

May 12, 1942.

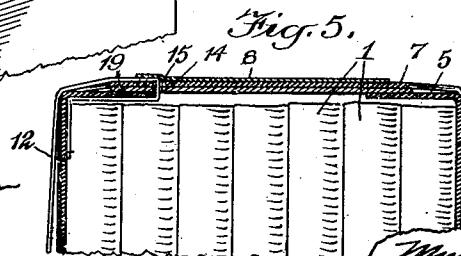
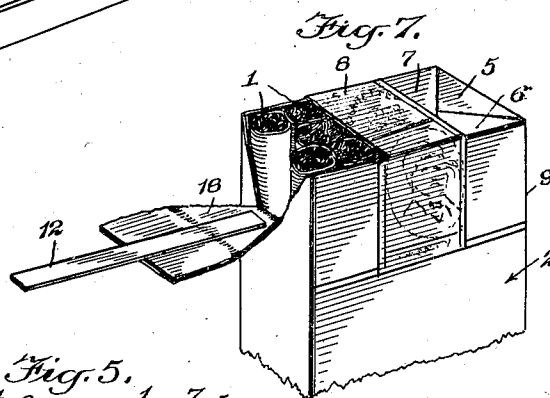
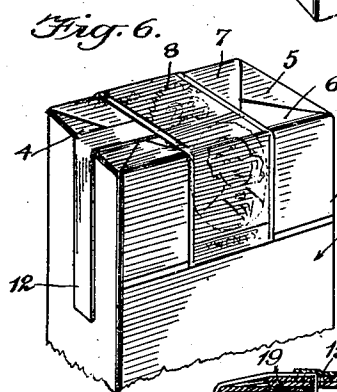
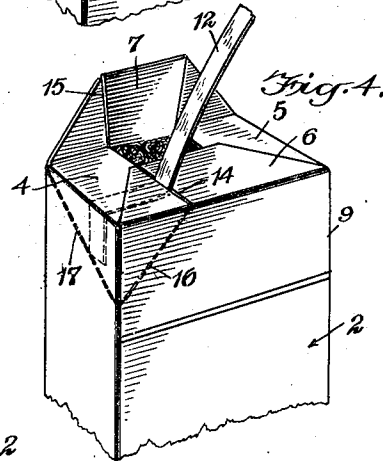
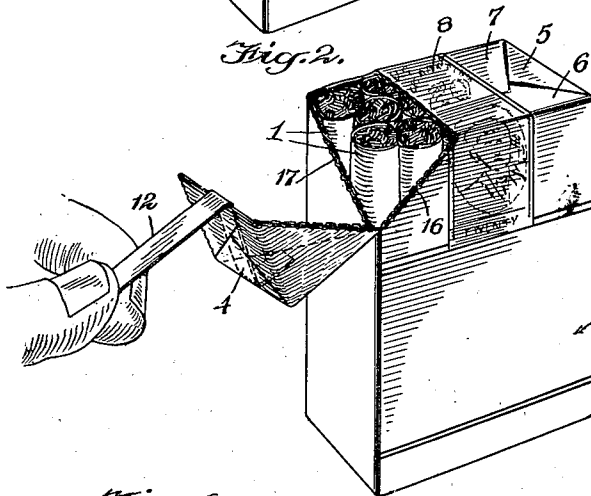
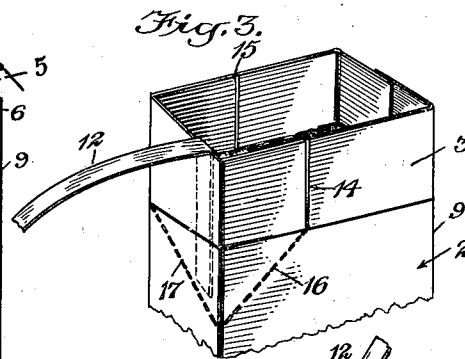
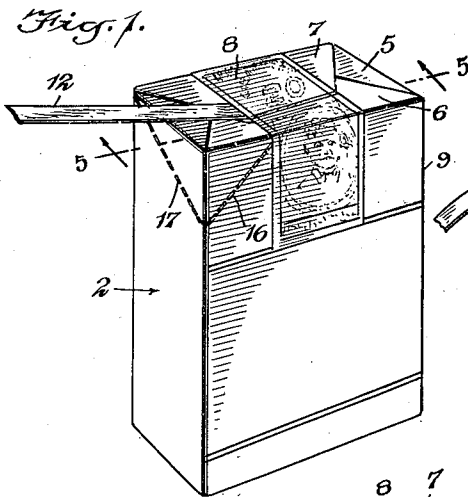
C. S. STEPHANO

2,283,102

PACKAGE

Filed Sept. 20, 1939

2 Sheets-Sheet 1



WITNESSES
Geo. W. Raylor
M. H. Kane

INVENTOR
Constantine S. Stephano

BY
Mum, Anderson & Liddy
ATTORNEYS

May 12, 1942.

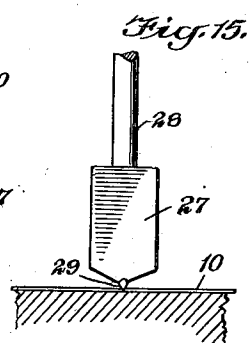
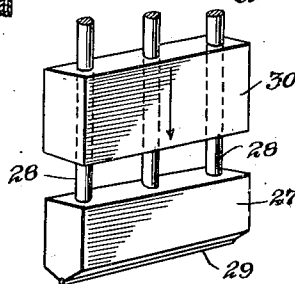
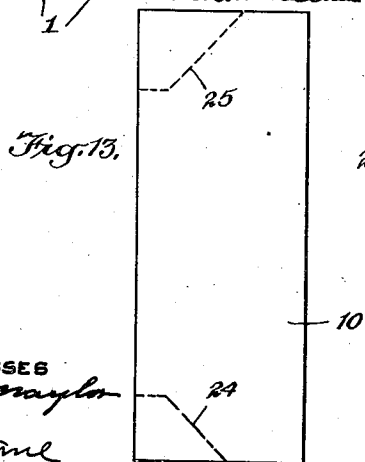
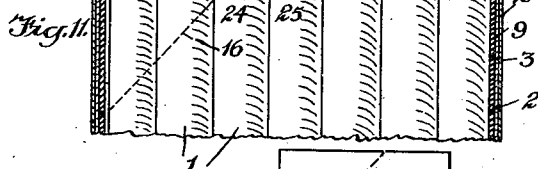
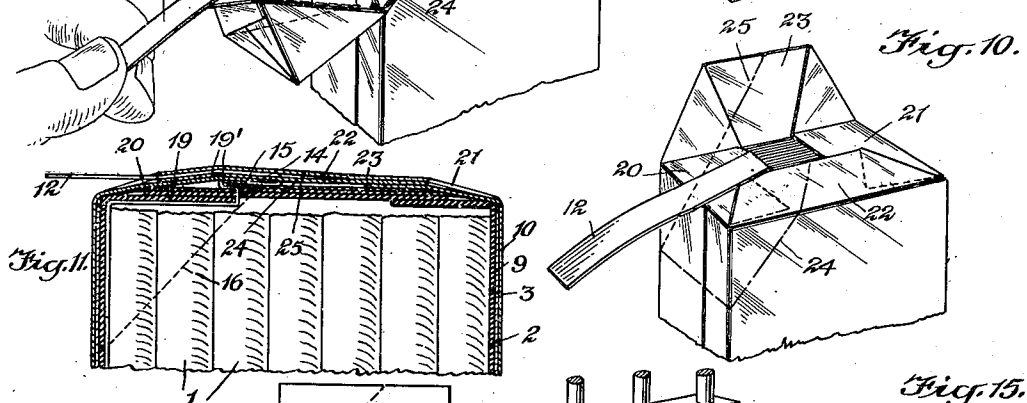
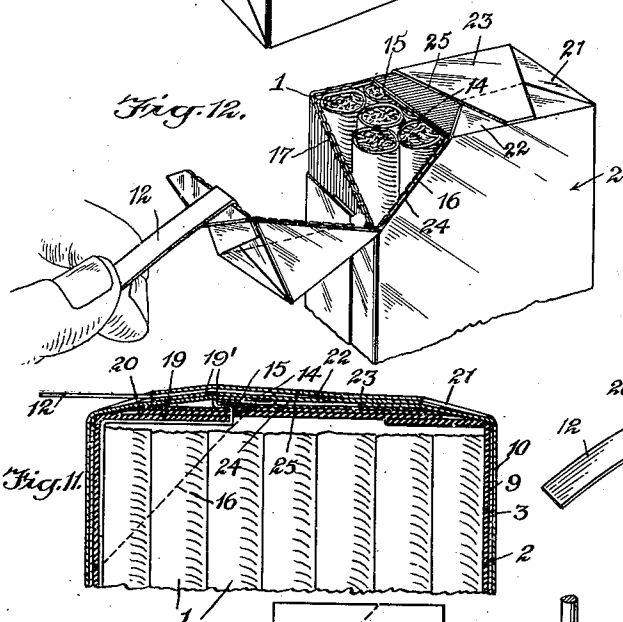
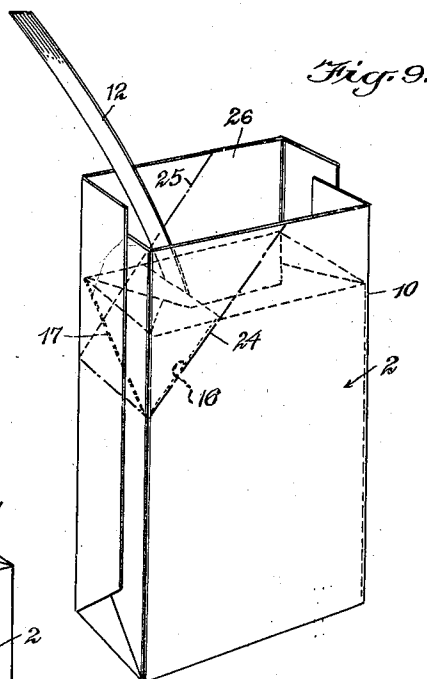
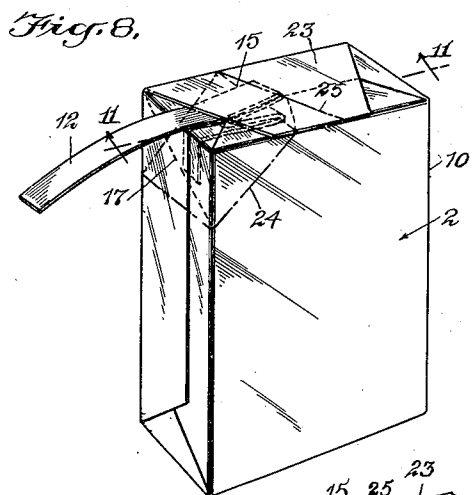
C. S. STEPHANO

2,283,102

PACKAGE

Filed Sept. 20, 1939

2 Sheets-Sheet 2



WITNESSES
Geo. W. Rayla
D. H. Kane

INVENTOR
Constantine S. Stephano
BY
Murray, Anderson & Liddy
ATTORNEYS

UNITED STATES PATENT OFFICE

2,283,102

PACKAGE

Constantine S. Stephano, Elkins Park, Pa., assignor to Stephano Brothers, Philadelphia, Pa., a corporation of Pennsylvania

Application September 20, 1939, Serial No. 295,728

3 Claims. (Cl. 229—51)

This invention relates to an improved package, particularly to an improved package for cigarettes.

It is an object of the invention to provide a package of improved construction which may be opened so as to expose the contents thereof in a simple manner without destroying or unduly weakening the package.

The popular type of cigarette package consists of a number of cigarettes, usually twenty, wrapped in a container made of flexible sheet material, usually layers of foil and paper. Frequently an outer wrapping made of Cellophane or similar transparent sheet material is disposed around the package for the purpose of improving the appearance thereof and also to prevent any undue variation in the moisture contents of the tobacco. Difficulty is frequently experienced in opening the package in a manner so that the cigarettes can be conveniently removed therefrom. Attempts have heretofore been made to solve this problem by providing package openers of various types. However, these have been subject to various criticisms as, for instance, they were expensive to apply to the package or were cumbersome. Also, many of the openers heretofore employed unduly mutilated or weakened the package.

It is a particular object of the present invention to overcome the difficulties heretofore encountered and to provide an improved cigarette package having opening means of simple and inexpensive construction incorporated therein and which may be operated to expose the cigarettes so that they may be conveniently removed from the package and without unduly mutilating or weakening the package.

A further object is the provision of an improved package having opening means for the Cellophane wrapping as well as for the package itself and which is so constructed as not to adversely affect the impervious character of the Cellophane.

For a fuller understanding of the invention reference should be had to the accompanying drawings, in which

Fig. 1 is a perspective view of a cigarette package embodying my invention;

Fig. 2 is a similar view in which the opening device has been operated to partially open the package;

Fig. 3 is a perspective view of the top of the package prior to closing the same, showing the manner in which it is constructed and assembled;

Fig. 4 is similar to Fig. 3 with the top of the package partially closed;

Fig. 5 is a sectional view of the top of the package on the line 5—5 of Fig. 1;

Fig. 6 is a perspective view of the upper end of a modified type of package embodying my invention;

Fig. 7 is a similar view after the opening device has been operated to partially open the package;

Fig. 8 is a perspective view of a package similar to that shown in Fig. 1, but having a Cellophane or similar wrapping formed therearound;

Fig. 9 is a similar view with the top of the Cellophane in open position showing the manner in which it is assembled;

Fig. 10 is a perspective view of the top of the package showing the Cellophane in partially closed position;

Fig. 11 is a sectional view of the top of the package on the line 11—11 of Fig. 8;

Fig. 12 is a perspective view of the top of the package after the fastening device has been operated to partially open the package;

Fig. 13 is a plan view of a blank sheet of Cellophane to be applied around the outside of the package and showing the manner in which it is weakened to facilitate the opening of the package;

Fig. 14 is a perspective view of the type of apparatus which may be used in weakening the Cellophane; and

Fig. 15 is a side elevation of the apparatus.

My invention is particularly applicable to the conventional type of cigarette package as shown in the accompanying drawings consisting of a plurality of cigarettes indicated by the numeral 1, arranged in parallel relationship and encased in a suitable container 2. The container is formed in the usual manner from a sheet of flexible material 3 which is usually made of several layers such as an inner layer of paper and an outer layer of metal foil. The sheet material is folded so as to form front, rear, and side panels and also a top and bottom. The front, rear and side panels and also the bottom may be formed and folded in any desired manner and may be adhesively secured together.

The top of the package, which is pertinent to my present invention, is formed by extending the sheet material 3 above the upper ends of the cigarettes in the manner shown in Fig. 3 and then tucking the opposite sides inwardly against the ends of the cigarettes in the manner indicated at 4 and 5 thus providing a pair of flaps 6 and 7 extending from the rear and front panels respec-

tively. The flaps 6 and 7 are then folded inwardly in superimposed relationship and an adhesive may be employed to hold them in assembled relation. Around the outside of the package a jacket 9 made of paper and extending up to but not over the top of the package may be provided in the usual manner. The jacket 9 usually contains the brand name of the cigarettes and advertising, descriptive, and similar printed matter. A revenue stamp 8 in the form of an adhesive strip is applied over the central portion of the top of the package and this aids in holding the package in assembled relation.

The package as described is of conventional character and is embodied in each of the forms of my invention. In the form of my invention shown in Figs. 8 to 13 a wrapping of Cellophane or similar transparent sheet material is applied around the package in the usual manner as indicated at 10.

In each of the forms of my invention I provide improved opening means whereby one side of the top of the package may be opened so as to expose the ends and a portion of the sides of some of the cigarettes but so as to leave the remainder of the package intact to protect the cigarettes.

Referring now to the form of my invention shown in the first five figures of the drawings the opening means comprises a relatively narrow elongated flexible strip 12 made of a strong material such as Cellophane. The strip 12 is secured to the under-surface of the tuck 4 preferably to one side of the center thereof and the inner end of the strip preferably depends downwardly for a short distance and is secured to the inner surface of the adjacent side of the package. The handle portion of strip 12 extends outwardly through the superimposed slits 14 and 15 formed in the flaps 6 and 7 beyond but adjacent to the end of tuck 4 and also adjacent the end of the revenue stamp 8. Strip 12 is then extended out to the adjacent side of the package as clearly shown in Fig. 1. So as to guide the tearing of the package when it is opened I preferably provide the adjacent panels of the package with perforated or weakened lines. Thus, as shown, I may provide the back panel of the package with a perforated or weakened line 16. The perforated line 16 meets the slit 14 at its upper end and proceeds diagonally downwardly to the corner of the package a short distance beneath the top where it meets a similar scored or weakened line 17 extending diagonally upwardly to the top of the package on the opposite corner of the side panel. Both the perforated or weakened lines 16 and 17 extend through the flexible sheet material 3 and the jacket 9.

In opening the package the protruding end of the strip 12 is grasped in the hand and pulled outwardly away from the package. The result is that the top of the package is removed from the slits 14 and 15 to the adjacent side edge and the back and side panels are torn along the perforated lines 16 and 17. So as to insure the removal of this portion as a unit, additional adhesive may be applied to the superimposed layers of the top of the package at this point as indicated at 19. One corner of the top of the package is thus removed so as to expose the tops and upper ends of the adjacent cigarettes as most clearly shown in Fig. 2. The cigarettes may thus be conveniently grasped in the hand and removed from the package.

It will be appreciated that since only a small portion of the top of the package is removed and

since the revenue stamp which aids in securing the package in position remains substantially intact, the package is not unduly mutilated or weakened.

In the modified form of my invention shown in Figs. 6 and 7 the package is formed in substantially the same manner. Thus, it is provided with the opening strip 12 which is secured to the under-surface of tuck 4 and to the adjacent inner surface of the side of the package, at the center rather than at one side, extending outwardly through the slits 14 and 15 formed in the flaps 6 and 7. However, I do not provide the back and side panel of the package with weakened perforated lines 16 and 17 but permit the package to tear naturally along the lines to which the force is applied. In this form of my invention when the strip 12 is grasped in the hand of the user and pulled outwardly the top of the package from the slits 14 and 15 to the adjacent side panel is removed and the side panel is torn downwardly in a generally V-shaped tear as indicated at 18 so as to expose the upper ends of the adjacent cigarettes. As in the first form of my invention the revenue stamp 8 is left substantially intact and thus the package is not substantially mutilated or weakened.

In the final form of my invention shown in Figs. 8 to 15 a package similar to that shown in the first 5 figures of the drawings is encased in a Cellophane or similar wrapping made from flexible transparent sheet material. In this connection it should be understood that the form of my invention shown in Figs. 6 and 7 may also be encased in Cellophane in a similar manner. It will be seen that the package is provided with a flexible opening strip 12 which extends through the slits 15 and 14 and is secured to the under-surface of tuck 4 and the inner surface of the side panel of the package. Also the rear and side panels are provided with weakened lines 16 and 17 so as to guide the tearing of the package when force is applied to the opening strip.

The Cellophane wrapping 10 is formed in the usual manner from a unitary blank of Cellophane as shown in Fig. 13. The bottom of the package is placed transversely of the center of the blank and the blank is folded upwardly over the front and rear panels and is then folded in overlapping relation along the sides of the package and adhesively secured in position in the manner shown in Fig. 9. The two overlapping edges of the Cellophane protruding above the side panels of the package are then folded inwardly in the manner shown in Fig. 10 so as to produce the tucks 20 and 21 and the flap 22 is folded against the top of the package. Strip 12 is extended outwardly above flap 22, and flap 23 is then folded downwardly against the top of the package and over the strip 12 and adhesively secured in position. It will be appreciated that if force is then applied to the strip 12 the top of the package will be opened in the manner described in connection with the first five figures of the drawings. However the Cellophane wrapping will be torn in an irregular manner. So as to cause a uniform tearing of the Cellophane wrapping in a predetermined manner I provide it with weakened lines extending around the portion of the package which is opened by the strip 12. The weakened lines should be of such a character as not to destroy the impervious nature of the Cellophane and I form the weakened line in an improved manner as will hereinafter be explained.

The weakened lines are formed in two separate

sections, one indicated by the numeral 24 at one end of the Cellophane blank and the other indicated by the numeral 25 at the other end of the Cellophane blank. The weakened line 24 extends diagonally across the flap 22 and the rear panel of the package and transversely across a portion of the side of the package while the weakened line 25 extends diagonally across the flap 23 and the front panel of the package and transversely across a portion of the side of the package overlapping the end of the weakened line 24. In the usual cigarette package one end of the Cellophane blank extends upwardly above the other end of the blank when applied to the package as indicated at 26 in Fig. 9. For this reason the diagonal portion of the weakened line 25 should be made somewhat longer than the diagonal portion of the weakened line 24.

As previously stated the weakened lines 24 and 25 are made in an improved manner so as not to destroy the impervious character of the Cellophane. This may be accomplished by means of the apparatus shown in Figs. 14 and 15 which consists of a block 27 suitably supported on rods 28 and having an elongated rounded member such as a fine wire as, for instance, 53-thousandths of an inch in diameter secured along its under-surface.

A weakened line is formed in the Cellophane by placing the block on the Cellophane with the wire extending along the portion to be weakened. A weight as indicated at 30 is then dropped on the upper surface of the block with the result that the force applied to the Cellophane by the wire 29 produces weakening in the Cellophane along the line of contact. The force applied should be sufficient to weaken the Cellophane without rupturing or fracturing it. I have found that when a Cellophane sheet of 1-thousandths of an inch thickness is employed and a wire two inches in length and 53-thousandths of an inch in diameter is used on the block 27, a force of approximately 600 pounds should be applied to the block. Where the wire 29 is two inches in length and is 125-thousandths of an inch in diameter a slightly greater force in similar relation should be applied to the block. The forces applied in weakening the Cellophane of course may be varied. However, the forces indicated have been found to produce the desired results in weakening the Cellophane without rupturing or fracturing it.

When the Cellophane wrapping is formed in the manner described above, strip 12 may be pulled so as not only to open the package along the perforated lines 16 and 17 but so as to open the Cellophane wrapping along the weakened lines 24 and 25. So as to cause the severed portion of the Cellophane to be removed as a unit additional adhesive may be applied between the several layers of Cellophane on the top of the package and between the weakened lines as indicated at the point 18'. The remainder of the Cellophane wrapping and the remainder of the package are left intact. It will thus be seen that the ends of the cigarettes can conveniently be grasped between the fingers of the user and removed from the package. The package nevertheless is left substantially intact so as to serve as a protection for the remaining cigarettes.

From the foregoing description of the several embodiments of my invention it will be appreciated that I have provided a cigarette package of improved construction which can readily be opened but which is nevertheless of simple and

inexpensive construction. It will also be appreciated that when a package embodying my improved construction is opened the cigarettes can easily be grasped between the fingers of the user and removed from the package but the package is nevertheless left substantially intact so as to serve as protection for the cigarettes.

It should of course be understood that modifications may be made in the illustrated and described embodiments of my invention without departing from the invention as set forth in the accompanying claims.

I claim:

1. In a cigarette package having connected side and bottom portions the combination of a top portion comprising a pair of tucks extending partway across the top of the package from opposite sides thereof and a pair of flaps extending inwardly from the other sides of the package in overlapping relation with respect to each other and with respect to the tucks and provided with superimposed slits extending substantially across the respective flaps adjacent the end of one of the tucks, an adhesive strip secured over the central portion of the top, one edge of which is disposed adjacent said slits, and a relatively thin elongated strip of flexible material having greater tensile strength than the material of the tucks secured to the under-surface of the last-mentioned tuck and to the upper portion of the adjacent side of the package and extending upwardly through the said slits in the flap whereby the exposed portion of the strip may be pulled to remove the top portion of the package from the slits to the adjacent end and also the upper portion of the side of the package to which the strip is secured.

2. In a cigarette package having connected side and bottom members the combination of a top portion comprising a pair of tucks extending partway across the top of the package from opposite sides thereof and a pair of flaps extending inwardly from the other side of the package in overlapping relation and provided with superimposed slots adjacent the end of one of the tucks, a casing of substantially impervious transparent flexible sheet material disposed around the package and having folded overlapping edges adhesively secured across the top, said casing being formed with an elongated weakened portion extending adjacent said slits in the flaps across the top of the package and around the upper portion of the adjacent side panels, and a relatively elongated strip made of flexible material having greater tensile strength than the material comprising the tucks and flaps connected to the under-surface of the last-mentioned tuck and to the upper portion of the adjacent side of the package and extending outwardly through the slits in the flap and through the overlapping folded portion of the casing whereby the exposed portion of the strip may be pulled to remove a portion of the top of the package and to sever the casing along the weakened line.

3. In a cigarette package having connected side and bottom panels the combination of a top portion comprising a pair of tucks extending partway across the top of the package from opposite sides and a pair of flaps extending inwardly from the other sides in overlapping relation and provided with superimposed slits extending the entire width of respective flaps adjacent the end of one of the tucks, a revenue stamp in the form of an adhesive strip secured over the central portion of the top portion, one edge of which

is disposed adjacent said slits, a casing made of substantially impervious flexible transparent sheet material disposed around said package and having overlapping folded portions adhesively secured over the top, said casing being provided with a substantially continuous elongated weakened portion extending across the top of the package adjacent the slits and around the upper portion of adjacent panels, and a relatively elongated strip made of flexible material having 10

greater tensile strength than the material comprising the tucks and flaps secured to the under-surface of the tuck and to the upper portion of the adjacent side of the package and extending outwardly through the slits in the flap and through the overlapping folded portion of the casing whereby the exposed portion of the strip may be pulled to remove a portion of the top and to sever the casing along the weakened portion.

CONSTANTINE S. STEPHANO.