March 2, 1937. E. B. CHRISTOPHER 2,072,796

PACKAGE OPENER AND CONTENTS EXTRACTOR

Filed Oct. 5, 1934

Fig. 1.

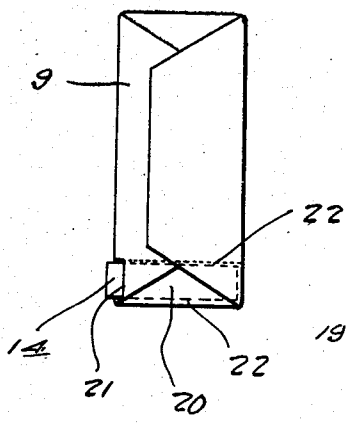


Fig. 3.

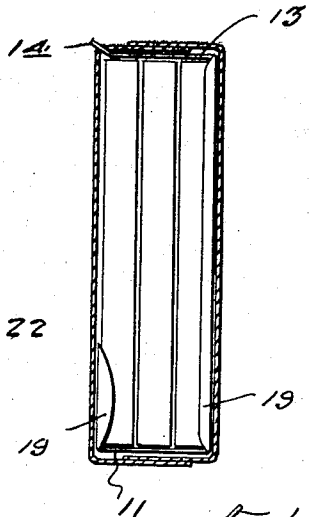


Fig. 4.

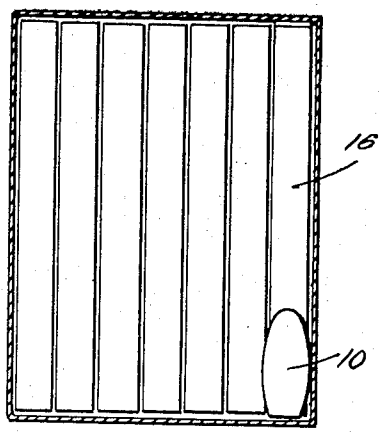


Fig. 5.

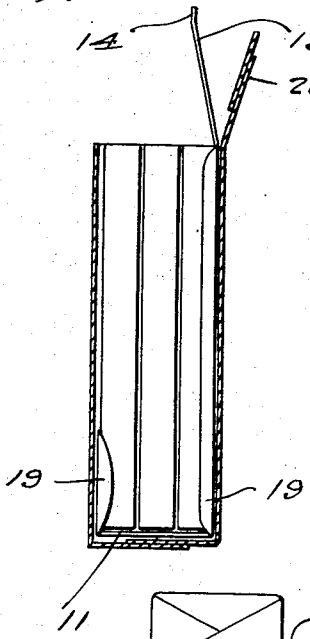


Fig. 6.

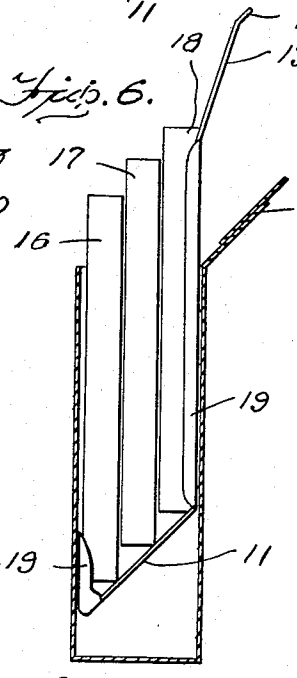


Fig. 7.

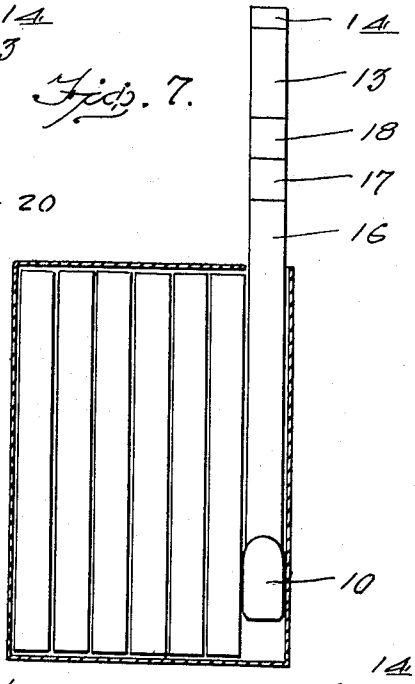


Fig. 8.

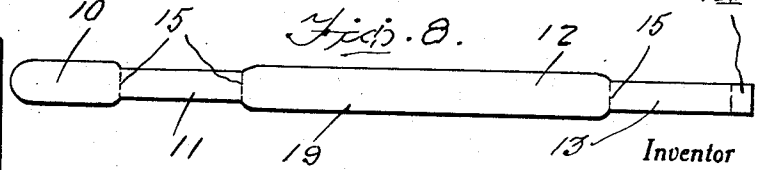
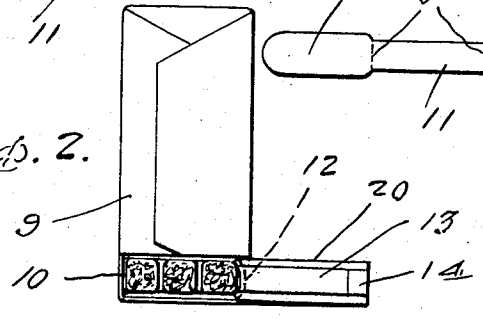


Fig. 2.



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PACKAGE OPENER AND CONTENTS EXTRACTOR

Edwin B. Christopher, Wichita, Kans.

Application October 5, 1934, Serial No. 747,093

2 Claims. (Cl. 206—56)

My invention relates to an improvement in package and containers having any form of contents packed in uniform regularity, and particularly to cigarette packages which have means for opening the same and for projecting the contents therefrom. The description hereafter given, for convenience, refers to its use in connection with the present conventional type of cigarette packages and the cigarettes contained therein.

Every smoker has encountered the difficulty of tearing the cover from a package of cigarettes with the fingers and the more difficult task of extracting the first two or three cigarettes from the package by means of the finger tips.

Accordingly, my invention has two principal objects; one of which is to provide means to facilitate the opening of a package of cigarettes; and the other of which is to provide means whereby the first cigarettes of a package are partially projected at varying degrees from the package without the fingers of the person who is opening the same, touching the cigarettes, thereby avoiding the usual pounding of the package, the digging for and the tearing of the tips of the cigarettes.

A further object of my invention is to combine the opening and projecting means into one solitary structure and operation; whereby the opening of the package, the partial projecting of the cigarettes therefrom and the release and disposition of the projector can be performed by one continuous act.

Other objects of my invention will be apparent from the following description of the present preferred form thereof, taken in connection with the accompanying drawing, wherein:

Figure 1 is a top plan view of the cigarette package, showing the invention positioned therein;

Figure 2 is a top plan view of the cigarette package, showing a corner of the cover of the package removed.

Figure 3 is an end sectional view of the cigarette package showing the invention in a normal position;

Figure 4 is a view at right angles to Figure 3;

Figure 5 is a view similar to Figure 3, and showing the first step of operation.

Figure 6 is a sectional view showing the invention in operative position.

Figure 7 is a view at right angles to Figure 6.

Figure 8 is a view of the blank from which the invention is formed.

In the drawing, wherein for the purpose of illustration is shown a preferred embodiment of my invention, 9 designates conventional package containing cigarettes, which are arranged in rows in said package, and which are completely and tightly enclosed in the same.

To facilitate the opening of the package and the projecting of the cigarettes therefrom, I provide a strip of flexible material such as cardboard, heavy paper, tinfoil or the like, which consists of sections 10, 11, 12 and 13, crimped or otherwise adapted to be bent at their joining points 15. This strip is so inserted in one end of the package that the section 11 extends along the bottom of the package and immediately below the tips of the end row of cigarettes 16, 17 and 18 to form a lifter for the same. The sections 10 and 12 are provided with foldable flanges 19, and are bent at right angles to the lifter 11 to embrace the sides of the cigarettes 16 and 18 respectively. The section 12 extends upward from the lifter 11 the full depth of the package 9 to form a follower, from which extends the section 13 of the flexible strip. This section 13 is bent at right angles to the follower 12, and extends across the top of the cigarettes 16, 17 and 18 and immediately beneath the corner 20 of the top of the package, and has its free end 14 disposed through an opening 21 cut in the corner 20 of said package to form a fingerpiece. This section 13 and its free end 14, so arranged in the package, constitute the opening means for said package, the corner 20 of which having lines of creasings or perforations 22 to facilitate the operation of said opening means.

To secure the projector in the package during the projection of the cigarettes, the end section 10 of the flexible strip is bent at right angles to the lifter 11 to extend detachably along the side of the package for a short distance from the bottom thereof, thereby forming a drag for the projector by embracing the lower end of cigarette 16. It is evident from this construction that when the projector is pulled upon, the drag 10 is free to slide up or down between cigarette 16 and the wall of the package; that when, with the cigarettes all in position as packed, a pull is made on section 12, section 10 is a sufficient drag to cause section 11 to lift the end row of cigarettes at varying degrees from the bottom of the package and project them through the opening at the top of the package. As soon as cigarette 16 has thus been lifted a short distance, section 10, because of its flexibility, will bend in from the bottom in response to the pull on the projector and will continue to lift cigarette 16 until said

cigarette is raised high enough to release said section 10 as a drag. After cigarette 16 thus releases section 10, said section, following section 11, will slip from underneath the end row of cigarettes and both sections 11 and 10 will follow section 12 up along the side of cigarette 18 and out of the package, entirely free from the cigarettes and without any of the cigarettes being entirely removed from the package. The projector, being section 10, 11, 12 and 13, can then be cast aside, leaving the end cigarettes partially projected in varying degrees as is shown in Figures 6 and 7 of the accompanying drawing. If only one cigarette is wanted it can then be removed and the rest can be pushed back into place leaving the package with a neat and not excessive opening and with the cigarettes loosened for further use. In other words, the opening of the package, the projecting of the cigarettes, and the disposition of the projector can be made in one continuous act. No one of cigarettes 16, 17 and 18 need be removed from the package before the projector can be completely removed and freed from the cigarettes and package.

However, it is apparent that this projector need not be removed from the package when only one cigarette is wanted, but may be caused to lift the aforesaid cigarettes only slightly so that they are merely accessible, and after one of them is removed, the other two end cigarettes together with this projector can be pushed back into place to remain subject to further use and operation in connection with the said remaining two end cigarettes.

Furthermore, the distance and extent to which the aforesaid cigarettes can be lifted and projected from the package can be varied by the increasing or decreasing of the length of section 10 in the construction of said projector and its placement in the package; thus cigarettes 16, 17 and 18 can be caused, by decreasing the length of section 10 to be projected only a short distance in the operation of this device or can, by increasing the length of section 10, cause all three cigarettes, 16, 17 and 18 or the two cigarettes 17 and 18, or the one cigarette 18, to be completely projected from the package in the operation of this device.

After the package 9 is wrapped in cellophane, it is apparent that the finger piece 14 will be held in place against accidental displacement or pulling, and the opening 21 will be closed to dust and other foreign substances. In order that the finger piece may be readily visible, it may be colored to contrast it with the outer appearance of the package.

The cellophane in which the package is wrapped may be creased or impressed, without breaking through that cellophane and without effecting the airtightness thereof, in such a manner as to cause it to break and tear along the same lines as perforations 22 when the finger or thumb nail of the operator is pushed through the cellophane and underneath of end 14. Thus the package, after the opening or the opening and ejecting process of this invention, can retain its cellophane covering except for the small opening at the end along 22.

In use, the strip is so placed in the package that the bottom and sides thereof will rest against the bottom and sides respectively of the package. After the package is filled with cigarettes, the top member of the strip is extended across the top of the cigarettes 16, 17 and 18, and the free end disposed through the top of the package, which top is then sealed. The package is then wrapped in cellophane.

When the package is to be opened and cigarettes projected, the finger piece 13 is pulled across the top of the package, by which action the cover is torn along the line of perforation 22. Then by continuing the pull on the finger piece 13 in an upward direction, the lifter 11 will cause the cigarettes 16, 17 and 18 to be projected in varying degrees from the package for the ready convenience and accessibility of the smoker or opener. The projector may be removed from the package while the cigarettes are in the projected position, or it may be left in the package, according to the wishes of the user.

It is to be understood that the form of my invention herein shown and described is to be taken as a preferred embodiment of the same, and that various changes in the shape, size and arrangement of parts may be made, without departing from the spirit and functions of my invention, and the scope of the accompanying claims.

Having thus described my invention, what I claim as new is:

1. In combination, a cigarette package and a flexible strip for projecting cigarettes from said package, said strip comprising a lift extending along the bottom of the package and immediately below the ends of a row of cigarettes, a follower pivoted to one end of the lift and extending vertically from the same the full depth of the package, operating means pivotally secured to the follower, and a drag pivotally secured to the other end of the lift and extending vertically therefrom to lie detachably between the inner side wall of the package and one of the cigarettes of the row of the same, whereby when a pull is exerted on the operating means, the drag slides downwardly between the wall of the package and the cigarette to permit projection of the roll of cigarettes and the removal of the strip from the package without the withdrawal of the projected cigarettes from said package.

2. A device for projecting cigarettes from a package, comprising a flexible strip having top, bottom and side members detachably enclosed by said package, said bottom member being interposed betwen the bottom wall of the package and the ends of a row of cigarettes, one side member being pivotally secured to one end of the bottom member and extending vertically the full depth of the package between one cigarette of the row of the same and one side wall of the package, the other side member being pivotally secured to the other end of the bottom member and extending vertically therefrom to lie detachably a short distance between the other side wall of the package and one of the cigarettes of the row of the same, each side member having flanges to embrace its respective adjacent cigarette, the top member being pivotally attached to the first-mentioned side member and extending across the interior of the top of the package, the free end of said top member projecting from the package to provide a finger piece for manipulating the device, whereby a continuous pull exerted on the finger piece causes in one continuous operation the opening of the package, the partial projection of the row of cigarettes therefrom and the removal of the flexible strip from the package without withdrawing the projected cigarettes from said package.

EDWIN B. CHRISTOPHER.