

G. W. WILLIAMS.
 TOBACCO BAG CLOSURE.
 APPLICATION FILED MAY 17, 1917.

1,237,134.

Patented Aug. 14, 1917.

Fig. 1.

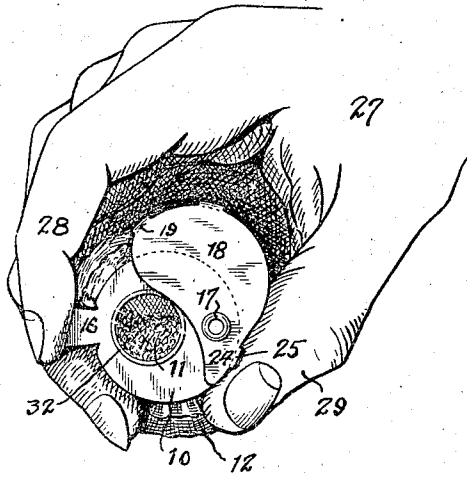


Fig. 6.

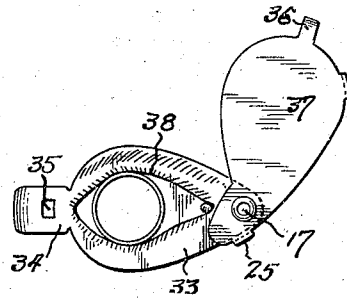


Fig. 2.

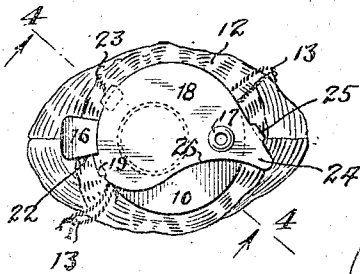


Fig. 7.

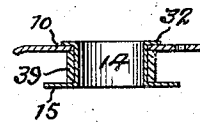


Fig. 5.

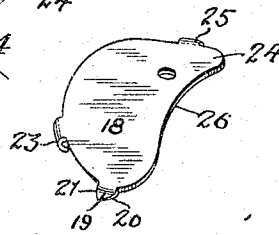


Fig. 3.

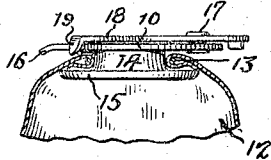


Fig. 8.



Fig. 4.

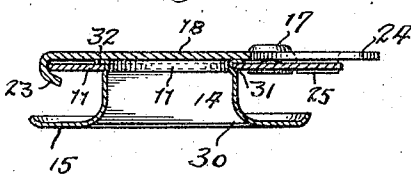
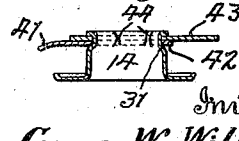


Fig. 9.



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UNITED STATES PATENT OFFICE.

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TOBACCO-BAG CLOSURE.

1,237,134.

Specification of Letters Patent. Patented Aug. 14, 1917.

Application filed May 17, 1917. Serial No. 169,242.

To all whom it may concern:

Be it known that I, GEORGE W. WILLIAMS, a citizen of the United States of America, and residing in the borough of Brooklyn, 5 in the county of Kings and State of New York, have invented a certain new and useful Improvement in Tobacco-Bag Closures, of which the following is a specification.

My invention relates to an improved tobacco bag closure, the object of my invention being to provide a simple and efficient closure device adapted to be mounted in the mouth of an ordinary tobacco bag and of such construction that it may be readily operated by the fingers of the hand in which 15 the bag is held during discharge of tobacco therefrom.

In the accompanying drawings,

Figure 1 is a plan view of the closure device mounted in a tobacco bag and showing the shutter open;

Fig. 2 is a similar view showing the shutter closed;

Fig. 3 is a side elevation of the device showing the bag in section;

Fig. 4 is a vertical section through the closure device drawn to a larger scale;

Fig. 5 is a perspective of the valve shutter alone;

Fig. 6 is a plan view of a modified construction; and

Figs. 7, 8 and 9 are vertical sections through various modified constructions of the body of the device.

Various devices have heretofore been provided to facilitate the discharge of granulated smoking tobacco from the bags in which it is marketed. These devices are for the most part however rather frail and easily put out of order or are manufactured from rubber, as in my prior Patent No. 744,846, the expense of which renders the cost of the device too high priced for large sales.

By the present invention I have provided a simple and inexpensive closure which operates satisfactorily and can be manufactured and sold cheaply at a profit.

In the form illustrated in Figs. 1 to 5 my present device comprises a plate 10 centrally apertured at 11 to afford an outlet passage and adapted to be secured at the mouth of the bag 12 by the usual draw strings 13. Any suitable holding means may be provided to receive the bag mouth and I have here shown a tubular ferrule 14 rigid with

the plate 10 and having its lower flange 15 spaced from the plate to afford a channel within which the margins of the bag mouth are held by pulling up the draw strings 13, as best illustrated in Fig. 3. A spring tongue 16 extends from the margin of the plate 10, while on the opposite side of the aperture 11, the plate is perforated to receive the rivet 17 by which the shutter plate 18 is pivotally secured thereto. The shutter 18 has a downwardly angled catch 19 beveled on the edge 20 and straight on the edge 21 so that it rides freely over the latter tongue 16 when moved in closing direction and engages the edge 22 (Fig. 2) of the latter when in closed position. A recurved locking flange 23 is also provided on the shutter to engage the edge of the plate 10 adjacent the tongue 16 when the shutter 18 is in closed position and serves to prevent freeing of the catch 19 through accidental flexure of the parts when the bag is in the pocket. The extended end 24 of the shutter lies to one side of the diametral line taken through the latching tongue 16 and pivotal point 17, so that the pressure applied thereto tends to throw the shutter 18 into the open position illustrated in Fig. 1. A lug 25 formed on this extended end 24 affords not only a thumb rest but also a stop which bears upon the edge of the plate 10 and limits the opening movement of the shutter. The latter is cut away at its margin 26 to completely clear the discharge passage 11 in its fully opened position.

The operation of the device is readily understood from Figs. 1 and 2. Under normal conditions the device is in the closed position illustrated in Fig. 2. When the pipe is to be filled or the cigarette rolled, the bag is held in the hand 27 with the forefinger 28 lying against the spring latch or tongue 16 and the thumb 29 against the extended end 24 of the shutter. If pressure be applied between the forefinger and thumb the latching plate 16 is bent down out of the way of the catch 19. As soon as the catch is released the pressure applied through the thumb 29 swings the shutter 18 to the open position illustrated in Fig. 1. The friction at pivoting rivet 17 is sufficient to hold the shutter open so that the bag may be grasped at any point to pour the tobacco therefrom, while the forefinger applied to the edge 18 of the shutter returns the latter to the latched position shown in Fig. 2.

The means for attaching the plate 10 to the bag may be variously modified, but I prefer the ferrule type shown since the coned surface 30 (Fig. 4) leading to the discharge passage 11 acts as a guide for the tobacco and facilitates its free discharge. It is also an economical method of manufacture since it is only necessary to press in the neck of the ferrule to form a shoulder 31 upon which plate 10 is seated and then held by spinning over the projecting edge 32 of the ferrule hub (see Fig. 4).

In Fig. 6 I have shown a modified construction in which the spring tongue 34, carried by the plate 33 has a latching aperture 35 formed therein and into which the downturned end of the tongue 36 on the shutter 37 enters in the latched position of the parts. The shape of the device conforms approximately to the cross section of the bag but is modified somewhat to approximate the shape of an eye, and as an advertising novelty, I emphasize this feature by suitable representations of eyelash 38, etc., surrounding the aperture 11 so that the device may be appropriately called the "eye opener."

In Fig. 7 the plate 10 is spaced from the ferrule flange 15 by a washer 39 which serves the function of a shoulder 31 of Fig. 4, while in Fig. 8 I have shown the plate 40 integral with the ferrule. In Fig. 9 the spring latching tongue 41 is formed on an independent ring 42 resting beneath the plate 43 on the shoulder 31 and clamped by the rolled over edge 32 of the ferrule hub. Indentations 44 formed by the die, keep the parts from rotary displacement with relation to each other.

I prefer to manufacture the plate 10 and shutter 18 of celluloid or some other cheap resilient non-oxidizing material but obviously either one or both may be made of metal, or one of metal and one of celluloid, or the entire device of celluloid or metal, and I do not limit my invention to the particular material of which the parts are manufactured. The underlying thought is the provision of a spring latching tongue such as 16 for the catch of the shutter, so that the pressure of a finger 28 moves it out of the way of the catch 19 or 36 to free the shutter 18 or 37, the latter having a part so arranged that the pressure against it of the thumb 29, opposed to the pressure of the finger 28, automatically opens the shutter upon the release of its catch 19 or 36. Another underlying thought is the frictional pivoting of the shutter so that it remains open without holding until closed by positive pressure. This feature is of special importance when the pouch is partially empty and it is difficult to shake the tobacco from the pouch if it is necessary to maintain the mouth open by pressure of the fingers as in

the rubber closure of my previous patent above referred to.

Various modifications of detail will readily occur to those skilled in the art which do not depart from what I claim as my invention.

I claim:—

1. A bag closure comprising an apertured plate, a shutter swinging across the face of said plate to close the aperture therein, latching means to hold the shutter closed, said closure being adapted to be grasped between two digits of the hand which holds the bag, one digit at the latching device and the other digit against one edge of the shutter, said parts being so constructed that upon pressure between said digits, the latch is freed by one and the shutter opened by the other.

2. A bag closure comprising an apertured plate, a shutter swinging across the face of said plate, a spring latching tongue associated with said plate and adapted to be pressed out of latching position by a digit of the hand which holds the bag, a cooperating catch on the shutter, a portion of said shutter extending beyond said plate and against which another digit bears, whereby upon the application of pressure upon the closure between the said digits, the latching device is freed and the shutter automatically swung into open position.

3. A bag closure comprising an apertured plate, a shutter frictionally pivoted to and swinging across the face of the plate, the pivoted joint having sufficient friction to maintain the shutter in open position, a spring latching tongue associated with said plate and adapted to be pressed out of latching position by a digit of the hand which holds the bag, a cooperating catch on the shutter, a portion of said shutter extending beyond said plate and against which another digit bears, whereby upon the application of pressure upon the closure between said digits, the latching device is freed and the shutter automatically swung into open position.

4. A bag closure comprising a ferrule affording a channel adapted to receive the mouth of a bag and having an outer plate, a shutter swinging across the face of said plate to close the aperture therein, latching means to hold the shutter closed, said closure being adapted to be grasped between digits of the hand which holds the bag, one at the latching device and the other against an edge of the shutter, said parts being so constructed that upon pressure between said digits, the latch is freed by the one and the shutter opened by the other.

5. A bag closure comprising an apertured plate, a shutter swinging across the face of said plate to close the aperture therein, latching means to hold the shutter closed,

said closure being adapted to be grasped between two digits of the hand which holds the bag, one digit at the latching device and the other digit against an edge of the shutter, said parts being so constructed that upon pressure between the digits, the latch is freed by the one and the shutter opened by the other, together with a locking flange on said shutter engaging the edge of said plate in closed position of the shutter and serving to prevent accidental opening of the latch.

6. A bag closure comprising an apertured plate, a shutter swinging across the face of said plate to close the aperture therein, latching means to hold the shutter closed,

said closure being adapted to be grasped between two digits of the hand which holds the bag, one digit at the latching device and the other digit against an edge of the shutter, said parts being so constructed that upon pressure between the digits, the latch is freed by the one and the shutter opened by the other, together with a stop flange on said shutter against which one digit bears during the opening movement of the shutter, said flange bearing against the edge of the plate and serving to limit the opening throw of the shutter.

In testimony whereof I have signed my name to this specification.

GEORGE W. WILLIAMS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."