March 10, 1959 T. WILL 2,876,930

GUIDED PULL TAB EJECTOR

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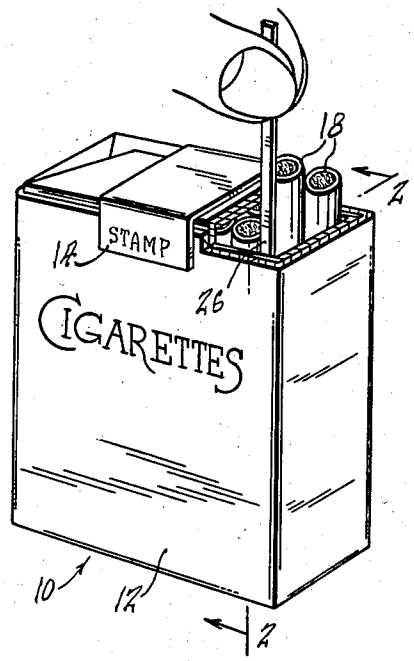


FIG. 1.

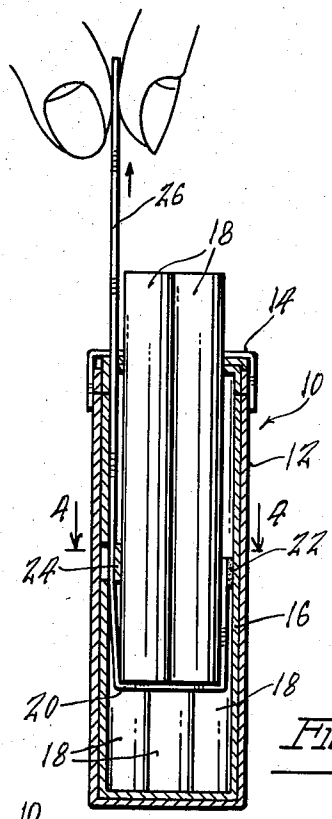


FIG. 3.

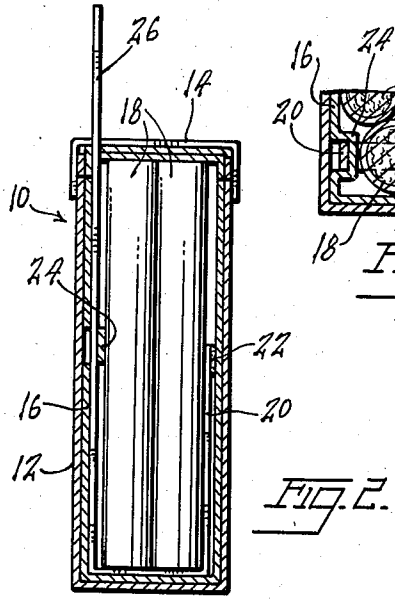


FIG. 2.

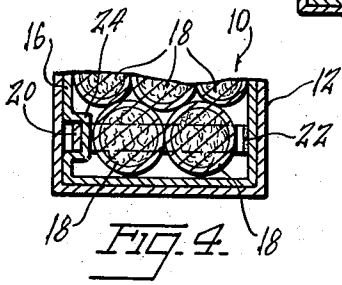


FIG. 4.

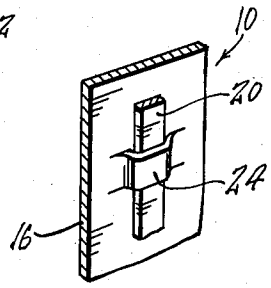


FIG. 5.

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GUIDED PULL TAB EJECTOR

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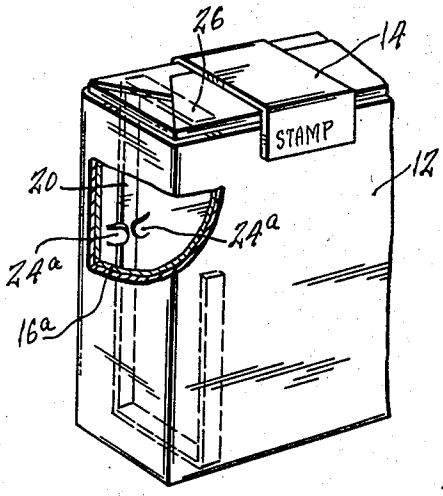


Fig. 6.

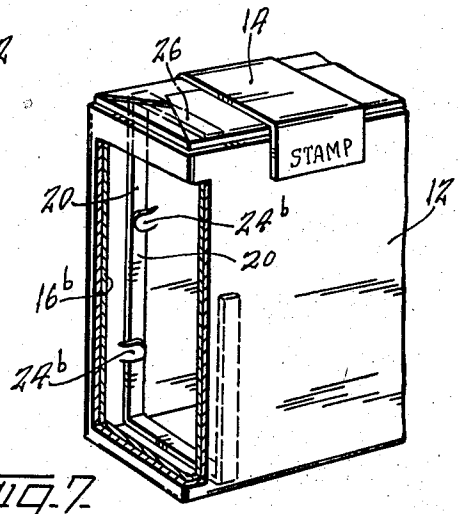


Fig. 7.

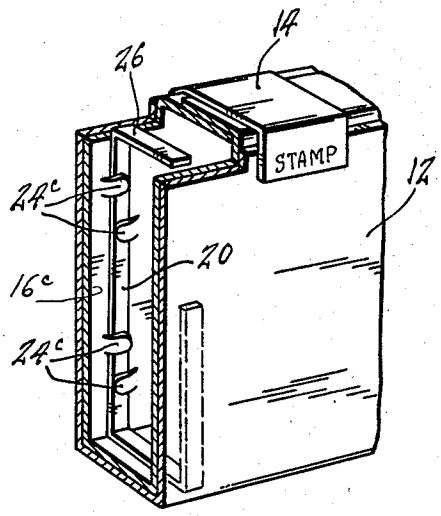


Fig. 8.

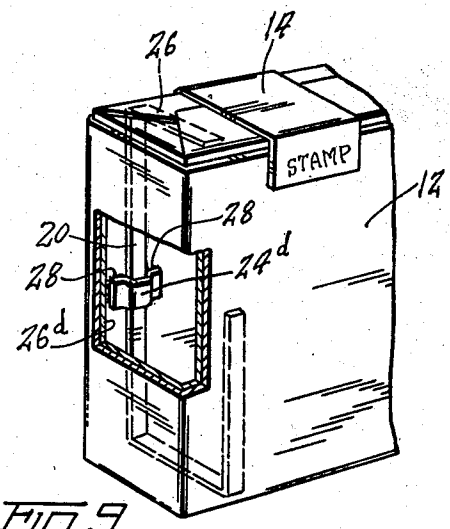


Fig. 9.

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GUIDED PULL TAB EJECTOR

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Application August 2, 1954, Serial No. 447,167

1 Claim. (Cl. 221—260)

This invention relates to a pull tab incorporated in a package of cigarettes in a manner to facilitate the partial ejection of the two endmost cigarettes thereof.

While devices for the purpose of partially ejecting cigarettes are not new per se, heretofore such devices have not, so far as is known, found favor commercially, due in some instances, in all probability, to their relative complexity and the difficulty of mounting them in a cigarette wrapper, and in other instances to unreliability of operation.

The main object of the present invention, accordingly, is to provide a generally improved pull tab that will be mountable in a cigarette package wrapper with relatively little increase in manufacturing costs, and that will be sure in operation.

Another object is to insure that the pull tab will remain in place, by the provision of a novelly located guide means therefor.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

On the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a perspective view, partly broken away, of a cigarette package equipped with a pull tab formed in accordance with the invention, the tab being shown in the process of being pulled upwardly to partially eject the cigarettes.

Fig. 2 is a sectional view on line 2—2 of Fig. 1 in which the cigarettes have not been ejected.

Fig. 3 is a view similar to Fig. 2 showing the cigarettes ejected.

Fig. 4 is an enlarged sectional view on line 4—4 of Fig. 3.

Fig. 5 is an enlarged fragmentary perspective view of the package liner showing the guide means for the pull tab.

Fig. 6 is a fragmentary perspective view showing a modified form.

Fig. 7 is a fragmentary perspective view of a second modification.

Fig. 8 is a fragmentary perspective view of a third modification.

Fig. 9 is a fragmentary perspective view of a fourth modification.

At 10 there is shown a cigarette package having a conventional outer wrapper 12, and a stamp 14. A liner is shown at 16, and packed in the lined wrapper are cigarettes 18.

A pull tab 20, formed as an elongated ribbon element of paper or the like, has one end adhesively secured as at 22 to the inner surface of the back wall of the liner, medially between the upper and lower ends of the package, said tab being disposed adjacent one of the sides of the package so as to underlie the endmost cigarettes of the package. The tab is formed to a U-shape so as to have

one leg extending in contact with the back wall of the liner, a bight portion extending across the bottom of the package diametrically of and in contact with the two endmost cigarettes 18, and a second leg, approximately two and one-half times as long as the first leg in the illustrated form, extending in contact with the front wall of the package. The second leg is longer than the package, so as to provide an extension portion 26 foldable over the upper ends of the cigarettes 18. The second leg is slidable, through a guide 24 provided on the liner front wall, normally intermediate the ends of the leg. The guide is provided by forming a pair of closely spaced, horizontal slits, thus forming a loop through which the pull tab extends.

When the package is opened, the folded free end portion 26 is first turned upwardly or outwardly in the manner shown in Fig. 2. Then it is grasped between the thumb and index finger (Figs. 1 and 3) and pulled upwardly or outwardly. This causes the bight portion to be elevated, thus lifting the cigarettes 18 as shown in Fig. 3. The partially ejected cigarettes can now be fully removed, and the remaining cigarettes can be removed easily in turn due to the increasing looseness of the cigarettes remaining in the wrapper.

In the modification shown in Fig. 6, the liner 16^a instead of having spaced slits defining a single loop, is cut to form opposed confronting ears 24^a extending over the opposite sides of the pull tab and aligned transversely of the tab to form the guide therefor. In this arrangement, the assembly of the tab is simplified, since the tab need not be threaded through the guide. Instead, the ears can be lifted sufficiently to permit insertion of the tab.

In the Fig. 7 form, the liner 16^b has confronting, struck-out ears 24^b which are engaged over the opposite side edges of the pull tab 20 in the same manner as the ears of Fig. 6. In this form, the ears are offset longitudinally of the pull tab rather than aligned transversely thereof.

In the form of Fig. 8, the liner 16^c includes two pairs of ears 24^c. One pair is located adjacent the lower end of the package, the ears thereof being offset longitudinally of the pull tab 20 to a slight extent. The other pair is disposed close to the upper end of the package, and the ears thereof are similarly relatively offset.

In the form of Fig. 9, instead of striking out ears or a guide loop from the material of the liner, a guide loop or eyelet 24^d is secured at its ends by adhesive 28 to the inner surface of the liner, the pull tab 23 being then extended therethrough.

In all forms of the invention, the pull tab is arranged in the same manner, that is, as a U-shaped member having legs of different lengths and a folded free end portion. The pull tab may be made of any suitable material such as paper, plastic strip, tinfoil, etc., and all any desired width.

In some cigarette packages, there is a means for flipping to an open position a portion of the upper end of the cigarette package that is disposed over the endmost cigarettes. In such packages, the portion 26 of the tab 20 might be attached to the part that is turned upwardly, so as to conveniently locate said portion for subsequent grasping by the user.

It is to be understood that this device may be used in connection with any size and shape package for ejecting cigarettes or any other packed ejectable articles.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein discolsed and that the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claim.

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

The combination, with a cigarette package including an outer wrapper and a liner, of a pull tap secured at one end to said liner and extending under the endmost cigarettes of the package, said tab being elevatable to partially eject said cigarettes, said tab being formed at its other end with an extension portion adapted to be grasped between the fingers of a user, and a guide means on the liner through which said pull tab is extended, said tab being formed to a U-shape with the bight portion thereof underlying said cigarettes, one leg of the tab being shorter than the other and being the portion of the tab attached to the liner, the longer leg extending through the guide means, said guide means comprising a plurality of pairs of ears struck out of the material of the liner and opening laterally, said pairs being spaced longitudinally of the cigarette package, the ears of each pair being engaged over opposite sides of the pull tab, the ears of each pair being offset longitudinally of the pull tab.

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