

[54] CIGARETTE CONTAINER AND DISPENSER
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[22] Filed: Dec. 17, 1971
[21] Appl. No.: 209,037
[52] U.S. Cl.....221/205
[51] Int. Cl.....A24f 15/02
[58] Field of Search.....221/202, 224, 276, 205, 143,
221/144, 145, 146, 188, 189, 257, 262;
312/78

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[57] ABSTRACT

A cigarette container and dispenser which includes a housing having a tray for supporting cigarettes pivoted therein. An actuator for moving the tray is pivoted in the housing transverse to the tray. Guide means are provided in the housing for cooperating with the tray for moving cigarettes one at a time from the tray to a support trough. Tilt means adjacent an end of the support trough cooperate with the support trough for tilting a cigarette so that it can readily be grasped by a user. Divider means are detachably secured to the tray to accommodate cigarette or like objects of different lengths. The housing is supported in tripod fashion so as to better adapt to non-planar surfaces.

11 Claims, 9 Drawing Figures

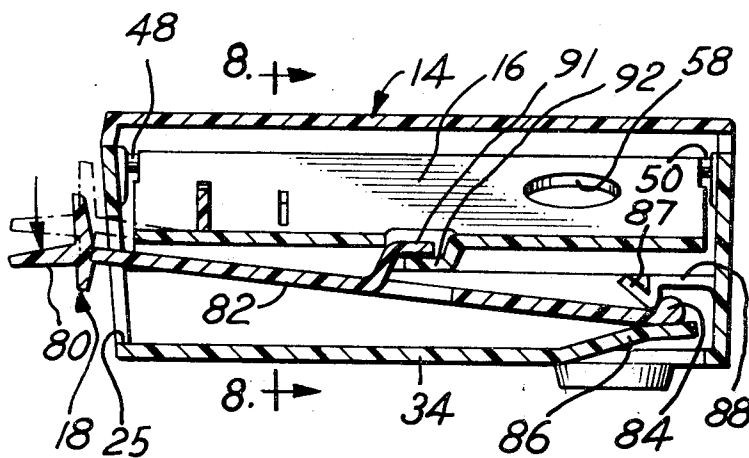


Fig. 1

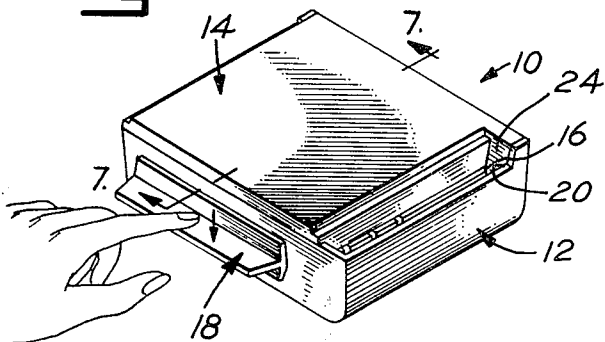


Fig. 2

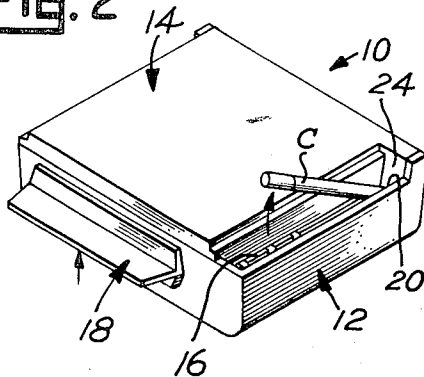
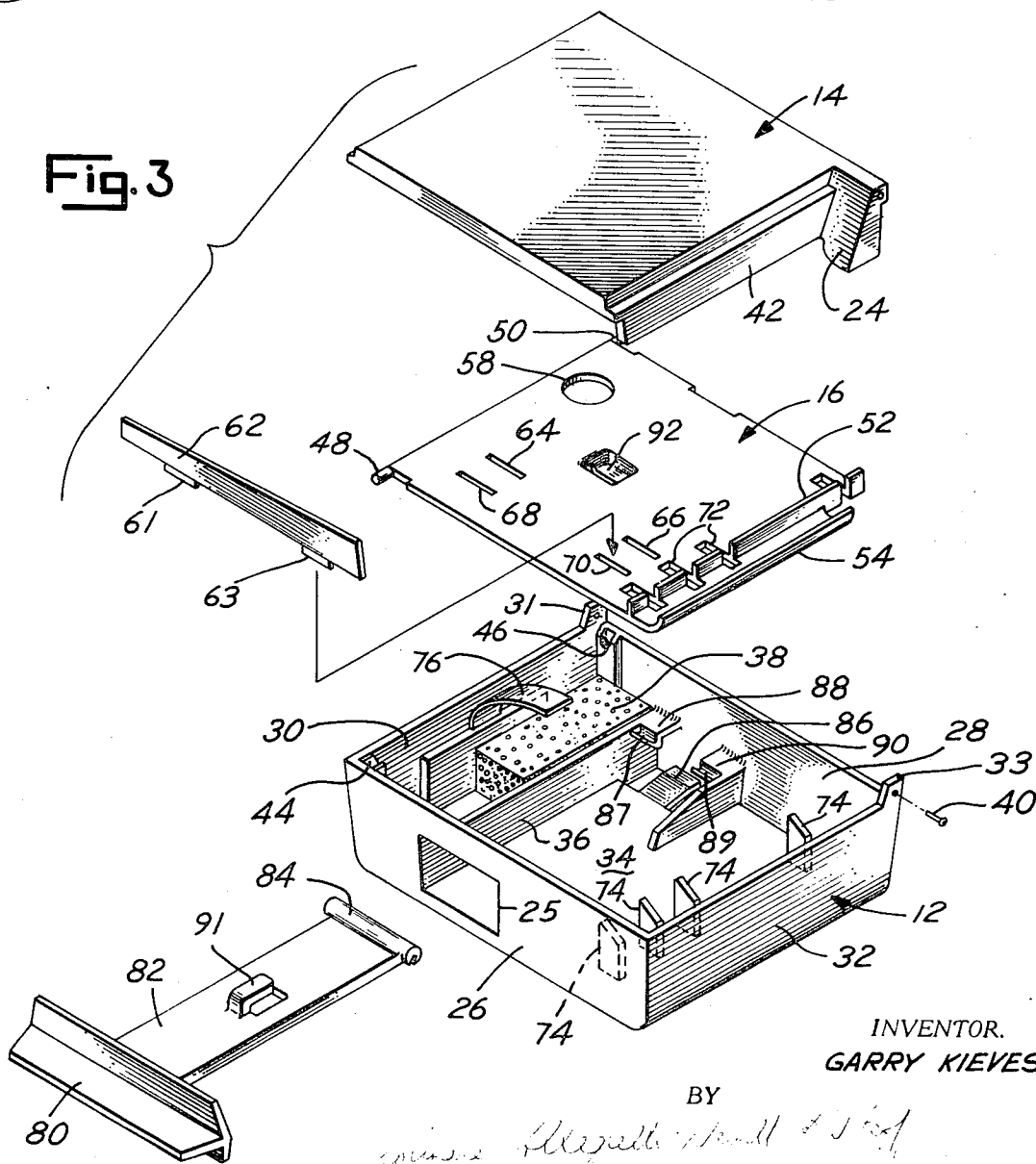


Fig. 3

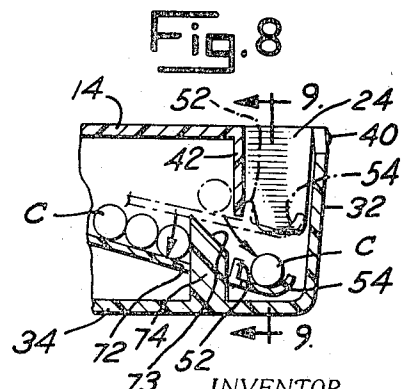
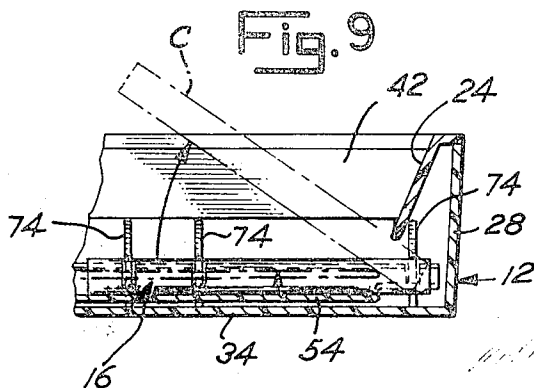
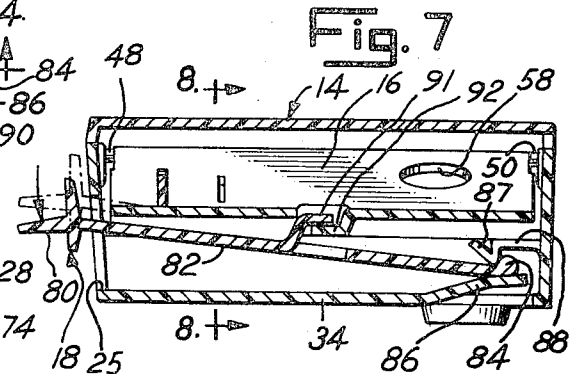
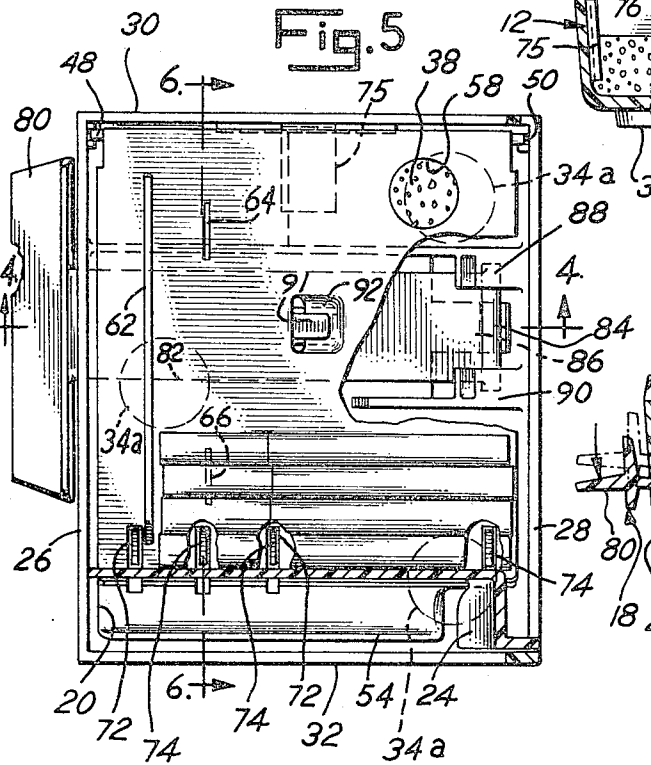
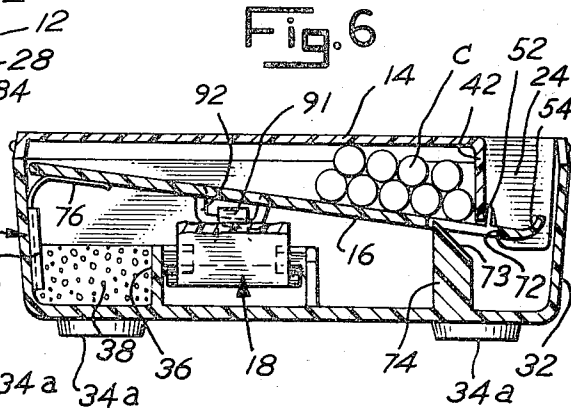
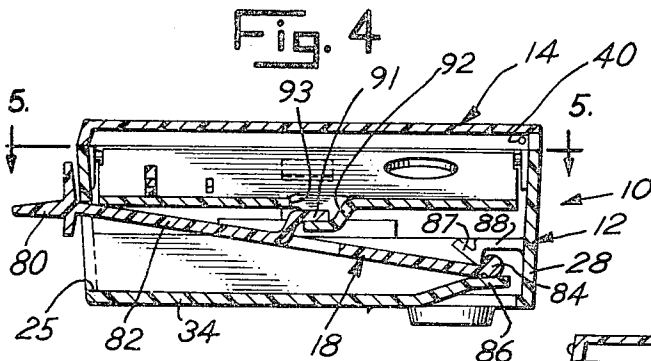


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CIGARETTE CONTAINER AND DISPENSER

BACKGROUND OF THE INVENTION

This invention relates to an improved cigarette container and dispenser and more particularly, to an improved cigarette container and dispenser which contains a plurality of cigarettes and dispenses them one at the time in a tilt relative to the housing so as to be readily gripped by a user for removal from the cigarette container and dispenser.

The prior art shows various dispenser devices for housing cigarettes and feeding them one at a time as desired. Known exemplary prior art U.S. Pats. are Oldenbusch No. 1,676,109, Steininger No. 2,269,066 and Jennings No. 2,548,310. The devices illustrated in the patents are comprised of many parts which render the assemblies somewhat complex and manufacture relatively expensive. In none of these patents is the cigarette tilted upwardly from a support tray in the housing to facilitate removal of the cigarette from the dispenser mechanism.

An object of this invention is to provide an improved cigarette container and dispenser simple in design so that it can be expeditiously and relatively inexpensively assembled.

Another object of this invention is to provide an improved cigarette container and dispenser formed mainly from molded plastic components adapted to be assembled with a minimum of screws, bolts or like fasteners so as to facilitate assembly and enhance reliability in use.

Still another object of the present invention is to provide an improved cigarette container and dispenser which incorporates an actuating lever that is snapped into place so as to pivot within the housing, the actuating lever being arranged to engage the tray supporting the cigarettes intermediate its ends so as to actuate same to effect feed of a single cigarette as desired.

Yet another object of the present invention is to provide an improved cigarette container and dispenser including a molded housing having an actuator pivoted therein so as to operate a pivoted tray in the housing that supports cigarettes said tray including a support trough, the cover for the housing including tilt means adjacent an end of the support trough cooperating with the support trough for tilting a cigarette so that it can readily be grasped by a user.

Still another object of this invention is to provide an improved cigarette container and dispenser including a housing having a tray for supporting cigarettes pivoted therein, the tray being moved by an actuator pivoted in the housing, with guide means extending upwardly in the housing through openings in the tray for moving cigarettes one at a time from the tray to a holding portion of the tray, the holding portion cooperating with tilt means adjacent an end of the holding portion for tilting a cigarette upon movement of the tray from the bottom of the housing so that it can be grasped more easily by a user.

Another object of the present invention is to provide an improved cigarette container and dispenser which incorporates a detachable divider wall on the support tray to permit the tray to accommodate cigarettes of different length.

A further object of this invention is to provide an improved cylindrical article container and dispenser hav-

ing a tripod-type support to enhance supporting of the dispenser in a stable manner on either a planar or a contoured support surface. Other objects and advantages of this invention will become more apparent hereafter.

BRIEF DESCRIPTION OF THE DRAWING

There is illustrated in the attached drawing a presently preferred embodiment of the present invention wherein like numerals refer to like elements in the different views and wherein:

FIG. 1 is a perspective view of the improved cigarette container and dispenser embodying the present invention, illustrating a user commencing actuation of the actuating lever to feed a single cigarette;

FIG. 2 is a perspective view of the improved cigarette container and dispenser, and illustrating a cigarette tilted up in position where it can be grasped by a user;

FIG. 3 is an exploded perspective view illustrating the components of the improved cigarette container and dispenser;

FIG. 4 is a cross-sectional view taken generally along the line 4—4 of FIG. 5;

FIG. 5 is a cross-sectional view taken generally along the line 5—5 of FIG. 4;

FIG. 6 is a cross-sectional view taken generally along the line 6—6 of FIG. 5;

FIG. 7 is a detail cross-sectional view similar to FIG. 4, illustrating the position of the components with the actuating lever depressed;

FIG. 8 is a detail cross-sectional view taken generally along the line 8—8 of FIG. 7;

FIG. 9 is a detail cross-sectional view taken generally along the line 9—9 of FIG. 8.

DETAILED DESCRIPTION OF THE PRESENT INVENTION

Referring to FIGS. 1 and 2, there is illustrated an improved cigarette container and dispenser 10 embodying principles of the present invention. The cigarette container and dispenser 10 comprises a box-like housing 12 having an open top closed by the cover 14. Disposed within the housing is a movable tray 16 for receiving and supporting cigarettes. An actuating lever or depressor handle 18 is operatively connected to the tray 16 for moving same downwardly within the housing 12 so as to selectively move a single cigarette from the tray to a position on a support trough portion of the tray 16 within the opening 20 defined between the cover 14 and the housing 12. When the actuating lever or depressor handle 18 is released, as indicated in FIG. 2, the tray 16 will be spring biased upwardly and the cigarette on the trough portion of tray 16 will be engaged with the tilt means 24 formed on the cover 14 and cooperating with the support trough portion of tray 16 for tilting the cigarette C so that it can readily be grasped by a user.

Turning to FIG. 3, there is illustrated an exploded perspective view of the improved cigarette container and dispenser 10. The housing 12 includes front wall 26, rear wall 28, side walls 30, 32 and bottom 34. A transverse wall 36 is provided within the housing 12 for rigidifying same and also to define a compartment within the housing for receiving humidifying means which take the form of a sponge 38 or like water absor-

bent material for maintaining moisture and humidity in the housing so as to maintain freshness of the cigarettes during an extended time when the cover 14 is in place on the housing 12.

The cover 14 is adapted to be pivoted on the ears 31, 33 extending upwardly from the side walls 30, 32, respectively, by pivot means or pivot pins 40, which extend through openings in the projections or ears 31, 33 into the aligned openings within the cover 14. The cover 14 includes a depending wall portion 42 extending from front to rear and the tilt means which comprise a depending wall portion 24 at the rear of the cover 14. It will be understood that the opening 20 in the housing 12 is defined between the wall portions 24 and 42 of the cover 14 and the front wall 26 and side wall 32 of the housing 12.

Formed in the front wall 26 and rear wall 28 of the housing 12 are recesses 44, 46, respectively, for receiving projections 48, 50 extending from an end of the pivoted deck or tray 16. The cigarettes are adapted to be supported on the main portion of the tray 16 which will generally be inclined from the wall 30 downwardly toward the wall 32. In use, as will be explained hereafter, a single cigarette is urged over the upwardly extending retainer wall portion 52 onto the support trough 54 which forms a part of the tray 16. The support trough or holding portion 54 of tray 16 is cut away at an end so that there may be cooperation with the tilt means 24 of the cover 14, to effect a tilting of a cigarette C to a use position with an end extending through the opening 20 above the cover 14. A suitable opening or openings 58 may be provided in the tray 16 to provide communication between the humidifying means 38 and the interior of the housing 12 outside of the humidifier compartment.

A divider wall or end wall 62 is detachably secured to the tray 16 for accommodating cigarettes of different length. The divider wall 62 has a pair of projections 61, 63 extending therefrom which are adapted to engage within recesses 64, 66 or 68, 70 in the deck or tray 16. With divider wall 62 in recesses or openings 64, 66, short cigarettes are supported on the tray. Longer cigarettes can be supported when the divider wall 62 is in openings 68, 70. With the divider wall 62 removed, still longer cigarettes can be supported on tray 16. It will be understood that the cigarettes will be supported on the tray 16 with the axis of each extending from front to rear generally parallel to the retainer wall 52.

Opening means comprising a plurality of slots 72 are provided in the tray 16 near the support trough portion 54. As shown, the slots 72 are transverse to the retainer wall and extend through the retainer wall so that the retainer wall is not continuous, but rather is comprised of a number of aligned segments. Guide means 74 extend upwardly from the bottom 34 of the housing 12 through the openings or slots 72 and cooperate with the slots 72 so as to effect movement of a single cigarette over the retainer wall 52 onto the support trough 54 during pivotal action of the tray 16 clockwise as viewed in FIG. 3. A leaf spring 76 is secured within the housing 12 and is adapted to bear against the bottom of the tray 16 for urging the tray 16 counterclockwise as viewed in FIG. 3.

The tray 16 is actuated by means of the depressor handle or actuating lever 18, which comprises a handle

portion 80 adapted to be engaged by the fingers of an operator (as indicated in FIG. 1) and a rearwardly extending planar portion 82 having a rounded projection or journal portion 84 at the end thereof which is adapted to fit over the projection tab 86 on the base 34 and under the retaining fingers or spring fingers 88, 90, whereby the actuating lever 18 is pivotally secured within the housing 12. An L-shaped tab 91 is formed centrally of the portion 82 of the actuating lever 18 and is adapted to engage within a complementary recessed receiving portion 92 in tray 16. The pivot plane of the actuating lever 18 is generally transverse and essentially at 90 degrees to the plane of the pivoted deck or tray 16. When the actuating lever 18 is depressed, then the right hand end of the tray 16, as viewed in FIG. 3, will be moved downwardly and when the actuating lever 18 is released, the spring member 76 will bias the tray 16 upwardly to its initial position.

Another feature of this invention is the provision of three legs or projections 34a extending from bottom 34. The legs are disposed at the apices of an imaginary triangle and form a tripod-type support for holding the dispenser in a stable manner on a contoured surface in a vehicle, for example, on a dashboard.

It will be apparent from the foregoing description that assembly of the improved cigarette container and dispenser is relatively simple. The humidifying means 38 is positioned within the compartment in the housing 12 defined between wall 30 and wall 36. The leaf spring 76 may be inserted into the retaining bracket 75 formed on the side wall 30 of the housing 12. Pivoted deck or tray 16 is positioned in the housing with the projections 48, 50 disposed in the journal recesses 44, 46. The actuating lever 18 is inserted through the opening 25 in the front wall 26 until the rounded projection 84 at the rear thereof is engaged between the projection tab 86 extending from bottom 34 and the retaining fingers 88, 90 extending from the wall 28. The fingers 88, 90 and tab 91 are biased toward one another and the rounded projection 84 is forced between the fingers and tab to pivotally and detachably retain the actuating lever or depressor handle 18 in the housing 12. No separate fasteners are required and assembly is simplified. The tab 91 on the actuating lever 18 is secured within the recess or receiving portion 92 on the tray 16 so that when the lever 18 is actuated, the tray 16 will be pivoted. It is to be noted that the tray 16 is positioned such that the upright guide means 74 will extend through the slots or openings 72 in the tray 16. Cover 14 is then positioned properly with the openings in the rear thereof aligned with the openings in ears 31, 33 and the pivot pins 40 are inserted into the openings to pivotally retain the cover 14 on the housing 12.

With reference to FIGS. 4, 5, 6 and 7, there is better illustrated the details of construction and the mode of operation of the present invention. The housing 12 is preferably molded from a suitable plastic, with the projection tab 86 being formed so as to have an inherent resiliency upward. Similarly, the retaining fingers 88, 90 are formed integrally with the rear wall 28 of the housing 12 and are each formed with a hook portion 87, 89 on the end thereof. The hook portions 87, 89 are adapted to cooperate with the tab portion 86 to pivotally retain the rounded journal portion 84 of the actuating lever 18 within the housing 12. The retaining

fingers and tab comprise cooperating retaining means for pivotally supporting the actuating lever in the housing 12.

There is best shown in FIGS. 4, 5, 6 and 7 the cooperative relationship between the tab 91 on the actuating lever 18 and the recessed portion 92 provided within the tray 16 intermediate the ends of the tray. The tab 91 is of sufficient length to positively extend through opening 93 and engage in the recessed portion 92 and operate the tray.

With reference to FIGS. 5 and 6, it is noted that the cigarettes C are retained on the tray 16 which is normally inclined somewhat from its pivotal connection at the left toward the right as viewed in FIG. 6, for example. As seen in FIG. 6, initially the tray 16 is positioned such that the top of the upright guides 74 are just within the openings 72 in the tray 16. Leaf spring 76 bears upon the bottom of the tray 16 and urges the tray into the position shown in FIG. 6. Downward movement of the tray 16 would be in opposition to the bias of the spring 76 which is retained at one end within a pocket or recess in the bracket portion 75 on the side wall 30 of the housing 12.

The upper end of the guides 74 are each provided with an inclined planar surface 73 which slopes from left to right as viewed, for example, in FIG. 6. In the start or at rest position, a cigarette C will rest on the tray 16 and bear against the depending wall 42 of the cover 14.

As best seen in FIG. 5, the length of the support trough portion 54 of the tray 16 is less than the width of the tray. The cigarette C will normally extend beyond an end of the support trough portion 54. The access opening 20 from the housing 12 is defined between the depending wall portion 42 of the cover 14, the tilt means portion 24 of the cover 14, the side wall 32 of the housing and a portion of the front wall 26. The right hand end of the support trough 54, as viewed in FIG. 5, is spaced somewhat from the end of the tilt wall 24 and offset forwardly. The retaining wall 52 on the tray extends upwardly from the tray approximately equal to or preferably somewhat less in extent than the normal diameter of a cigarette or like article upported on the tray 16.

When the actuating lever 18 is moved downwardly, the tray 16 will be moved downwardly to the position shown in FIG. 8. The guide means 74 are constructed and arranged so that the lower end of inclined surface 73 will be above the retaining wall when the tray 16 is pivoted to its lowermost position. A cigarette C will then move from the dotted line position to the solid line position and as it slides or rolls over the guide surface 73 of the guide means 74, it will pass over the retaining wall 52 and be received on the support trough portion 54. The cigarette C is then positioned such that an end thereof is beneath the tilt means 24, whereby upon release of the actuating lever 18, the tray 16 will be biased upwardly by spring 76 and as the tray 16 pivots upwardly, the right hand end of the cigarette C will contact the bottom of wall or tilt means 24. The end of the support trough portion 54 is spaced from the end of the wall 24 at least a distance equal to the diameter of a cigarette. Thus, the cigarette C will be tilted upwardly, as shown in FIG. 9. The smoker may then readily grip the end of the cigarette C which extends above the

cover 14 through opening 20 and remove it from the housing for use.

There has been provided by the present invention an improved cigarette container and dispenser fabricated mainly from plastic molded components that are easily and quickly assembled. The assembly technique can readily be taught to relatively unskilled and inexperienced persons. The resultant cigarette container and dispenser is relatively inexpensive and is reliable in use.

The parts of the cigarette container and dispenser are constructed and arranged such that little effort on the depressor handle or actuating lever 18 is needed to cause the tray 16 to pivot sufficiently to move a cigarette from a stored position on the tray 16 to a position on a support trough portion 54. Release of the depressor handle or actuating lever 18 will permit the tray 16 to be biased upwardly under the influence of the spring 76, and as the tray 16 is biased upwardly, the end of the cigarette between the support trough portion and the tilt means will be engaged such that the cigarette will be tilted into gripping position, with an end extending above the cover where it can be readily grasped by a user and removed from the housing 12. The dispenser has a divider cooperative with the tray to enable different length cigarettes to be carried on the tray. A tripod-type support is provided to hold the dispenser in a stable manner on a contoured or curved surface, e.g., a dashboard. If desired, the projections may take the form of suction cups or like members.

While a preferred embodiment of the invention has been described and illustrated, it should be understood that the invention is not limited thereto since it may be otherwise embodied within the scope of the following claims.

I claim:

1. A cigarette container and dispenser comprising a housing having front, rear, bottom and side walls, a tray for supporting cigarettes pivoted in the housing and having a holding portion thereon, an actuator for moving the tray pivoted in the housing, guide means cooperating with the tray for moving cigarettes on the tray one at a time to the holding portion thereof; and tilt means adjacent an end of the holding portion cooperating with the holding portion for tilting a cigarette so that it can readily be grasped by a user and removed from the housing, said actuator being pivoted at an end and operatively secured intermediate its ends to the tray, said actuator having a tab intermediate its ends engageable in a recessed portion of the tray, the actuator and tray being oriented for pivotal movement transverse to one another.

2. A cigarette container and dispenser as in claim 1 wherein the actuator includes a journal portion adapted to engage detachable between cooperating retaining means on the housing.

3. A cigarette container and dispenser comprising a housing having front, rear, bottom and side walls, a tray for supporting cigarettes pivoted in the housing and having a holding portion thereon, an actuator for moving the tray pivoted at an end in the housing, complementary tab and tab receiving means on the tray and actuator for interconnecting the tray and actuator, said actuator and said tray being oriented for pivotal movement transverse to one another, guide means in the

housing cooperating with the tray for moving cigarettes on the tray one at a time to the holding portion thereof; and tilt means adjacent an end of the holding portion cooperating with the holding portion for tilting a cigarette so that it can readily be grasped by a user and removed from the housing, said tray being provided with a retaining wall and the guide means urging a single cigarette over the retaining wall onto the holding portion during pivotal movement of the tray toward the bottom of the housing, said tray having opening means therein in the region of the retaining wall and the guide means being adapted to extend through the said opening means in the tray.

4. A cigarette container and dispenser as in claim 3 including spring means biasing the tray, the tilt means cooperating with the holding portion during pivotal movement of the tray away from the bottom for tilting a cigarette.

5. A cigarette container and dispenser as in claim 1, including humidifying means in the housing for maintaining freshness of the cigarettes.

6. A cigarette container and dispenser as in claim 3 including a cover carried on the housing, the cover having an opening at one end overlying and substantially coextensive with the length of the holding portion, a first end of a cigarette on the holding portion extending beyond the holding portion, whereby said first end of the cigarette on the holding portion will be contacted by the tilt means as the holding portion moves away from the bottom of the housing to tilt a cigarette upwardly through the opening such that the opposite end of the cigarette can be easily grasped by a user.

7. A cigarette container and dispenser as in claim 6 wherein the tilt means comprises a wall portion of the cover that is laterally offset from a cooperating end of the holding portion.

8. A cigarette container and dispenser as in claim 4 wherein the spring means comprises a leaf spring engaging the bottom of the tray for biasing same from the bottom of the housing.

9. A cigarette container and dispenser comprising a box-like housing, movable tray means for supporting cigarettes pivoted in the housing and having a support portion and a holding portion, guide means cooperating with the tray means for moving cigarettes one at a time from the support portion to the holding portion, tilt means adjacent an end of the holding portion cooperating with the holding portion for tilting a cigarette so that it can readily be grasped by a user and removed from the housing, and divider means comprising a wall detachably secured to the support portion cooperating with the support portion to enable the tray means to accommodate different length cigarettes.

10. A cigarette container and dispenser as in claim 9 including a tripod-type support secured to the housing for maintaining the housing in a stable manner on a planar or contoured surface.

11. A cigarette container and dispenser as in claim 2 wherein the retaining means comprise fingers and tab means biased relative to one another to pivotally retain the journal portion therebetween for pivotal movement.

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