

Jan. 19, 1965

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PACKAGING

3,166,233

Filed April 30, 1963

4 Sheets-Sheet 1

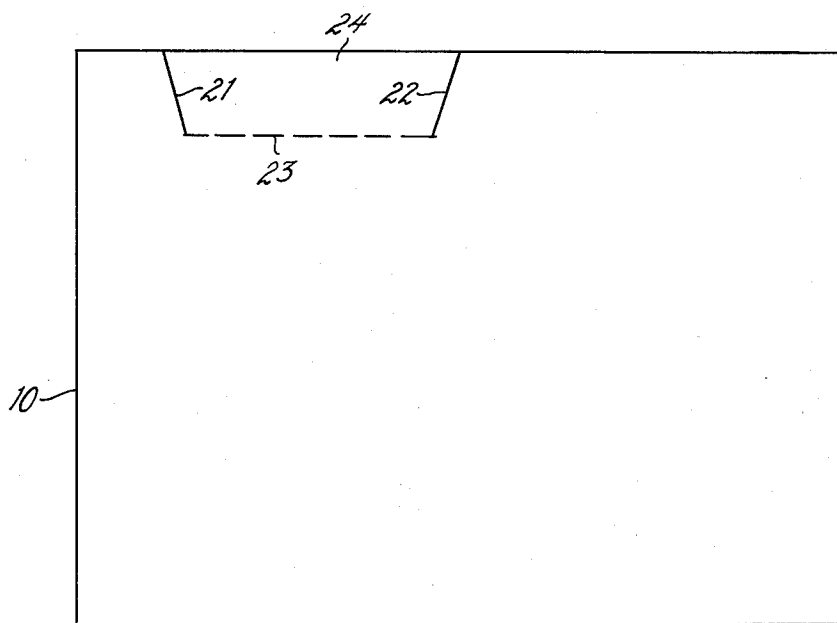


*Fig. 1.*

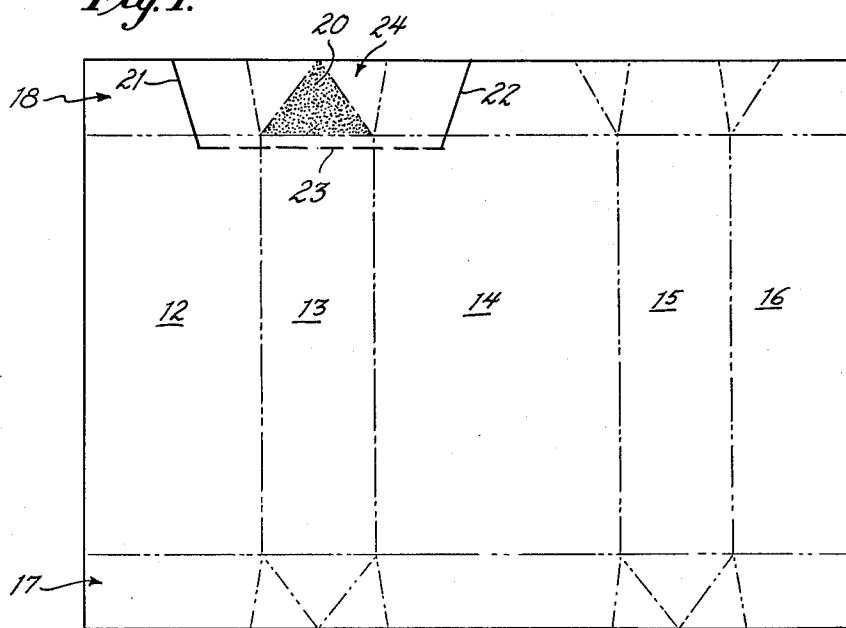


*Fig. 2.*

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4 Sheets-Sheet 2

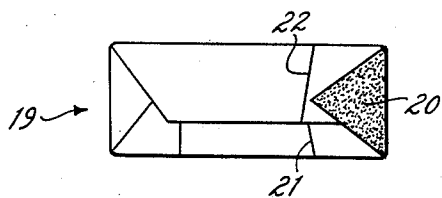


*Fig. 3.*

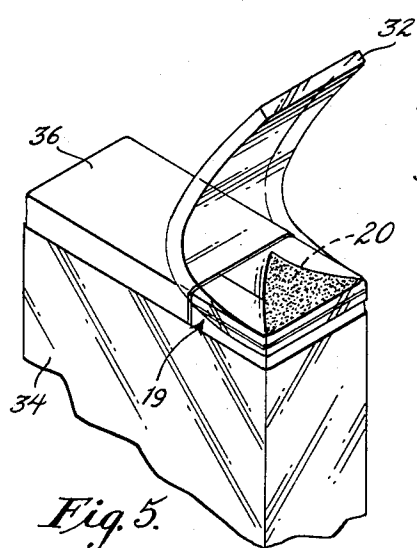


*Fig. 5.*

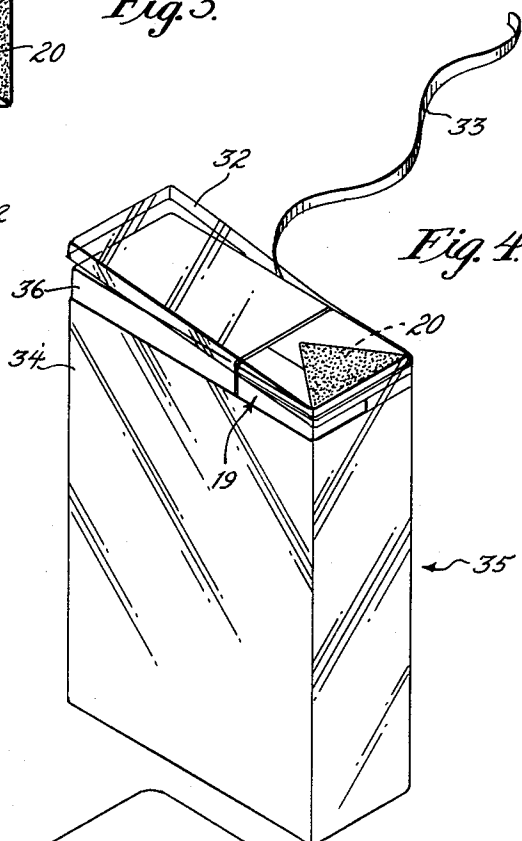


*Fig. 4.*

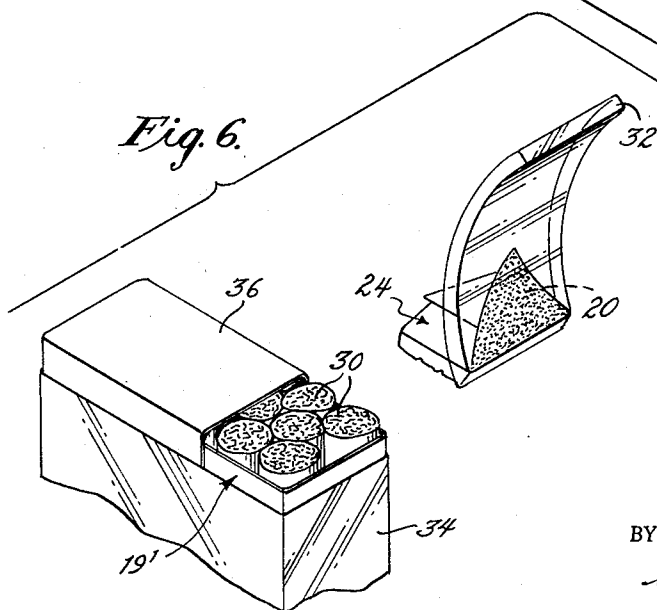


*Fig. 6.*

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4 Sheets-Sheet 3

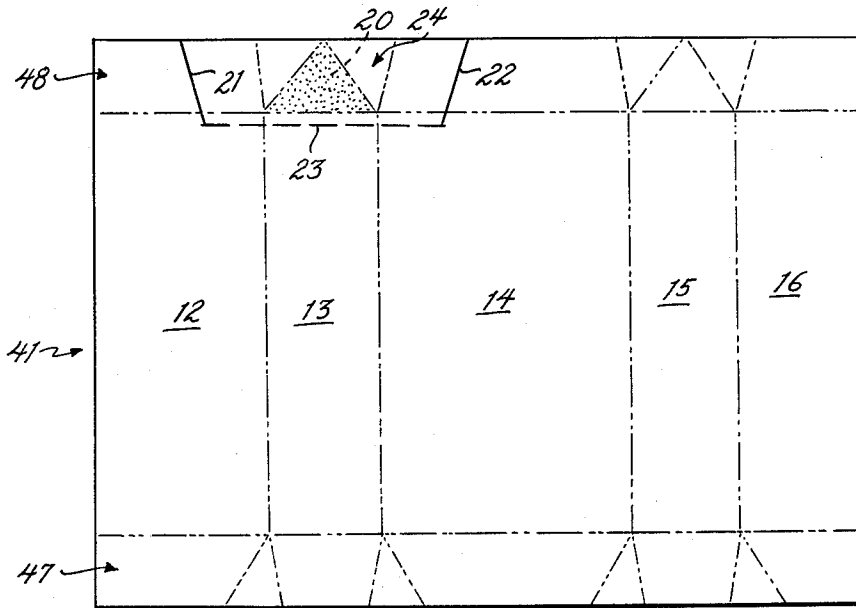


Fig. 7.

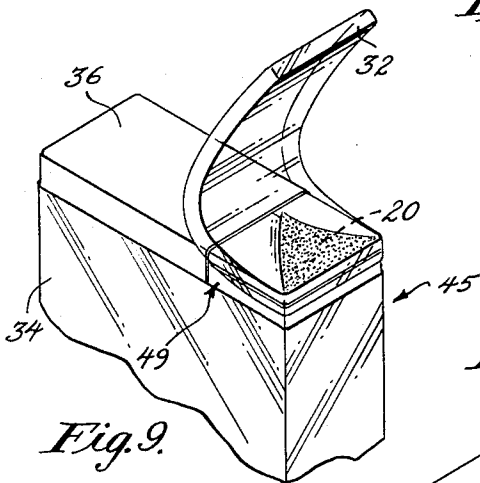


Fig. 9.

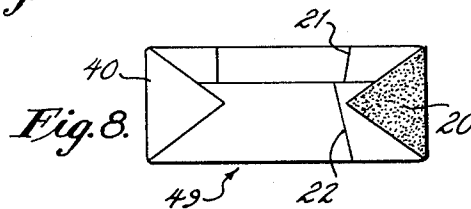


Fig. 8.

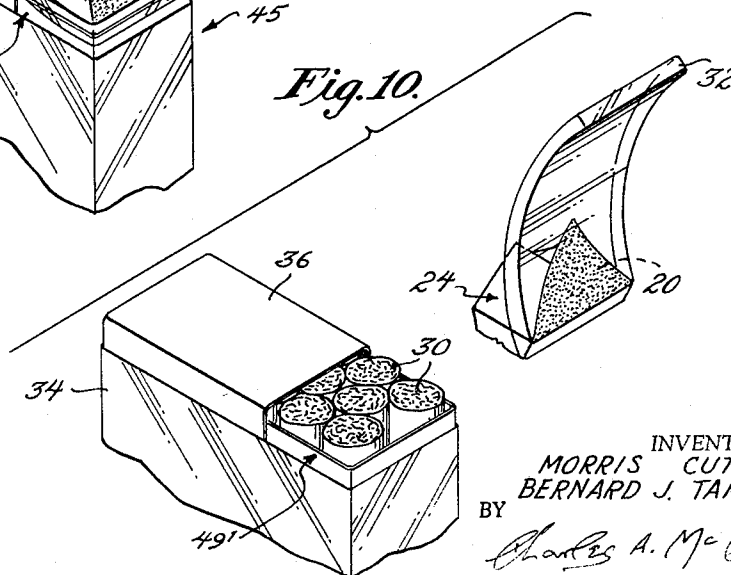


Fig. 10.

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3,166,233

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4 Sheets-Sheet 4

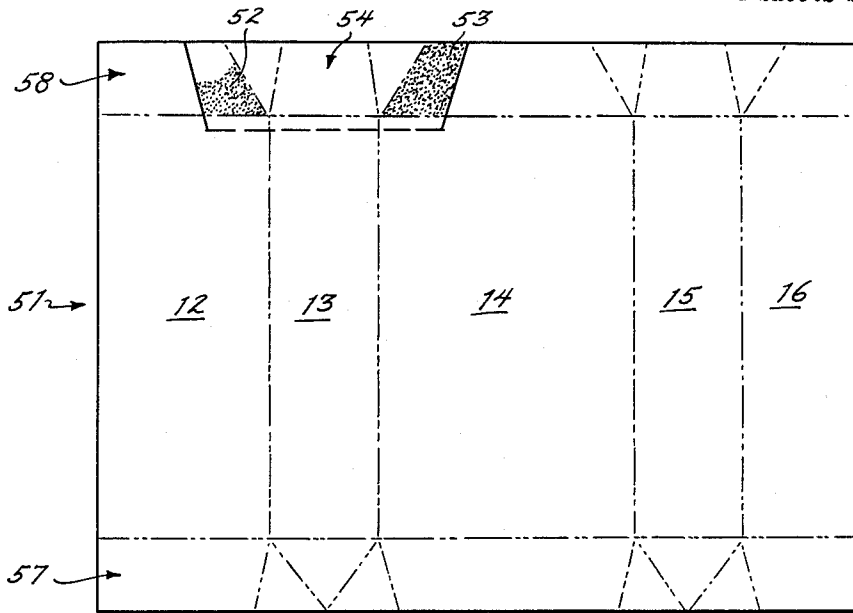


Fig. 11.

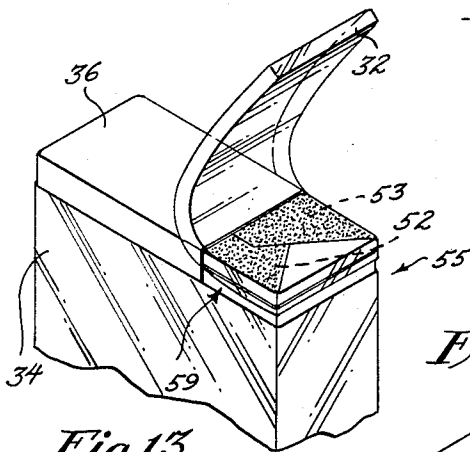


Fig. 13.

Fig. 12.

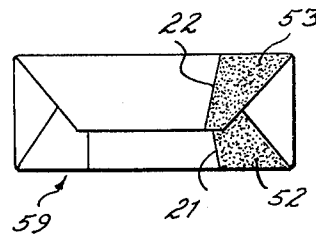
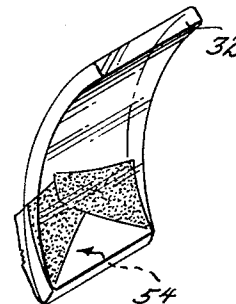
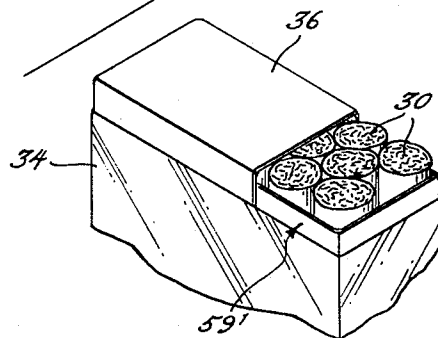


Fig. 14.



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1

2

## 3,166,233 PACKAGING

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This invention relates to readily openable cigarette packages or the like.

Quick-opening cigarette packages are known in which removal of a detachable portion of an outer sheath unfolds a closure portion of an inner wrapper to permit the contents to be dispensed through the access opening so provided. The open, unfolded portion of the inner wrapper may be detached and discarded or may be re-folded to the closed position. Also known are packages in which removal of a detachable portion of an outer sheath actuates a pullstrip to rupture a portion of an inner wrapper and detach it to expose a portion of the contents.

A primary object of the present invention is provision of a cigarette package permanently openable upon removal of a portion of the usual outer cellophane sheath.

Another object is elimination of the pull strip found in conventional quick-opening packages for cigarettes or the like.

A further object is provision for a quick-opening cigarette package readily constructable on conventional cigarette-packaging machinery.

Other objects of this invention, together with means and methods for attaining the various objects, will be apparent from the following description and the accompanying diagrams.

FIG. 1 is a plan of an inner wrapper (opened flat) useful according to the present invention;

FIG. 2 is a similar view of an inner wrapper like that of FIG. 1 but with addition of fold lines indicating use in a first embodiment of this invention;

FIG. 3 is a top plan of the inner wrapper of FIG. 2 folded into package form;

FIG. 4 is a perspective view of a first embodiment of cigarette package of this invention at an early stage in the opening thereof;

FIG. 5 is a perspective view of the upper portion of the package of FIG. 4 at a later or intermediate opening stage; and

FIG. 6 is a perspective view of the same package portion fully opened, including a showing of the detached part thereof.

FIG. 7 is a plan view of an inner wrapper (opened flat) like that of FIG. 1 but with addition of fold lines indicating use in a second embodiment of this invention;

FIG. 8 is a top plan view of the inner wrapper of FIG. 7 folded into package form;

FIG. 9 is a perspective view of the upper portion of a second embodiment of cigarette package of this invention at an intermediate stage in the opening thereof, corresponding to FIG. 5 of the previous embodiment; and

FIG. 10 is a perspective view of the last shown package portion fully opened, including a showing of the detached part thereof.

FIG. 11 is a plan view of an inner wrapper (opened flat) like that of FIG. 1 but with addition of fold lines indicating use in a third embodiment of this invention;

FIG. 12 is a top plan view of the inner wrapper of FIG. 11 folded into package form;

FIG. 13 is a perspective view of the upper portion of a third embodiment of cigarette package of this invention at an intermediate stage in the opening thereof, corresponding to FIG. 5 of the first and FIG. 9 of the second embodiment; and

FIG. 14 is a perspective view of the last shown package portion fully opened, including a showing of the detached part thereof.

In general, the objects of the present invention are accomplished by providing a cigarette package or the like comprising an inner wrapper having a removable closure portion and an outer sheath having a removable closure portion located adjacent the inner removable closure portion and secured contiguously thereto, whereby removal of the outer removable closure portion is effective to remove also the inner removable closure portion secured thereto.

The invention contemplates particularly a cigarette package or the like comprising an inner wrapper having a folded detachable portion including at least one multi-layered triangular piece, a fixed closure alongside the folded detachable portion, and outer sheath having a detachable portion covering the fixed closure and the detachable closure portion of the inner wrapper, the outer detachable portion being secured to the exterior face of each multi-layered triangular piece of the inner detachable portion and thereby adapted to remove the inner detachable portion in folded condition and leaving the fixed closure in place.

FIG. 1 shows rectangular inner wrapper 10 in flat or unfolded condition. Pair of oblique slits 21, 22 slant inward toward one another from the top edge and terminate at perforated or crush-cut line 23 extending parallel to the top edge between (and slightly past) their ends, defining trapezoidal detachable portion 24 therebetween.

FIG. 2 shows inner wrapper 11, which is identical with inner wrapper 10 of the preceding view except for added illustration of fold lines (in phantom) and adhesive location (stippled) 20. The illustrated face is that which is visible from the exterior of a package. The adhesive location occupies a triangular area located in top margin 18 with its base coincident with the fold line denoting the junction of the margin with narrow panel 13 of the body. Between top margin 18 and bottom margin 17 the body is divided into five panels 12 to 16, inclusive, in that order from left to right. Panels 13 and 15 are of equal width and narrowest, while panel 14 flanked thereby is widest; leftmost panel 12 is intermediate in size, and rightmost panel 16 is only slightly wider than the narrow panels. Unnumbered oblique fold lines in the respective margins indicate the tucking and folding thereof at the top and bottom when folded into package form according to a first embodiment of this invention.

FIG. 3 shows in plan the top of package component 19 formed by enfolding of inner wrapper 11. Visible are triangular adhesive area 20 and part of slits 21, 22. The top configuration is formed by tucking the portion of the top margin located adjacent narrow panel 15 inward across the package top, then folding the margin portions located adjacent partially overlapping panels 12 and 16 as a first flap over the top, then folding in like manner the margin portion located adjacent panel 14 as a second flap, and finally folding down the margin portion located adjacent panel 13 and containing triangular adhesive area 20. All but the last of these steps conform to the conventional tucking and folding of the top of the "soft" type of cigarette package, and the final step is performed conveniently by substituting for one of the two conventional opposed tuckers a plough with which the package comes into contact after performance of the single tucking and two opposite folding steps, as on the AMF 3-79 packer (produced by American Machine and Foundry Company). The resulting multiple-layered triangular flap may have adhesive applied to its exterior surface after completion of the folding, or adhesive may have been applied to that area (20) at an earlier stage, even when the wrapper was lying flat. Application of heat or pressure (or both) to the outer

surface of the sheath over the adhesive area during or after application of the sheath to the package bonds that top portion of the sheath directly to the exterior of the triangular flap. Any suitable adhesive or bonding agent, depending upon the sheath and inner wrapper compositions, may be used.

An outer sheath of cellophane or the like is applied in largely conventional manner to enclose the package surrounded by the enfolded inner wrapper (with or without an intervening paper label or the like about the edges or bottom). When an intervening paper label is used, a portion of it may cover also a portion of the package top, as may be desirable to keep the inner wrapper enfolded in closed position; alternately, a bridging fixed closure piece (possibly resembling the former revenue stamp) may be employed with like effect. In either event it is preferred to cover a major portion of the package top therewith, from one narrow side edge and over about two thirds of the top surface, before application of the outer sheath. When a bridging or stamp-like closure piece is used, its opposite ends, which terminate on the wide wall panels of the package, preferably do so at the level of the customary rip tape; that tape surrounds the package a short distance from the top and inside the outer sheath, with a tail thereof protruding to the exterior to facilitate opening of the sheath and removal of the top portion thereof.

FIG. 4 shows, in perspective, complete package 35, embodying this invention, at an early stage in being opened. Rip tape 33 is partially removed, partially severing top portion 32 of the transparent outer sheath from body portion 34 thereof and exposing therebetween enfolded inner wrapper package component 19, the sides of which are assumed to be covered with a paper label or the like, not separately designated or shown, which covers perforated line 23, otherwise visible therein. Of course, fixed closure 36 covering about two thirds of the package top, and adhesive area 20 of the inner wrapper are visible through the transparent sheath. Complete removal of the rip tape severs the top of the sheath from the body thereof, as shown in the next view.

FIG. 5 shows in perspective an intermediate (later than in FIG. 4) stage in the opening of the same package, of which only the inner half or so is shown. At this stage top portion 32 of the sheath is curved upward from the portion of the package top covered by fixed closure piece 36 and is lifting the apex end of the transparent flap bearing adhesive area 20, which is bonded to the underside of that portion of the sheath, without unfolding the adjacent portions of the inner wrapper covering the package top (under the sheath) adjacent fixed closure piece 36.

FIG. 6 shows, also in perspective, the upper portion of the same package, completely open. The inner package component, now designated as 19' to distinguish it from closed package component 19, from which top portion 32 of the sheath (with inner detachable portion 34 attached thereto) has been completely removed, is open over about one third of the top surface, revealing the top of cigarettes 30 inside, and is surrounded on its sides (and bottom, not shown) by sheath body 34. Portion 24 of the inner wrapper, which formerly covered the open part of the package, is completely detached from the package but remains bonded to the removed top portion of the sheath and remains in enfolded condition although the triangular flap is bent upward somewhat. Of course, the removed attached portions of the package are not replaceable thereon and will be discarded.

It will be apparent that this invention provides a quick-opening package in which complete and permanent opening thereof occurs as the top of the otherwise conventional outer sheath of cellophane or the like bonded thereto is removed. No added manipulation by the person opening the package is required. The embodiment described above is preferred; however, two other

embodiments of the invention are described below by way of further example.

FIGS. 7 through 10 illustrate a second embodiment of the invention. In this embodiment a similar triangular flap is provided for bonding to the outer sheath by simply inverting the package component formed by a conventional inner wrapper to which slits 21 and 22 and perforated line 23 have been added as shown in FIG. 7. Such inversion locates the conventional bottom folds and tucks at the top and places the conventional top tucks and folds at the bottom. Except that the visible face is folded toward the inside, instead of the outside, inner wrapper 41 of FIG. 7 differs only in location of the fold lines from inner wrapper 31 of the previously illustrated embodiment. Triangular adhesive area 20, now on the hidden face of the wrapper, otherwise remains unchanged. Bottom margin 47 is adapted to be tucked from the narrow panels and then folded, while top margin 48 is to be tucked from the wide panels first, leaving small triangular flaps to be folded over at the narrow sides.

FIG. 8 shows in plan the top of package component 49 formed by the enfolding of inner wrapper 41 into package form as indicated. The most obvious difference from the top view of the corresponding component of the previous embodiment (in FIG. 3) is that triangular flap 40 at the left, formed by the portion of the top margin adjacent panel 15, replaces the tucked configuration previously present at that location. The wide flap formed from the margin portion adjoining panel 14, which overlies the flap formed by partially overlapping margin portions adjacent panels 13 and 15, is located at the lower or near side of the top, instead of the upper or far side as before.

FIG. 9 shows an intermediate stage (corresponding to that shown in FIG. 5 of the previous embodiment) in the opening of the sheathed package 45 made by enclosing package component 49 in a conventional sheath and bonding the two together at adhesive area 20 of the former and the immediately overlying portion of the latter. FIG. 10 shows the second package embodiment fully opened by removal of top portion 32 of the sheath, with portion 24 of the inner wrapper bonded thereto, leaving open package component 49' surrounded (except on top) by sheath body 34.

FIGS. 11 through 14 illustrate a third embodiment of this invention in a sequence of views corresponding generally to those showing the second embodiment.

Inner wrapper 51 shown in FIG. 11 has oblique slits 21, 22 and perforated line 23 defining detachable portion 24 as did the inner wrappers of the previous embodiments. Bottom margin 57 contains fold and tuck lines like those of the top margin of the second embodiment (FIG. 7), and top margin 58 of this inner wrapper third embodiment contains tuck and fold lines like those of the bottom margin of the second embodiment, indicating that the enfolding of inner wrapper 51 conforms entirely to the conventional soft-packaging technique and produces an upright enfolded package component like that of a conventional soft cigarette package. Detachable portion 54, which is bounded by oblique slits 21, 22 at the sides, by perforated line 23 at the bottom, and by the top edge of the inner wrapper at the top differs from the detachable portion of the previous embodiment not only in the different location of the fold lines but also in having two adhesive areas: area 52 bordering an intermediate portion of slit 21 and terminating at the junction of the top margin with panel 12, and area 53 bordering a major portion of slit 22 from the top edge to the junction of the margin with panel 14.

FIG. 12 shows the top of package component 59 resulting from the enfolding of inner wrapper 51 of the third embodiment into package form. The overlapping of the respective generally triangular (slightly trapezoidal) minor flap portions defined between the slits and

5

the nearer side edges of the folded flaps produces a composite adhesive area, made up of areas 52 and 53, from one wide edge of the top to the opposite wide edge, alongside an edge of fixed closure 36. This composite adhesive area of the flaps is bonded to the underside of the outer sheath as were the single triangular flap areas of the respective previous embodiments.

FIG. 13 shows, in perspective, an intermediate stage in the opening of the third package embodiment; FIG. 14 shows the fully opened stage, including a view of detached inner wrapper portion 54 still folded and bonded to removed top portion 32 of the outer sheath, leaving open package component 59' in sheath body 34.

Other modifications in the shape, size, or other characteristics of the package of this invention and its components may be made without involving a departure from the invention which is defined in the following claims.

We claim:

1. Cigarette package or the like comprising an inner wrapper having a folded detachable portion including at least one multilayered triangular piece, a fixed closure alongside the folded detachable portion, an outer sheath having a detachable portion covering the fixed closure and the detachable closure portion of the inner wrapper, the outer detachable portion being secured to the exterior face of each multilayered triangular piece of the inner detachable portion and thereby adapted to remove the inner detachable portion in folded condition and leaving the fixed closure in place.

2. Cigarette package or the like comprising an inner wrapper tucked and folded over a plane surface of the package, an outer wrapper covering the same, the inner wrapper tucked and folded over the plane surface having a portion detachable from the rest and including at least one multilayered generally triangular piece, a fixed closure located alongside the inner detachable portion and over a portion of the rest of the inner wrapper tucked and folded over the plane surface, the outer wrapper having a detachable portion covering the plane surface and secured to each multilayered triangular piece of the inner detachable portion, the securing thereof precluding the inner detachable portion from unfolding upon detachment thereof together with the outer detachable portion, and the fixed closure preventing unfolding of the rest of the inner wrapper tucked and folded over the plane surface upon detachment of the outer detachable portion and the inner detachable portion secured thereto.

3. Cigarette package or the like comprising an inner wrapper tucked and folded over a rectangular plane surface of the package, an outer wrapper covering the same, the inner wrapper tucked and folded over the plane surface having a portion detachable from the rest and including a single multilayered generally triangular piece bordering one of the shorter side edges of the rectangular plane surface, a fixed closure located alongside the inner detachable portion and over a portion of the rest of the inner wrapper tucked and folded over the rectangular plane surface, the outer wrapper having a detachable portion covering the rectangular plane surface and secured to the multilayered triangular piece of the inner detachable portion, the securing thereof precluding the inner detachable portion from unfolding upon detachment thereof together with the outer detachable portion, and the fixed closure preventing unfolding of the rest of the inner wrapper tucked and folded over the rectangular plane surface upon detachment of the outer detachable portion and the inner detachable portion secured thereto.

6

4. Cigarette package or the like comprising an inner wrapper tucked and folded over a rectangular plane surface of the package, an outer wrapper covering the same, the inner wrapper tucked and folded over the rectangular plane surface having a portion detachable from the rest and including two multilayered generally triangular pieces, the respective pieces bordering opposing parts of the longer side edges of the rectangular plane surface, a fixed closure located alongside the inner detachable portion and over a portion of the rest of the inner wrapper tucked and folded over the rectangular plane surface, the outer wrapper having a detachable portion covering the rectangular plane surface and secured to each multilayered triangular piece of the inner detachable portion, the securing thereof precluding the inner detachable portion from unfolding upon detachment thereof together with the outer detachable portion, and the fixed closure preventing unfolding of the rest of the inner wrapper tucked and folded over the plane surface upon detachment of the outer detachable portion and the inner detachable portion secured thereto.

5. In a cigarette package or the like having an inner wrapper and an enveloping outer wrapper covering a rectangular top surface, a top closure comprising a removable portion of the inner wrapper covering part of the top surface, the portion of the inner wrapper covering the adjacent part of the top surface being secured in place, with a removable portion of the outer wrapper overlying the removable portion of the inner wrapper and at least part of the rest of the inner wrapper and being secured to at least part of the removable portion of the inner wrapper, the part of the removable portion of the inner wrapper to which the removable portion of the outer wrapper is secured being distributed essentially equally on opposite sides of a longitudinal bisector of the top surface.

6. In a cigarette package or the like having an inner wrapper and an enveloping outer wrapper covering a rectangular top surface, a top closure comprising a removable portion of the inner wrapper covering part of the top surface, the portion of the inner wrapper covering the adjacent part of the top surface being secured in place, with a removable portion of the outer wrapper overlying the removable portion of the inner wrapper and at least part of the rest of the inner wrapper and being secured to at least part of the removable portion of the inner wrapper, the part of the removable portion of the inner wrapper to which the removable portion of the outer wrapper is secured being distributed essentially equally on opposite sides of a longitudinal bisector of the top surface, the removable portion of the outer wrapper covering the entire top surface and being adapted to be separated from the rest of the outer wrapper by severing the outer wrapper essentially parallel to the top surface by means of a rip tape surrounding the package between the outer and inner wrappers, the terminal portion of the rip tape being located adjacent one of the shorter side edges of the top surface and closer to the removable portion of the inner wrapper than to the portion thereof secured in place.

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