Feb. 2, 1932. F. P. LEVY 1,843,514

HUMIDIFIED PACKAGE OF TOBACCO PRODUCTS

Filed June 24, 1930

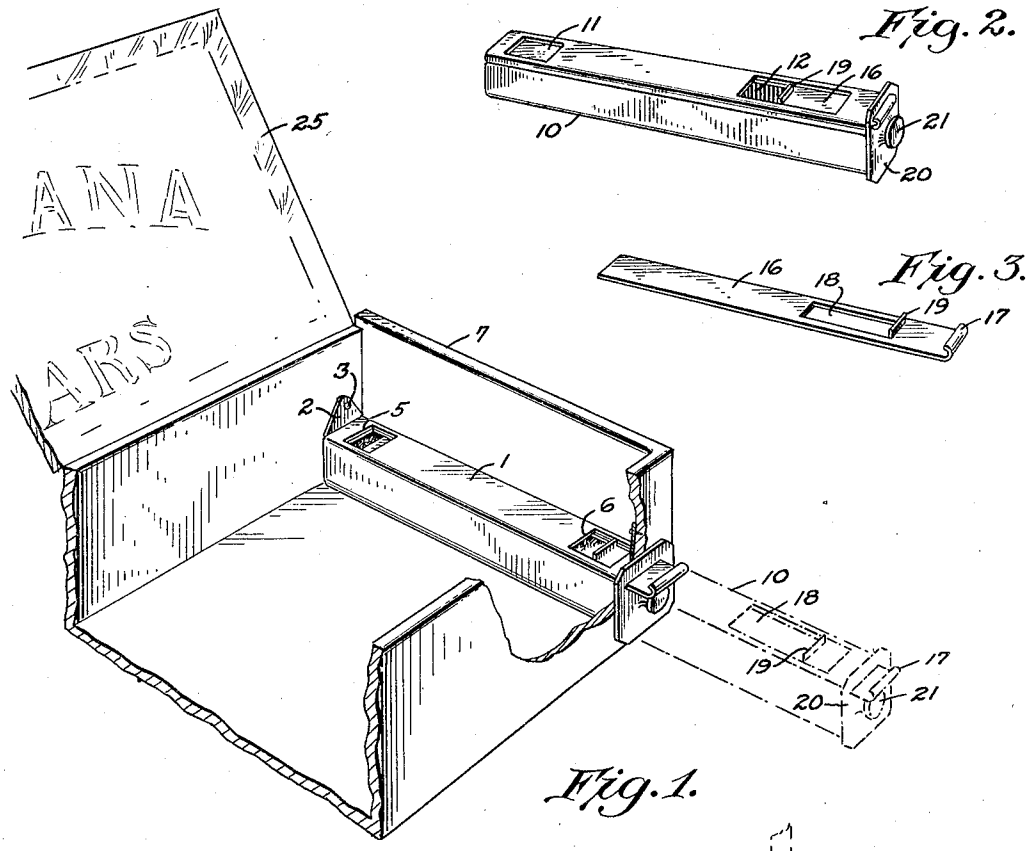


Fig. 1.

Fig. 2.

Fig. 3.

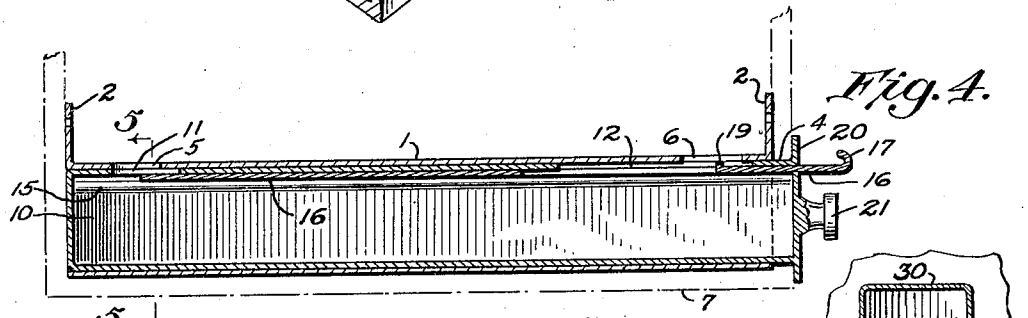


Fig. 4.

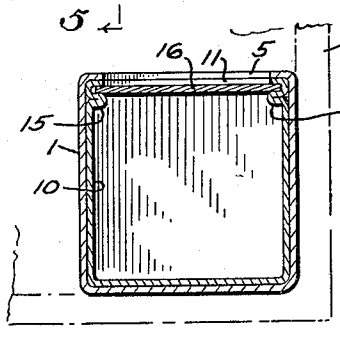


Fig. 5.

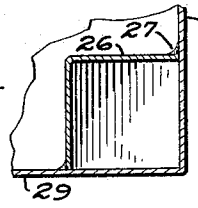


Fig. 6.

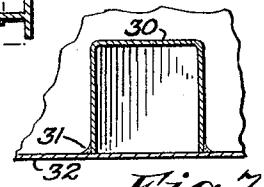


Fig. 7.

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UNITED STATES PATENT OFFICE

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HUMIDIFIED PACKAGE OF TOBACCO PRODUCTS

Application filed June 24, 1930. Serial No. 463,522.

This invention relates to humidifiers for packages of tobacco products, and has for its object to provide a construction simple in parts and more efficient in operation than those heretofore proposed.

With these and other objects in view the invention resides in the novel details of construction and combinations of parts as will be disclosed more fully hereinafter and particularly pointed out in the claims.

Referring to the accompanying drawings forming a part of this specification and in which like numerals designate like parts in all the views,

Fig. 1 is a partial perspective view of a package to which this invention has been applied;

Fig. 2 is a perspective view of the humidifying element which has been removed from its guide compartment in the package;

Fig. 3 is a perspective view of the slide associated with the humidifying element shown in Fig. 2;

Fig. 4 is a longitudinal vertical sectional view of the humidifying element in place;

Fig. 5 is a transverse sectional view of the invention taken as on the line 5—5 of Fig. 4 and looking in the direction of the arrows; and

Figs. 6 and 7 are transverse sectional views somewhat similar to Fig. 5 but showing modifications of the guide compartment when applied to different portions of a package as well as different means of securement to said package.

The invention consists of a metallic tubular compartment 1 preferably rectangular or otherwise angular in cross section and, as shown in the drawings, adapted to fit snugly across a cigar box at one end thereof, the ends of the compartment being provided with suitable means such as the tabs 2 by which said compartment may be secured in place in the box as by a nail 3. This compartment is preferably open at both ends, one end registering with an aperture 4 in the front wall of the cigar box. The top wall of the compartment is provided near its ends with openings 5 and 6 through which moisture may pass to the cigars or other tobacco product within the box 7.

Adapted to frictionally slide within the compartment 1 is a container 10 for holding an absorbent to which moisture may be added, and the top wall of this container is provided near one end with an opening 11 adapted to register with the openings 5 of the compartment 1 when said container is disposed wholly therein. Near the other end of the container is an elongated opening 12 registering with the opening 6 of said compartment, said opening 12 being greater than the opening 11 for the purpose of inserting and extracting the absorbent as well as applying the moisture therefor.

As shown in Fig. 5 the opposite side walls of the container are provided with shelves or inturned ribs 15 disposed opposite each other and spaced at such a distance from the top wall of the container as to permit a friction slide 16 to be operatively supported. The slide at its outer end is upturned or otherwise formed to provide a finger hold 17 by means of which the slide may be moved within the container. The slide has an elongated opening 18 adapted, when the slide is moved outwardly with respect to the container, to register with the large opening 12 thereof, and the slide is provided with an upstanding lug 19 at the outer end of the opening 12 and abuttingly engages one end thereof when the slide is moved outwardly of the container, said lug serving as a stop for the slide when the openings 12 and 18 are in registry. The lug 19 does not extend beyond the outer surface of the top wall of the container, whereby it causes no interference with the insertion or extraction of the container from its compartment. When the slide is pushed in the lug closely fits the under side of the top wall of the compartment and thus closes the opening 6 while the inner end of the slide closes the opening 11 of the container.

One end wall of the container is formed of larger dimensions than the cross sectional area of the container to provide a plate 20 serving to limit the depth to which the container may be inserted in its compartment,

and further serving as a cover for the opening 4 through the front wall of the cigar box. This plate 20 has a suitable handle 21 by means of which the container may be moved in or out of said compartment.

From the foregoing and with particular reference to the drawings, it will therefore be seen that the container may be withdrawn from its compartment, moisture added preferably through the larger opening 12 thereof, and then reinserted in its compartment. When the container is in the position shown in Fig. 4, which is its normal position, the openings in the top wall of said container will register with the openings in the top wall of the compartment, and when the slide 16 is pulled outwardly moisture may escape from within the container through the registering openings into the interior space of the cigar box.

On the other hand, when the slide is pushed to its innermost limit, these openings will be closed and no moisture may gain the cigar box. With the slide at intermediate positions more or less moisture may be allowed to reach the tobacco product in the box.

The compartment 1 is preferably disposed at one of the lower corners of the cigar box, but it could just as well be located at any other position. The advantage of its position as shown in Fig. 1 namely, in a lower corner, is that the compartment occupies a location where greater rigidity may be had since the side and bottom walls of the box aid in supporting the compartment against any longitudinal rotation. By locating the compartment in the bottom of the box and making it of a size substantially equal to the transverse area of one of the cigars, all of the cigars in the box can be packed not only in horizontal rows but in vertical rows as well.

That is to say, if the box was adapted to hold twenty-five cigars, twelve would be placed in the bottom row and thirteen in the top row, the end cigar of the top row overlying the compartment 1. It is well known that in boxes of twenty-five cigars, as heretofore packed, there must be one more cigar in one of the horizontal rows than there is in the other horizontal row, but in such instances the thirteen cigars of the one row have been compressed or jammed into the same box length occupied by the twelve cigars of the other row with the result that the cigars are misshaped and, when on exhibition in a show-case in an open box, the cigars of the thirteen row appear to be not so large as the cigars of a row containing only twelve, although in fact there is the same amount of tobacco in each of the twenty-five cigars.

This generally results in a purchaser selecting his cigars from the bottom row thereby disturbing the normal unpacking of each box.

Since cigars are tapered at each end, the openings such as 5 and 6 are placed near the ends of the compartment so that moisture arising through said openings may pass readily to the spaces formed in the cigar box by the reduced tapered ends of the cigars. The moisture then can travel through these connected spaces and thereby humidify the air within the cigar box to the end that each and every cigar will be substantially equally moistened. Should the cigars in a box be too moist the container 10 may be withdrawn from its compartment, thereby permitting air to pass through the opening 4 in the front wall of the cigar box, enter the compartment, and pass through the openings 5 and 6, to reach the cigars, as a result of which the cover 25 of the cigar box may always be left in closed position resulting in a protection to the cigars in the box.

In the modification shown in Fig. 6 the compartment 26 is shown formed by a sheet of metal bent to provide two side walls, the edges of which are secured as by solder 27 to the end and bottom walls 28 and 29 respectively of a metal receptacle for the tobacco product. Similarly in Fig. 7 the compartment 30 is formed by a sheet of metal bent to provide three side walls, the edges being secured by solder as at 31 to the bottom 32 of a metal receptacle. The modified form shown in Fig. 6 is adapted for location in a corner of the package whereas the modification shown in Fig. 7 may be located at any point on a wall of the package intermediate the corners. In every other respect, the modification of Figs. 6 and 7 are similar to the compartment 1. That is to say, the compartments 26 and 30 are each provided in their walls with openings similar to the openings 5 and 6 of compartment 1 and the container 10 as previously described may be as readily used in either compartment 26 or 30 as it was in compartment 1.

It is not intended that this invention be strictly confined to a box of cigars since the humidifying element could as well be applied to a box of cigarettes or other tobacco products. Further it could be secured to any portion of the tobacco package in either a horizontal or vertical position with this exception, that if applied in a vertical position the openings such as 5 and 11 would be omitted from the lower or depending portion of the compartment whereby the moisture from within the container would rise and pass laterally through the openings 12 and 6. Thus this humidifying element may not only be applied to boxes of cigars at the factory but it may be applied to canisters or other suitable receptacles for cigars or other tobacco products, which canisters are manufactured

and sold empty to be later filled by the purchaser with the desired tobacco product. Lastly the compartment 1 need not necessarily be secured to the portion of the package which contains the tobacco product, since it may be secured to the cover or lid.

It is obvious that those skilled in the art may vary the details of construction and arrangement of parts without departing from the spirit of the invention, and therefore it is not desired to be limited to the foregoing except as may be required by the claims.

What is claimed is:—

1. In a tobacco package the combination with a receptacle for the tobacco product of a compartment within the receptacle; a container fitting said compartment and removable therefrom said container having an absorbent therein; ducts in said compartment and said container adapted to register with each other, the duct of said container being the greater and constituting an opening through which the absorbent as well as the moistening liquid therefor may be inserted in the container; and a valve carried by said container to open and close said ducts.

2. In a tobacco package the combination with a receptacle for the tobacco product of a compartment within the receptacle; a container fitting said compartment and removable therefrom said container having an absorbent therein; ducts in said compartment and said container adapted to register with each other, the duct of said container being the greater and constituting an opening through which the absorbent as well as the moistening liquid therefor may be inserted in the container; and a valve mounted in said container and operable from outside the package to open and close said ducts.

3. In a tobacco package the combination with a receptacle for the tobacco product of a compartment within the receptacle, said compartment having an open end registering with an aperture in a wall of the package; a container fitting said compartment and removable therefrom through the aperture in the package wall, said container having an absorbent therein, the container further having an end wall extending laterally to cover the aperture in the package wall; ducts in said compartment and said container adapted to register when the container is in position within the compartment; and a slide within the container and operable from outside the package, said slide constituting a valve to open and close said ducts.

4. In a tobacco package the combination with a receptacle for the tobacco product of a compartment within the receptacle, said compartment having an open end registering with an aperture in a wall of the package; a container fitting said compartment and removable therefrom through the aperture in the package wall, said container having an absorbent therein, the container further having an end wall extending laterally to cover the aperture in the package wall; ducts in said compartment and said container adapted to register when the container is in position within the compartment; and a slide within the container and operable from outside the package, said slide provided with a stop to limit its movement in one direction, said slide constituting a valve to open and close said ducts.

5. In a tobacco package the combination with a receptacle for the tobacco product of a compartment within the receptacle, said compartment having an open end registering with an aperture in a wall of the package; a container fitting said compartment and removable therefrom through the aperture in the package wall, said container having an absorbent therein, the container further having an end wall extending laterally to cover the aperture in the package wall; ducts in said compartment and said container adapted to register when the container is in position within the compartment; and a slide within the container and operable from outside the package, said slide provided with a stop engageable with a container duct to limit the movement of said slide in one direction, said slide constituting a valve to open and close said ducts.

6. In a tobacco package the combination with a receptacle for the tobacco product of a compartment within the receptacle; a container fitting said compartment and removable therefrom said container having an absorbent therein; ducts in said compartment and said container adapted to register; a slide within the container and operable from outside the package, said slide constituting a valve to open and close said ducts, and being provided with a stop to limit the movement of said slide in one direction, said stop comprising a portion of the slide bent out of the plane thereof and engageable with the wall of the container duct.

In testimony whereof I affix my signature.

FRANK P. LEVY.