Sept. 4, 1951 B. L. PETTY 2,566,808

CIGARETTE DISPENSER

Filed Jan. 17, 1949 2 Sheets-Sheet 1

FIG. 1

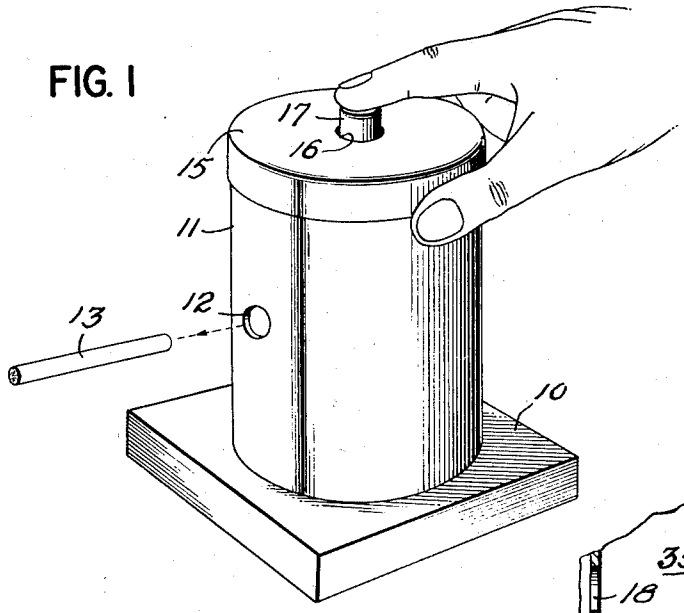


FIG. 6

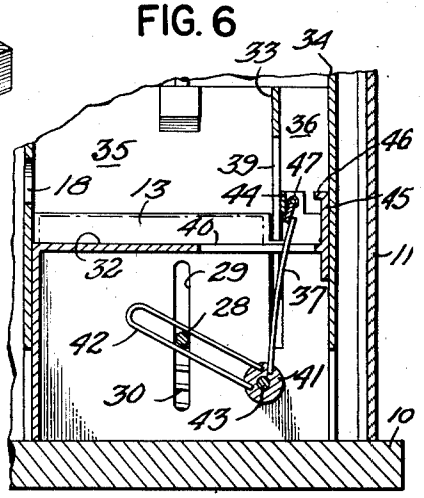


FIG. 2

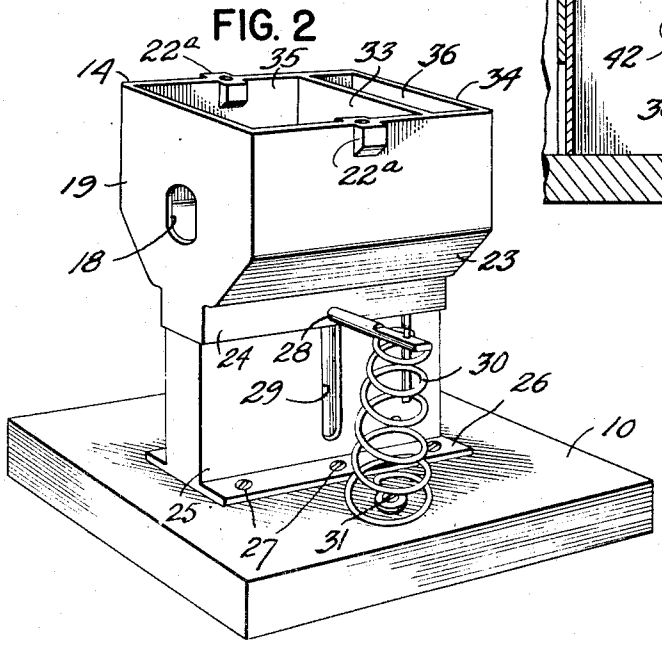
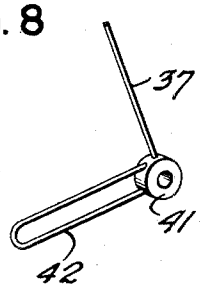


FIG. 8



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Sept. 4, 1951 B. L. PETTY 2,566,808

CIGARETTE DISPENSER

Filed Jan. 17, 1949 2 Sheets-Sheet 2

FIG. 3

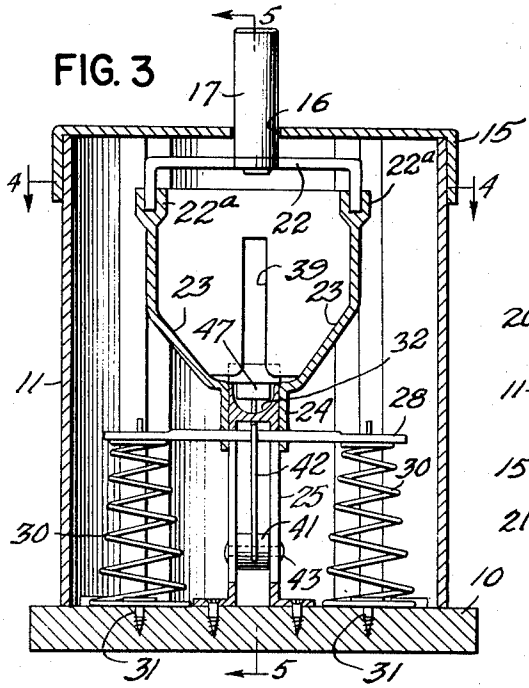


FIG. 4

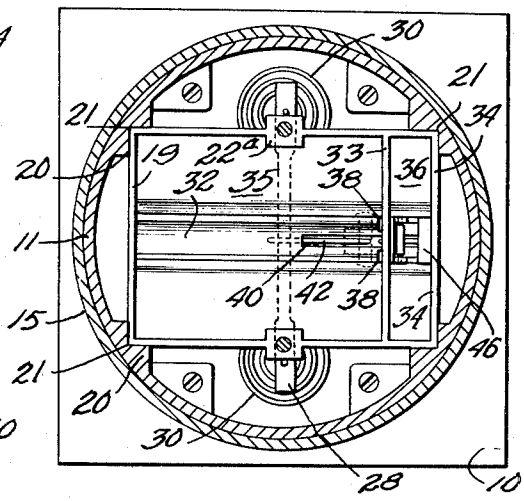


FIG. 5

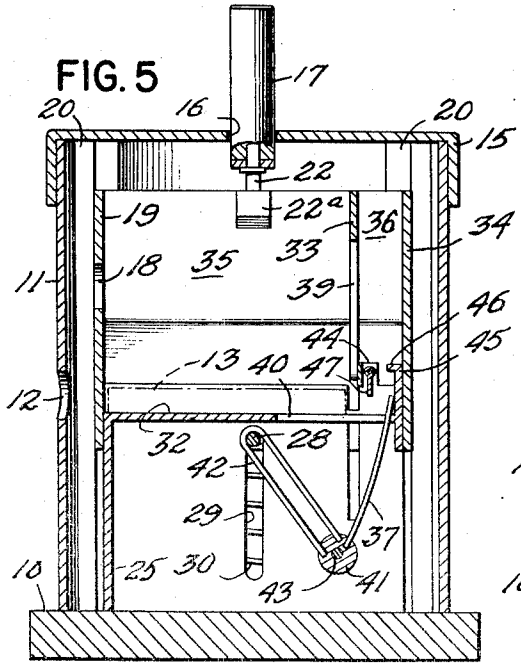
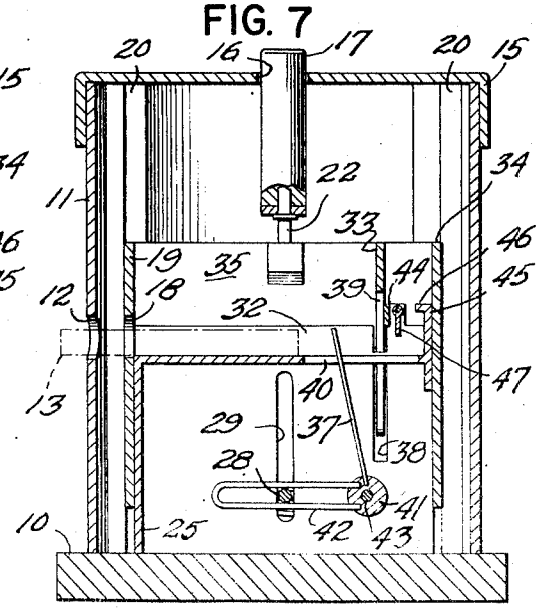


FIG. 7



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Patented Sept. 4, 1951 2,566,808

UNITED STATES PATENT OFFICE

2,566,808

CIGARETTE DISPENSER

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Application January 17, 1949, Serial No. 71,291

3 Claims. (Cl. 312—77)

1

This invention relates to dispensers for cigarettes of a character whereby cigarettes may be dispensed from a hopper, one at a time, the dispenser being preferably in the nature of a stand or table cabinet in contradistinction to pocket cases.

The principal object of the invention is to provide dispensers which are simple in construction, inexpensive to manufacture and not likely to get out of order even though operated a great number of times and over a long period of time.

Another object is to provide dispenser mechanism which may be compactly and attractively housed to harmonize with other smokers' equipment, such as humidors, so as to serve a companion piece for such equipment.

A further object is to provide in such a dispenser, means whereby the cigarette is shot, so to speak, from the housing without damagaing the cigarette, the unit affording amusement to those operating and observing its operation.

Other objects and advantages will appear in the following detailed description of a highly satisfactory embodiment of my invention, taken in connection with the accompanying drawings forming a part of this specification, and in which drawings:

Fig. 1 is a perspective view of the dispenser, the index finger of a hand shown, being on a plunger of operating mechanism depressed to the end of operating stroke, and a cigarette shown in the air, propelled free of the dispenser casing.

Fig. 2 is a perspective view of mechanism mounted on a suitable base, with the casing and operating plunger shown in Fig. 1, removed.

Fig. 3 is a view partly in elevation and partly in central vertical section through the dispenser, showing the relative position of parts at the start of an operating stroke.

Figs. 4 and 5 are horizontal and vertical sectional views on the line 4—4 and 5—5 of Fig. 3, respectively.

Fig. 6 is a fragmentary view similar to Fig. 5, but showing the relative position of parts at an intermediate position of the operating stroke.

Fig. 7 is a view similar to Fig. 5, but showing the relative position of parts at the end of the operating stroke.

Fig. 8 is a perspective view of an actuating unit forming a part of the dispensing mechanism.

In general the cigarette dispenser comprises a cabinet structure of artistic design including a base 10 and in the design shown an upright cylindrical casing 11 having an opening 12 therein through which a cigarette 13 may be projected from a vertically movable hopper 14 within the casing. The casing is shown with a top cover 15 having a central aperture 16 therethrough through which a plunger 17 connected with the hopper 14 for operating the same in cigarette dispensing operations.

While the casing 11 is illustrated of cylindrical

2

conformation with its opening 12 in a position to be in line with an aperture 18 in hopper 14, when in its lower dispensing position it may be any other shape and if desired the opening may be increased in size even to the extent of substantially the entire front end wall 19 of the hopper 14 so that said end wall 19 may take the place of a portion, at least, of the wall of casing 11; a large opening 12 in casing 11 provides for the complete dispensing of a cigarette 13 from the hopper and casing at all times without any possibility of the cigarette being caught in the two openings 12 and 18 even if the hopper is returned suddenly to its upper position in the casing.

As shown hopper 14 is of rectangular transverse construction and casing 11 provided with vertical guideways 20 into which the corners 21 of the hopper are adapted to slide. The upper end of hopper 14 has a yoke 22 across its top connected with operating plunger 17, the ends of which yoke 22 are positioned in sockets 22^a formed in the upper side walls of the hopper so that it is removable when it is desired to fill the hopper with cigarettes. The lower end hopper 14 has inwardly diverging side walls 23 which with the end walls of the hopper terminate in a rectangular depending collar 24 which slidingly engages the outer surface selector pedestal 25 the base 26 of which is secured to base 10 of the cabinet structure by means of screws 27 or the like.

A bar 28 extends laterally of the mid portion of collar 24 of the hopper and cooperative vertical slots 29 in the spaced apart side walls of the selector pedestal with compression springs 30 under the ends of the bar which are secured in place to base 10 by screws 31. These springs 30 yieldably hold the hopper 14 in its elevated position, this elevated position being determined by the upper ends of slots 29 and the selector pedestal has a longitudinal rounded trough 32, which when the hopper is in its elevated position provides a receptacle at the bottom thereof of a size to engage or select one cigarette from the hopper which will roll therein, as shown in Fig. 5. As shown in Fig. 7 the lower limit of movement of bar 28 is determined, by the lower ends of slots 29, being substantially when the opening 18 of the hopper end 19 is in alignment with opening 12 of casing 11 so that the cigarette 13 may be shot or dispensed therefrom.

Hopper 14 is somewhat longer than the cigarette 13 and has a partition 33 adjacent its back end wall 34 providing a forward cigarette receiving receptacle or hopper 35 and rear small compartment 36 to accommodate a cigarette dispensing spring 37 and cooperating parts. The spaced apart side walls of the selector pedestal are provided with slots 38 for the reception of partition 33 when the hopper 14 is depressed and the partition 33 and pedestal trough 32 have slots 39

and 40 respectively through which the dispensing spring 37 may operate.

Cigarette dispensing spring 37 comprises a straight spring wire mounted in a cylindrical hub 41 as best shown in the perspective view Fig. 8. Also mounted in hub 41 is a slotted lever 42 which as shown is preferably formed of a wire or rod loop which is sufficiently rigid to actuate the hub to operate spring 37 on a cigarette ejecting operation. As shown in several of the views hub 41 is mounted on a pivot 43 fixed between the spaced apart side walls of the selector pedestal 25 with the slot of lever 42 in engagement with bar 28 and the dispensing spring 37 extending upwardly through slot 40 in the trough 32 of the selector pedestal.

As best shown in Figs. 5, 6 and 7, the rear end of the selector pedestal 25 has a forward upstanding channel extension 44 and a rear extension 45 with a forwardly extending stop 46 on its upper end. The side portions of extension 44 provide pivot mounting for a swinging abutment 47 which normally hangs vertically downward from its supports to an extent to be engaged by the upper end of spring 37 when it is pressed against the web portion of channel projection 44 as a stop as shown in Fig. 6; the forward projection 46 on rear extension 45 acts as a stop to prevent the swinging abutment 47 from being swung upwardly and into an inoperative position, thus insuring the return of the abutment to its normal depending position.

In operation, in Fig. 5 the dispenser shown with the parts in positions they take before the start of a dispensing operation, a single cigarette 13 being shown in the trough 32 of the selector pedestal 25; the hub 41 is swung on its pivot so that spring 37 is bowed in engagement with rear extension 45 of the pedestal under slight stress. As plunger 17, with hopper 14, are depressed, spring 37 is swung forwardly into engagement with swinging abutment 47 as shown in Fig. 6 and by further depression of the plunger the stress on spring 37 is increased until the hopper reaches the position shown in Fig. 7 when the spring 37 is drawn down by turning of hub 41 so that it snaps out from under swinging abutment 47 under considerable stress to eject the cigarette in the dispensing operation with sufficient force so as to actually shoot it therefrom as indicated in Fig. 1, much to the amusement of the operator of the dispenser.

After such operation, releasing the plunger 17 the parts return to the position shown in Fig. 5, swinging abutment 47 swings rearwardly upwardly as spring 37 passes without obstructing its movement, and another cigarette in chamber 35 of the hopper rolls into place in trough 32 of the selector pedestal ready for the next dispensing operation.

Having described a highly satisfactory preferred embodiment of a cigarette dispenser in accordance with my invention it is not desired that my invention should be limited to the exact details as illustrated, it being understood that various changes may be made within the scope of the following claims.

I claim:

1. A cigarette dispenser including a vertically movable hopper for receiving a supply of cigarettes and having an opening in an upper portion of an end thereof through which a cigarette may be dispensed, a selector pedestal having a longitudinal trough in its upper end providing the bottom of the hopper when the hopper is in an elevated position and into which trough a cigarette will roll, spring supporting the hopper in said upper position but yieldable to the depressing of the hopper downwardly over the pedestal until the opening in the end thereof is in line with the trough, said trough in the top of the pedestal having a longitudinal slot in the end thereof remote from the opening in the end of the hopper, a spring projecting upwardly in the remote end of said slot in the trough of the pedestal, means for stressing said spring to move forwardly in said slots when the hopper is depressed, and means for releasing the spring in its stressed condition as the opening in the hopper comes into alignment with the trough in the pedestal so that the cigarette in the trough will be ejected through the opening in the end of the hopper by the sudden release of the spring.

2. In a cigarette dispenser including a vertically movable hopper for receiving a supply of cigarettes and having an opening in an upper portion of an end thereof through which a cigarette may dispensed, a selector pedestal having a longitudinal trough in its upper end providing the bottom of the hopper when the hopper is in an elevated position and into which trough a cigarette will roll, said pedestal having spaced apart walls and vertical slots therein, a bar connected with the bottom of the hopper extending laterally through the slots in the pedestal whereby the vertical movement of the hopper over the pedestal is guided and limited, springs supporting the outer ends of said bar beyond the sides of the hopper to yieldingly hold the hopper in its upper position, and cigarette ejector means engaging said bar between said walls of the pedestal and operated thereby to dispense a cigarette when the hopper is depressed to a position aligning the opening in its end with the trough in the top of the pedestal.

3. In a cigarette dispenser including a vertically movable hopper for receiving a supply of cigarettes and having an opening in an upper portion of an end thereof through which a cigarette may be dispensed, a selector pedestal having a longitudinal trough in its upper end providing the bottom of the hopper when the hopper is in an elevated position and into which trough a cigarette will roll, said pedestal having vertical slots in its side, a bar connected with the bottom of the hopper extending laterally through the slots in the pedestal whereby the vertical movement of the hopper over the pedestal is guided and limited, springs supporting the outer ends of said bar beyond the sides of the hopper to yieldingly hold the hopper in its upper position; and cigarette ejector means connected with said bar within the pedestal and operated thereby to dispense a cigarette when the hopper is depressed to a position aligning the opening in its end with the trough in the top of the pedestal including a spring tensioned by the downward movement of the bar, and a swinging abutment holding the spring under stress until the opening in the trough is aligned with the trough in the top of the pedestal.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
599,398	Maxfield	Feb. 22, 1898
1,125,933	Bartholomew	Jan. 26, 1915