Sept. 28, 1943. F. A. WODAL ET AL 2,330,772

CIGARETTE PACKAGE

Filed June 12, 1941 3 Sheets-Sheet 1

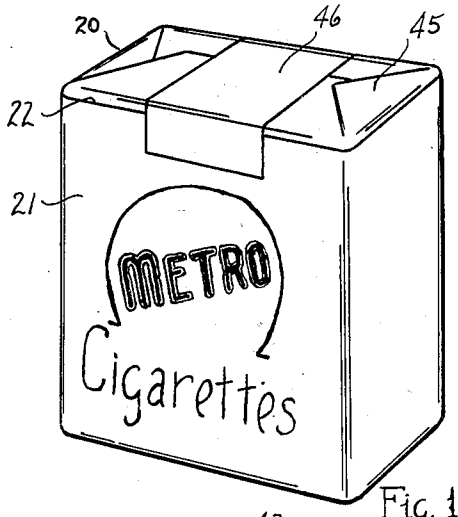


Fig. 1

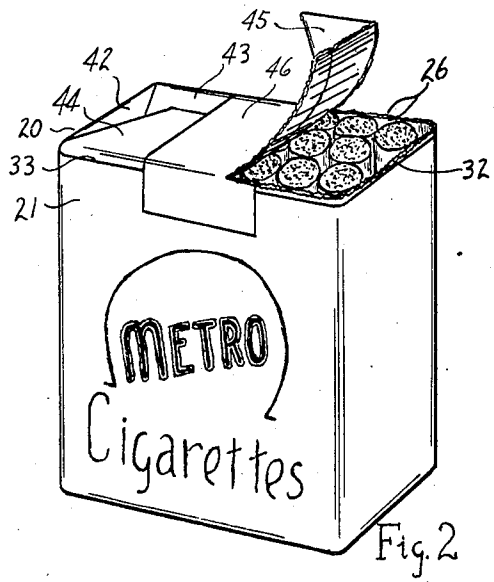


Fig. 2

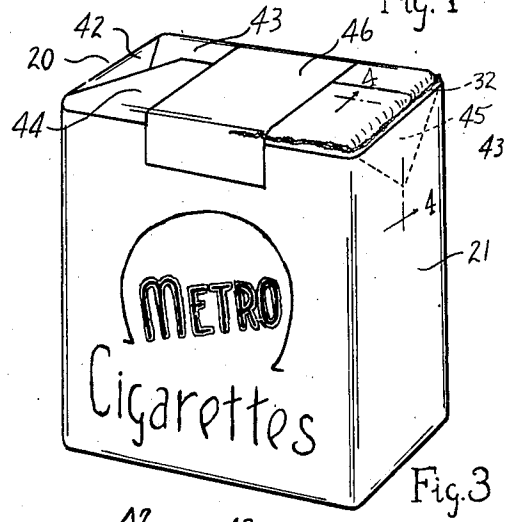


Fig. 3

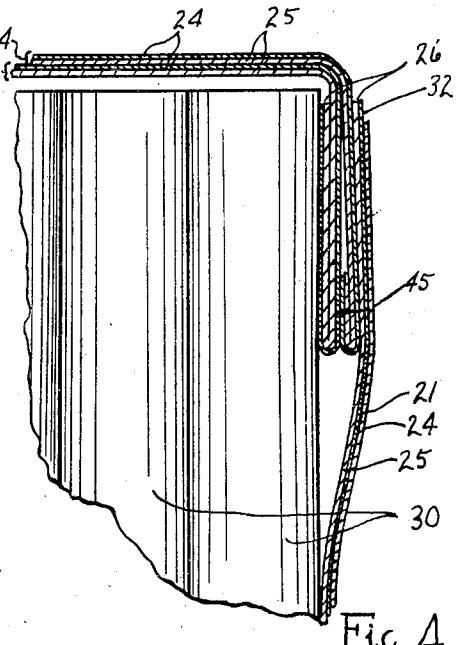


Fig. 4

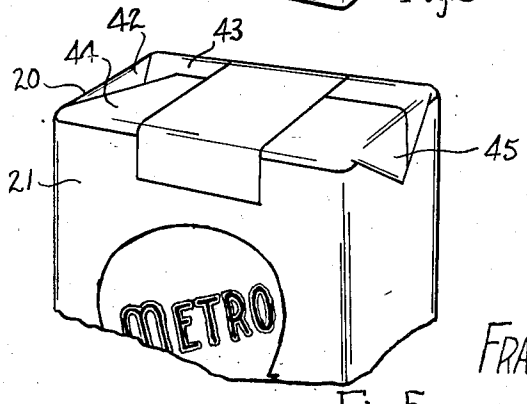


Fig. 5

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Filed June 12, 1941 3 Sheets-Sheet 2

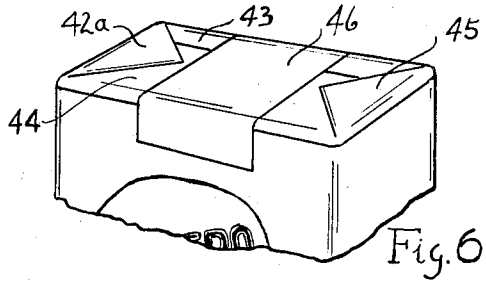


Fig. 6

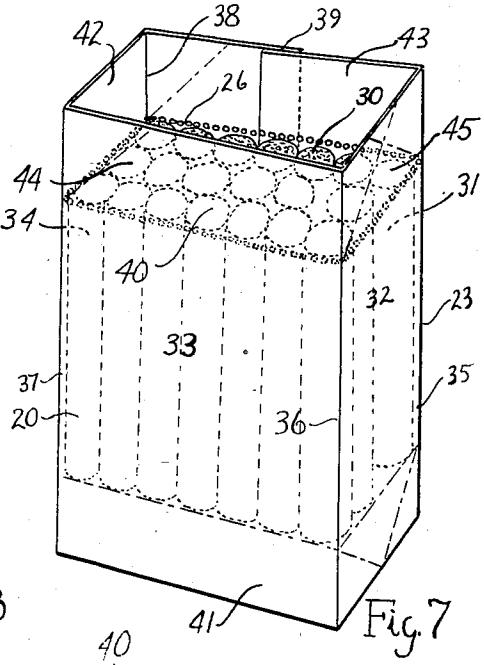


Fig. 7

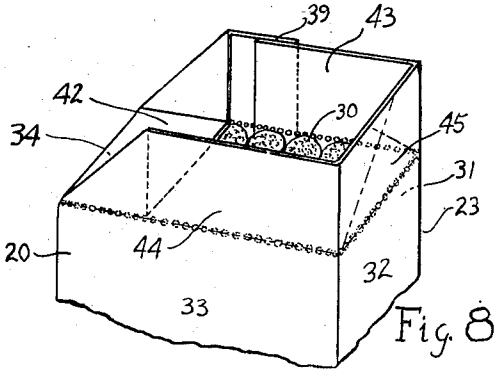


Fig. 8

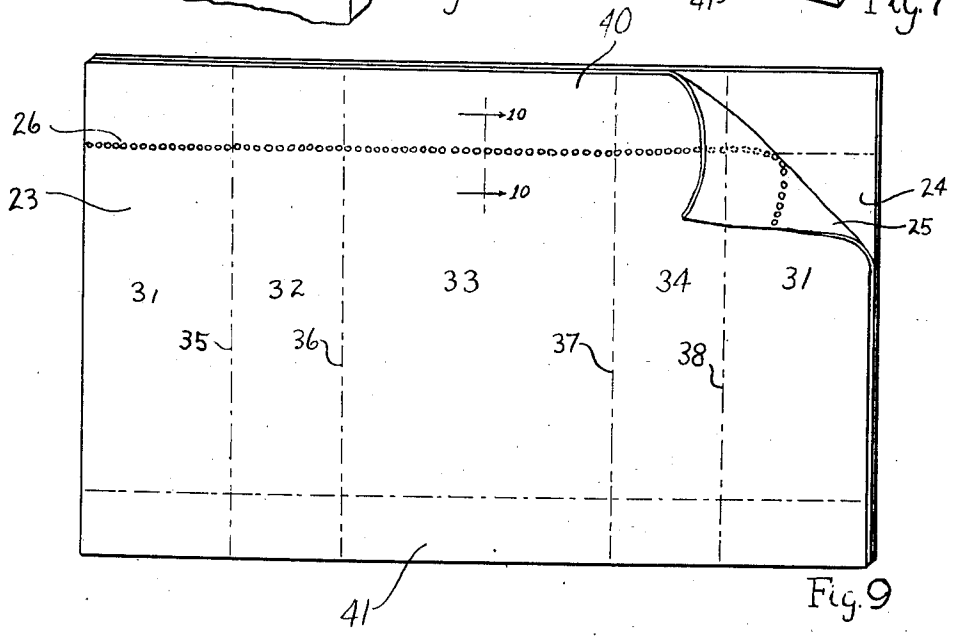


Fig. 9

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Filed June 12, 1941 3 Sheets-Sheet 3

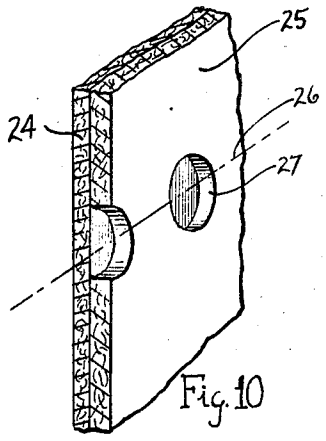


Fig. 10

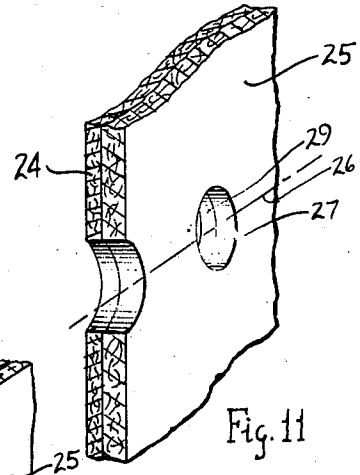


Fig. 11

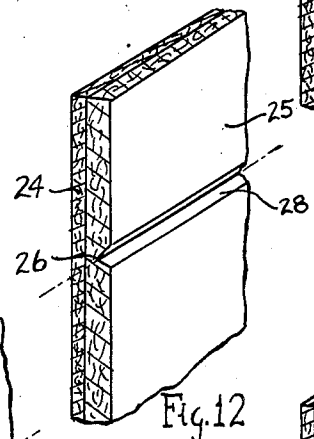


Fig. 12

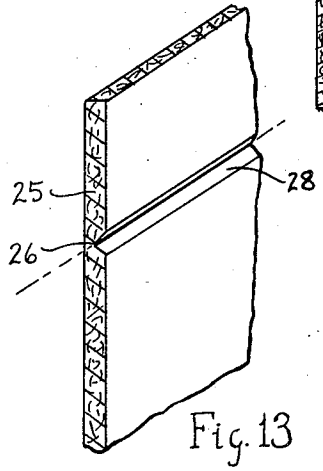


Fig. 13

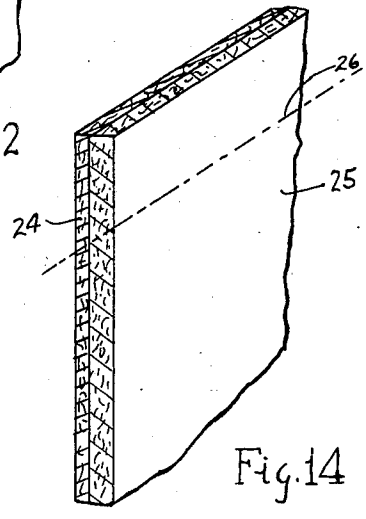


Fig. 14

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CIGARETTE PACKAGE

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Application June 12, 1941, Serial No. 397,754

7 Claims. (Cl. 229—51)

The present invention relates to cigarette packages in general, and it relates more particularly to a new and improved cigarette package made of sheet material constructed and arranged to be readily torn open along some predetermined regular zone to provide quick and easy access to the enclosed cigarettes.

One of the objects of the present invention is to provide a cigarette package of the aforesaid character which may be conveniently and easily torn open by the consumer along its predetermined tear-zone without requiring the exercise of any special care or effort.

Another object of the present invention is to provide a cigarette package having the aforesaid advantages and which yet fully and adequately seals in the enclosed cigarettes and protects their tobacco content against dryness, loss of aroma or the like, and keeps said cigarettes fresh and flavorful.

A further object of the present invention is to provide a handy cigarette package which, after once having been opened as aforesaid, may thereafter repeatedly be readily securely closed, and easily opened, as frequently as necessary; the package in its closed states affording full and adequate protection to the cigarettes, and in its open states permitting quick and easy extraction of cigarettes therefrom, and at all times tending to retain its original shape.

Another object of the present invention is to provide a cigarette package having the foregoing advantageous features and which yet requires no more material or elements for its make-up than currently go into the manufacture of unimproved cigarette packages now on the market, which may be made for substantially the same cost as the unimproved packages, and which is of simple construction.

With the above and other objects in view, which will appear more fully from the following detailed description, accompanying drawings and appended claims, the present invention in one of its phases may comprise a generally rectangular cigarette package having a jacket provided with four vertical walls and horizontally-extending top and bottom portions which generally completely encase the enclosed cigarettes, at least one end of said top portion having an integral readily manually-graspable pull-tab formed in the process of folding the jacket material to form the top portion, the junction of said jacket, side walls and top portion at least in the region of said pull-tab bearing a well-defined pre-weakened or readily-frangible tear zone designed readily to rupture along a definite predetermined zone substantially coincident with the adjacent upper edge portion of the package as the tab is pulled outwardly, thereby to provide means for quick and easy access to the enclosed cigarettes through a regular substantially even-edged top opening.

For the purpose of illustrating the invention, there are shown in the accompanying drawings forms thereof which are at present preferred, since the same have been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized and that the invention is not limited to the precise arrangements and organizations of the instrumentalities as herein shown and described.

Referring to the drawings wherein like reference characters indicate like parts:

Figure 1 represents a perspective view of a closed one-tab cigarette package, constituting an illustrative embodiment of the present invention.

Figure 2 represents a view showing the package of Figure 1 after it has been partially opened at the top by pulling upwardly on its pull-tab.

Figure 3 represents a view showing how the partially opened package of Figure 2 may be effectively and securely reclosed by having its pull-tab folded downward and tucked in against the adjacent upper side wall portion of the package.

Figure 4 represents an enlarged fragmentary cross-sectional view of the tucked-in pull-tab portion of the package shown in Figure 3, taken generally on line 4—4 thereof, looking in the direction of the arrows.

Figure 5 represents a fragmentary perspective view of the upper portion of a slightly modified closed one-tab cigarette package, having the pull-tab portion thereof initially folded to extend vertically downward along the outside surface of the upper side-wall portion of the package, rather than horizontally along the top wall of the package as in the Figure 1 embodiment.

Figure 6 represents a fragmentary perspective view of the upper portion of a closed two-tab cigarette package constituting another illustrative embodiment of the present invention.

Figure 7 represents a perspective view showing how the blank from which the package is made may be folded around a compact group of cigarettes to provide the four vertical walls of the package.

Figure 8 represents a fragmentary perspective view showing how the projecting upper margin

of the folded blank of Figure 7 may be folded down over the cigarette ends at the tab-less side of the one-tab top illustrated in Figures 1 and 5.

Figure 9 shows a two-ply blank of sheet material having a corner portion of one of its plies rolled back better to reveal the weakening line of perforations provided along that zone which later marks the junction of the package side walls with the top.

Figure 10 represents a much enlarged fragmentary sectional perspective view through the weakened zone of the two-ply blank illustrated in Figure 9, such as would be seen for example on line 10—10 of Figure 9, looking in the direction of the arrows.

Figure 11 represents a similar view showing how both the plies may be perforated to provide the weakened tear-zone.

Figure 12 represents a similar view taken through a somewhat modified construction wherein one of the plies is scored along the desired line of tear.

Figure 13 represents a similar view taken through the tear-zone of a scored one-ply blank of sheet material.

Figure 14 shows a similar sectional view taken through the tear zone of a two-ply blank of sheet material, each ply being inherently of such weak nature as to tear readily along the fold zone extending around the basal portion of the pull-tab.

The particular cigarette package constituting the embodiment illustrated in Figures 1 and 2 includes an inner jacket, 20, completely encasing the contained cigarettes, and a protective outer jacket 21 which is open at its upper end and provides access to the top portion of the inner jacket 20. The outer jacket 21 may be constructed from a rectangular blank of relatively strong paper snugly wrapped around the front, side and rear walls of the inner jacket 20, with its end portions overlapped and adhesively secured together along a vertically extending seam line at the rear of the package. The height of the blank from which the outer jacket 21 is made preferably exceeds the overall height of the completed package by an amount sufficient to provide, when the upper edge 22 of said jacket is in approximate registration with the top level of the finished package, a downwardly-depending marginal portion of sufficient length to form a complete bottom wall for said jacket when turned in under the lower ends of the enclosed cigarettes.

The opposed depending lower marginal portions of the front and rear walls of jacket 21 may be turned in last and adhesively secured together in overlapped relation thereby to hold all inturned lower marginal portions, including those extending from the side walls of jacket 21, in their bottom-forming positions.

The inner casing 20 may be formed from a rectangular blank 23 which, as illustrated in Figure 9, may consist of two juxtaposed plies of material 24 and 25; ply 24 constituting the outer exposed ply and being made of relatively thin sheet material such as tinfoil, thin paper or the like, and ply 25 constituting a reinforcing inner or backing ply made of relatively heavier weight paper. Ply 25 is preferably pre-weakened along its upper fold line 26, which will ultimately define the upper edge of the package, in order to provide a regular tear-zone which will give way when pulled by means later to be described, to provide a regular even-edged opening at the top of the package through which the enclosed cigarettes may be extracted.

This pre-weakening of ply 25 along fold line 26 may be accomplished in any suitable manner as for example by perforating the paper along said line as illustrated in enlarged detail at 27 in Figures 10 and 11, or by scoring the paper along score-line 28 as illustrated in Figures 12 and 13. If desired, the outer tinfoil ply 24 may also be perforated along said fold line as shown at 29 in Figure 11 to facilitate the tearing operation, although in view of the relative thinness of ply 24 and the ease with which it may be torn even when left intact, this latter feature may be dispensed with, as is the case in the embodiment illustrated in Figures 9 and 10.

If desired, the blank from which the inner jacket 20 may be formed may consist of only a single sheet of material such as paper or parchment, which may either be perforated as at 27, or scored as shown at 28 in Figure 13, or otherwise suitably pre-weakened along its said fold line to facilitate subsequent tearing therealong. It will be noted that with the arrangements shown in Figures 10, 12 and 13, the enclosed cigarettes will be effectively sealed-in, there being no communication with the atmosphere along the pre-weakened fold line as in the embodiment shown in Figure 11.

In some instances where the backing ply 25 is made of some thin inherently easily-tearable short-grained paper, the aforesaid pre-weakening of fold line 26 may be dispensed with, as illustrated in Figure 14, and the paper merely folded along said line as subsequently described. Upon initiation of the tearing operation, this paper will then tear along fold-line 26 by reason of the existence of the crease or fold therealong, and because of the fact that the angularly related top and side wall portions of the cigarette package meet at said line, resulting in a progressive concentration of stresses therealong during the tearing operation.

As shown more particularly in Figures 7 to 9 inclusive, the blank 23 extends completely around a rectangularly-arranged group of cigarettes 30 forming rear, side, front and side panels 31 to 34 inclusive, respectively bounded by the vertical fold lines 35 to 38 inclusive located at the four vertical corners of the jacket. The vertical marginal portions of the blank 23 may be overlapped at the rear panel 31 to form a vertical seam 39, where they may be adhesively secured together, or left unattached, as desired. If left unattached the outer jacket 21 will restrain the inner jacket 20 from unfolding.

The vertical height and arrangement of the jacket blank 23 relative to the cigarettes 30 are preferably such as to provide projecting upper and lower marginal portions 40 and 41 respectively, each integral with the main panels 31 to 34 inclusive, and adopted to be folded over the upper and lower cigarette ends thereby completely to enclose the cigarettes. The tear-zone 26 is preferably located in the plane which bounds the upper ends of the cigarettes 30, with sufficient material extending thereabove to insure that the relatively long sections of the upper margin 40 which are co-extensive with the front and rear panels will overlap when folded down over the upper cigarette ends. Similarly the lower margin 41 is also preferably wide enough to overlap when turned in under the lower ends of the cigarettes.

In turning in the lower marginal portion 41,

the relatively long portions thereof which bound the lower edges of the front and rear panels 33 and 31 may be turned in first, and then the relatively short portions bounding the side panels 32 and 34 may be turned in, or vice-versa. In either case, the bottom portion of the subsequently-applied snugly-fitting outer jacket 21 will restrain these inturned lower marginal portions from unfolding.

The upper marginal portion 40 may be folded-down over the upper cigarette ends in a variety of ways to provide the readily accessible integral pull-tab means which characterize the present invention. Thus, for example, the single-tab cigarette package illustrated in Figure 1 may be formed by first folding down the relatively short portion 42 of the upper marginal portion 40 which bounds the upper edge of the left side panel 34, as illustrated in Figure 8, and then folding down the juxtaposed relatively longer marginal portion 43 and 44, which respectively bound the upper edges of the rear panel 31 and the front panel 33, in the sequence named, leaving the triangular tab-like marginal portion 45 bounding the upper edge of the remaining right side panel 32. This tab 45, whose basal portion is traversed by the tear-line 26, may then be folded down either in a counter-clockwise direction into the top-paralleling horizontal position illustrated in Figure 1, or in a clockwise direction into the side-paralleling vertical position shown in Figure 5.

In either case, however, the cigarette package may be quickly and easily opened to provide access to the enclosed cigarettes by merely grasping the triangular pull-tab 45 between one's thumb and index finger and then pulling said tab away from the body of the package, preferably in an upward direction. The jacket 20 will part along its relatively weak tear-zone 26 which bounds the top portion of the jacket, enabling the consumer to rip up the top portion of said jacket and expose the enclosed cigarettes, as illustrated in Figure 2. In this connection it will be noted that the pull-tab 45, although weakly connected with the upper edge of the side panel 32, (by reason of the existence of tear-zone 26) is nevertheless securely connected with the adjoining top-forming marginal portions 43 and 44 with which it bears full integral relationship, so that when pulled outwardly, pull-tab 45 will readily part from the side panel 32, but firmly carry along with it the top portion of the jacket.

The tab-lifted top portion can be entirely torn away to expose all the cigarettes at once, or if desired only a fractional portion of the top may be pulled up (preferably tearing at least a portion of the revenue stamp 46) and the cigarettes extracted through the relatively smaller opening left thereby. The remaining cigarettes, if any, may conveniently be protected by tucking the triangular pull-tab 45 down either inside the upper end portion of side-wall 32 of the inner jacket 20 as illustrated in Figures 3 and 4, or by slipping it in between this side wall 32 and the juxtaposed portion of the outer jacket 21. In either case, however, the package will be relatively securely closed and will not only afford ample protection to the remaining cigarettes, keeping them fresh and preventing any loss of moisture content, but will also tend to retain its rectangular shape and resist collapsing or flattening out at its opened portion.

If desired, the pre-weakened tear-zone 26 may extend from pull-tab 45 only partway around the top of the package, and may terminate for example somewhere underneath the revenue stamp 46, so that only half of the package top can be pulled open for removal of cigarettes.

In the embodiment, illustrated in Figure 6, the upper marginal portions 43 and 44 are folded down before the end portion 42 of Figure 8, thereby providing a second triangular pull-tab portion 42a on the left side of the package. This affords a two-tab construction by means of which the cigarette package may be opened from either side.

The present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and it is therefore desired that the present embodiments be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

Having thus described the invention, what is hereby claimed as new and desired to be secured by Letters Patent is:

1. A cigarette package of the character described including a rectangular blank of two-ply material, one of said plies bearing a straight continuous line of perforations adjacent and paralleling one of the longer edges of said blank, said line of perforations extending uninterruptedly across the full width of said blank from one edge thereof to the other, said blank being folded around a group of cigarettes to form front, rear and side panels, with the aforesaid line of perforations substantially coinciding with the upper ends of cigarettes so that the material intermediate said line of perforations and the adjacent parallel edge of said blank provides an upper margin bordering said panels and projecting beyond the upper ends of said cigarettes, said margin being devoid of any traversing lines of perforations and being folded along the aforesaid line of perforations for the most part down over the upper ends of said cigarettes, the marginal portion bordering a side panel being folded down subsequent to the downfolding of the marginal portions bordering the front and rear panels to provide an integral readily manually-graspable pull-tab, whereby by outward pull exerted on said pull-tab as much or as little of the aforesaid margin as desired may be quickly and easily torn away from said panels to provide an even-edged rectangularly-shaped regular top opening having at least three of its sides coinciding with edges of said package top through which top opening said cigarettes may be extracted.

2. A cigarette package of the character described including a rectangular blank of material bearing a straight continuous line of perforations adjacent and paralleling one of the longer edges of said blank, said line of perforations extending uninterruptedly across the full width of said blank from one edge thereof to the other, said blank being folded around a group of cigarettes to form front, rear and side panels, with the aforesaid line of perforations substantially coinciding with the upper ends of cigarettes so that the material intermediate said line of perforations and the adjacent parallel edge of said blank provides an upper margin bordering said panels and projecting beyond the upper ends of said cigarettes, said margin being devoid of any traversing lines of perforations and being folded along the aforesaid line of perforations for the

most part down over the upper ends of said cigarettes, the marginal portion bordering a side panel being folded down subsequent to the downfolding of the marginal portions bordering the front and rear panels to provide an integral readily manually-graspable pull-tab, whereby by outward pull exerted on said pull-tab as much or as little of the aforesaid margin as desired may be quickly and easily torn away from said panels to provide an even-edged rectangularly-shaped regular top opening having at least three of its sides coinciding with edges of said package top through which top opening said cigarettes may be extracted.

3. A cigarette package of the character described including a rectangular blank of sheet material having a straight line of scoring adjacent and paralleling one of the longer edges of said blank, said line of scoring extending uninterruptedly across the full width of said blank from one edge thereof to the other, said blank being folded around a group of cigarettes to form front, rear and side panels, with the aforesaid line of scoring substantially coinciding with the upper ends of cigarettes so that the material intermediate said line of scoring and the adjacent parallel edge of said blank provides an upper margin bordering said panels and projecting beyond the upper ends of said cigarettes, said margin being devoid of any traversing lines of scoring and being folded along the aforesaid line of scoring for the most part down over the upper ends of said cigarettes, the marginal portion bordering a side panel being folded down subsequent to the downfolding of the marginal portions bordering the front and rear panels to provide an integral readily manually-graspable pull-tab, whereby by outward pull exerted on said pull-tab as much or as little of the aforesaid margin as desired may be quickly and easily torn away from said panels to provide an even-edged rectangularly-shaped regular top opening having at least three of its sides coinciding with edges of said package top through which top opening said cigarettes may be extracted.

4. A cigarette package of the character described including a rectangular blank of sheet material having a well-defined pre-weakened straight tear-line adjacent and paralleling one of the longer edges of said blank, said tear-line extending uninterruptedly across the full width of said blank from one edge thereof to the other, said blank being folded around a group of cigarettes to form front, rear and side panels, with the aforesaid tear-line substantially coinciding with the upper ends of said cigarettes so that the material intermediate said tear-line and the adjacent parallel edge of said blank provides an upper margin bordering said panels and projecting beyond the upper ends of said cigarettes, said margin being devoid of any traversing tear-lines, and being folded along the aforesaid tear-line for the most part down over the upper ends of said cigarettes, the marginal portion bordering a side panel being folded down subsequent to the downfolding of the marginal portions bordering the front and rear panels to provide an integral readily manually-graspable pull-tab, whereby by outward pull exerted on said pull-tab as much or as ilttle of the aforesaid margin as desired may be quickly and easily torn away from said panels to provide an even-edged rectangularly-shaped regular top opening having at least three of its sides coinciding with edges of said package top, through which top opening said cigarettes may be extracted.

5. A cigarette package of the character described including a rectangular blank of sheet material relatively weak and easily tearable along a straight tear-zone adjacent and paralleling one of the longer edges of said blank and extending uninterruptedly across the full width of said blank from one edge thereof to the other, said blank being folded around a group of cigarettes to form front, rear and side panels, with the aforesaid tear-zone substantially coinciding with the upper ends of said cigarettes so that the material intermediate said tear-zone and the adjacent parallel edge of said blank provides an upper margin bordering said panels and projecting beyond the upper ends of said cigarettes, said margin being devoid of any traversing tear-zones, and being folded along the aforesaid tear-zone for the most part down over the upper ends of said cigarettes, the marginal portions bordering the side panels being folded down subsequent to the downfolding of the marginal portions bordering the front and rear panels to provide a pair of integral readily manually-graspable pull-tabs disposed one at either side of the package top, whereby by outward pull exerted on either one of said pull-tabs, as much or as little of the aforesaid margin as desired may be quickly and easily torn away from said panels from either side of said top to provide an even-edged rectangularly-shaped regular top opening having at least three of its sides coinciding with edges of said package top, through which top opening said cigarettes may be extracted.

6. A cigarette package of the character described including a rectangular blank of sheet material relatively weak and easily tearable along a straight tear-zone adjacent and paralleling one of the longer edges of said blank and extending uninterruptedly across the full width of said blank from one edge thereof to the other, said blank being folded around a group of cigarettes to form front, rear and side panels, with the aforesaid tear-zone substantially coinciding with the upper ends of said cigarettes so that the material intermediate said tear-zone and the adjacent parallel edge of said blank provides an upper margin bordering said panels and projecting beyond the upper ends of said cigarettes, said margin being devoid of any traversing tear-zones, and being folded along the aforesaid tear-zone for the most part down over the upper ends of said cigarettes, the marginal portion bordering a side panel being folded down subsequent to the downfolding of the marginal portions bordering the front and rear panels to provide an integral readily manually-graspable pull-tab, whereby by outward pull exerted on said pull-tab, as much or as little of the aforesaid margin as desired may be quickly and easily torn away from said panels to provide an even-edged rectangularly-shaped regular top opening having at least three of its sides coinciding with edges of said package top, through which top opening said cigarettes may be extracted.

7. A cigarette package of the character described including a rectangular blank of sheet material relatively weak and easily tearable along a straight tear-zone adjacent and paralleling one of the longer edges of said blank and extending uninterruptedly across the full width of said blank from one edge thereof to the other, said blank being folded around a group of cigarettes to form front, rear and side panels, with the afore-

said tear-zone substantially coinciding with the upper ends of said cigarettes so that the material intermediate said tear-zone and the adjacent parallel edge of said blank provides an upper margin bordering said panels and projecting beyond the upper ends of said cigarettes, said margin being devoid of any traversing tear-zones, and being folded along the aforesaid tear-zone for the most part down over the upper ends of said cigarettes, the marginal portion bordering a side panel being folded down subsequent to the downfolding of the marginal portions bordering the front and rear panels to provide an integral readily manually-graspable pull-tab, whereby by outward pull exerted on said pull-tab, as much or as little of the aforesaid margin as desired may be quickly and easily torn away from said panels to provide an even-edged rectangularly-shaped regular top opening having at least three of its sides coinciding with edges of said package top, through which top opening said cigarettes may be extracted, said pull-tab thereafter being adapted to be tucked in alongside its formerly associated side panel thereby relatively securely to close said package.

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