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CIGARETTE DISPENSER

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Fig.1

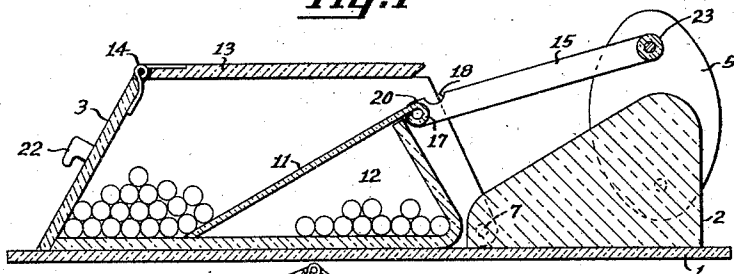


Fig. 2

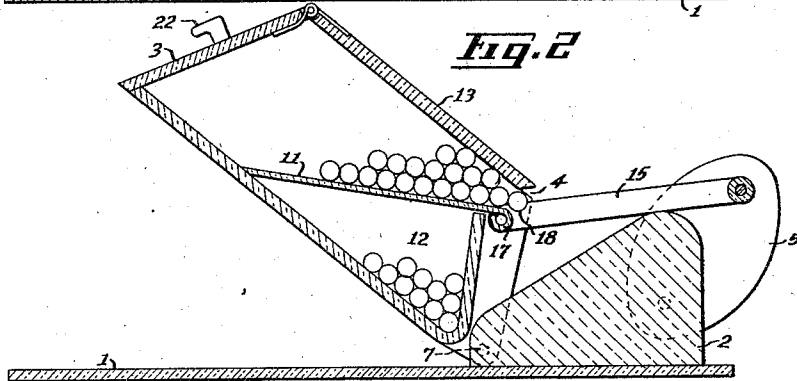
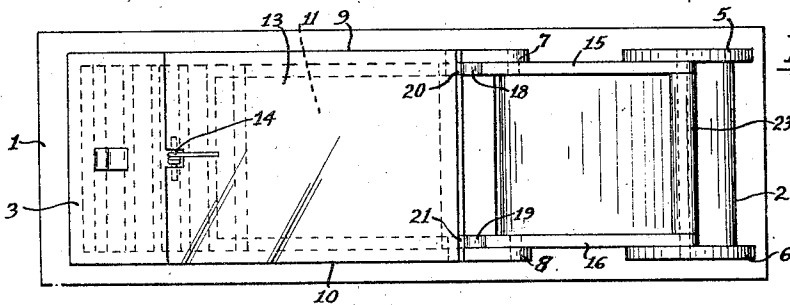


Fig. 3



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CIGARETTE DISPENSER

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7 Claims. (Cl. 312-77)

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This invention relates to improvements in cigarette dispensers of the type in which a single cigarette is automatically dispensed each time the device is actuated, the remaining cigarettes being retained in a suitable container until required.

In dispensers of this kind it is desirable to have a substantially closed container to protect the cigarettes from excessive drying out and from dust and to have positive means for dispensing a single undamaged cigarette for the user when desired. Heretofore the means employed for dispensing cigarettes have involved mechanisms which were either complicated in structure or were easily clogged by loose tobacco particles or which were not positive in action or in which the cigarettes were liable to be squeezed, torn, or mangled so that they could not be smoked.

An object of my invention is to provide a dispenser which is extremely simple in construction, positive in action, and in which the cigarette is presented to the smoker without having been subjected to forceable mechanical action or any mechanical action other than the action of gravity resulting from tilting the container itself and in which there is no possibility that the cigarette may be torn or injured. A further object of my invention is to provide a dispenser in which the cigarettes are retained in a substantially closed moisture-proof container so as to retain their original moisture content as long as possible and to avoid contamination from dust or handling. Another object of my invention is to provide a dispenser which is easily manufactured principally by a pressing, stamping, or molding operation and which is attractive in appearance, interesting to operate, and suitable for use in the home as an acceptable smoker's article.

According to my invention, these objects are accomplished by a dispenser, preferably made of transparent plastic, in which the container itself is pivoted so that it may be tilted and the cigarettes caused to slide down a ramp or inclined plane by the force of gravity to an opening in the container where the first cigarette in line is caught and cradled by an indentation in a pair of arms or in a trough. The opening in the container need not be any larger than necessary to permit a single cigarette to roll through and thus excessive evaporation of moisture is avoided. By reason of the tilting of the container, the cigarette is caused to roll to the opening by its own weight and at no time is it seized, pushed, or propelled by mechanical means so that all injury to the cigarette is avoided. The simplicity of the action and the simplicity of construction permits easy

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and inexpensive manufacture and also provides an attractive and interesting device for dispensing cigarettes.

In the accompanying drawings:

Fig. 1 is a vertical sectional view of the preferred form of the dispenser in normal position.

Fig. 2 is a vertical section of the preferred form of the dispenser in elevated position.

Fig. 3 is a plan view of the preferred form.

Referring to Figs. 1 to 3 of the drawings, the base member 1 is preferably a rectangular sheet of plastic sufficiently thick so as to form a stable supporting member. Any good wood such as mahogany or walnut may also be used to form an attractive and suitable base. Mounted upon said base is a supporting member 2 which may, as shown, be a single block of plastic, wood, or other material. The supporting member 2 acts as a support for container 3 and also as a stop to prevent the container from tilting beyond the point necessary to permit the cigarettes to roll to the opening 4 in the container. Members 5 and 6 are also mounted on the support. The supporting member may, of course, be divided into two supports functioning in like manner.

The container 3 is preferably made of transparent plastic to permit observation of the cigarettes rolling to the opening and also to disclose the quantity of cigarettes remaining in the container. It may be provided with a pair of connecting members, one on each side. These members are pivoted to the supporting member at 7 and 8. In the preferred form the connecting members are extensions of the sides 9 and 10 and are slightly rounded at the bottom corner to permit the container to pivot freely in the direction shown in Fig. 2.

Mounted in the container is a ramp or surface 11 which divides the container into a portion from which cigarettes are dispensed and a storage portion 12 in which a supply of cigarettes may be kept until needed. The upper end of the ramp is arranged adjacent the slot 4 and the lower end rests upon the bottom of the container. When the container is tilted, the cigarettes in the dispensing portion are caused to roll up the ramp to the slot by the action of gravity. The ramp may be hinged so that it may be swung aside and permit access to the storage portion.

The container is provided with a cover 13 which in the preferred form is hinged at 14 with a spring hinge. It is shorter than the opening in the container by an amount equal to the size of the slot. When the cover is in place, the space thus provided forms the slot 4. The cover is held

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in place by spring hinges, catches, or any convenient conventional means.

The slot 4 is slightly larger than the diameter of a cigarette to permit a cigarette to roll through it easily. Preferably the opening should be kept as small as possible so that the moisture content of the cigarettes is maintained.

Arms 15 and 16 are hinged to the container at 17 near the slot or opening. These arms are provided with substantially U-shaped indentations 18 and 19 adjacent their ends. Projections 20 and 21 are formed on the arms beyond the indentations, and, when the container is tilted, they are in substantially the same plane as the ramp. As the lower end of the ramp is then higher than the slot, the cigarette rolls through the slot and is caught in the indentations. When the container returns to its normal position, the projections 20 and 21 hold the cigarette in the indentations and prevent it from sliding back into the container. It may thus be picked up by the smoker and used.

The container may be swung on its pivot by means of a handle 22 on the opposite end of the container. In the preferred form the tilting is accomplished by the action of the arms 15 and 16. These arms may be connected to the supporting hinged members 5 and 6 and a cross member 23 may extend between them. The lever action provided by this construction permits the user of the device to operate it by a slight pull upon the cross member 23.

Fig. 2 shows the container in a tilted position with the cigarette rolling along the ramp which is now tilted towards the slot. The projections 20 and 21 are shown in a position whereby a cigarette may roll over and pass them and into the indentations provided in the arms. The angle which the arms form with respect to the container prevents more than one cigarette from sliding through the opening. Thus, when the container is returned to its normal position, only one cigarette remains cradled in the indentations and is tendered to the smoker.

The operation of my invention is substantially as follows: The cover is removed from the container and the ramp is either swung out of the way if hinged or removed if that modification is employed. The part of the container which acts as a storage space is filled with cigarettes and the ramp replaced in position. The remainder of the container is then filled with cigarettes leaving some space so that the cigarettes may move freely when the container is tilted. The cover is then replaced and the dispenser is ready for operation. In the preferred form of operation the cross arm 23 is grasped and moved in the direction away from the container. This causes the container to tilt upwardly on the pivoted axis. The ramp which theretofore was inclined away from the discharge opening now slants towards the discharge opening causing the cigarettes, by action of gravity, to roll towards the discharge opening. The first cigarette through the discharge opening falls into the cradle formed in the arms and because of the relative position and the arms prevents any subsequent cigarettes from following. As the pull on the cross arm is released, the container returns to its normal position causing the remaining cigarettes to roll back into the container, the projections on the arms forming the indentation holding the discharged cigarette until it can be picked off by the smoker.

Having thus described my invention, I claim:

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1. In a cigarette dispenser the combination of a base member, a container having an opening for receiving cigarettes in the top thereof and being pivotably connected at one end to the base member, a cover for said receiving opening, said cover being shorter than the opening so that when in place on the container, said cover forms a discharge opening in the container at the pivoted end thereof, a ramp extending diagonally from the discharge opening to a point on the bottom of the container and a pair of arms operably connected to the container near the discharge opening to tilt the same, each of said arms having an indentation at the connected end for the purpose of receiving and holding a discharged cigarette.

2. In a cigarette dispenser the combination of a base member, a container pivotably connected at one end to the base member and having a discharge opening at the top of the pivoted end, a ramp in said container leading to the discharge opening from the bottom of the container and a pair of arms operably connected to the container at the discharge opening, each of said arms having a substantially U-shaped indentation near the connected end to receive and hold a discharged cigarette and means for actuating said arms to tilt the container on its pivot.

3. In a cigarette dispenser the combination of a base member, a container pivotably connected at one end to the base member and having a discharge opening at the top of the pivoted end, a ramp in said container leading to the discharge opening from the bottom of the container, a pair of arms operably connected to the container adjacent the discharge opening and having substantially U-shaped indentations near the connected ends to receive and hold a discharged cigarette, and a pair of supporting members pivotably attached at one end of the base member and pivotably attached at the other to the arms.

4. In a cigarette dispenser the combination of a base member, a container pivotably mounted at one end on said base member and having a discharge opening at the top thereof at the pivoted end, a receiving opening for the insertion of cigarettes, a hinged cover for said receiving opening, a ramp bisecting the container from the bottom thereof to the discharge opening, means operably connected to the container near the discharge opening and operating to tilt the container, said means having projections at the connected end to receive a discharged cigarette when the container is tilted and to hold it when the container returns to its normal position.

5. In a cigarette dispenser the combination of a base member, a container pivotably mounted at one end on said base member having a discharge opening at the top thereof at the pivoted end and having an opening for receiving cigarettes, a hinged cover for said opening, a ramp bisecting the container from the bottom through to the discharge opening, arms pivotably connected to the container near the discharge opening and operating to tilt the container, said arms having projections at the pivoted end to receive and hold a discharged cigarette.

6. In a cigarette dispenser the combination of a base member, a container pivotably mounted at one end on said base member and having a slot in the top thereof at the pivoted end for discharging cigarettes, an opening for receiving cigarettes, a ramp bisecting the container from the slot to the point at the bottom of the container and a pair of arms operably connected to the container

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adjacent the slot to pivot the container, said arms having substantially U-shaped indentations at the pivoted ends to receive and hold a discharged cigarette.

7. In a cigarette dispenser the combination of a base member, a container pivotably mounted at one end on said base member, having a slot at the top thereof at the pivoted end for discharging cigarettes, and having an opening for receiving cigarettes, a cover for said opening, a ramp in said container forming an angle with the bottom of the container and leading to the slot and a pair of arms operably connected to the container adjacent to the slot, said arms having indentations at the ends adjacent to the slot and

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operating to tilt the container and to receive and hold a discharged cigarette.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

10	Number	Name	Date
	248,184	Landis	Oct. 11, 1881
	1,062,503	Reed	May 20, 1913

FOREIGN PATENTS

15	Number	Country	Date
	403,807	Germany	1924