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THOMAS M. RECTOR, OF NEW YORK, N. Y., ASSIGNOR TO VITAPACK CORPORATION, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

PACKAGING TOBACCO AND THE LIKE.

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To all whom it may concern:

Be it known that I, THOMAS M. RECTOR, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Packaging Tobacco and the like, of which the following is a specification.

This invention relates to the packing of cigars, cigarettes and tobacco in its various forms and the object of the invention is to pack the tobacco in such a way as to save and preserve the original flavor, aroma, moisture content and other desired qualities.

To accomplish this result the tobacco which may be in the form of cigars, cigarettes or even chewing tobacco or leaf tobacco is hermetically sealed in cans or other suitable containers in an atmosphere of inert gas. A suitable gas for this purpose is carbon dioxid.

According to a preferred method the tobacco is placed in the can or container in which it is to be packed, which then is subjected to an exhausting action, after which, when the vacuum is as near complete as may be, the can is charged with the inert gas, usually at about atmospheric temperature. When thus surrounded with the inert gas the tobacco is hermetically sealed within its container.

Any suitable apparatus may be employed for the vacuumizing and sealing operations, such as one of the well-known forms of machines having a chamber to receive the containers and provided with suitable suction and gas supplying connections together with means for applying the covers or otherwise hermetically sealing the cans or containers.

It has been found that tobacco, like other plant life, exhibits a tendency to give off carbon dioxid and possibly other gases in smaller amounts. This evolved gas in some instances accumulates sufficiently to swell or bulge the cans when they are constructed in the usual way out of flexible and yielding sheet metal.

To overcome this swelling or bulging effect the tobacco may be preliminarily warmed so as to expand the added gas slightly. Then after the can is sealed a slight vacuum is created as the contents becomes cooled and this affords space sufficient for the gases which may be afterwards evolved so that even with a subsequent evolution of gas the can will not be bulged.

To accomplish the same or nearly the same results the gas may be inserted while hot or both the gas and the tobacco may be heated. It is preferred, however, for the present to heat the tobacco as that causes the cold gas to expand rapidly and thus creates a slight outward flow of the gas during the interval of time between the insertion of the gas and the final sealing of the can; whereas, when hot gas is run into cold tobacco there is a tendency for the tobacco to cool off the gas and cause an inrush of air during the interval between the filling and the closing of the can. In either event the heating is only such as to produce a slight expansion of the gas and is not sufficient to destroy the flavor or vaporize any appreciable amount of the volatile content of the tobacco.

As a further or as an alternative step in the preservation process, the cans may be filled with an inert gas other than carbon dioxid, such as nitrogen, for instance, and there may be enclosed within the cans a chemical substance such as soda lime, which will unite with any carbon dioxid which may be given off by the tobacco but will not unite with the inserted inert gas. This in effect provides for the absorption of evolved carbon dioxid and by maintaining substantially atmospheric pressure within the cans at all times, prevents swelling of the cans.

This improved method of packing keeps the tobacco fresh and possessed of all its original aroma and taste. The presence of the inert gas also prevents ingress of atmospheric air in case of injury to the container.

What I claim is:

1. A process of packaging cigars, cigarettes and the like which consists in enclosing the same in a container, exhausting the air from the container, filling said container with inert gas and then hermetically sealing said container.

2. A process of packaging cigars, cigarettes and the like which consists in enclosing the same in a flexible container, exhausting the air from said container, filling the container with inert gas, hermetically sealing the container and warming the con-

tents of the container prior to sealing the same to a temperature sufficient to expand the inserted gas but insufficient to destroy or vaporize to an appreciable extent the flavoring element of the tobacco, whereby upon cooling of the contents a slight vacuum will be produced providing room for evolution of gas from the tobacco without bulging the flexible container.

3. A process of packaging cigars, cigarettes and the like which consists in placing the same in a container, filling the container with inert gas, hermetically sealing the container and warming the tobacco prior to the insertion of the inert gas to thereby warm the gas upon contact with the tobacco so that upon sealing and subsequent cooling the gas will contract sufficiently to provide space for evolved gas from the tobacco.

4. A process of packaging cigars, cigarettes and the like which consists in placing the same in a container with an inert gas and with a substance which does not combine with such inert gas but will combine with gases given off by the contained tobacco.

In testimony whereof I affix my signature.

THOMAS M. RECTOR.