A. J. MEYERS.

CONTENTS EJECTOR FOR BOXES.

APPLICATION FILED DEC. 31, 1914.

1,206,124. Patented Nov. 28, 1916.

Fig 1

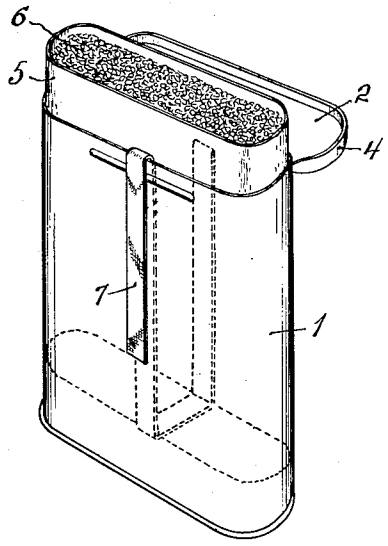


Fig 2

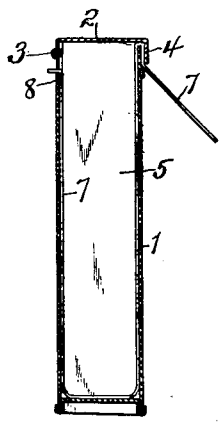


Fig 3

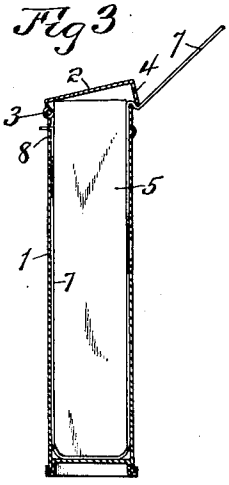
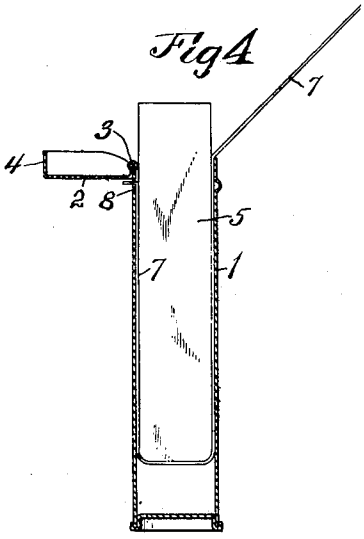


Fig 4



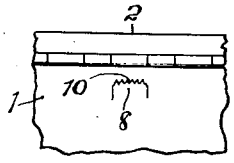


Fig 5

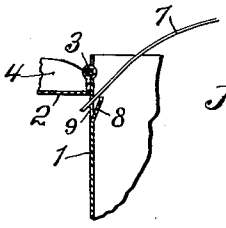


Fig 6

WITNESSES:

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CONTENTS-EJECTOR FOR BOXES.

1,206,124. Specification of Letters Patent. Patented Nov. 28, 1916.

Application filed December 31, 1914. Serial No. 879,863.

To all whom it may concern:

Be it known that I, ALBERT J. MEYERS, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented a certain new and useful Improvement in Contents-Ejectors for Boxes, of which the following is a specification.

My invention relates to improvements in contents ejectors for boxes.

It is particularly adapted for use with boxes adapted to contain tobacco, starch or similar materials and which have restricted openings for the removal therethrough of the contents.

Boxes which are generally used for carrying in the pocket granulated smoking tobacco are ordinarily of flat form having narrow restricted open ends which are normally closed by hinged lids or covers. Sometimes the tobacco is held in an inner paper bag container or holder. The restricted open end of the box renders it difficult to remove the tobacco therefrom after a considerable amount thereof has been taken from the box.

One of the objects of my invention is to provide a novel, simple and efficient means for lifting the contents of the box to the open end thereof so as to facilitate its removal.

A further object of my invention is to provide novel means by which the cover is moved to the open position simultaneously with the forcing of the contents of the box toward the open end thereof.

Other novel features of my invention are hereinafter fully described and claimed.

In the accompanying drawings which illustrate the preferred embodiment of my invention, Figure 1 is a perspective view of a box provided with my improvement, the cover being shown in the open position and the contents holder being shown lifted from the bottom of the box. Fig. 2 is a vertical sectional view of a box provided with my improvement, the cover being shown closed and the contents holder in the lowermost position. Fig. 3 is a vertical sectional view, showing the ejecting member as having partly opened the cover. Fig. 4 is a vertical sectional view, showing the cover in the fully opened position and the contents holder lifted by the ejecting member from the bottom of the box. Fig. 5 is an elevation of a portion of the box which contains the slit in which is secured one end of the ejecting member. Fig. 6 is a vertical sectional view of a portion of the box showing the position of the securing tongue prior to its being forced to a position in which it will hold the ejecting member, a portion of which is shown in position ready for being secured.

Similar reference characters designate similar parts in the different views.

1 designates the body of a box such as is commonly employed for holding granulated smoking tobacco and for carrying in the pocket. Such boxes are usually of flat form provided with restricted open upper ends.

2 designates a cover or lid which is hinged at 3 to the rear side and upper edge of the body 1. The lid or cover 2 is provided with a downwardly extending peripheral flange 4 which is adapted to embrace the upper end of the box when the cover is in the closed position shown in Fig. 2.

Slidably mounted in the body 1 is a contents holder comprising preferably a flexible bag 5 which may be of paper to enable the upper end of the bag being easily torn away as the contents 6 are lowered therein. For lifting the bag 5 and, if desired, simultaneously swinging the cover 2 to the open position, the following mechanism is preferably provided: An ejecting member comprising, preferably, a flexible ribbon or tape 7 has one end secured to the body 1 at the rear side thereof and adjacent to the upper end of the body, said member 7 being extended downwardly from its place of securing, thence forwardly and under the contents holder 5, thence upwardly and out of the open end of the box.

When the cover 2 is in the closed position, shown in Fig. 2, the ejecting member 7 will be held by the flange 4 against the outer side of the body 1, the ejecting member 7 being

of a length sufficient to permit a portion of its free end to extend outwardly beyond the flange 4. Upon grasping the free end of the ejecting member 7 and pulling it upwardly, it will cause the cover 2 to be lifted and swung to the open position shown in Fig. 4 and at the same time it will lift the paper bag 5 upwardly, so that the fingers of the operator, or at least the thumb and one of the fingers, may be readily inserted into the bag for the purpose of removing a portion of the contents thereof. After the desired amount of tobacco or other material has been removed, the bag 5 is forced downwardly to the position shown in Fig. 2 and the cover 2 replaced to the closed position.

As a means of securing the ejecting member 7 to the body 1, any suitable means may be employed. In the drawing I have shown an efficient and simple means for effecting this function consisting of a tongue 8 which is punched inwardly from the back of the body 1 to the position shown in Fig. 6. The ejecting member or ribbon 7 is then slipped through the opening 9 thus provided, after which the tongue 8 is forced back to its initial position, which is shown in Figs. 2 to 4. The ribbon or ejecting member 7 will thus be pinched between the upper end of the tongue 8 and the adjacent portion of body 1. If desired, the upper edge of the tongue 8 and a portion of the body immediately adjacent thereto may be provided with serrations 10 for more securely engaging the ejecting member 7.

I do not limit my invention to the structure shown and described, as various modifications, within the scope of the appended claims, may be made without departing from the spirit of my invention.

What I claim is:—

1. In a contents ejector for boxes, the combination with a box having a discharge opening and a cover hinged to one side of the box and adapted to cover said opening, of a flexible ejecting member having one end secured to said side and adapted to be extended downwardly from its place of securing, thence under the contents of the box, and thence upwardly and out of said opening between the upper edge of the box and the free edge of the cover, and arranged, when its free end is upwardly drawn to swing the cover to the open position and to force the box contents toward said opening.

2. In a contents ejector for boxes, the combination with a box having a discharge opening and a cover for the same, of a contents holder slidable in said box toward and from said opening, and a flexible ejecting member having one end secured to one side of the box and being adapted to be extended downwardly from its place of securing and thence under said holder and thence upwardly out of said opening between the upper edge of the box and the free edge of the cover, and arranged when its free end is upwardly drawn to open the cover and force the holder toward said opening.

3. In a contents ejector for boxes, the combination with a box having a discharge opening and a cover hinged to one side of the box and adapted to cover said opening, of a contents holder slidable in said box toward and from said opening, and a flexible ejecting member having one end secured to one side of the box and adapted to be extended downwardly from its place of securing, thence under said holder, and thence upwardly and out of said opening between the upper edge of the box and the free edge of the cover, and arranged, when its free end is upwardly drawn to swing the cover to the open position and to force said holder toward said opening.

4. In a contents ejector for boxes, the combination with a box having an open end and having a hinged cover provided with a flange adapted to embrace the open end of the box when the cover is in the closed position, of a flexible ejecting member, having one end secured to one side of the box and being adapted to be extended downwardly from its place of securing, thence under the contents of the box, and thence upwardly out of the open end of the box and, when the cover is in the closed position, being adapted to be disposed between said flange and the outer side of the box, with its free end extending beyond said flange, whereby when the free end of the ejecting member is drawn upwardly, said member will swing the cover to the open position and will force the box contents toward the open end of the box.

5. In a contents ejector for boxes, the combination with a box having an open end, of a paper bag slidable therein, the box having a cover for said open end, and a flexible ejecting member secured at one end to the box and extending downwardly from its place of securing, thence under said bag, and thence upwardly and out of said open end between the upper edge of the box and the free edge of the cover, and adapted, when the cover is in the closed position, and the free end of the ejecting member is drawn upwardly against the cover to open the cover and force the bag toward the open end of the box.

6. In a contents ejector for boxes, the combination with a box having an open end, of a paper bag slidable therein, the box having a cover for said open end, and a flexible ejecting member attached to the box adjacent the open end thereof and extending downwardly from its place of attachment, thence under said bag, and thence upwardly

and out of said open end between the upper edge of the box and the free edge of the cover, and adapted, when the cover is in the closed position, and the free end of the ejecting member is drawn upwardly against the cover to open the cover and force the bag toward the open end of the box.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

ALBERT J. MEYERS.

Witnesses:

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E. B. HOUSE.