The present invention relates to packaging, and is more particularly concerned with a novel frangible package adapted especially for containing cigarettes.

Heretofore many proposals have been advanced for improving cigarette packages and the like to permit ready opening for extraction of the cigarettes or other contents. That these proposals have been impractical or impossible in practice is due in part to the fact that up to the present time none of them has been adopted by any of the major tobacco companies.

Certain important requirements must be met if such a readily opening package is to become into general use. One of these has to do with the needs of the cigarette maker. The improved package should be capable of manufacture upon existing packaging machinery with little or no expense for modifications or attachments. The package, therefore, should be of the same size, shape and general construction as the standard cigarette package now on the market and further must not require any additional materials, since the profit margin on each pack of cigarettes is of the order of only a cent and one-half, more or less.

An improved package must likewise meet the requirements of the consumer. Smokers have well formed habits of opening cigarette packages, and any change or improvement relating to the mode of opening must not be frustrating to them but rather should conform naturally with their existing habits. Most smokers, from my observation, tear a square or rectangular opening at one side of the upper end of the package, leaving exposed for a number of cigarettes. When the open package is carried around in purse or clothing, loose tobacco and often individual cigarettes fall out. Furthermore, since there is no way of reclosing the usual package, the cigarettes quickly become dry and stale, losing their flavor.

A further consideration is that any improved frangible cigarette package should be constructed in such a manner that the revenue stamp will not be torn during opening. This stamp is placed across the middle of the top of the package and very often is not destroyed in the usual manner of opening.

With the foregoing in mind, it is an object of my invention to provide a new and improved package for cigarettes and the like, provided with a readily accessible pull tab and associated tearing or ripping portions, so arranged that a simple pull of the tab will tear a sizable opening in one end of the package corresponding closely with that which most smokers customarily make in opening the conventional package.

Still another object of the invention is to provide such a package in which, preferably, the pull tab remains attached to the package and is readily capable of being used as a cleaning device to prevent scattering of particles of tobacco or accidental falling out of cigarettes, and to aid in keeping the cigarettes fresh until all are consumed.

Still another object of the invention is to provide a new improved package of the type described, employing a minimum of additional materials in its construction. My novel package is formed from at least one sheet of wrapping material appropriately folded to package form. For cigarette package purposes, this wrapper is usually the composite inner wrapper consisting of an innermost paper sheet enclosing the cigarettes surrounded by a metallic foil, the two components being secured to each other and acting as a single sheet for wrapping purposes. This wrapper is folded to provide a pair of overlapping closure flaps at one end which are folded toward each other, as from the bottom side of the package, for example. Prior to folding the wrapper, a portion thereof is cut out so that when the wrapper is folded into package form, two edges of these overlapping flaps are generally aligned with each other and with the adjacent edge of the narrow side of the package and there is also provided an opening beneath the aforementioned overlapping flaps extending inwardly of the package generally from the vicinitly of such edge of the narrow side of the package. The location of the opening corresponds with that which would be occupied by a third underlying flap if the wrapper had not been cut out in this manner. In one form of the invention the wrapper is notched to eliminate entirely this underlying third flap; in another form the cut-out is somewhat shorter and leaves an abbreviated or truncated flap which extends across the opening a short distance toward the middle of the package beneath the two overlapping flaps but not sufficiently to interfere with extracting the contents of the package.

I provide a tearing tape composed of suitable flexible material which preferably has greater tensile strength than the wrapper, and I extend a flap of the same beneath the overlapping flaps. This inwardly extending portion of the tape underlies at least in part and is adhesively secured to the underside of the overlapping flaps. Preferably, this portion is as wide as the width of the package so that its edges abut the bases of the two overlapping flaps at each side of the package. The adjacent portion of the tape is adhesively secured either to the outer surface of the abbreviated flap, where such is provided, or to a narrow area of the side wall of the package beneath the edge thereof adjacent the opening, thereby, in either manner, completing the seal of the package. Still another portion of the tape may be a separate piece or an extension of the flap-underlying portion bent back on itself, overlies and is adhesively secured to the outside of the two overlapping flaps. An outwardly extending portion of the tape is provided to form a tab protruding from the side of the package. The tab is adapted to be manually grasped and, when pulled upwardly and toward the center of the end of the package, it serves to disengage the portion of the tape which is secured to the outer side of the wrapper or to the upper surface of the abbreviated flap, as the case may be, and thereafter causes the tape to tear the two overlapping flaps, along lines corresponding generally to the side edges of the underlying portion of the tape, from the edge of the package toward the middle, thereby affording access to the interior of the package. Where the portion of the tape is of the same width as the end of the package these two tearing lines correspond to the base lines of the overlapping flaps and a sizeable opening is formed which therefore extends all the way across the corresponding side of the package and which may extend as far toward the center of the package as desired, depending upon how far inwardly the underlying portion of the tearing tape is inserted. Preferably, this underlaying portion is beneath at least a portion of the revenue stamp on a cigarette package to facilitate destruction thereof during opening the package. The package described above, may be further wrapped in an outer paper wrapper and cellophane in the usual manner. The tab, after the package has been opened, is adapted to be inserted beneath a wrinkle of the package on one side thereof to reclose the opening which has been torn.

Still further objects, features and advantages of the invention will become apparent from the following detailed description of a preferred embodiment thereof, taken in connection with the accompanying drawings in which like numerals refer to like parts in the several views, and in which:

Fig. 1 is a view in perspective of a complete cigarette package, including the cellophane wrapper, according to the invention, showing the position of the tab of the tearing tape;

Fig. 2 is a similar view of the package with the upper portion of the cellophane wrapper removed and the tab
and tearing tape, according to the invention, pulled to form an opening exposing the cigarettes;

Fig. 3 is a fragmentary sectional view on an enlarged scale on line 3—3 of Fig. 1 showing the several layers which make up the package;

Fig. 4 is a perspective view of the package which has been opened as in Fig. 2, but with the tab tucked beneath the inner wrapper on one side, reclosing the opening;

Fig. 5 is a plan view of the composite paper and foil inner wrapper unfolded, showing the notch which is cut in it prior to wrapping;

Fig. 6 is a fragmentary view of the formed inner wrapper with the upper end flaps unfolded preparatory to receiving the tearing tape;

Fig. 7 is a view corresponding to Fig. 6, with the tape in place and wrapper being pulled to form the inner wrapper,

tearing the tape;

Fig. 8 is a view corresponding to Fig. 7, with the flaps folded down and the tape refolded and secured thereto and having a portion formed into a protruding tab;

Fig. 9 is a fragmentary view corresponding to Fig. 8, disclosing a modified embodiment of the invention in which the tape is secured to the side of the package beneath the opening;

Fig. 10 is a fragmentary plan view of the unfolded wrapper used in forming the embodiment of Fig. 9; and

Fig. 11 is a fragmentary perspective view of a still further modified package according to the invention employing a two-part tearing tape.

As is well known, the standard cigarette package in this country consists of an inner paper wrapper enclosing the cigarettes, a metal foil wrapper secured to and surrounding the inner wrapper, an outer paper wrapper outside the foil and covering the bottom and sides but not the top of the package and bearing the manufacturer’s trade-mark, and finally, surrounding the entire package, a transparent, moisture-vaportproof wrapper of cellulose or similar material. This cellulose wrapper customarily is provided with a tear strip extending all the way around the package to facilitate ready opening. The revenue stamp is applied beneath the cellulose wrapper across the top of the package and secured by adhesive to the flaps of the inner wrapper on top and also on the wide sides to the outer paper wrapper which bears the brand name.

As seen in Fig. 1, the outer cellulose wrapper is indicated by numeral 10. The number 12 designates the tearing strip for opening the cellulose wrapper 10 permitting removal of the portion thereof enclosing the top of the package. The cellulose wrapper surrounds an inner paper wrapper 14 (Fig. 2) to which the trade-mark or brand name of the cigarette maker is applied, and which may be seen through the transparent outer covering. This outer wrapper which bears the name of the cigarette is wrapped around the four upstanding sides of the package and is folded across the bottom and sealed in the usual manner. It does not, however, extend across the upper end of the package. Underneath this paper wrapper 14 is a metal foil wrapper 16 and the inner wrapper of two layers the innermost of which is paper and the adjacent one of which is metal foil, the two being secured to each other in the usual manner. The inner paper wrapper 16 will be referred to by the numeral 16a and the foil wrapper by the numeral 16f. Since these two layers operate as a unit, they will be referred to collectively by the numeral 16 and it is evident that they may be composed of one or more layers without in any way changing the nature of the invention.

The composite inner wrapper 16 is shown in unfolded flaps in Fig. 5. In forming the package (Figs. 6–8) the blank wrapper 16 is folded as shown in Fig. 6 with the notch 18 at one end and adjacent a narrow side of the package. The edges 20 and 21 overlap on the flaps of the package as seen in Fig. 5. The top flaps 18 are turned down along the broken line 22 (Fig. 5) providing a pair of side flaps 24 and 26 and one end flap 28 (Fig. 5). Opposite the flap 26 in one form of the invention I provide an abbreviated flap 30 which extends only a very short distance inwardly from the narrow side of the package over the top of the cigarettes, as best seen in Fig. 6. This flap is provided by cutting the notch 18 at an angle as indicated above the line 22.

Turning to Fig. 7, the manner of affixing the tearing strip or tape will be explained. The tape, indicated generally by the numeral 32, may be composed of cellulose or some other suitable strong, flexible material and carrying on one surface a suitable adhesive, as indicated. One end portion 34 of the tape is laid with the adhesive side up over the cigarettes and within the upper flaps 24 and 26. The portion 34 preferably covers a sufficient area of the cigarettes to have at least some portion of it located beneath the position which the revenue stamp will occupy when the package is sealed. The portion of the tape overlying the top portion of the inner wrapper 16 is bonded thereto by the adhesive indicated in Fig. 6 or otherwise.

Next the flap 28 is folded inwardly and flaps 24 and 26 folded down in overlapping fashion over the top of the flap 28 and over the end portion 34 of the tape 32.

Due to the presence of the adhesive on the upper surface of the portion 34, the under side of the flaps 24 and 26 will be securely attached thereto. Next the tape 32 is folded back upon itself along the line 36 leaving a portion 38 protruding from the side of the package and with the portion 40 overlying the upper side of the flaps 24 and 26 and secured thereto by the adhesive coating. It will be evident that that part of the portion 40 which overlies the protruding portion 38 of the tape will adhere thereto forming a composite tab 42 which may be trimmed down to a convenient shape, as seen in Fig. 8, to permit ready reclosing.

To complete the package the outer wrapper 14 bearing the trade-mark is next applied over the bottom and sides of the package, the tab 42 being secured to the top of the package and the revenue stamp applied, the latter holding the tip of tab 42 securely in place. Following this operation, the outer cellulose wrapper 10 is applied covering as indicated.

Returning to Figs. 1, 2, and 4, the manner of opening and reclosing my novel package will be explained. First, the top of the cellulose wrapper is removed employing the tearing strip 12. Next the tab 42 is pulled upward from beneath the revenue stamp 44 and pulled upwardly and toward the left as viewed in Figs. 1 and 2. By reason of the presence of the portion 34, which is just as wide as the package, beneath the flaps 24 and 26 these flaps are torn along their base lines from one narrow side of the package toward the center, providing an opening having a width corresponding to the end of the package. The tearing may be continued a sufficient distance to expose the cigarettes for ready removal and also to tear a portion of the revenue stamp, thereby destroying the same. After the extraction of a cigarette, the tab 42 may be tucked down between the inner wrapper 16 and the outer wrapper 14 or beyond the outer wrapper 10 and the cigarettes, leaving the flap 30 on the outer side of the maker 16. If the cigarette is left in place, the tab 42 might also be merely tucked between the cellulose 10 and the wrapper 14. In this manner the abbreviated flap 30 entirely and employ the construction illustrated. It is evident that it will be observed that in the last sealing operation of making the package instead of turning the flap 42 back upon itself and tucking its ends beneath the revenue stamp, I bend it down along the side of the package between the outer paper wrapper and the cellulose. A narrow portion of the tab is glued to a corresponding adhesively coated narrow area 45 of the side wall 46 of the inner wrapper thus completing the seal. In this form of the invention the tab 42 is lifted upwardly to break the seal between its under surface and the surface 45 of the outer side wall 46 of the inner wrapper. Next it is pulled upwardly and to the left as viewed in Fig. 9 to tear the top of the package in the same manner as before.

In Fig. 11 I have shown a somewhat modified form of the invention illustrated in Figs. 1–8. In this case I have employed a tearing tape composed of a pair of distinct sections 32 and 34 which are joined together in a long piece folded upon itself. The first piece 34 corresponds with the portion 32 and is placed on the package in the same manner, adhesive side up. The flaps 24 and 26 are folded over it and next the separate pieces 30 are tucked over the whole, adhesive side down, as indicated by broken lines. The tab portions 52a and 52b of each are joined to form a tab like the tab 42 of the other figures. The underside of the tape 40 is glued to the short flap 30 in like manner as shown in Fig. 7, or, where the flap 30 is omitted, the tape 48 may be secured to the side of the package as in Fig. 9.

While I have particularly disclosed and described my
5 novel frangible package as applied to cigarette packages where its advantages are most striking, the same may be applied to containers for other products where it may be found useful. In the accompanying drawings, I have not limited myself to cigarette packages in the statement of the invention or the appended claims.

Still further changes and modifications will occur to those skilled in the art nevertheless within the scope of the appended claims.

I claim:

1. A cigarette package or the like comprising at least one sheet of wrapping material, said sheet being folded to provide a pair of overlapping closure flaps at one end which are folded toward each other and have a pair of edges generally aligned both with each other and with an adjacent edge of the end of said package, said sheet having a portion cut away to provide an opening beneath said closure flaps extending inwardly of the package generally from the vicinity of said edge of said package, and a tearing tape having a portion of substantially the width of the end of the package extending inwardly from said edge of said package underlying at least in part and secured to said flaps, said tape having another portion overlying at least in part and secured to the outside of said flaps and likewise a portion secured to the outer side of said sheet along an area thereof adjacent said opening, and said tape further having a portion extending inwardly from the base of said last named area, whereby said tape when pulled upwardly and inwardly by said tab will disengage the portion of said tape which is secured to said relatively short flap extending inwardly from said edge of said package beneath said closure flaps to provide an opening beneath said closure flaps extending inwardly of the package generally from the vicinity of said edge of said package, and a tearing tape having a portion of substantially the width of the end of the package extending inwardly from said edge of said package underlying at least in part and secured to said flaps, and a portion thereof being adapted to be inserted beneath a wrapper of said package at one side thereof for reclosing the opening thus torn.

2. A cigarette package or the like comprising at least one sheet of wrapping material, said sheet being folded to provide a pair of overlapping closure flaps at one end which are folded toward each other and have a pair of edges generally aligned both with each other and with an adjacent edge of the end of said package, said sheet having a portion cut away leaving only a relatively short flap extending inwardly of said edge of said package beneath said closure flaps to provide an opening beneath said closure flaps extending inwardly of the package generally from the vicinity of said edge of said package, and a tearing tape having a portion of substantially the width of the end of the package extending inwardly from said edge of said package underlying at least in part and secured to said flaps, and a portion thereof being adapted to be inserted beneath a wrapper of said package at one side thereof for reclosing the opening thus torn.

3. A cigarette package or the like comprising at least one sheet of wrapping material, said sheet being folded to provide a pair of overlapping closure flaps at one end which are folded toward each other and have a pair of edges generally aligned both with each other and with an adjacent edge of the end of said package, said sheet having a portion cut away leaving only a relatively short flap extending inwardly of the package generally from the vicinity of said edge of said package, and a tearing tape having a portion of substantially the width of the end of the package extending inwardly from said edge of said package underlying at least in part and secured to said flaps, and a portion thereof being adapted to be inserted beneath a wrapper of said package at one side thereof for reclosing the opening thus torn.

4. A cigarette package or the like comprising at least one sheet of wrapping material, said sheet being folded to provide a pair of overlapping closure flaps at one end which are folded toward each other and have a pair of edges generally aligned both with each other and with an adjacent edge of the end of said package, said sheet having a portion cut away leaving only a relatively short flap extending inwardly of said edge of said package beneath said closure flaps to provide an opening beneath said closure flaps extending inwardly of the package generally from the vicinity of said edge of said package, and a tearing tape having a portion of substantially the width of the end of the package extending inwardly from said edge of said package underlying at least in part and secured to said flaps, and wherein said tape further having a tab extending from said last named area, whereby said tape when pulled upwardly and inwardly by said tab will disengage the portion of said tape which is secured to said relatively short flap and likewise tear said two closure flaps along their bases from said edge of the package toward the middle of the package to afford access to the interior thereof, said tab being adapted to be inserted beneath a wrapper of said package at one side thereof for reclosing the opening thus torn.

5. A cigarette package or the like comprising at least one sheet of wrapping material, said sheet being folded to provide a pair of overlapping closure flaps at one end which are folded toward each other and have a pair of edges generally aligned both with each other and with an adjacent edge of the end of said package, said sheet having a portion cut away leaving only a relatively short flap extending inwardly of said edge of said package beneath said closure flaps to provide an opening beneath said closure flaps extending inwardly of the package generally from the vicinity of said edge of said package, and a tearing tape having a portion of substantially the width of the end of the package extending inwardly from said edge of said package underlying at least in part and secured to said flaps, and wherein said tape further having a tab extending from said last named area, whereby said tape when pulled upwardly and inwardly by said tab will disengage the portion of said tape which is secured to said relatively short flap and likewise tear said two closure flaps along their bases from said edge of the package toward the middle of the package to afford access to the interior thereof, said tab being adapted to be inserted beneath a wrapper of said package at one side thereof for reclosing the opening thus torn.

6. A cigarette package or the like comprising a composite inner wrapper of paper and overlying at least being folded to provide a pair of overlapping closure flaps at one end which are folded toward each other and have a pair of edges generally aligned both with each other and with an adjacent edge of the end of said package, said wrapper being notched to provide an opening beneath said closure flaps extending inwardly of the package generally from the vicinity of said edge of said package, and a tearing tape having a portion extending inwardly from said edge of said package underlying at least in part and secured to said flaps, and wherein said tape further having a tab extending from said last named area and folded back across the top of said package, and an outer wrapper surrounding said inner and said first named wrapper, and a revenue stamp secured across the top of said package overlying in part the first named position of said tape and also holding said tab, whereby said tape when pulled upwardly and in-
wardly by said tab will disengage the portion of said tape which is secured to the outer side of said sheet and likewise tear said two flaps along lines corresponding generally to the side edges of the underlying portion of said tape from said edge of the package toward the middle of the package to afford access to the interior thereof.