May 10, 1932. G. DE MAZIROFF 1,858,199

CIGARETTE PACKAGE CONTAINER

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Fig. 1.

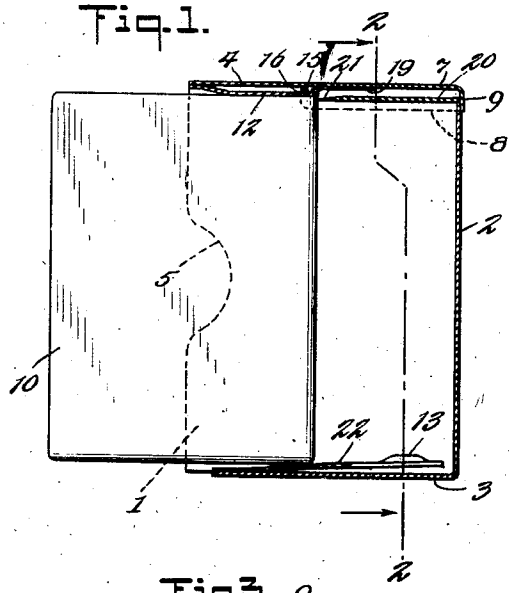


Fig. 2.

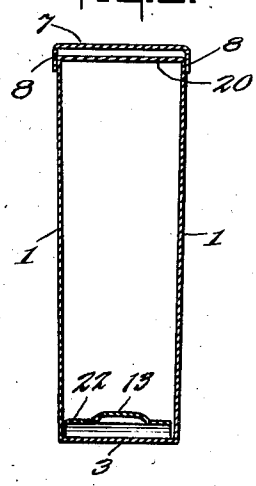


Fig. 3.

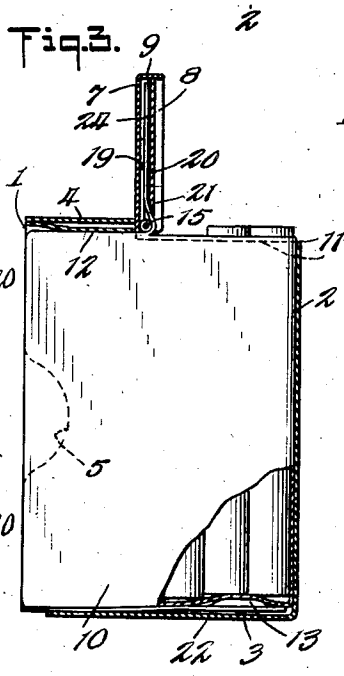


Fig. 10.

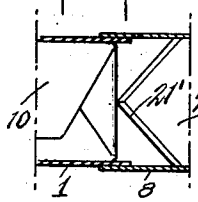


Fig. 11.

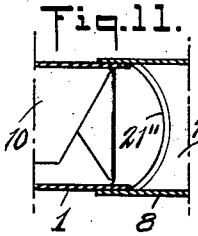


Fig. 4.

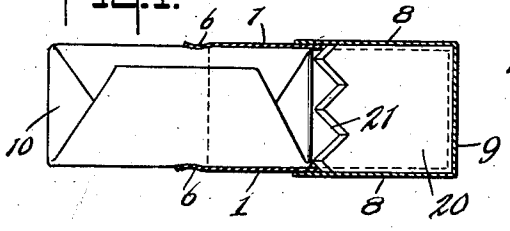


Fig. 5.

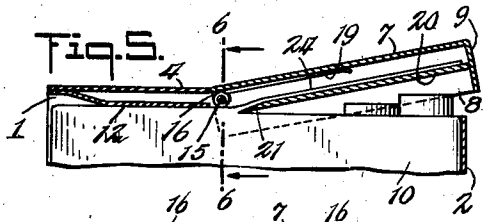
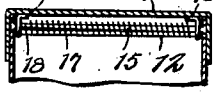


Fig. 6



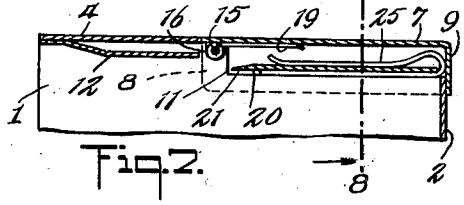


Fig. 2.

Fig. 8.

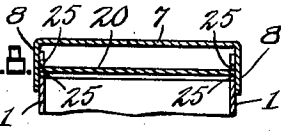
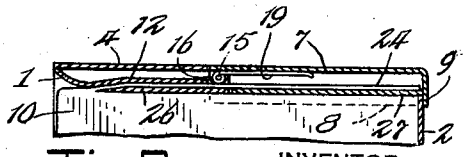


Fig. 9



INVENTOR
GEORGE DE MAZIROFF
BY
J. S. Wooster
ATTORNEY

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Fig. 12.

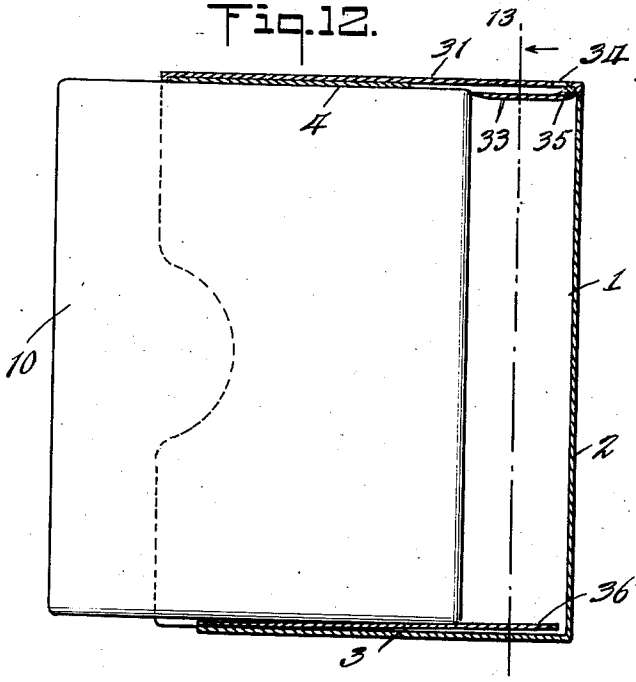


Fig. 13.

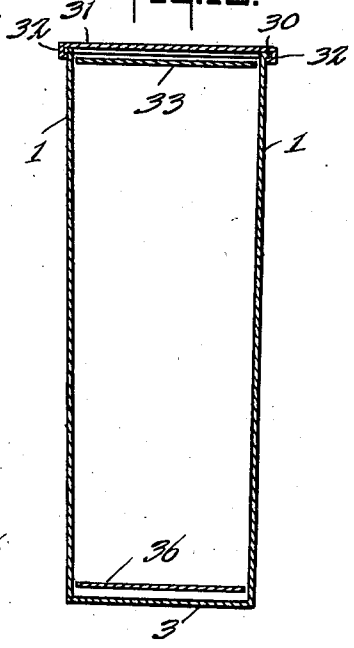
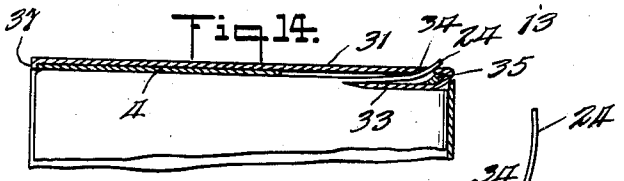


Fig. 14.



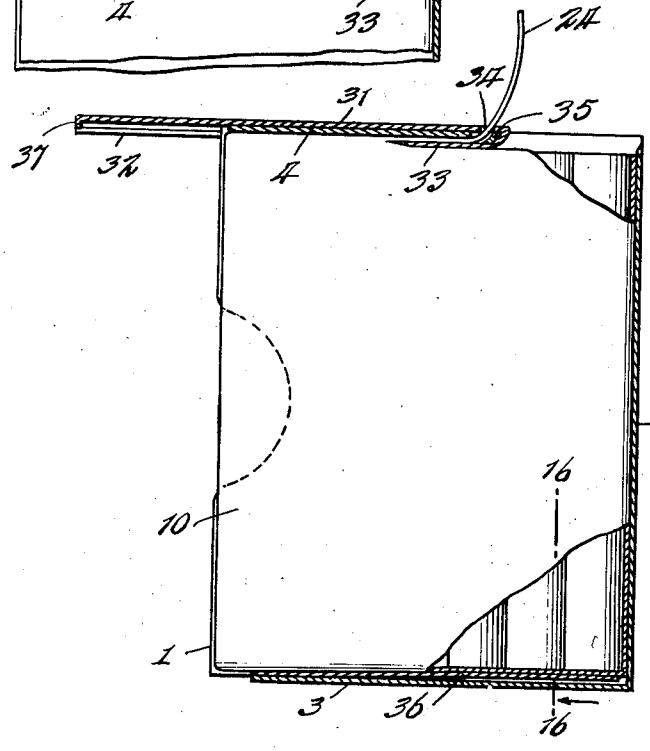


Fig. 15.

INVENTOR
GEORGE DE MAZIROFF
BY
J. S. Wooster
ATTORNEY

Patented May 10, 1932

1,858,199

UNITED STATES PATENT OFFICE

GEORGE DE MAZIROFF, OF NEW YORK, N. Y., ASSIGNOR TO NATIONAL AUTOMATIC CONTAINER CORPORATION, OF BALTIMORE, MARYLAND, A CORPORATION OF MARYLAND

CIGARETTE PACKAGE CONTAINER

Application filed December 7, 1929. Serial No. 412,387.

The invention relates to improvements in cigarette package containers, particularly that type of container adapted to hold the usual paper or tin foil pack of cigarettes.

An object of this invention is to provide a device adapted to slice the top of a pack of cigarettes for part of its length automatically and also destroy the revenue stamp thereon as the pack is placed therein.

Another object is to provide a cigarette container wherein the loose flap formed by slicing the top of the pack as it is placed in the container, is automatically disposed in such position in the container that it does interfere with the removal of cigarettes from the container.

Another object is to provide a device adapted to elevate the cigarettes at the open portion of the pack slightly above the remainder of the cigarettes to facilitate withdrawal of a cigarette when the pack is full or nearly full.

A further object of the invention is to provide a container which will protect the cigarette from crushing regardless of whether the pack is full or nearly empty.

The device of this invention is one adapted to hold a pack of cigarettes and comprises a container, preferably of metal, of substantially the same shape as the pack to be held, having one end and a portion of the top adjacent its opposite end open, a movable cover adapted to close the opening in the top of the container, and a blade adapted to lie parallel to the top of said container and present its cutting edge toward the open end of the container, said blade being spaced sufficiently below the top of the container so that it is adapted to engage the pack of cigarettes slightly below the top thereof along two lines of severance and slice the top thereof upon relative movement of the blade and pack.

More specifically, the top of the container is open for approximately half its length and the cover is attached thereto. The cover carries the blade and the bottom of the container is advantageously provided with a spring plate soldered, welded, riveted, or otherwise attached at one end adjacent the open end of the container and sloping upwardly and toward the other end of the container. This plate urges the pack of cigarettes against the top of the container as it is inserted therein and maybe provided with a raised portion adjacent its free end to slightly elevate the cigarettes opposite the opening in the cover thereby facilitating their removal.

To understand the invention more fully, reference is made to the accompanying drawings in which:

Fig. 1 is a longitudinal section of a cigarette package container embodying the invention showing a pack of cigarettes partially inserted and the cover of the container closed.

Fig. 2 is a section taken on the line 2—2 of Fig. 1 in the direction of the arrows.

Fig. 3 is a longitudinal section of the container shown in Fig. 1 with the pack of cigarettes fully inserted and the cover raised.

Fig. 4 is a horizontal section of the device shown in Fig. 1, illustrating one form of blade to be used.

Fig. 5 is an enlarged longitudinal section of the upper part of the device shown in Fig. 1 with the cover slightly raised and the pack of cigarettes fully inserted.

Fig. 6 is a section taken on the line 6—6 of Fig. 5 in the direction of the arrows.

Fig. 7 is a longitudinal section of the upper portion of a modified form of the cigarette package container.

Fig. 8 is a section taken on the line 8—8 of Fig. 7 in the direction of the arrow.

Fig. 9 is a longitudinal section of the upper portion of another modified form of the container.

Fig. 10 is a sectional plan illustrating another form of blade to be used.

Fig. 11 is a sectional plan illustrating a third form of blade to be used.

Fig. 12 is a longitudinal section of a modified cigarette container having a sliding cover, a pack of cigarettes being shown partly inserted therein.

Fig. 13 is a section taken on the line 13—13 of Fig. 12.

Fig. 14 is a section of the upper part of

the cigarette container shown in Fig. 12 with the pack fully inserted and the cover in closed position.

Fig. 15 is a view similar to Fig. 12 but showing the pack fully inserted and the cover in open position.

Referring to Figs. 1 to 6, inclusive, the device illustrated comprises a rectangular container, preferably made of metal, having side walls 1, a single end wall 2, bottom 3, and top wall 4 extending from the open end of the container to approximately half way over to the single end wall. This container is substantially the same shape and size as the pack of cigarettes to be held; the pack of cigarettes, designated by reference numeral 10, is to be inserted in the open end of the container as illustrated in Fig. 1. Preferably the sides have semi-circular portions 5 cut away to facilitate insertion and removal of the pack.

In order that the pack of cigarettes may be securely held in the container, the sides 1 are provided with a vertical indented section 6 adjacent the open end of the container. (See Fig. 4.) To further aid in holding the pack securely and yet not impede the removal of cigarettes therefrom, the width of the bottom of the container is made approximately equal to the width of the pack to be held while the width of the top of the container is made about one-sixteenth of an inch wider to enable the cigarettes to be removed more readily.

A cover 7, adapted to close the open portion of the top of the container and having depending side walls 8 and an end wall 9, is hingedly connected to the container by means of the horizontal shaft 15, anchored at each end in the side walls 1 of the container adjacent their top, passing through a hole in each of two ears 16 carried by the cover 7 adjacent its inner end. These ears 16 are preferably soldered or welded to the cover. To swing the cover open a spiral spring 17 is disposed on shaft 15, being anchored at one end 18 and having a straight portion 19, integral therewith, extending from the other end parallel to and engaging the under side of cover 7.

The cover is held in closed position against the action of spring 17 either by frictional engagement of the depending walls with the walls of the container or by any conventional latch means. As shown in the drawings, the cover is held in closed position merely by frictional engagement of its walls with the walls of the container.

Disposed in cover 7 is a blade 20 carried by the side walls 8 and end wall 9 of the cover. This blade is preferably soldered or welded to all three walls although it may be securely held in position without being attached to the end wall 9. As shown in the drawings, the blade is positioned below but parallel to the top of the cover and above the lower edge of the depending walls of the cover, and extends for approximately half the length of the container with its cutting edge 21 presented toward the open end of the container. As the function of this blade is to slice the top of the pack of cigarettes as it is inserted in the open end of the container, it will be appreciated that the position of the blade must be such as to engage the pack slightly below the top thereof.

The side walls 1 and end wall 2 of the container are cut away at the top thereof, as indicated by the reference numeral 11, in order to allow the blade 20 which extends the full width of the container to assume a position low enough to engage the top of the pack of cigarettes as it is introduced when the cover is in closed position.

To facilitate the slicing action of the blade it is preferable to shape its cutting edge so that it will first engage the pack at not more than three points simultaneously as the pack is inserted through the open end of the container. Therefore it is preferred to use a blade having a saw tooth cutting edge 21, as shown in Fig. 4, or a triangular shaped cutting edge 21′ with the apex of said triangle toward the open end of the container, as shown in Fig. 10, or a concave shaped cutting edge 21″, as shown in Fig. 11. As shown in the drawings, the blade in each case is as wide as the cover 7 and consequently slightly wider, approximately one-sixteenth of an inch, than the pack of cigarettes thereby making it certain that the whole top of the pack will be sliced along two lines of severance rather than a narrow strip across the top. Although it is preferred that the whole top of the pack is sliced, if it is desired, a blade of narrower width may be used whereby only a strip across the top of the pack is sliced.

In order that the blade 20 may slice the top of the pack without damaging the cigarettes, it is necessary that the blade engage the pack at that small space between the top of the pack and the top of the cigarette. The blade must therefore engage each pack at almost exactly the same distance from the top of the pack and, because the packs may vary slightly in height, it is advantageous to provide the container with a flat spring 22 welded or riveted at one end to the bottom 1 adjacent the open side of the container, said spring 22 being sloped upwardly from its point of attachment to bottom 1 toward the end wall 2. The slope of this spring is so adjusted that it will hold the pack of cigarettes up against the plate 12 carried by side walls 1 adjacent the top 4, as the pack is inserted in the container. By this means the position of the top of each pack is exactly the same with respect to the blade 20 regardless of slight variations in the height of the pack and consequently, by accurately adjust-

ing the height of the blade 20 when the cover 7 is in closed position, with respect to the height of the plate 12, the blade will engage each pack between the top thereof and the top of the cigarettes. The plate 12 merely functions a bearing surface for the top of the pack just below the level of the hinge means illustrated and it is to be understood that the top 4 could equally well serve for the same surface by using a hinge means not extending below the top 4 or making the plate 12 and top 4 in one solid piece.

As shown in Figs. 1, 2, and 3, the spring 22 has a raised portion 13 adjacent its free end but set in from the edges of said spring. By means of this raised portion 13, the bottom of the pack of cigarettes, when the pack is fully inserted in the container and the cover in open position, is pushed up in the middle thereby slightly elevating the cigarettes opposite the open portion of the top and facilitating their removal.

The operation of this device is as follows:— A full, unopened pack of cigarettes is pushed through the open end of the container with cover 7 in closed position as shown in Fig. 1. As the pack is pushed in it bears against the plate 12 and engages the cutting edge 21 of blade 20, the top of the pack being sliced and the flap 24 being formed thereby entering the space between the blade 20 and the top of the cover 7. Fig. 5 shows the pack pushed all the way into the container with the loose flap 24 disposed between blade 20 and the top of cover 7. As shown in this Fig. 5, the blade has sliced through approximately half the top which ensures that the revenue stamp has been mutilated.

To remove a cigarette, the top 7 is swung open as shown in Fig. 3, the loose flap 24 being carried up by the cover, thereby leaving the top of the cigarettes exposed. Due to the raised portion 13 of spring 22, the cigarettes adjacent the end wall 2 of the container are elevated slightly above the others, thereby facilitating their removal.

In Figs. 7 and 8 a modified form of top 7 is shown whereby the blade 20 is removably mounted in spring wires 25 doubled back on themselves, attached to the side walls 8 of cover 7. The spring wires 25 are preferably soldered or welded along their lower portion to the side walls 8. The blade 20 is slipped between these wires, being held in position by frictional engagement therewith. When the blade becomes dull through long usage, it may readily be slipped out and a new blade inserted.

In Fig. 9, a third modification of this invention is shown wherein a blade 26 is secured to side walls 1 of the container by soldering, welding or the like. This blade extends from a point adjacent the open end of the container to a point directly beneath the hinge of cover 7. In this modification a shelf member 27 is carried by the walls of top 7 to form a support for the loose flap as it is sliced from the pack. As shown in Fig. 9, the shelf member 27 is separate from blade 26; when the cover 7 is swung open shelf member 27 goes with it but the blade remains stationary, being mounted in the container. This modified form completely severs the revenue stamp and opens the pack to a greater extent.

In Figs. 12 to 15, another embodiment of the invention is illustrated in which a sliding cover is employed. The container proper is identical with that illustrated in Figs. 1–3 except that a flange 30 is provided along each side wall 1 at the top thereof. A sliding cover 31 is mounted on the top of the container, said cover being provided along each side with a narrow downwardly and inwardly directed wall 32 adapted to engage the flanges 30 on each side of the container and be guided thereby.

The cover 31 carries a blade 33 at the right hand end thereof looking at Figs. 12, 14, and 15. This blade 33 is slightly less than the width of the container at its top and is thus adapted to move between the side walls 1 thereof. The blade is positioned parallel to and sufficiently below the cover so that it will engage a pack of cigarettes bearing against the top 4 of the cover between the top of the pack and the top of the cigarettes contained therein.

The cover 31 is provided with a transverse slot 34 adjacent its right hand end as viewed in Fig. 1 and a guide member 35 extending from the right hand side of the groove to the top of blade 33.

The bottom 3 of the container is provided with a flat spring 36, similar to spring 22 in Figs. 1–3 but having no raised portion therein. The function of this spring 36 is to hold the pack of cigarettes against the top 4 of the container so that the blade 33 will engage each pack the same distance below its top, the position of the knife 33 being accurately adjusted with respect to the top 4 so that it will engage the pack of cigarettes between the top of the pack and the top of the cigarettes.

The movement of the cover 31 is limited at one end by the guide member 35 engaging the top 4 and at the other end by the short depending wall 37 of the cover 31 engaging the top 4.

In this form of container the pack of cigarettes is pushed in the open end of the container with the cover in closed position, the top being sliced for a short distance by the blade 33. After the pack is fully inserted, the cover 31 is moved to the left as shown in Fig. 15, thereby slicing the top for at least half its length and mutilating the revenue stamp. The flap 24, formed by the slicing of the blade, in this case is guided up through

the slot 34 by guide member 35 and may be torn off by hand. The cigarettes, having been exposed in this manner, can now be readily removed without interference from the flap sliced off the top.

It will be evident that my container may be used in appropriate sizes for other types of packages. It will also be evident that various changes may be made in the construction and operation of the container without departing from the scope and spirit of the invention as defined in the appended claims.

The invention claimed is:

1. A device adapted to hold a pack of cigarettes comprising a straight walled container having a bottom substantially the same shape and size as the bottom of the pack to be held, a top slightly wider and of the same length as the bottom, the height of said container being slightly greater than the height of the pack, said container having one end and substantially half of the top adjacent the opposite end open, a rectangular cover hingedly attached to the top and adapted in closed position to lie parallel to said top and close the opening therein, depending walls carried by said top, a blade carried by said walls below and parallel to the top of the cover presenting its cutting edge toward the open end of the container when said cover is in closed position, said blade extending the width of the container and being spaced sufficiently below the top of said cover so that, when said cover is in closed position, said blade will engage the pack of cigarettes slightly below the top thereof along two lines of severance and slice the top thereof, as the pack is inserted through the open end of the container, and means for yieldingly urging the pack against the top of the container.

2. A device adapted to hold a pack of cigarettes comprising a container having an opening at one end to admit the pack and an opening in the top to permit removal of the cigarettes, the bottom portion of the container being of a width substantially that of the pack and the top portion being slightly wider than the bottom portion, and a blade extending the width of said container arranged operatively below the top of said container and presenting its cutting edge toward the open end thereof, whereby the top of the pack is sliced along two lines of severance upon relative movement of the pack and blade.

3. A device adapted to hold a pack of cigarettes comprising a container having an opening at one end to admit the pack and an opening in the top to permit removal of the cigarettes, the sides of said container being tapered from top to bottom and providing a bottom portion of a width substantially that of the pack and a top portion slightly wider than the bottom portion, and a blade extending the width of said container arranged operatively below the top of said container and presenting its cutting edge toward the open end thereof, whereby the top of the pack is sliced along two lines of severance upon relative movement of the pack and blade.

4. A device adapted to hold a pack of cigarettes comprising a container having an opening at one end to admit the pack and an opening in the top to permit removal of the cigarettes, the bottom portion of the container being of a width substantially that of the pack and the top portion being slightly wider than the bottom portion, a blade extending the width of said container arranged operatively below the top of said container and presenting its cutting edge toward the open end thereof, whereby the top of the pack is sliced along two lines of severance upon relative movement of the pack and blade, and means for yieldingly urging the pack against the top of the container.

5. A device adapted to hold a pack of cigarettes comprising a container having an opening at one end to admit the pack and an opening in the top to permit the removal of the cigarettes, the bottom portion of the container being of a width substantially that of the pack and the top portion being slightly wider than the bottom portion, a blade extending the width of said container arranged operatively below the top of said container and presenting its cutting edge toward the open end thereof, whereby the top of the pack is sliced along two lines of severance upon relative movement of the pack and blade, a plate adjacent the top of the container to limit the upward movement of the pack, and a spring attached to the bottom of the container and sloping upwardly from the open end thereof to hold the pack against said plate.

6. A device adapted to hold a pack of cigarettes comprising a container having an opening at one end to admit the pack and an opening in the top to permit removal of the cigarettes, the bottom portion of the container being of a width substantially that of the pack and the top portion being slightly wider than the bottom portion, a sliding cover on the top of the container having a transverse slot therein, and a blade extending the width of the container attached to and arranged slightly below said cover with its cutting edge toward the open end of the container to slice the top of the pack along two lines of severance and guide the severed portion of the top through the slot in the cover.

7. A device adapted to hold a pack of cigarettes comprising a container having an opening at one end to admit the pack and an opening in the top to permit removal of the cigarettes, the bottom portion of the container being of a width substantially that of the pack and the top portion being slightly

wider than the bottom portion, a sliding cover on the top of the container having a transverse slot therein, a blade extending the width of the container attached to and arranged slightly below said cover with its cutting edge toward the open end of the container to slice the top of the pack along two lines of severance and guide the severed portion of the top through the slot in the cover, and a spring attached to the bottom of the container in position to hold the pack against the top of the container.

8. A device adapted to hold a pack of cigarettes comprising a container having an opening at one end to admit the pack and an opening in the top to permit removal of the cigarettes, the bottom portion of the container being of a width substantially that of the pack and the top portion being slightly wider than the bottom portion, and a blade extending the width of the container arranged operatively below the top of the container and presenting its cutting edge toward the open end thereof, whereby the top of the pack is sliced along two lines of severance upon relative movement of the pack and blade, said blade having a saw tooth cutting edge so shaped that it will first engage the pack at not more than three points simultaneously.

Signed at New York, in the county of New York and State of New York, this 27th day of November, A. D. 1929.

GEORGE DE MAZIROFF.