Oct. 4, 1966 B. J. TAMARIN 3,276,668

CIGARETTE PACKAGING

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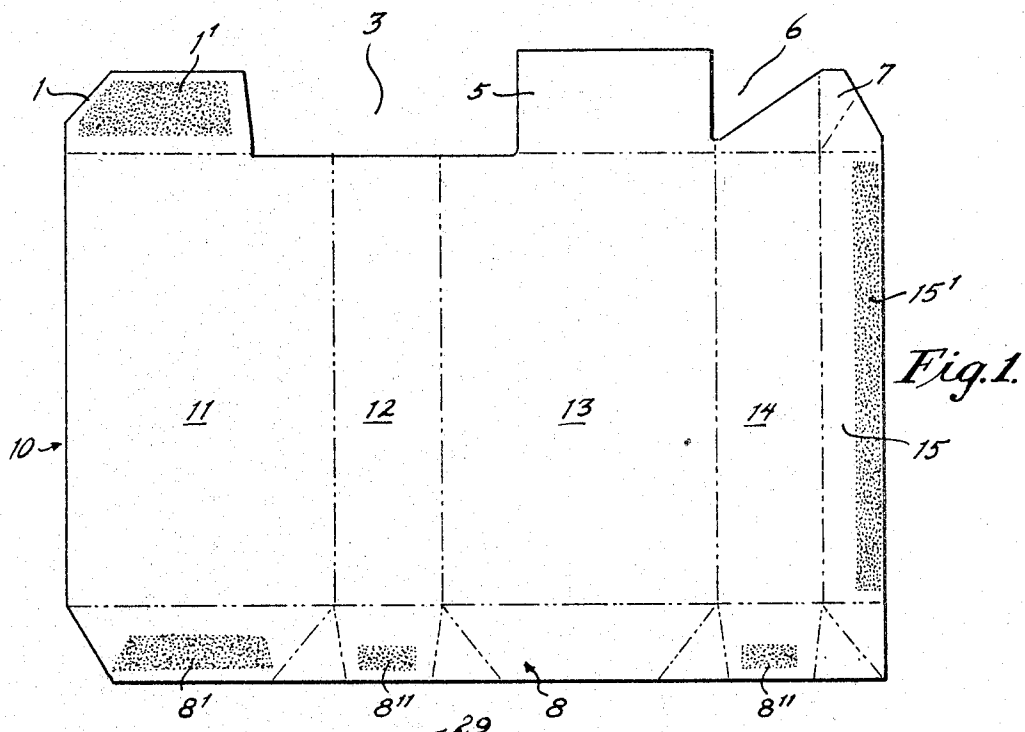


Fig. 1.

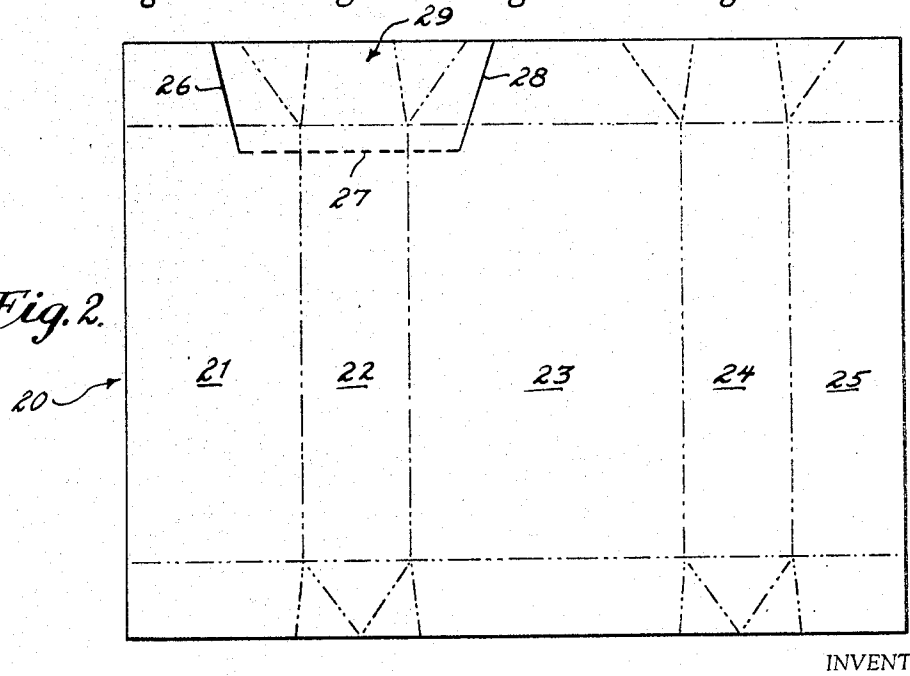


Fig. 2.

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Oct. 4, 1966 B. J. TAMARIN 3,276,668

CIGARETTE PACKAGING

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Fig. 3.

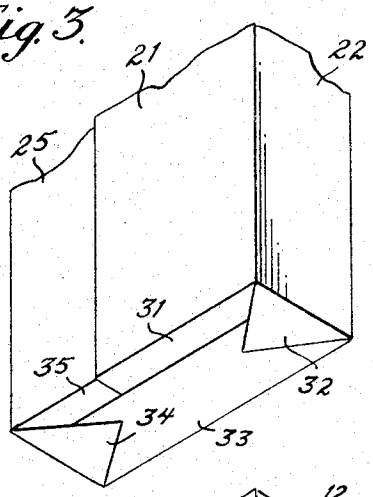
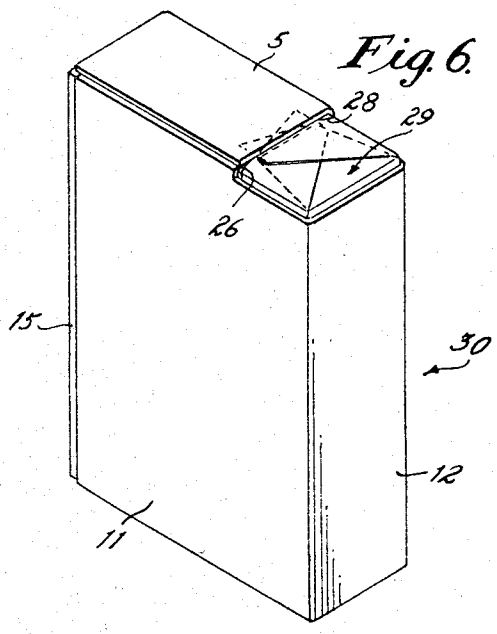


Fig. 6.



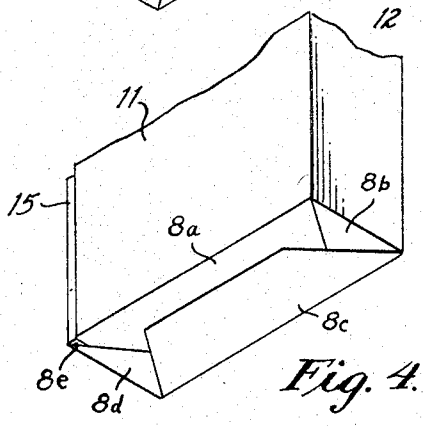
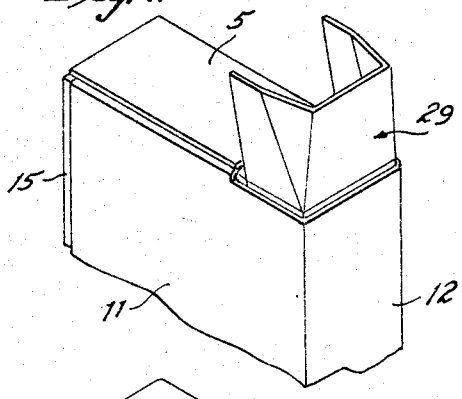


Fig. 4.

Fig. 7.



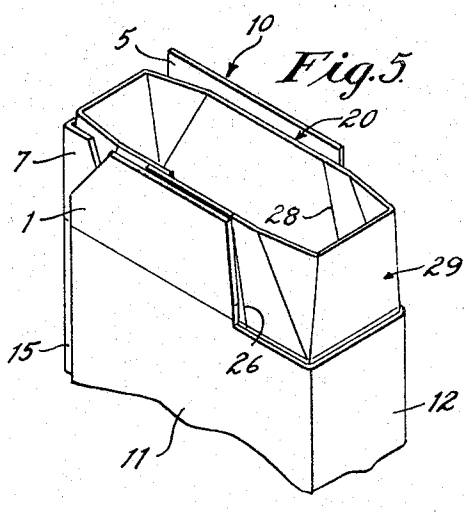


Fig. 5.

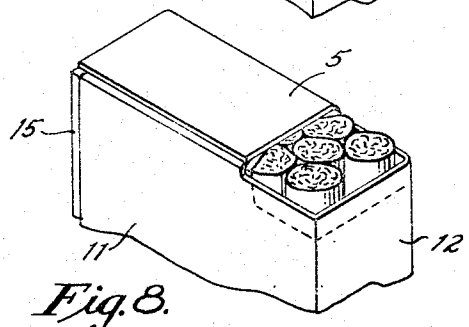


Fig. 8.

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CIGARETTE PACKAGING

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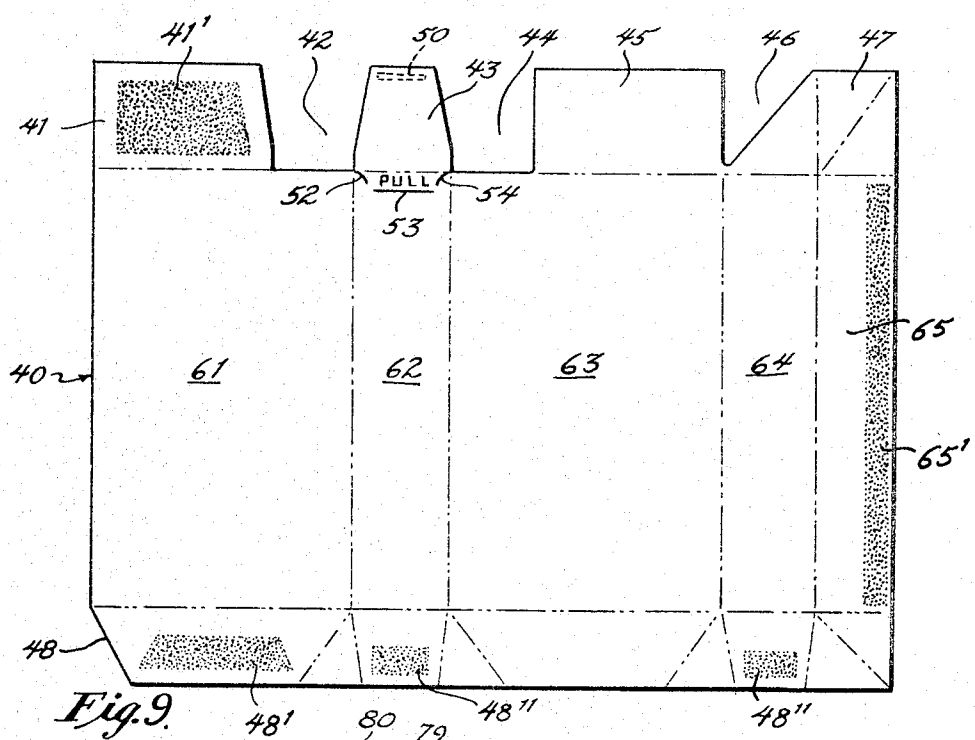


Fig. 9.

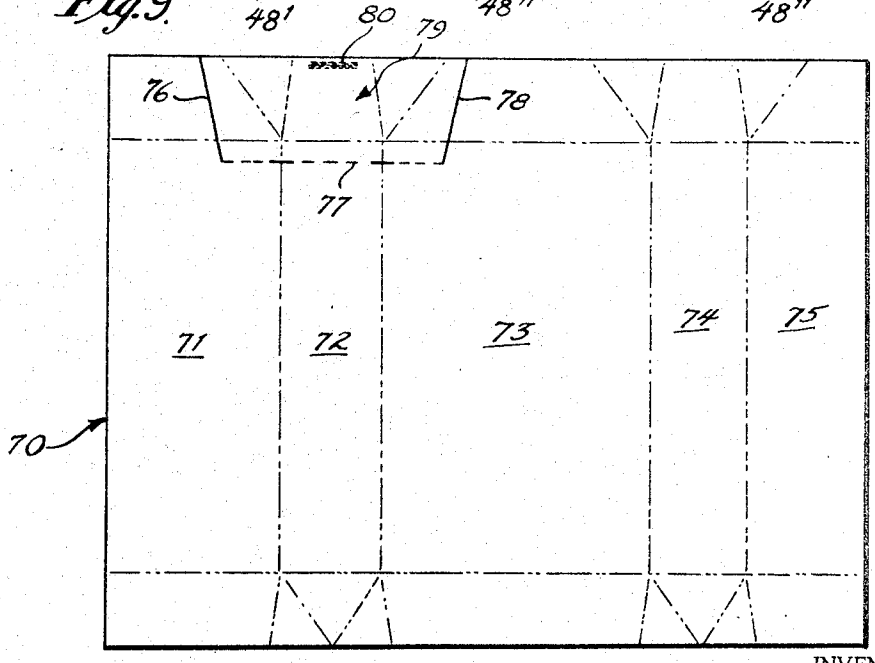


Fig. 10.

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CIGARETTE PACKAGING

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Fig. 11.

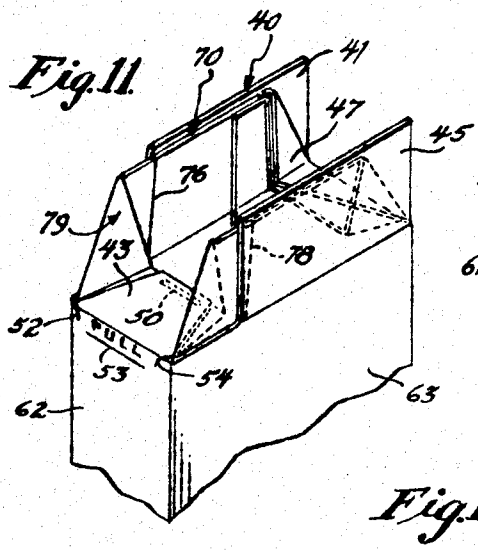


Fig. 12.

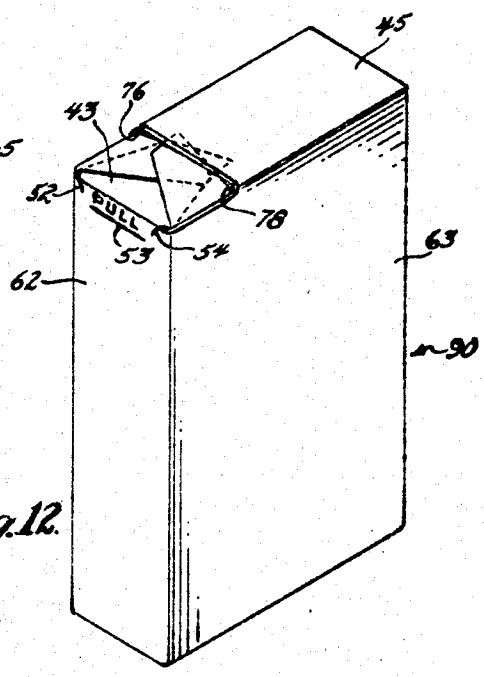
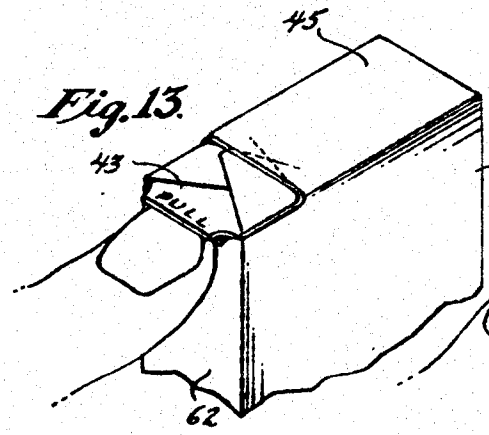


Fig. 13.



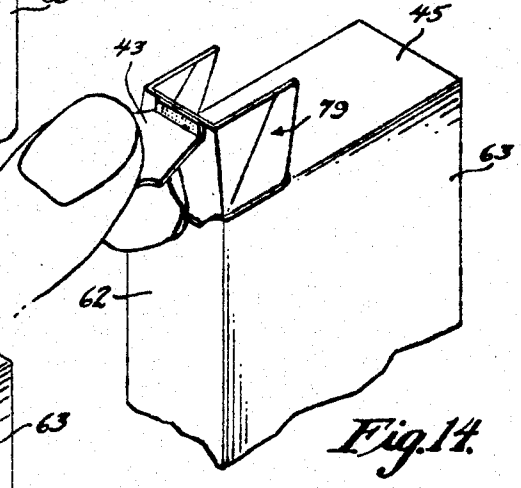


Fig. 14.

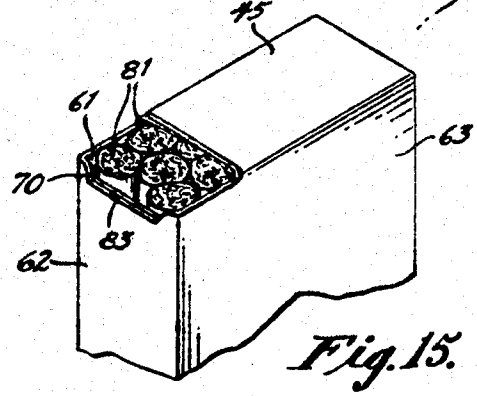


Fig. 15.

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United States Patent Office

3,276,668

Patented Oct. 4, 1966

3,276,668

CIGARETTE PACKAGING

Bernard J. Tamarin, W. Valley Green Road and Hunt Lane, Whitemarsh, Pa.

Filed June 28, 1965, Ser. No. 467,545
20 Claims. (Cl. 229—51)

This application is a continuation-in-part of my copending application Serial No. 216,448, field August 13, 1962, now abandoned and is in part a substitute for my prior abandoned applications, filed jointly with Richard B. Tamarin, Serial No. 594,325, filed June 27, 1956 and Serial No. 747,176, filed July 8, 1958, all for Cigarette Packaging.

The invention of the present application also relates to packaging of cigarettes or the like.

So-called "soft" packages for cigarettes or other articles so packageable commonly comprise an inner wrapper (made of foil or paper or a combination thereof) that completely encloses the contents, an outer wrapper or sheath (made of clear film, such as cellophane) entirely surrounding the inner wrapper and contents, and an intermediate wrapper surrounding the sides and often the bottom but ordinarily not the top of the package and usually called a "label." Upon removal of the outer sheath, the portion of the inner wrapper covering the package top is available to be opened as necessary to expose part of the contents. A portion of the top may be covered by closure or securing means, such as a stamp, usually centrally located.

A primary object of the present invention is a provision of novel packaging or sheathing labels useful in or as part of packages for cigarettes or the like.

An object is modification of otherwise conventional cigarette packages by inclusion of such labels adapted to facilitate opening thereof.

Another object is construction of such packages utilizing such labels and having a readily openable top closure.

A further object is formation of an opening pull-tab integral with a wrapper or label component of an otherwise substantially conventional package.

Yet another object is optional elimination of the conventional outer wrapper or sheath of a soft cigarette package by utilization of the novel sheathing label of this invention.

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

FIG. 1 is a plan of a first embodiment of sheathing label according to the present invention;

FIG. 2 is a plan of an inner wrapper useful therewith;

FIG. 3 is a perspective view of the lower portion of the inner wrapper of FIG. 2 showing a form of bottom closure thereof when folded into intermediate pouchlike or final closed container form;

FIG. 4 is a similar perspective view of the lower portion of the sheathing label of FIG. 1 when folded into a corresponding form of bottom closure;

FIG. 5 is a perspective view of the upper portion of a package at an intermediate pouchlike stage of formation into final closed container form;

FIG. 6 is a perspective view of the resulting package in closed container form;

FIG. 7 is a perspective view of the upper portion of the same package after opening of the openable top closure thereof; and

FIG. 8 is a similar perspective view of the upper portion of the package after complete removal of the openable top closure therefrom.

FIG. 9 is a plan of a second embodiment of sheathing label according to this invention, showing locations of adhesive and fold lines;

FIG. 10 is a plan of a modified inner wrapper showing locations of adhesive and fold lines;

FIG. 11 is a perspective view of the upper portion of a cigarette package including the label of FIG. 9 and inner wrapper of FIG. 10, at a stage in being closed from intermediate configuration;

FIG. 12 is a perspective view of such package completely closed, without an all-enveloping outer sheath;

FIG. 13 is a perspective view of the upper portion of such package at an early stage in opening of the openable top closure;

FIG. 14 is a perspective view of the upper portion of such package at a later stage in being opened; and

FIG. 15 is a perspective view of the upper portion of such package fully opened, with the openable top closure removed therefrom.

In general, the objects of the present invention are accomplished by means of a sheathing label made of flexible wrapping material for a group of cigarettes or the like and having a generally rectangular body portion with an integral marginal portion along one edge and with at least one marginal extension therefrom along the opposite edge. The invention comprehends also packages utilizing such labels, preferably with a flaplike marginal extension covering a major portion of the package top and optionally with a tab-like marginal extension overlying at least part of the remaining minor portion of the top.

FIG. 1 shows, in plan, sheathing label **10** of this invention flat and unfolded but with fold lines superimposed thereon in phantom representation. Also shown by stippling on the visible outer face of the label are adhesive areas to underlie other parts of the label when folded into container form. The lower horizontal phantom line represents the junction of the rectangular body portion of the label with bottom marginal portion **8**, which is subdivided into parts **8***a*, **8***b*, **8***c*, **8***d*, and **8***e*. The upper horizontal phantom line represents the junction of the body portion with several flaplike or tablike extensions therefrom into what may be considered a corresponding top marginal portion, part of which is missing. The diagonal phantom lines indicate folds of the marginal portions during formation of the top and bottom of a package comprising this label. The vertical phantom lines divide the label body into pair of wide wall panels **11** and **13**, pair of narrow wall panels **12** and **14**, and lap panel **15** numbered in the order of their appearance from left to right. Extending from along a major part of the top edge of panel **11**, beginning at the left edge thereof is marginal flap **1**, which is generally trapezoidal in outline, with its outer edge shorter than its junction to the panel. The top edge of narrow panel **12** and the adjoining minor parts of the top edges of flanking wide panels **11** and **13** are cut away to leave marginal gap **3**, and the remaining major part of the top edge of wide panel **13** is occupied by rectangular marginal flap **5**. Triangular tab **7** adjoins the top edge of narrow panel **14** and lap panel **15**, being separated from flap **5** by cut-out indentation **6**. Adhesive area **1′** occupies most of the visible surface of flap **1**; smaller adhesive area **8′** is present on bottom marginal portion **8***a* adjoining wide panel **11**; even smaller adhesive areas **8″** are present (one each) on bottom marginal portions **8***b* and **8***d* adjoining narrow panels **12** and **14**; and long narrow adhesive area **15′** borders most of the right edge of lap panel **15**.

FIG. 2 shows, in similar plan, inner wrapper **20**, which is rectangular in outline. Phantom fold lines superimposed on it divide it into a top margin, a bottom margin, and an intermediate body portion, all rectangular, and also denote the location of vertical as well as diagonal

folds. The body is divided into panels **21**, **22**, **23**, **24**, and **25** much as the body of label **10** is divided into panels. Inner panels **22**, **23**, and **24** correspond in width to panels **12**, **13**, and **14** of the label. Leftmost panel **21** of the inner wrapper, although wider than narrow panels **22** and **24** thereof, is narrower than panel **11** of the label; rightmost panel **25** of the inner wrapper is wider than each of the narrow panels by a like amount (as panel **11** is narrower than wide panel **13**) and consequently wider than correspondingly located narrower panel **15** of the label. This dimensional variation ensures that the overlap or seam of the inner wrapper does not register with the overlying seam of the label when folded into container form, which is the customary parallelepipedal configuration. Also apparent on FIG. 2 is perforated line **27**, which crosses narrow panel **22** of the inner wrapper just within and paralleling the junction of the body with the top margin and which extends straight into adjoining panels **21** and **23** for a minor part of the width of each. From the opposite ends of this perforated line, slits **26** and **28** extend obliquely outward across the top margin of the inner wrapper and terminate at the outer or top edge thereof, defining separable portion **29**, which has a symmetrical trapezoidal outline.

FIG. 3 shows, in perspective, the lower portion of a suitable type of bottom closure of inner wrapper **20** folded into intermediate pouchlike (open at the top) or closed container form. The bottom is covered by an underlying flap composed of marginal portions **31** and **35** adjoining respective wall panels **21** and **25**, by partially overlying flap **33** made up of the marginal portion adjoining wide wall panel **13**, and by triangular flaps **32** and **34** folded from the marginal portions adjoining narrow wall panels **22** and **24** (not visible in this view) each of which partially overlies both of the wide flaps. FIG. 4 shows similarly a bottom closure of label **10**, which surrounds the corresponding part of the inner wrapper. Tucks formed in narrow parts **8***b* and **8***d* of bottom marginal portion **8** partially underlie both intermediate wide flap **8***a* and outer wide flap **8***c*. Suitable methods of folding the inner wrapper and the label to form such bottom closures will be apparent without description thereof; such folding may take place about a hollow mandrel into which the contents of the forming package are inserted, or about the contents themselves.

FIG. 5 shows, in perspective, the upper portion of a package, being formed from label **10** and inner wrapper **20**, at an intermediate pouchlike stage open at the top. It will be understood that the upstanding marginal portions of both the label and the inner wrapper will be tucked downward from the narrow wall panels and over the top, after which the near wide side will be folded down, and then the far wide side be folded down last, over the contents (not visible) to form the package top. Of course, the folding of the label to form top, bottom, and side closures is accomplished under suitable conditions of pressure and temperature (and time) to ensure adhesive securing of the adhesive areas to the adjacent surface. Resulting completely closed package **30** is shown in FIG. 6, from which it can be seen that a major portion, approximately two-thirds, of the top is covered by rectangular flap **5** of the label, and that folded separable portion **29** of the inner wrapper occupies the remaining portion of the top surface.

FIGS. 7 and 8 show the upper portion of package **30** with separable portion **29** of the inner wrapper upstanding in spoutlike configuration and completely removed, respectively. The separable portion may, but need not, be completely unfolded as shown in FIG. 7, just as many smokers unfold the corresponding portion of a conventional cigarette package. Perforated line **27** and cooperating slits **26** and **28** permit removal of the separable portion from the rest of the package, to leave the access opening permanently open as shown in FIG. 8, either before or after such unfolding. Alternatively, the upstanding spout may be reclosed, instead of being removed, if desired. The contained cigarettes (or other contents) may be removed readily, one by one or a few at a time, in either open position.

FIG. 9 shows, in plan, sheathing label **40** flat and unfolded, with adhesive areas indicated by stippling and with fold lines superimposed thereon in phantom. This second label embodiment is useful according to this invention much as was first label **10**; label **40** also presents additional features of the present invention, as will be made apparent. Along the forward or upper edge, left flap **41** and tab **43** are spaced apart by indentation **42**, and tab **43** and rectangular flap **45** are similarly spaced by indentation **44**, while trapezoidal right flap **47** is spaced from rectangular flap **45** by indentation **46**. At the lower left corner of label **40**, the edge of bottom marginal portion **48** is beveled or mitered. A separable junction of tab **43** to the body of the label is marked by three slits **52**, **53**, and **54**. Slit **53** parallels the outermost free edge of the tab and is located below or within the edge of the body as defined by the aligned edges of indentations **42** and **44**. Shorter slits **52** and **54** curve inward from junction with those respective indentation edges to terminate near the opposite ends of slit **53**. The legend PULL appears just above slit **53** and below the nearby phantom line. The overlay of phantom lines indicates the locations of fold lines when the label is folded into container form or incorporated into a package. The upper horizontal phantom line defines an upper margin adjoining the rectangular body of the label and containing flaps **41**, **45**, and **47**, as well as most of tab **43**. The lower horizontal phantom line defines bottom margin **48** adjoining the body and is a complete rectangle except for the beveled edge at the left. The vertical phantom lines divide the body into wide panels **61** and **63** and narrow panels **62**, **64**, and **65** (the last being somewhat narrower than the other two). The visible diagonal phantom lines indicate folds formed during formation of the top and bottom of a parallelepipedal package comprising this label. Also indicated is adhesive area **50** (in broken lines, being located on the opposite face) just within the outermost free edge of tab **43**. Adhesive areas **41'** on flap **41**, **48'** and **48''** (two) on bottom margin **48**, and **65'** on lap panel **65** are located similarly to the adhesive areas on label **10**.

FIG. 10 shows, in similar plan, inner wrapper **70**, which is rectangular in outline. Phantom lines superimposed on it divide it into an upper margin and a lower margin, and an intermediate body proper, all rectangular. The body is divided into panels **71**, **72**, **73**, **74**, and **75**, just as the body of previous inner wrapper **20** is divided into panels. Corresponding parts of the respective inner wrappers, which themselves are indentical except for an additional feature of wrapper **70** (mentioned below), differ by exactly fifty in their reference numerals, and the identical features of wrapper **70** are not described as such description would be superfluous. Just inside the top edge of wrapper **70** and centered between oblique slits **76** and **78** is adhesive area **80**, on the visible face of separable portion **79** defined by the slits and perforated line **77** joining their lower ends; the position of adhesive area **80** on this inner wrapper corresponds to that of adhesive area **50** on tab **43** of label **40**. The adhesive itself may be on either the outer face of the inner wrapper or the inner face of the label (or both).

FIG. 11 shows in perspective the upper portion of a package being formed, as by wrapping around the conventional mandrel (not shown), using label **40** and inner wrapper **70**. At this stage the body has been formed, but the top is only partially formed. Narrow panel **62** and wide panel **63** of the label are mutually perpendicular to one another and to the top (as well as to the bottom, not shown) in the customary parallelepipedal configuration. Rectangular flap **45** of the label is still aligned with panel **63**. A portion of flap **41**, now parallel to flap **45** is visible behind marginal portions of the inner wrapper.

Slit **76** in the inner wrapper is visible, while slit **78** (shown in broken lines) is behind flap **45** of the label. Separable portion **79** between them has been folded inward and part of it tucked over the near narrow edge of the top underneath tab **43**, whose adhesive area **50** (broken lines) on its inner face overlies adhesive area **80** (not shown) on the adhering portion of the outer face of the inner wrapper. Trapezoidal flap **47** at the opposite narrow edge of the top is folded inward and tucked down in like manner over a portion of the inner wrapper.

FIG. 12 shows the completed package in perspective from the same vantage point as FIG. 11. Rectangular flap **45** covers the major portion of the top, which otherwise is completely closed (at the near end) by the tucked and overlapped portions of the inner wrapper and the tab of the label therebetween. Portions of slits **76** and **78** are just visible at the corners of the minor top portion adjacent flap **45** (and underlying flap **41**, barely visible and not numbered here).

FIG. 13 shows, in like perspective view, the first stage in opening of the package top. Pressure of a thumb (or finger) against panel **62** just below slit **53** (visible in the two immediately preceding views) separates tab **43** from its junction therewith. Then gripping of the tab, as shown in FIG. 14 (at the edge marked PULL in previous views) will bring separable portion **79** of the inner wrapper into an upstanding spoutlike configuration. Use of an adhesive having high-shear but low-peel characteristics permits removal of the pull tab from the separable portion of the inner wrapper without removing that separable portion from the rest of the package, if desired.

While the degree of opening shown in FIG. 14 will expose the contents along about one third of the package top, and the separable portion is reclosable to recover the exposed portion, it also can be removed, if desired, to leave that portion of the package top permanently open as in FIG. 15. Separation of separable portion **79** (shown in FIG. 11 and previously but not in FIG. 15) along perforated line **77** (previously shown) recesses the inner wrapper, of which an edge is barely visible in this view, and gives a neat tailored appearance to the opening defined between the top edges of panels **61**, **62**, and **63** of the label. Cigarettes **81** are partly visible in FIG. 15, and recessed edge **83**, to which the tab was previously joined, facilitates access to them.

This invention provides a most convenient closure for cigarette packages or the like and a modified sheathing label therefor, together with an optional quick-opening feature. If desired, the customary enveloping outer sheath of cellophane or the like may be dispensed with in view of the nearly complete enveloping of the package by this label. Also provided thereby is a most convenient and extensive top display surface for brand name, etc. Advantages and benefits of the invention in its various aspects have been mentioned above, and others doubtless will become apparent and will accrue to those undertaking to practice the invention. The above disclosures are merely exemplary and not limitative, the scope of the invention being defined only by the following claims.

The claimed invention:

1. In a container of rectangular plan having an access closure occupying a minor part of the top, the improvement comprising a sheathing label covering the remaining part of the top and having a substantially rectangular body covering substantially all the rest of the container, leaving the access closure location uncovered.

2. In a container of rectangular plan having a rectangular access closure occupying about one-third of the top from one narrow edge, the improvement comprising a sheathing label covering the remaining two-thirds of the top and having a substantially rectangular body covering substantially all the rest of the container, leaving the first one-third thereof uncovered.

3. In a container of rectangular plan for cigarettes or the like, the combination of an openable closure bordering an edge of the top and occupying a minor part of the top surface, and a sheathing label having a substantially rectangular body thereof covering substantially all the rest of the container and having extending from the body thereof a flap covering the remaining major part of the top surface.

4. In a parallelepipedal container for cigarettes or the like, the combination of an inner wrapper having a predetermined, separable top portion, and a sheathing label about the bottom, sides, and remaining part of the top of the inner wrapper, that remaining part of the top being entirely covered by part of the sheathing label.

5. In a parallelepipedal container for cigarettes or the like, the combination of an inner wrapper having a top portion predeterminedly separable therefrom bordering an edge of the top, the remaining part of the top of the inner wrapper being tucked and folded over that part of the package top, and a sheathing label about the bottom, sides, and remaining part of the top of the inner wrapper, the sheathing label having a plurality of top flaps, and that remaining part of the top being entirely covered also by flaps of the sheathing label interleaved with the tucked and folded part of the top of the inner wrapper.

6. In a parallelepipedal container for cigarettes, the combination of a predetermined access closure in the top covering and thereby circumscribing in plan a plurality of entire cigarette ends, openable when pulled, and a sheathing label having a pull tab joined thereto but predeterminedly separable therefrom extending over the access closure and secured thereto.

7. In a parallelepipedal container comprising an inner wrapper with a sheathing label about its sides and with an end closure openable in place upon being pulled, the improvement comprising a predetermined pull-tab integral with the sheathing label, adherent to the openable end closure of the wrapper, and adapted to be detached from the sheathing label and thereafter to pull the end closure open.

8. A parallelepipedal container for cigarettes or the like, comprising an inner wrapper tucked and folded over the top of the container, and a sheathing label about the bottom, sides, and part of the top of the inner wrapper, the inner wrapper having an end closure therein openable upon being unfolded, the sheathing label having a pull-tab integral therewith but predeterminedly separable therefrom and adapted to adhere to and, upon being pulled, to open the unfoldable end closure part of the inner wrapper, the inner wrapper also having a predetermined portion adapted to be separated therefrom, the separable portion of the inner wrapper including the end closure part thereof openable by unfolding.

9. In a parallelepipedal container for cigarettes or the like having a rectangular end with an openable closure portion therein, the combination of an inner wrapper and a sheathing label each being generally rectangular in outline when flat and each having an integral portion predeterminedly separable therefrom, the respective separable portions lapping one another at the openable closure portion of the container and together forming that closure portion, the closure portion being adapted upon separation and pulling of the separable portion of the sheathing label to open the package reclosably and being adapted further upon separation and pulling of the separable portion of the inner wrapper to open the package permanently.

10. In a parallelepipedal container for cigarettes or like articles, comprising an inner wrapper having a closure portion at one end openable into spout-like configuration and a sheathing label surrounding the sides and the opposite end of the wrapper, the improvement comprising a pull-tab integral with but predeterminedly separable from the sheathing label and detachably joined to a separable portion of the inner wrapper and adapted, upon being detached from the sheathing label and then pulled, to open the end closure portion of the inner wrap-

per into the spout-like configuration, the opened spout-like end closure portion being part of the separable portion of the inner wrapper and removable from the container therewith to leave the container open.

11. In a parallelepipedal container for cigarettes or the like, having an inner wrapper tucked and folded over the top of the container and having also a sheathing label overlying the sides, bottom, and most of the top of the inner wrapper, the container including a generally rectangular major top portion adjoining three side edges, a pull-tab integral with but predeterminedly separable from the sheathing label, being joined thereto along a preslit junction near the fourth side edge of the top, the pull-tab overlying and being adherent to the tuck of the inner wrapper adjacent that side edge and underlying adjacent folded portions of the inner wrapper.

12. A parallelepipedal container for cigarettes or the like, having an inner wrapper tucked and folded over the top of the container and having also a sheathing label overlying the side, bottom, and most of the top of the inner wrapper, the container including a generally rectangular major top portion covered by the sheathing label adjacent three side edges, a pull-tab integral with but predeterminedly separable from the sheathing label, being joined thereto along a preslit junction near the fourth side edge of the top, the pull-tab overlying and being adherent to the tuck of the inner wrapper adjacent that side edge and underlying adjacent folded portions of the inner wrapper.

13. A cigarette container having a substantially rectangular end and comprising a flexible inner wrapper adapted to close the end by tucking of end margins of opposing narrow sidewalls thereof across the end, thereby forming end margins of opposing wide sidewalls thereof into upstanding flaps, and thereafter folding the flaps across the end, each of the pair of flaps formed by the folding being slit transversely of the end, in substantial alignment with the underlying free edge of one of the end tucks, into a major portion and a minor portion, that tuck and adjoining minor flap portions thereby composing an access closure openable into spout-like configuration, and a sheathing label having an integral pull-tab extending from one edge along a detachable junction therewith into adherent contact with the tuck between the openable minor flap portions of the wrapper and having at least one flap extending from the edge and fixedly covering the remaining part of the end.

14. Cigarette container comprising an inner wrapper with an access closure predeterminedly separable therefrom and a surrounding substantially rectangular sheathing label of claim 13.

15. Cigarette container comprising an inner wrapper with an access closure in the inner wrapper and a surrounding substantially rectangular sheathing label of claim 13 with the pull-tab thereof secured to the access closure in the inner wrapper.

16. One-piece sheathing label of paper or the like

adapted to surround the contents of a cigarette container or the like having a rectangular plan and having an access closure in a minor part of the top surface thereof, the label covering substantially all the sidewalls of the container, having a tab limited in length and in width to at most the shorter plan dimension, and having at least one flaplike extension adapted to cover the remaining major part of the top surface.

17. One-piece sheathing label of paper or the like adapted to surround the contents of a cigarette container or the like having a rectangular plan and having an enveloping inner wrapper with an access closure predeterminedly removable therefrom occupying about one-third of the top end surface thereof, the label having at least one flaplike extension integral with the body portion and adapted to cover the remaining two-thirds of the top surface and having a tab extending from the body portion and adapted to adhere to the removable access closure.

18. Sheathing label for a cigarette package or the like, of rectangular plan, comprising a generally rectangular panel of sheet material having an integral marginal strip extending along the bottom edge thereof and an integral tab extending from the top edge thereof for a maximum distance outward at most equalling the corresponding dimension of the bottom margin and laterally for a maximum width at most equalling the narrow dimension of the plan.

19. In a sheathing label for a cigarette package of rectangular plan, the improvement comprising a substantially rectangular body portion and a narrow tab having a width at most equal to the plan width, the tab adjoining the rest of the label only along a junction substantially aligned with the edge and being perforated for ready detachment therealong and consequent complete separation of the tab from the rest of the label.

20. Sheathing label, made of flexible wrapping material, for parallelepipedal containers for cigarettes or the like, comprising a generally rectangular body portion and an integral marginal portion along an edge thereof, the body portion having a tab separable from it extending into the margin defined by the marginal portion, the marginal portion also having a plurality of flaps extending from the body portion and spaced laterally from the tab, the free extremities of the tab and flaps lying substantially on a straight line parallel to the junction of the body and marginal portion.

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