July 24, 1928. 1,678,355

C. C. ROBERTS

CIGARETTE DELIVERY BOX

Filed Dec. 22, 1927

FIG. 1.

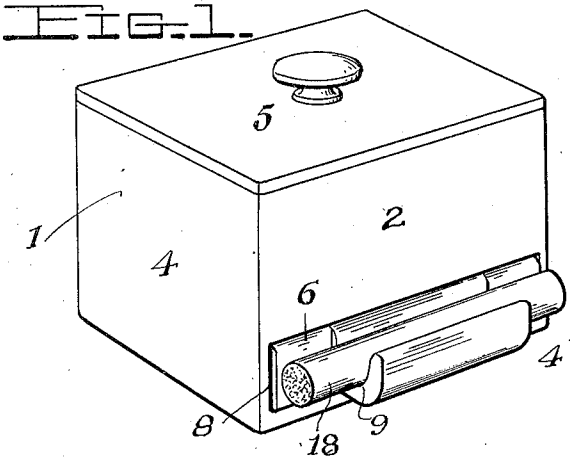


FIG. 2.

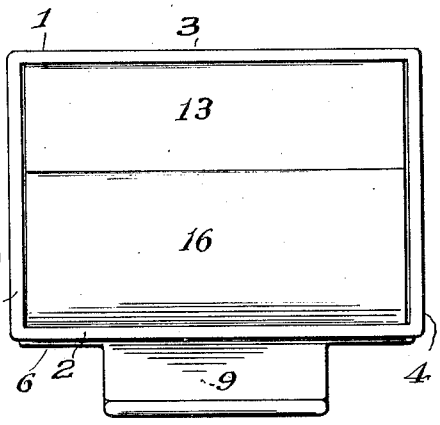


FIG. 3.

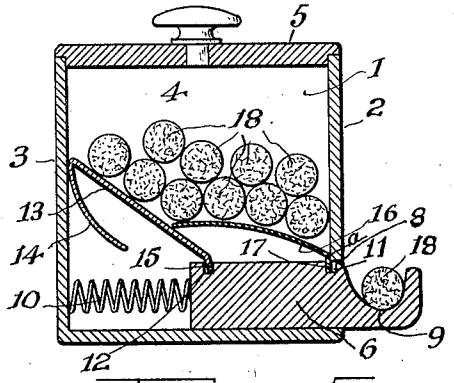


FIG. 4.

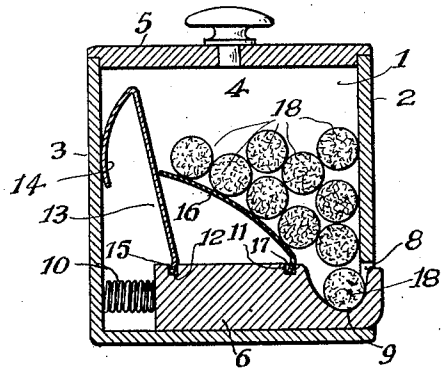


FIG. 5.

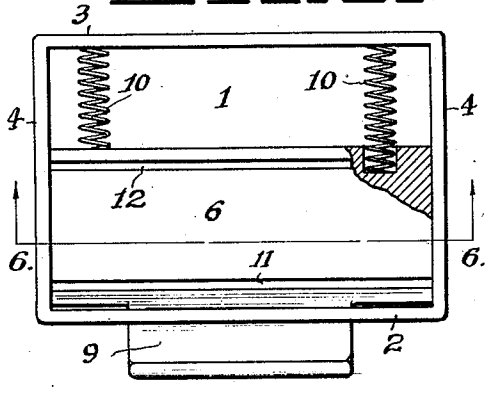
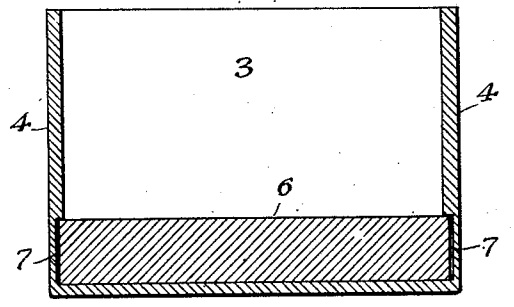


FIG. 6.



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UNITED STATES PATENT OFFICE.

CHARLES C. ROBERTS, OF BRIDGEPORT, CONNECTICUT.

CIGARETTE-DELIVERY BOX.

Application filed December 22, 1927. Serial No. 241,752.

This invention relates to cigarette delivery boxes and has for its object to provide a simple and efficient device of this character, not at all likely to get out of order, and furthermore, to keep the cigarettes in the box straightened and always in proper position for delivery, and with these ends in view the invention consists in certain details of construction and combination of parts hereinafter fully described and also illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the box.

Figure 2 is a top view of the same with the cover removed.

Figure 3 is a cross section with the parts in normal position.

Figure 4 is a view similar to Figure 3, but showing the delivery tray pushed inward preparatory to receiving a cigarette for delivery.

Figure 5 is a top view similar to Figure 2 but with the tilting and agitator plates removed, and

Figure 6 is a section at the line 6—6 of Figure 5.

Similar numerals of reference denote like parts in the several figures of the drawing.

1 generally denotes the box which has a front wall 2, a rear wall 3, and side walls 4, and any convenient and suitable cover 5.

6 is a delivery tray which is guided within ways 7 in the side walls of the box, and is capable of inward and outward movements through an opening 8 in the front wall of the box.

9 is a channel formed at the front of the tray for containing the cigarettes for delivery, as will be presently explained.

10 are coil springs extending between the rear of the tray and the rear wall of the box, and the function of these springs is to normally slide the tray outwardly.

11, 12, are grooves that extend throughout the width of the tray at the front and rear portions thereof.

13 is a tilting plate that extends throughout the width of the box and has at its rear edge a downwardly extending curved portion 14 which contacts the rear wall 3 of the box, while the forward edge of this plate is formed into a lip 15 that engages within the groove 12 and thereby establishes a pivotal relation between this plate and the tray 6.

16 is an agitator plate which extends throughout the width of the box and whose rear edge rests freely upon the plate 13 and along whose front edge is a lip 17 that engages within the groove 11 so as to establish a pivotal relation between the tray 6 and the plate 16.

When the parts are in normal positions as shown at Figure 3, the plate 13 will be downwardly and forwardly inclined with the curved portion 14 in contact with the wall 3, while the plate 16 will rest at a slight incline upon the plate 13, the front edge of the plate 16 at the point designated by *a* being abutted against the front wall 2 of the box so as to act as a stop to prevent undue outward movement of the tray 6.

The cigarettes are denoted by the numeral 18, and when the tray is pushed inwardly, the plate 16 will ride upwardly along the plate 13 and will also cause the cigarettes at the bottom to have a rotary movement which tends to straighten them out in case they are crossed and to cause them to roll toward the front of the box while at the same time this rearward movement of the tray 6 will cause the plate 13 to be raised at a steep incline so as to throw the mass of cigarettes forwardly, and the contact of the curved portion 14 with the rear wall of the box will cause this movement of the plate 13 to be effected smoothly and without undue agitation of the cigarettes.

When the tray has been pushed inwardly to its limit the lowermost cigarette will drop within the channel 9, and as the tray is released the parts will be restored to normal position by the action of the springs 10, and one of the cigarettes will be in position for delivery as shown at Figure 3.

It frequently happens in devices of this nature that the cigarettes are not lying straight within the box so that some of them will cross others, but the peculiar action of the plates 13, 16, will cause such cigarettes to straighten out, will always keep the cigarettes, even to the last one, thrown forward, and will therefore insure the delivery of such cigarettes into the channel.

What is claimed is:—

1. A cigarette delivery device, comprising a box, a normally spring impelled delivery tray having a channel in its front portion, a downwardly inclined tilting plate pivotally carried by the rear of said tray and bearing at its free edge against the rear

wall of the box, and an agitator plate whose front edge is pivotally connected to the tray while its rear edge rests freely upon said plate.

2. A construction as in claim 1, with the addition that the rear edge of the tilting plate carries a curved part that freely contacts the rear wall of the box, whereby the inward movement of the tray will uniformly tilt said plate forwardly.

In testimony whereof I affix my signature hereto.

CHARLES C. ROBERTS.