June 12, 1923. 1,458,585

J. T. McCROSSON

VACUUM CONTAINER FOR CIGARS, CIGARETTES, AND SMOKING TOBACCO

Filed Oct. 2, 1922

Fig. 1.

ON LINE. 1-1. FIG. 2.

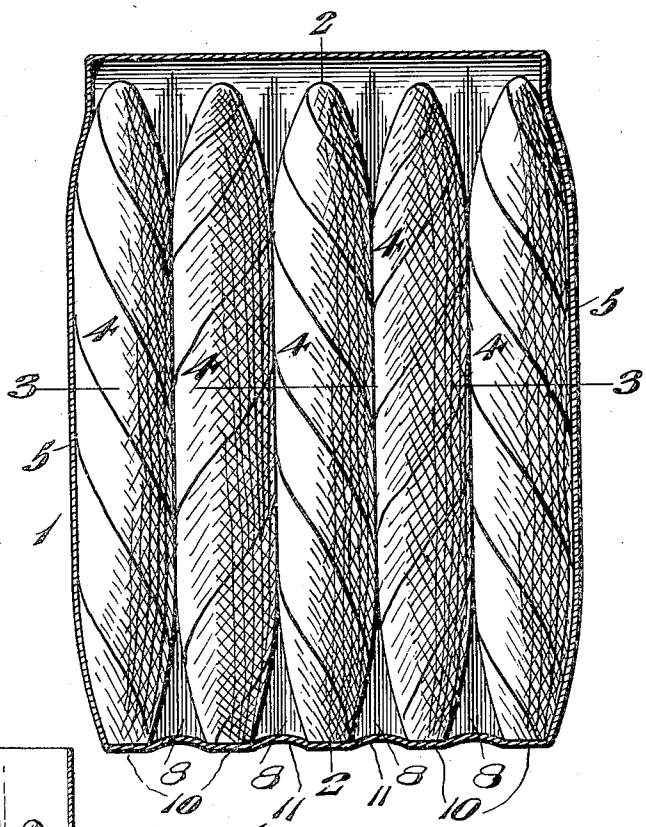


Fig. 2.

ON LINE. 2-2. FIG. 1.

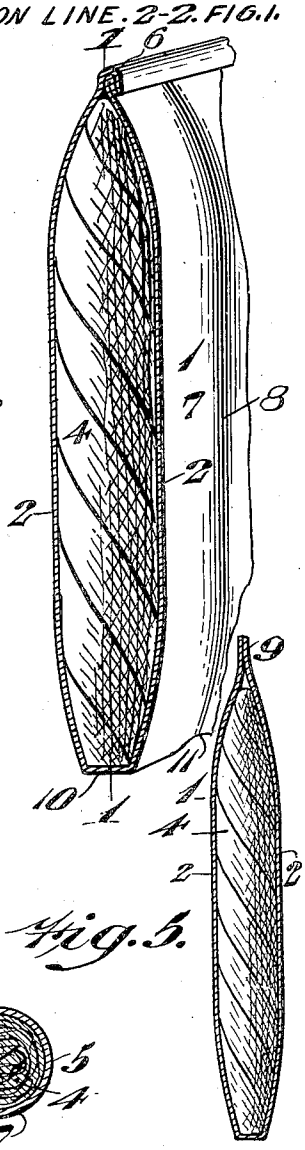


Fig. 4.

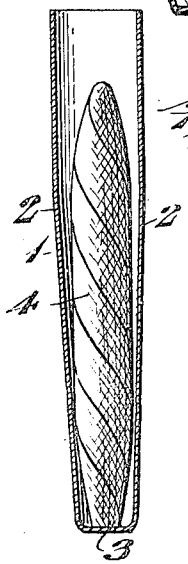


Fig. 3.

ON LINE. 3-3. FIG. 1.

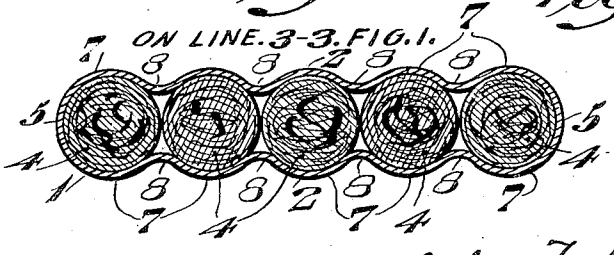


Fig. 5.

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UNITED STATES PATENT OFFICE.

JOHN T. McCROSSON, OF HONOLULU, TERRITORY OF HAWAII, ASSIGNOR OF ONE-HALF TO EUGENE S. COCHRAN, OF NEW YORK, N. Y.

VACUUM CONTAINER FOR CIGARS, CIGARETTES, AND SMOKING TOBACCO.

Application filed October 2, 1922. Serial No. 591,699.

To all whom it may concern:

Be it known that I, JOHN T. McCROSSON, a citizen of the United States, residing at Honolulu, Hawaiian Islands, have invented a new and useful Vacuum Container for Cigars, Cigarettes, and Smoking Tobacco, of which the following is a specification.

As is well-known, it is desirable that certain tobacco products, such as cigars, cigarettes and smoking tobacco, be contained or packed in a hermetically sealed container of some character, so that the air may be excluded therefrom, to the end that such products may remain fresh and reach the ultimate consumer in the condition in which they were originally manufactured and packed.

This is particularly desirable as regards cigars, as it is well-known that a cigar which is exposed to the atmosphere for any length of time loses its freshness and its original aroma, and my present invention is directed to a novel vacuum container, preferably designed for the reception of cigars, but at the same time capable of adaptation to the packing of cigarettes, smoking tobacco and the like, wherein the contents will remain indefinitely in their original condition, and when the device is used for cigars, the latter will be retained in longitudinal parallelism, so that they will not be liable to be broken.

In carrying out my invention, I employ a very thin container made of tin-foil or similar material of such equivalent thinness and flexibility, that when the outer meeting edges of the container are drawn together and afterwards crimped or otherwise interlocked after the air is exhausted therefrom, or simultaneously with such air exhausting operation, so as to be hermetically sealed, the container will be provided with a series of longitudinal convex and concave surfaces, arranged in alternate order, the convex surfaces engaging the contacting peripheral portions of the cigars which are packed within the container, and the concave longitudinal grooves occupying the spaces between the juxtaposed cigars within the container, so that the cigars are always retained in longitudinal parallel alignment and prevented from breakage.

To the above ends my invention consists of a novel construction of vacuum container and method of producing the same, to be hereinafter described.

It further consists of other novel features of construction and advantage, all as will hereinafter more fully appear in the detailed description.

For the purpose of illustrating my invention, I have shown in the accompanying drawings a typical embodiment thereof which is at present preferred by me, since it will give in practice satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a vertical sectional view of a vacuum container for cigars, cigarettes and smoking tobacco embodying my invention, the section being taken on line 1—1 of Figure 2.

Figure 2 represents a perspective view partly in section on the line 2—2 of Figure 1.

Figure 3 a horizontal section on the line 3—3 of Figure 1.

Figure 4 represents a vertical sectional view showing the manner of positioning the cigars within the container prior to the exhaustion of the air therefrom.

Figure 5 represents the second step in bringing the edges of the container into juxtaposition just prior to or during the sealing or crimping operation.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings,

In carrying out my invention, I employ a suitable container 1 having the side walls 2 and the bottom wall 3, said container or walls 2 being of a somewhat greater length than the cigars, which are to be packed. The container may be adapted to receive a sin-

gle cigar 4 or a plurality of cigars, as indicated in Figures 1 and 3, said cigars being arranged in parallelism and being held in juxtaposition by the side walls 2, the bottom wall 3 and the ends walls 5, said container initially being slightly larger than the cigars and open at its top, as seen in Figure 4.

The cigars having been placed in the open-ended container, as indicated in Figure 4, the next step in the operation is the passing of the upper edges of the container between suitable dies or formers, whereby the upper ends of the sides 2 are brought into juxtaposition, as indicated at 9 in Figure 5.

The next step in the operation is the simultaneous exhaustion of the air from the container and the formation of the interlocked or crimped top member 6 seen in Figure 2, whereby a vacuum within the container to the desired extent is produced and the upper end of the container at this point is hermetically sealed, any suitable means being employed for this purpose.

The operation as practically carried out consists in placing the container, 1, within an exhaustion chamber where suitable vacuum is maintained, sealing the container, 1, while within the vacuum and subsequently exposing container, 1, to atmospheric pressure.

After the exhaustion of the air from the interior of the container, by reason of the vacuum therein and by reason of the flexibility of the tin-foil or other material employed for the container, and by reason of the admission of atmospheric pressure to the outside thereof the outer walls 5 will be drawn gently but firmly against the periphery of the two outer cigars, as seen in Figures 1 and 3, and, in addition, the exterior convexities 7 will be formed, alternating with which are the exteriorly located corrugations or concavities 8, which are arranged in parallelism in alternate order with the lower walls 9, and serve to keep the cigars or other similar contents of the container in longitudinal, parallel alignment, so that they will retain their shape and will not be liable to be broken or injured in transit.

The vacuum within the container will in addition serve to draw the bottom wall of the container against the blunt ends of the cigar, as indicated at the points 10, between which will be the concavities 11, so that as will be understood from Figure 2, the cigars are contained within a vacuum chamber in a snugly fitting package, whose walls snugly engage the peripheral portions and ends of the cigars, as will be understood from Figure 2, so that the cigars will not be liable to be broken under any condition, and when the container is opened, the cigars will be in the same condition as they were originally packed.

I have deemed it unnecessary to show or describe in detail the dies or forming devices for bringing the upper ends of the walls 2 into juxtaposition as seen in Figure 5, or for forming the overlapping crimped edge 6 of the container as indicated in Figure 2, or for exhausting the air from the container during the crimping operation, as all this may be accomplished by various means, as will be evident to those skilled in the art.

By my invention, it will be apparent that cigars treated in the manner above described will retain their freshness indefiinitely, and, in addition, by reason of the longitudinal corrugations of the resultant structure growing out of the use of the tin-foil or similar flexible material for the container, which slightly collapses when the vacuum is formed, the casing walls snugly engage the cigars, which will be retained in parallelism and will not be injured during the period they are within the container.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is—

1. The herein described method of making a vacuum container for cigars, cigarettes and the like, which consists in placing the cigars in an open-ended trough-shaped container of flexible material, next, bringing the upper open ends of the container sides into juxtaposition, next, exhausting the air from the top of the container and hermetically sealing the juxtaposed upper edges thereof, and, lastly, forming the exterior walls of the container by exposure of same to atmospheric pressure into longitudinally extending corrugations which engage the contiguous peripheries of the cigars and retain them in longitudinal parallel alignment.

2. The hereindescribed method of making a vacuum container, which consists in placing the articles in an open ended container, next bringing the upper ends of the container sides into juxtaposition, next exhausting the air from said container and hermetically sealing the juxtaposed upper edges thereof, and lastly forming the exterior walls of the container by exposure of same to atmospheric pressure into corrugations engaging the contiguous peripheries of the articles to retain them in parallel alignment.

3. The herein described vacuum container for cigars, cigarettes and the like, comprising a container made of flexible material, having a vacuum, and having its juxtaposed edges hermetically sealed and its sides provided with longitudinal corrugations en-

gaging the contiguous peripheral portions of the cigars, whereby the latter are always held in longitudinal parallel alignment and prevented from breakage.

4. The herein described vacuum container for cigars and the like, comprising a container of flexible material, containing a vacuum and having its juxtaposed top edges crimped upon each other and hermetically sealed and its sides provided with longitudinal corrugations engaging the contiguous peripheral portions of the cigars, and its top and bottom portions engaging the ends of the cigars, whereby the latter are held in longitudinal parallel alignment and prevented from breakage.

JOHN T. McCROSSON.

Witnesses:
E. HAYWARD FAIRBANKS,
C. D. McVAY.