Dec. 25, 1928. 1,696,787

N. ZELKOWITZ ET AL

DISPENSING DEVICE

Filed Oct. 3, 1927

Fig. 1.

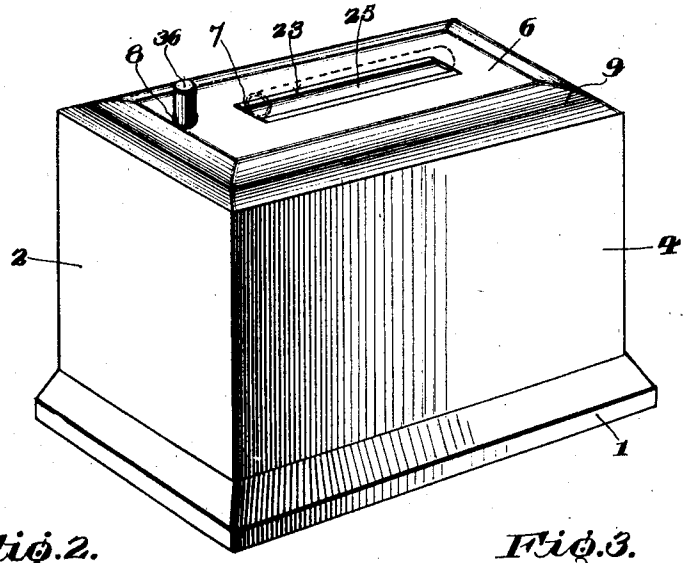


Fig. 2.

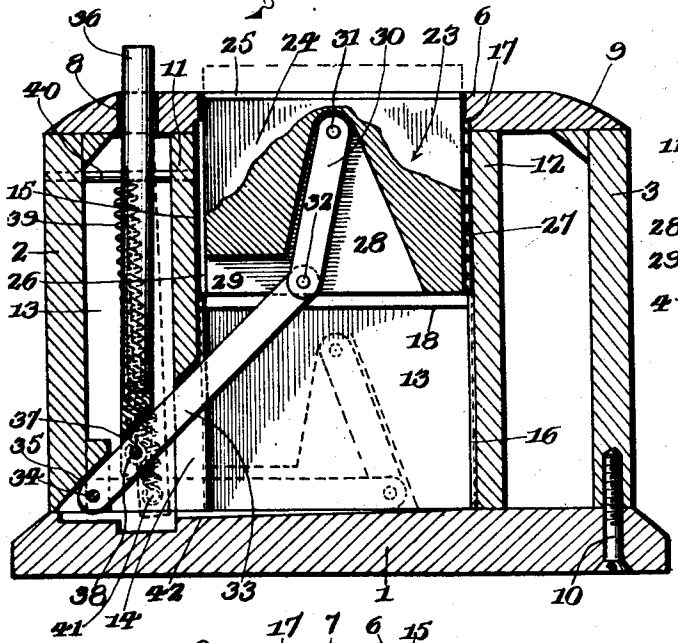


Fig. 3.

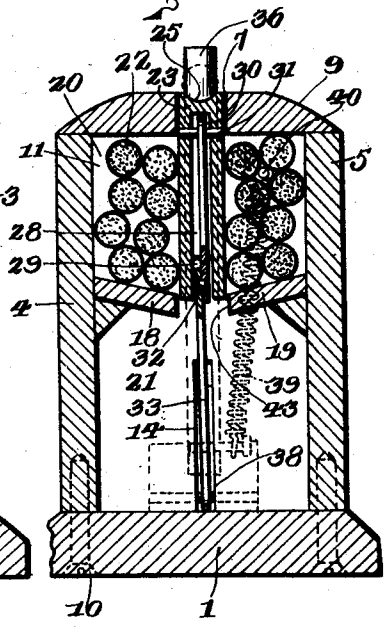
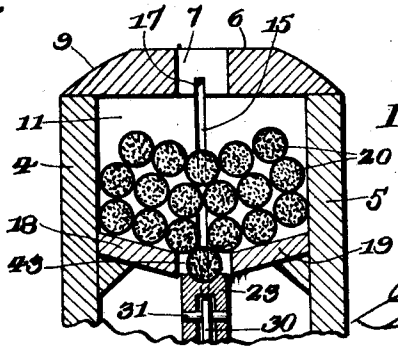


Fig. 4.



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UNITED STATES PATENT OFFICE.

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DISPENSING DEVICE.

Application filed October 3, 1927. Serial No. 223,726.

This invention relates to a dispensing device, designed primarily for use in connection with the dispensing of cigarettes and cigars, but it is to be understood that the dispensing device, in accordance with this invention, may be employed for any purpose for which it is applicable, and the invention has for its object to provide, in a manner as hereinafter set forth, a device of the class referred to for expeditiously dispensing therefrom, when desired, a cigarette or cigar.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a dispensing device for the purpose referred to which is simple in its construction and arrangement, strong, durable, compact, thoroughly efficient in its use, conveniently operated, readily assembled and comparatively inexpensive to manufacture.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall withn the scope of the claim hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is a perspective view of a dispensing device in accordance with this invention.

Figure 2 is a longitudinal sectional view thereof.

Figure 3 is a horizontal sectional view with the ejector in an elevated position.

Figure 4 is a fragmentary view in horizontal section with the ejector in a lowered position.

Referring to the drawings in detail a dispensing device, in accordance with this invention, comprises a casing including a bottom, a pair of end walls 2, 3, a pair of side walls 4, 5 and a top 6 formed with a rectangular slot 7 at the longitudinal median thereof and said top 6, at a point a substantial distance from one end of the slot 7, is formed with an opening 8. The marginal portions of the upper face of the top 6 are rounded or beveled as indicated at 9. The side and end walls of the casing are detachably connected to the bottom 1, by vertically disposed holdfast devices 10.

Arranged within the casing is a pair of spaced, vertically disposed partitions 11, 12 which are positioned in parallelism with respect to, but spaced from the end walls 2, 3. The partitions 11, 12, in connection with the side walls 4, 5 of the casing form an intermediate chamber 13 with which communicates the slot 7. The partition 11 in connection with the end wall 2 forms an outer chamber 13. The partition 11 has its lower portion formed with a slot 14 and said partition 11, has that face which opposes the partition 12, formed centrally with a vertically disposed groove 15 which opens at its lower end in the upper end of the slot 14. That face of the partition 12, which opposes the partition 11, is formed with a vertically disposed groove 16 arranged in alignment or rather in parallelism with the groove 15. The end walls of the slot 7 are grooved as at 17 and which form continuations of the grooves 15, 16.

Secured to the inner faces of the side walls 4, 5 are oppositely disposed supports 18, 19 which are arranged in spaced relation and said supports 18, 19 divide the intermediate chamber 13, into an upper compartment 20 and a lower compartment 21. The supports 18, 19 incline downwardly in opposite directions from the side walls 4, 5. The compartment 20 is adapted to contain the articles 22 which are dispensed and as illustrated by way of example, such articles are in the form of cigarettes.

Operating within the chamber 13 and capable of being shifted from the compartment 21, through the compartment 20 and into the slot 7, is an ejector member 23, which in its vertical movement passes between the supports 18, 19. The ejector member 23 comprises a rectangular body portion 24, having a concave groove 25 throughout the upper edge thereof. The body portion 24, at one side is formed with a tongue 26 which travels in the groove 15 and at its other side is formed with a tongue 27 which travels in the groove 16. The tongues and grooves constitute guiding means for the member 23 during the vertical movement thereof. The body portion 24 is formed with a recess which opens at the bottom of the member 23, and said recess consists of an inverted V-shaped portion 28 and a rectangular portion 29 which is disposed at right angles with respect to the lower part of the portion 28.

The ejector member 23 has arranged within the portion 28 of the recess a link 30, pivotally connected at its upper end as at 31, to said body portion 24 and the pivot 31 is arranged substantially at the upper end of the portion 28 of the recess. The lower end of the link 30, is pivotally connected as at 32, to the upper end of a lever arm 23, which extends through the slot 14, and has its lower end pivotally connected, as at 34, within a recess 35 formed in the lower part of the end wall 2. The lever arm 33 extends across the chamber 13.

Extending down through the opening 8 is a spring controlled plunger 36 having its lower end bifurcated as at 37, and extending through the furcation is the lever arm 33, and the latter is pivotally connected to the lower end of the plunger 36, as at 38. The controlling spring for the plunger 36 is indicated at 39 and which has its upper end, anchored to a cross bar 40, arranged within the upper portion of the chamber 23. The lower end of the controlling spring 39 is anchored to the lower end of the plunger 36, as at 41. The upper face of the bottom 1 is cut away as at 42 to provide a clearance for the lower end of the plunger 36, and also for the lever arm 33, when the ejector member 23 has been shifted to its lowermost position within the compartment 21.

The controlling spring 39, acts to normally maintain the ejector member 23 in the full line position as shown in Figure 2, that is to say with said member positioned in the compartment 21 and in the space 43 formed between the supports 18, 19. When the ejector member 23 is in its lowermost position, it is arranged in the compartment 21 and extends into the lower part of the space 43 and the articles 22, cigarettes, will be in the position as shown in Figure 5, whereby one of the cigarettes will fall into the space 43, and seat in the groove 25 formed in the top edge of the member 23. When the plunger 36 is moved downwardly, such action is had against the action of the spring 29, and on the downward movement of the plunger, the ejector member 23 will be shifted into the compartment 21, and receive a cigarette. When the pressure on the plunger 36 is released, the spring 39 will act to elevate said plunger 36, thereby providing for an upward movement of the ejector member 23, whereby the cigarette in the path of said member 23 will be carried to the slot 7 and ejected therefrom.

The device is constructed and arranged so that it will dispense a single article therefrom at one time and the dispensing of the article can be had in an expeditious manner. The articles, such as cigarettes, can be fed into the compartment 30 or supplied to such compartment, when the ejector member 23 is in its lowered position.

It is thought the many advantages of a dispensing device in accordance with this invention and for the purpose set forth can be readily understood, and although the preferred embodiment of the invention is as illustrated and described, yet it is to be understood that changes in the details of construction can be had which fall within the scope of the invention as claimed.

What we claim is:

A dispensing device comprising a casing provided with opposed spaced partitions to form an article containing compartment and further provided at its top with a discharge slot communicating with said compartment, a vertically movable ejector member travelling through said compartment and formed with a recess having an inverted V portion and a rectangular portion projecting laterally from the V portion, a link having its upper end pivoted in said V portion, a lever arm pivoted at one end to the lower end of said link and operating in said rectangular portion, means for pivotally connecting the other end of said lever to the casing at a point removed from said compartment, a vertically movable spring controlled plunger positioned in said casing adjacent said compartment and having its lower end pivotally connected to said lever in proximity to the point of connection between the lever and said casing and operated in one direction by its controlling spring for shifting said ejector in a direction to discharge an article from said compartment through the slot, and said partitions and ejector having coacting means to provide guides for the ejector.

In testimony whereof, we affix our signatures hereto.

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