

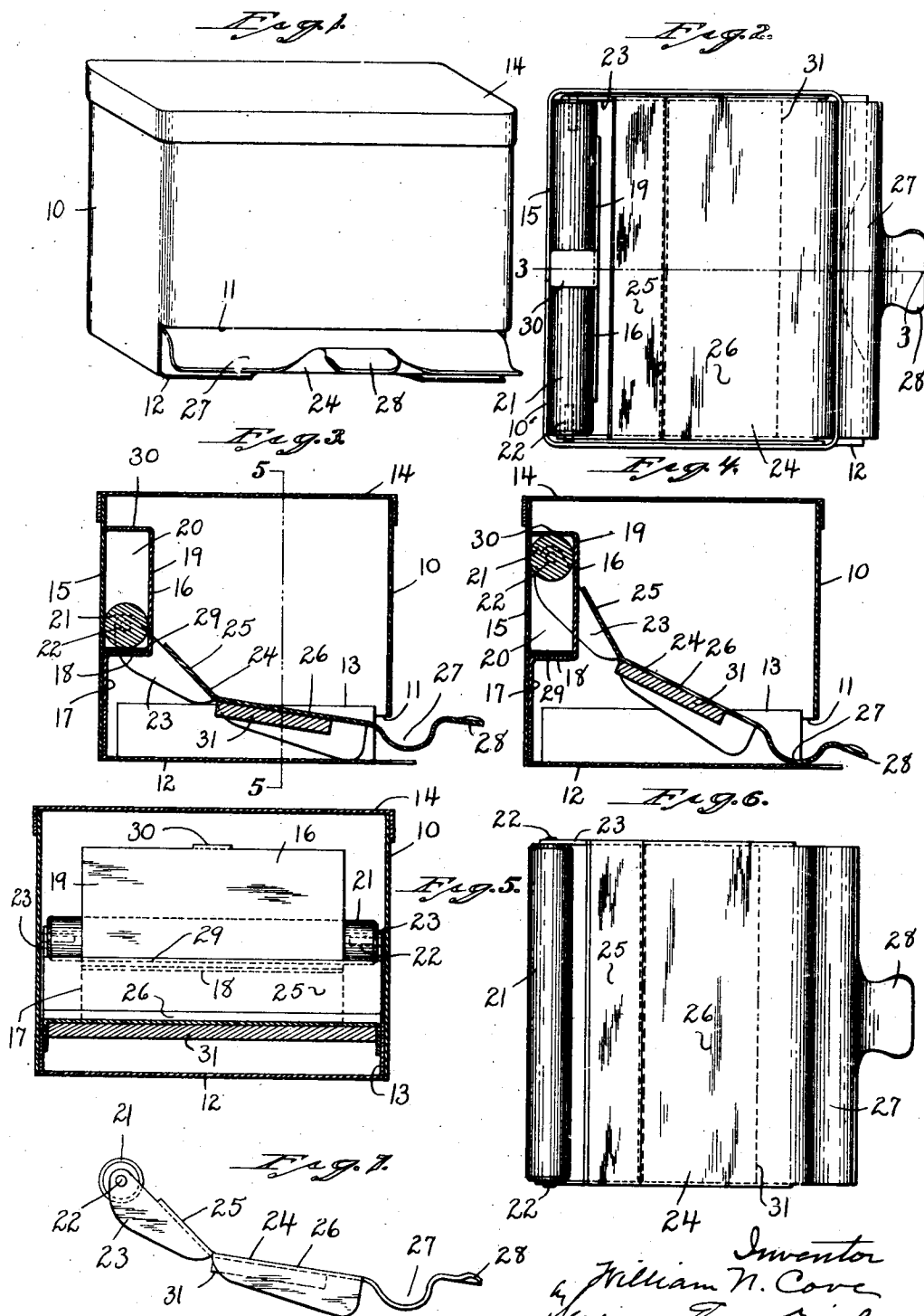
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DISPENSING DEVICE

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DISPENSING DEVICE.

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This invention relates to an improvement in dispensing devices and particularly to dispensing devices for cigarettes and like articles but not so limited.

5 The object of this invention is to produce at a low cost for manufacture a simple and effective dispensing device constructed with particular reference to fewness of parts and reliability of action.

10 With this object in view my invention consists in a dispensing device characterized by a magazine-casing formed with a delivery-opening, a tiltable, unitary, combined agitating-and-delivery member guided for move-
15 ment in one plane at its outer end where it is provided with a trough normally lying outside of the said casing and guided at its inner end for movement in a plane diverse to the first-mentioned plane, whereby a
20 single unitary member discharges the functions of both delivery and agitation.

My invention further consists in a dispensing device characterized as above and having certain details of construction and
25 combinations of parts as will be hereinafter described and particularly recited in the claims.

In the accompanying drawings:

Fig. 1 is perspective view of a cigarette
30 dispenser constructed in accordance with my invention;

Fig. 2 is a top or plan view thereof with the cover removed;

Fig. 3 is a transverse sectional view on the
35 line 3—3 of Fig. 2;

Fig. 4 is a corresponding view but showing the combined delivery-and-agitating member retired into the casing;

Fig. 5 is a sectional view on the line 5—5
40 of Fig. 3;

Fig. 6 is a top or plan view of the combined delivery-and-agitating member; and

Fig. 7 is a side edge view thereof.

In the embodiment of my invention herein chosen for illustration, I employ a tubular rectangular sheet-metal casing 10, the front wall of which is cut away as at 11 to form a delivery-opening. Inserted into the bottom of the said casing is a bottom-plate 12
45 having upstanding flanges 13 preferably secured in the said casing by soldering, brazing, or spot welding. The open upper end of the casing is closed by a rectangular flanged cover 14.

50 Secured within the casing to the inner

face of the rear wall 15 thereof, is a guide-plate 16 comprising a fastening-reach 17, a horizontally-offset stop-reach 18 and a vertical guide-reach 19. The guide-reach 19 of the guide-plate 16, as clearly shown in Figs. 60 3 and 4 of the drawings, is spaced away from the rear wall 15 of the casing so as to form a guide-channel 20 extending substantially across the entire width of the casing and designed for the reception of a weighted
65 roller 21 secured at its respective opposite ends by means of pins 22 to the downwardly-turned flanges 23 which flank the opposite side edges of a combined delivery-and-agitating member 24.

70 The above mentioned agitating-and-delivery member is formed of sheet-metal and is bent to form two relatively-inclined surfaces 25 and 26 upon which the cigarettes contained within the casing are adapted to
75 rest. The forward end of the member 24 projects outward through the delivery-opening 11 in the casing 10 and is there bowed downward to form a cigarette-receiving
80 trough or groove 27 extending across the entire width of the said member and terminating in a finger-piece 28.

The weighted roller 21 at the rear end of the combined agitating-and-delivery member 24 normally rests upon a felt pad 29
85 positioned upon the upper face of the stop-reach 18 of the guide-member 16, while the forward end of the said member is normally supported by the rounded forward ends of the flanges 24 which rest upon the bottom
90 12 of the casing.

An inward thrust upon the finger-piece 28 will cause the combined agitating-and-delivery member 24 to tilt into the position
95 shown in Fig. 4. In which position its trough 27 is forced inward through the delivery-opening 11 so that a cigarette may drop therein and the weighted roller 21 at its rear end has ridden upward in the guide-groove 20 until it engages a stop-finger 30
100 bent rearward from the vertical reach 19 of the guide-plate 16.

When the pressure is removed from the finger-piece 28, the weighted roller 21 will descend by gravity in the guide-groove 20
105 and force the trough 27, together with the cigarette contained therein, outward through the delivery-opening 11 into the position in which the parts are shown in Fig. 3. The return of the member 26 to the position
110

shown in Fig. 3 is facilitated by a weight 31 secured to the under face of the portion 26 thereof.

It will be apparent that as the combined 5 agitating-and-delivery member 24 is moved from the position shown in Fig. 3 to that shown in Fig. 4 the cigarettes or other articles contained within the casing 10 will be more or less agitated and aligned so that 10 the entry of one of the said articles into the trough 27 is facilitated.

I am aware that heretofore dispensing devices have been devised in which both agitation and delivery have been effected, but 15 only when distinct and relatively-movable elements have been employed for each purpose. By means of my invention I am enabled to discharge both functions by means of a unitary combined agitating-and-delivery 20 member thereby not only effecting savings in cost of material and assembly but also producing a device much more reliable in use, since owing to its simplicity it is practically immune to derangement.

25 I claim:

1. A push-in type dispensing device comprising a magazine-casing formed with a delivery-opening; and a tiltable, unitary, combined agitating-and-delivery member guided 30 for movement in a substantially-horizontal plane at its outer end where it is provided with a delivery-trough normally projected outward through the delivery-opening in the said casing in position to be manually 35 pushed inward therethrough to cause the said member to tilt, and guided at its inner end for movement in a substantially-vertical plane; whereby a unitary member discharges both the functions of delivery and agitation.

40 2. A dispensing device comprising a magazine-casing formed with a delivery-opening; and a tiltable, unitary, combined agitating-and-delivery member guided for movement in one plane at its outer end 45 where it is provided with a delivery-trough normally projected outward through the delivery-opening in the said casing, and provided at its inner end with a weighted roller guided for movement in a plane diverse to 50 to the first-mentioned plane; whereby a unitary member discharges both the functions of delivery and agitation.

3. A dispensing device comprising a magazine-casing formed with a delivery-opening; 55 a tiltable, unitary, combined agitating-and-delivery member guided for movement in one plane at its outer end where it is provided with a delivery-trough normally projected outward through the delivery-opening 60 in the said casing, and guided at its inner end for movement in a plane diverse to the first-mentioned plane; and stop-means co-acting with the inner end of the said member for limiting its movement; whereby

a unitary member discharges both the func- 65 tions of delivery and agitation.

4. A dispensing device comprising a magazine-casing formed with a delivery-opening; a tiltable, unitary, combined agitating-and-delivery member guided for movement 70 in one plane at its outer end where it is provided with a delivery-trough normally projected outward through the delivery-opening in the said casing, and provided at its inner end with a weighted roller guided for move- 75 ment in a plane diverse to the first-mentioned plane; and stop-means co-acting with the said roller for limiting the movement of the said member; whereby a unitary member discharges both the functions of delivery 80 and agitation.

5. A push-in type dispensing device comprising a magazine-casing formed with a delivery-opening; and a tiltable, unitary, combined agitating-and-delivery member having 85 two relatively-inclined and relatively rigid surfaces and guided for movement in a substantially horizontal plane at its outer end where it is provided with a delivery-trough normally projected outward through the de- 90 livery-opening in the said casing in position to be manually pushed inward therethrough to cause the said member to tilt, and guided at its inner end for movement in a substantially-vertical plane; whereby a unitary mem- 95 ber discharges both the functions of delivery and agitation.

6. A dispensing device comprising a magazine-casing formed in one wall with a delivery-opening and provided in its interior 100 with a substantially-vertical guide-channel; and a tiltable, unitary, combined agitating-and-delivery member guided for movement in a substantially-horizontal plane at its outer end, where it is provided with a delivery- 105 trough, and provided at its inner end with a transverse bar positioned in the said guide-channel for substantially-vertical movement therein; whereby a unitary member dis- 110 charges both the functions of delivery and agitation.

7. A dispensing device comprising a magazine-casing formed in one wall with a delivery-opening and provided in its interior 115 with a substantially-vertical guide-channel; and a tiltable, unitary, combined agitating-and-delivery member guided for movement in a substantially-horizontal plane at its outer end, where it is provided with a de- 120 livery-trough, and provided at its inner end with a transverse weighted roller positioned in the said guide-channel for substantially-vertical movement therein; whereby a unitary member discharges both the functions 125 of delivery and agitation.

In testimony whereof, I have signed this specification.

WILLIAM NELSON COVE.