the following is a specification.

This invention relates to a method of packing and preserving tobacco plugs or cakes and to the plug package resulting therefrom, and has special reference to the provision of a plug package especially adapted for the retail trade which may be handled and sold in individual units, each plug unit being kept in a preserved state as regards its moisture content, flavor and other properties up to the time of consuming use.

A common method hitherto employed in packaging tobacco plugs or cakes has involved the packaging of a large quantity of plugs in "caddies" or large cases made of expensive wood stock and especially constructed to preserve the plugs against deterioration from the elements. In order to reduce the cost of packaging per unit plug it has been the practice to package a large number of plugs in a single case, some "caddies" containing as many as 48 pounds of tobacco plugs. This procedure has involved many disadvantages, prime among which has been the inability to successfully cater to the demands of the small retail dealers who find it inconvenient and moreover uneconomical to handle large stocks of an article for which there may be a relatively small "call," the plugs when kept in stock for some period of time after the case or package is first opened being subject to relatively rapid deterioration, such plugs losing their moisture content, flavor and other desirable properties and becoming dry and brittle when open to air and atmospheric moisture. A prime desideratum of my present invention therefore involves the packaging of plug tobacco, the smallest salable unit of which is preservedly packaged to be handled as an individual unit and sold to the consumer as such, each plug unit being so packed as to be preserved against action by the elements, the plug being kept in its original state up to the time of its consumption.

Tobacco plugs are usually made and sold in compressed or compacted blocks, each unit or block comprising a tobacco leaf filler covered by a leaf wrapper. I have found it desirable to preserve each block or unit by packing such block or unit in a wrapper impervious to air or moisture, the unit block being so inclosed by the wrapper that all air pockets are ironed out and eliminated, the wrapper being then sealed against entry of air or moisture. A package made up of a plug provided with an impervious wrapper such as a wrapper having a coating of paraffin or wax; the wrapper and plug being compressed or compacted into a unit, the wrapper adhering closely to the faces of the packet, has been found highly efficient for this purpose. In producing such a package, however, it is desirable not to injure the tobacco product packages, as the preservation of the plug, especially the preservation of the wrapper leaf in undamaged condition is a factor in keeping the product in a preserved state. Furthermore, it is desired to so inclose the plug that the wrapper will adhere to the face of the plug without "sticking" thereto and without affecting the cohesion between the tobacco leaf wrapper and the filler inclosed thereby, the plug being removable from the wrapper without the necessity of having to strip the wrapper from the unit plug; such a construction permitting the obtaining of a plug in undamaged or unmutilated form for consuming use. My present invention therefore further comprehends the provision of a plug package in which the wrapper adheringly fits the packaged plug without sticking thereto, the package not only being preserved against action by the elements, but being kept in undamaged condition and being obtainable in a fresh and unmutilated state when required for consuming use.

The principal objects of my invention therefore include, besides the provision of a plug package which may be handled and sold to the consumer as a packaged unit, the provision of such a package in which each plug or cake is kept in a fully preserved state up to the time of its consumption; the provision of such a package which is imperviously sealed against the elements, each plug being enveloped by a wrapper closely adhering to all the faces of the plug for the elimination of air pockets, the impervious wrapper not affecting the integrity of the packaged plug commodity; the further pro-

vision of such a package inclosed in a plurality of enveloping wrappers so related as to effect an impervious seal at all wrapper joints not only, but between wrapper faces, the plug commodity being kept free from the impervious wrapper coatings and the provision of such a package in which the unit is assembled and packed by simple manufacturing steps to keep the cost of packaging down to a negligible quantity.

To the accomplishment of the foregoing and such other objects as may hereinafter appear, my invention consists in the elements and their relation one to the other, as hereinafter particularly described and sought to be defined in the claims, reference being had to the accompanying drawings which show a preferred embodiment of my invention and in which:

Figures 1 to 6 show the various operative steps of packaging the plug tobacco product and the preserved package resulting therefrom.

My invention is applied to tobacco products put up in plug or cake form, such plug tobacco products usually taking the form of compressed or compacted rectangular blocks having a tobacco leaf filler 10 covered by a tobacco leaf wrapper 11. My invention contemplates the packaging of such plugs in a wrapper or plurality of wrappers enveloping the same to provide an individual plug package imperviously sealed against action by air or moisture. To accomplish the desired end I provide a wrapper such as 12 of a size which, when folded about the faces or walls of the plug, will envelop and seal all the faces of such plug against atmospheric influences.

In order to facilitate the packaging operations, which may be accomplished by hand, I contemplate the preforming or prefolding of the wrapper by simple apparatus, the prefolding being along such lines that when the plug is inserted in the wrapper, the wrapper may be folded thereover by hand operation with facility, the wrapper falling into enveloping formation along the folds and creases provided therein. In this manner not only is the packaging operation facilitated, minimizing the cost of packaging, but a wrapped packet is provided in which the wrapper faces form a tight fit over the faces of the plug, this being one of the requirements in securing a preserved plug package, as will presently appear. To accomplish these features and results I therefore prefold the wrapper 12 along the lines 13, as shown in Fig. 1 of the drawings, this prefolding resulting in a wrapper having a bottom 14, side wings 15 and end folds 16. With a prefolded wrapper of this nature the packing operation consists as a first step in placing the plug 10 in the wrapper 12, with the bottom face of the plug 10 in contact with the bottom face 14 of the wrapper, the prefolded wrapper serving to properly center the plug therein. The wrapper wings 15 are then folded over the top faces of the plug, as shown in Fig. 2 of the drawings, the end fold 16 being then folded in overlapping relation, resulting in the formation shown in Fig. 3 of the drawings, the said wings and end folds falling into this formation by the simple guiding of the same by an operator. It will be seen that in this manner a wrapped packet may be provided in which the wrapper fittingly embraces or envelops the plug contained therein, the plug being, furthermore, centrally located in the wrapper, the prefolding operation providing this feature.

To the end of securing a sealed package impervious to air or moisture, I provide a wax or paraffin coated wrapper, the wrapper being preferably provided with such a coating on one of the faces thereof, as shown at 17 in the drawings. After the wrapped packet, as shown in Fig. 3, is obtained, the combined plug and wrapper is compacted or compressed preferably under application of heat, this compression or compacting being such as to cause the interior faces of the wrapper to adheringly envelop the faces of the plug to the end that all interior air pockets be substantially eliminated. It has been found that by eliminating all such air pockets between the wrapper faces and the plug faces, that the plug may be preserved in packaged form for a considerable length of time. The compression or compacting operation preferably under application of heat also effects the welding of the wax or paraffin coating between the wrapper faces and especially at the wrapper joints, such as shown at 18 in Fig. 3 of the drawings. In this manner I provide a package in which the enveloping wrapper adheringly fits the packaged plug, with the consequent elimination of all air pockets and in which the wrapper forms an impervious coating over the faces of the plug not only, but all the wrapper joints are imperviously sealed against entry of any air or moisture.

It is desirable in packaging such a commodity as tobacco plug products, that the compacting or compressing operation and the use of the impervious wrapper, have no deleterious effects on the packaged plug commodity. It is desirable, for example, that the plug, even after the packaging and compressing operations, remain in an undamaged or unmutilated state. It is desired that the tobacco wrapper 11 of the plug remain intact and undamaged and that the enveloping wrapper 12, although the faces of such wrapper adheringly envelop the faces of the plug, that such wrapper faces should not stick to the plug faces to

the end that when the wrapper seal is broken for purposes of plug consumption, that the plug should be removable from the wrapper without the necessity of stripping the wrapper therefrom, it being further desired that the plug so removed should be found in a whole and undamaged state. To this end I have provided a wrapper 12 having only a single coating of wax or paraffin 17, such coating of wax or paraffin being only on the outer walls of the wrapper 12. The interior faces of the wrapper 12 remain uncoated, and such faces may be compressed into adhering contact with the faces of the plug without sticking thereto. It has been found that by the provision of such a wrapper having an impervious coating of wax or paraffin on the outer faces thereof only, that when the wrapper seal is broken, the plug may be removed in a fully preserved and undamaged state.

The packaged product resulting from the above described operations and from the use of a wrapper having an exterior impervious coating is shown in Fig. 3 of the drawings. Although my invention contemplates the provision of such a packaged product without further wrapping operations, I have found it desirable for reasons which will appear presently to provide a second or outer wrapper for enveloping the packaged product shown in said Fig. 3. To this end I prefer to provide an outer wrapper 19 shown in Figs. 4 to 6 of the drawings, such wrapper being also preformed or prefolded in a manner similar to the wrapper 12 as described above and as shown in Fig. 4 of the drawings. The wrapper 19 is also provided with an impervious coating such as wax or paraffin, this impervious coating being provided on the inner faces of the wrapper 19, such as shown at 20 in Figs. 4 and 5 of the drawings. The provision of such a wrapper 19 having an impervious coating on the interior faces thereof has been found to have several desirable advantages. In the first place, the use of two enveloping wrappers provides a multiply formation offering better preservation for the packaged plug. In the second place, by having an outer wrapper with an impervious coating on the interior faces thereof in combination with an inner wrapper having the impervious coatings on the outer faces thereof, a construction is provided wherein the impervious coatings lie face to face, so that when the multiply package is compacted or compressed, especially under application of heat, the impervious coatings on adjacent wrapper faces will weld together, forming an efficient hermetically sealed container for the plug. It sometimes occurs that during handling of a package such as shown in Fig. 3 of the drawings, that the sealed joints break loose. The provision of a wrapper construction such as shown in Figs. 4 to 6 of the drawings, however, provides a container having adjoining faces so welded together that even in the event of the wrapper joints unsealing, an efficiently sealed container still remains. Another advantage in providing a wrapper such as 19 having the impervious coating only on one face thereof, such face being the interior face of the wrapper, is that the outer faces of the wrapper have no wax coating and may be handled with greater ease. Thus a package such as shown in Fig. 6 of the drawings may be compressed or compacted with greater facility, the outer wrapper surface of the package having no tendency to stick to any of the compressing apparatus. Furthermore, a plurality of such packages may be stacked together without liability of the enveloping wrappers of one package sticking or adhering to the enveloping wrapper of an adjacent package.

In packaging the plug and outer wrapper within the inner wrapper, the prefolding of the inner wrapper 19 will also serve to properaly center and position the plug and inner wrapper, the wings 21 and the end folds 22 of the outer wrapper 19 being folded in overlying relation similar to the folding of the plug within the inner wrapper, the folded and packed construction being shown in Fig. 6 of the drawings. Although I may insert the plug and the inner wrapper in any manner in the outer wrapper, it is preferred to so place the plug and inner wrapper within the said outer wrapper that the folds 16 of the inner wrapper overlie the bottom face of the outer wrapper, as shown diagrammatically in Fig. 4 of the drawings. The wrapped formation shown in Fig. 6 is then also compacted or compressed similar to the compressing or compacting of the formation shown in Fig. 3, the characteristics of the wrapped package shown in Fig. 6, in addition to being similar to that shown in Fig. 3, providing also the advantages pointed out above flowing from the use of an exterior or outer enveloping wrapper. Each of such wrapped packages may be also provided with an adhesive band such as shown at 23 in Fig. 6, the outer unwaxed faces of the outer wrapper permitting the application of such an adhesive strip or band 23.

It will be apparent from the foregoing that I have provided a sealed plug package which may be handled and sold in individual units instead of being handled loose as in prior practice, such a package eliminating the packing of plugs in "caddies" or large containers with the disadvantages consequent thereto, my packed plug being especially adapted to the demands of the small retail dealers not only, but providing, furthermore, a sanitary package much sought for by the consumer. The plug is so packed

as to be preserved until the time of its consumption, the plug commodity not being open to the elements until actually required or desired for use. By providing a preformed or prefolded wrapper the positioning of the plug in the wrapper and the wrapping operation is facilitated, a wrapped packet being provided having the wrapper faces fittingly inclose the plug faces. Each wrapper and its plug is compressed or compacted preferably under application to heat, so that all air pockets are eliminated, the interior wrapper faces closely adhering to the faces of the plug, sealing the same against atmospheric influences. Each plug is completely inclosed with the wrapper joints or junctions welded together, making an impervious package. The interior wrapper wax or paraffin coating is provided only on the outside thereof, this presenting a package in which the wrapper faces may closely adhere to the faces of the plug without sticking, the plug being removable in a whole or undamaged state when desired for use, the integrity of the plug being thus preserved. By the use of a double wrapper I provide a multiply protection in which the weld between wrapper faces covers all the faces of the packet making for an impervious package which can be roughly handled and remain sealed against atmospheric influence. Furthermore, a package is obtained with the outer surfaces of the outer wrapper uncoated so that a plurality of wrapped packets may be compressed or compacted without adjacent packages being welded together, thus eliminating sticking between the wrappers of adjacent units. Each packet therefore forms a separable unit which may be handled as such by the trade.

I claim:

1. A package of plug tobacco comprising a plug of tobacco and a wrapper inclosing the same, the wrapper having an impervious coating on its outer face and folded and compressed about the plug so that opposed coated faces adhere forming a substantially air-sealed closure for the plug.

2. A package of plug tobacco comprising a plug or cake of tobacco and a wrapper inclosing the same, the wrapper having an impervious coating of paraffin on one face only and being folded about the plug and compressed so that interior wrapper faces adhere to the faces of the plug and opposed coated faces adhere to each other forming a substantially air-sealed closure for the plug.

3. A package of plug tobacco comprising a plug or cake and wrapping means hermetically inclosing the same; the said wrapping means comprising an inner wrapper having an impervious coating on the outer faces thereof and an outer enveloping wrapper having an impervious coating on the inner faces thereof, the plug and wrappers comprising a compressed or compacted unit in which the opposed coated faces of the wrappers adhere hermetically sealing the plug.

4. A package of plug tobacco comprising a plug or cake and wrapping means hermetically inclosing the same; the said wrapping means comprising an inner wrapper having an impervious coating such as wax or paraffin on the outer faces thereof and an outer enveloping wrapper having a similar coating on the inner faces thereof, the inner faces of the inner wrapper adheringly enveloping the faces of the plug, and the opposed coated faces of the wrappers adhering to provide an hermetically sealed package.

5. The method of packing and preserving tobacco plugs which comprises packing a plug or cake in an enveloping wrapper; the wrapper being provided with an impervious coating such as wax or paraffin on the outer faces only thereof, compacting or compressing the plug and wrapper into a unit with the interior wrapper faces adheringly enveloping the faces of the plug and the opposed wax or paraffin coated faces of the wrapper adhering whereby an hermetically sealed plug package is provided, the plug being removable after breaking the seal in whole and undamaged condition.

6. The method of packing and preserving tobacco plugs which comprises prefolding an impervious wrapper to fit a tobacco plug or cake, in then packing the plug or cake in the wrapper, the wrapper completely enveloping the plug, in then compacting or compressing the plug and wrapper into a unit with the interior wrapper faces adheringly enveloping the faces of the plug and hermetically sealing the wrapper joints, whereby an hermetically sealed plug package is provided.

7. The method of packing and preserving tobacco plugs which comprises prefolding an impervious wrapper to fit a tobacco plug or cake, in then compacting the plug or cake in the wrapper; the wrapper completely enveloping the plug, the wrapper being provided with an impervious coating such as wax or paraffin on the outer faces only thereof, compacting or compressing the plug and wrapper into a unit with the interior wrapper faces adheringly enveloping the faces of the plug and wax welding the wrapper joints, whereby an hermetically sealed plug package is provided, the plug being removable after breaking the seal in whole and undamaged condition.

8. The method of packing and preserving tobacco plugs which comprises packing a plug or cake in an inner wrapper having an impervious outer coating, enveloping the said plug and wrapper in an outer wrapper

having an impervious inner coating, the impervious wrapper coatings being face to face, in then compressing the plug and wrappers into a compacted unit whereby an hermetically sealed impervious plug package is provided.

9. The method of packing and preserving tobacco plugs which comprises packing a plug or cake in an inner wrapper having an impervious outer coating such as wax or paraffin, enveloping the said plug and wrapper in an outer wrapper having a similar impervious inner coating, the impervious wrapper coatings being face to face, in then compressing the plug and wrappers into a compacted unit in such manner that the interior faces of the inner wrapper adheringly envelop the faces of the plug, and the opposed impervious wrapper coatings cohering to provide an hermetically sealed package.

10. The method of packing and preserving tobacco plugs which comprises prefolding inner wrappers having an impervious coating on the exterior faces thereof, prefolding outer wrappers having an impervious coating on the interior faces thereof, packing a plug or cake in the inner wrapper, enveloping the plug and wrapper in the outer wrapper, the impervious wrapper coatings lying face to face, in then compressing the plug and wrapper into a compacted unit whereby an hermetically sealed impervious plug package is provided.

Signed at New York, in the county of New York and State of New York, this 8th day of April, A. D. 1921.

JONATHAN PETERSON.