

No. 760,121.

PATENTED MAY 17, 1904.

J. A. HILL.
COMBINED TOBACCO BOX AND CUTTER.

APPLICATION FILED FEB. 19, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

FIG. 1

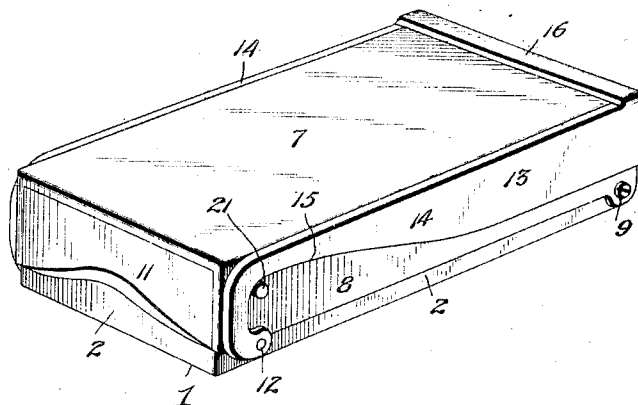


FIG. 2

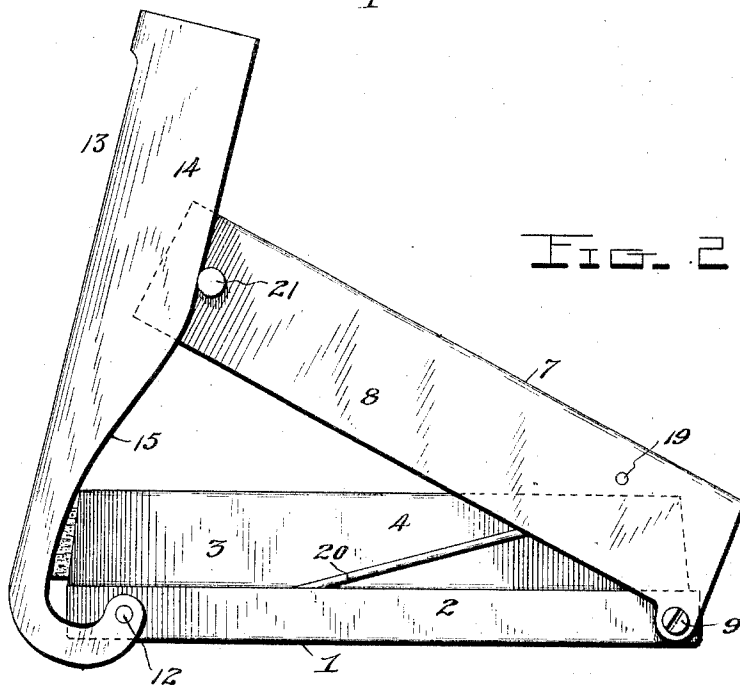
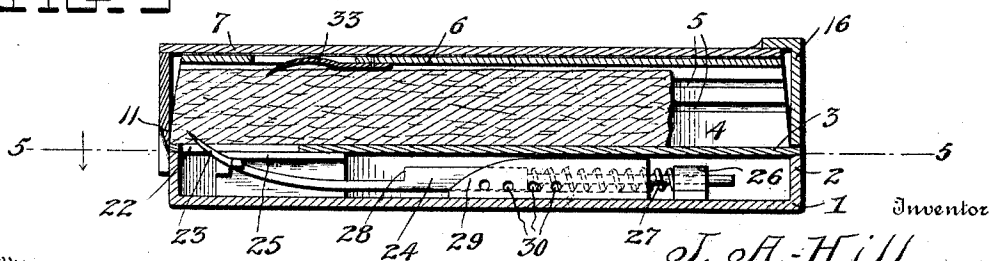


FIG. 3



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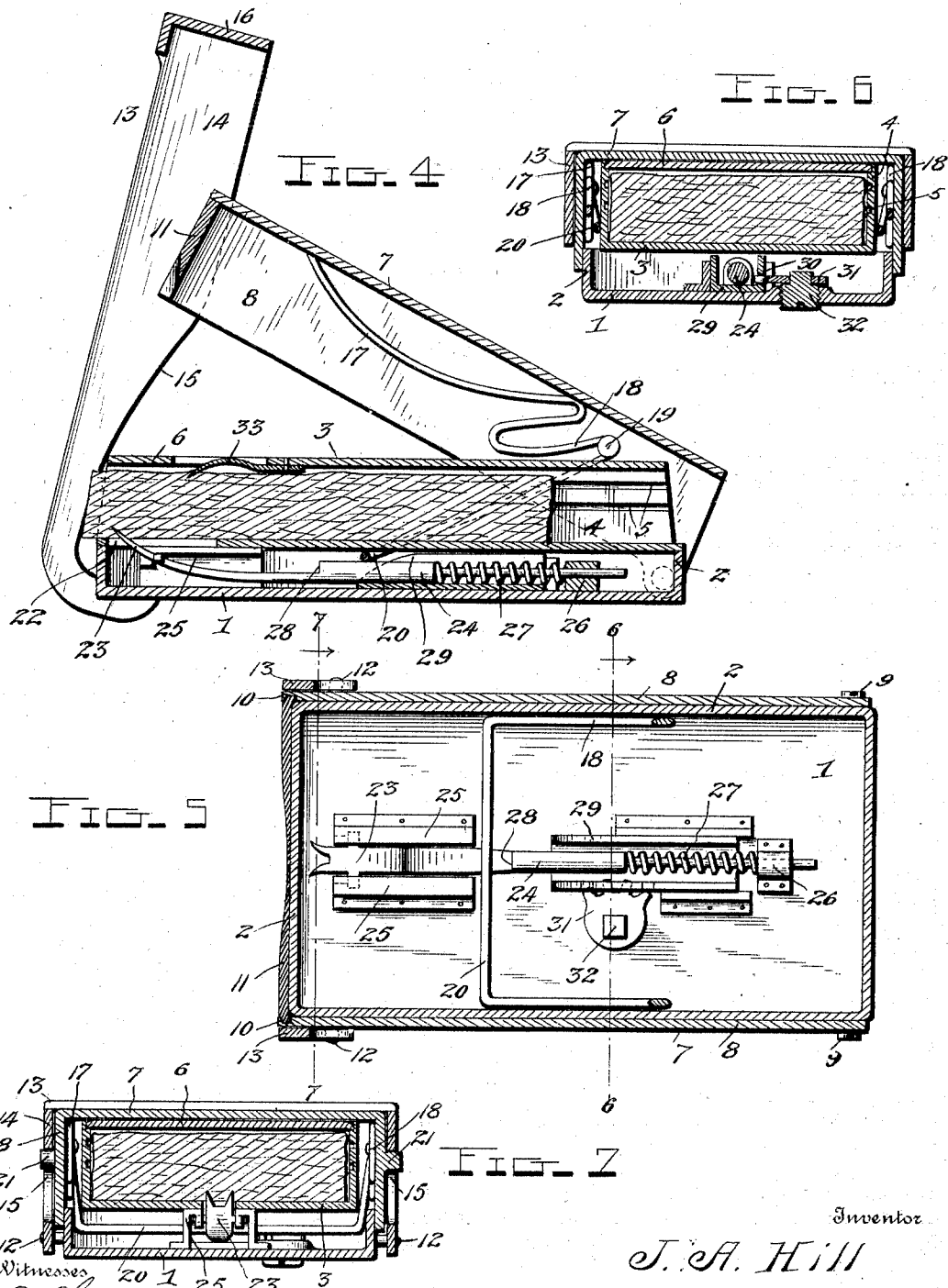
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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ONE-HALF TO E. W. NASH, OF WINSTON, NORTH CAROLINA.

COMBINED TOBACCO BOX AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 760,121, dated May 17, 1904.

Application filed February 19, 1903. Serial No. 144,150. (No model.)

To all whom it may concern:

Be it known that I, JACOB A. HILL, a citizen of the United States, residing at Brown Mountain, in the county of Stokes and State of North Carolina, have invented certain new and useful Improvements in a Combined Tobacco Box and Cutter; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in a combined tobacco box and cutter; and its object is to provide a device of this character which is simple in construction, durable in use, and efficient in operation.

A further object of the invention is to provide a box which may be conveniently carried in the pocket and which when opened will deliver or force the plug of tobacco out under the knife to permit a portion of the same to be severed when the box is again closed.

A still further object is to provide means for regulating the feed of the tobacco, and hence the size of the cut from the plug.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of my improved tobacco box and cutter, showing the same closed. Fig. 2 is a side elevation of the same, showing the cover raised. Fig. 3 is a vertical longitudinal sectional view through the closed box, showing a plug of tobacco in the same. Fig. 4 is a similar view showing the cover in its raised position and a portion of the plug of tobacco forced out into the path of the knife. Fig. 5 is a horizontal sectional view taken on the plane indicated by the line 5 5 of Fig. 3. Figs. 6 and 7 are vertical cross-sectional views taken, respectively, on the planes indicated by the lines 6 6 and 7 7 in Fig. 5.

Referring more particularly to the drawings, the numeral 1 denotes the base or bottom of my improved tobacco-box, which is preferably rectangular and formed with a sur-

rounding rim or wall 2 to inclose the mechanism for feeding the plug of tobacco out of the box. The top of the base 1 is closed by a plug-receptacle 3 of slightly less width than the base and having its ends open. In order to adapt this receptacle to contain plugs of tobacco of different thicknesses, I form the side walls 4 with grooves 5, in any of which the edges of the removable cover 6 are adapted to slide, and thus adjust the receptacle to plugs of different thicknesses.

The cover 7 of the box has deep side flanges or walls 8, by means of which the cover is pivoted at 9 to the surrounding rim 2 of the base and which flanges are adapted to close down over the base 1 when the cover is closed. The front ends of these side flanges of the cover are formed with grooves 10, which are adapted to receive the ends of a removable V-shaped cutting blade or knife 11, which closes the front end of the cover, and hence the box, when said cover is closed. Pivoted at 12 to the rim 2 of the base is a combined operating-lever and locking-clasp 13. This lever consists of the two side portions 14, formed with the cut-away cam, surfaces 15 adjacent to the pivots 12, and the connecting end portion 16, which is adapted to close the rear end of the plug-receptacle and cover and to act as a clasp or lock to hold the cover closed, as hereinafter described.

The cover 7 when released by the lever and clasp 13 is adapted to be forced up or raised by the spring-arms 17 of the double spring 18, which is formed of a single piece of steel spring-wire, bent as shown and pivoted to the inside of the side flanges of the cover at 19. The bail portion 20 of the spring 18 extends across the base 1 beneath the plug-receptacle 3 and is adapted to operate the feed mechanism upon the opening of the cover, as will be hereinafter described. The cut-away cam-surfaces 15 upon the operating-lever 13 are adapted to engage the lugs or projections 21 upon the side flanges 8 of the cover and force the cover down to sever a portion of the plug of tobacco and to close the box. It will be noticed that when the cover 7 is closed the lugs 21 are not directly over the pivots 12 of

the lever 13, but are somewhat forward or nearer the front end of the box. By this construction when the lever 13 is forced down upon the cover 7 the lugs 21 will pass the vertical center of the pivots, and thereby form a lock to hold the cover closed.

In order to feed the plug of tobacco out of the front end of the box and under the knife. I form in the bottom of the plug-receptacle 3 at its front end a slot 22, through which the pronged spring end 23 of a reciprocating ejector or feeding-bar 24 is adapted to operate. This feeding-bar is guided at its forward end under the guideways or plates 25, secured upon the base 1, and has its reduced rear end guided in the bearing-bracket 26, also secured to the base. A coil-spring 27 upon the bar between the bearing-bracket 26 and the shoulder formed by the reduced portion of the bar exerts its energy to force said bar and its spring-prongs 23 forward. The bar or projector 24 is provided with a notch or shoulder 28, formed by reducing the forward end of the bar. Said shoulder is adapted to be engaged by the bail-spring 20, which as it is drawn rearwardly when the cover 7 is raised will move the bar 24 rearwardly and permit the spring-prongs 23 to take a fresh bite upon the plug of tobacco. In order to release the bar 24 from the bail 20 and permit the spring 27 to force the feed-bar and plug of tobacco forward, I provide an adjustable automatic releasing device or trip, which consists of a channeled slide 29, which forms a partial housing for the rear end of the feed-bar 24. This slide is provided with sides having their forward ends beveled or inclined to engage the bail 20 as it moves rearwardly and release it from engagement with the shoulder 28. I make this slide adjustable by forming in one of its sides a row of perforations 30, which are engaged by the teeth of a segmental gear 31, secured upon the inner end of a screw 32, which operates in a threaded aperture in the base 1. It will be seen that by turning this screw the gear 31 will move the slide forwardly or rearwardly, and thus cause the release of the bail 20 at any desired point in its rearward movement. By thus regulating the rearward movement of the feed-bar its forward or return movement, under the action of the spring 27, may be controlled to regulate the feed of the plug of tobacco under the knife. In order to prevent a retrograde movement of the tobacco-plug as the feed-bar moves rearwardly to take a fresh bite or hold upon the plug, I secure upon the under side of the top of the plug-receptacle a spring-check 33, which engages the top of the plug and prevents rearward movement of the same.

In the operation of the device when it is desired to place a plug of tobacco in the box the operating-lever and clasp 13 are thrown up, as shown in Fig. 2, and the spring 17 will raise the cover 7. The top of the plug-re-

ceptacle is adjusted in the set of grooves 5, which correspond to the thickness of the plug of tobacco used, and the plug is then inserted at the rear end of the receptacle. The cover is then pressed down and the operating-lever and clasp 13 swung over and down upon the cover to force the latter down firmly upon the base and to hold it closed.

When it is desired to sever a chew of tobacco from the plug, the lever 13 is thrown up to allow the spring 17 to raise the cover, and the upward movement of the latter will move the bail-spring 20 rearwardly, which in turn will draw the feed-bar rearwardly until the inclined sides of the releasing-slide 29 frees the bail from engagement with the shoulder 28 of the feed-bar 24. The spring 27 then forces the feed-bar forwardly to move the plug a predetermined distance, as previously explained. Upon closing the cover the knife 11 will cut a slice from the plug, as will be readily understood.

It will be seen that by employing the lugs 21 upon the cover and the cam-surfaces 15 upon the operating-lever 13 a very powerful leverage is obtained upon the knife and hard thick plugs of tobacco may be easily cut. Furthermore, the lever 13 will firmly clamp the cover upon the base, thus acting as a locking-clasp, as well as serving to close the rear end of the box. It will also be observed that by operating the screw 32 the size of the cut from the plug may be quickly and easily regulated.

From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction, operation, and advantages of my improved tobacco box and cutter will be readily apparent without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A tobacco-box, comprising a container for the tobacco, a closure for said container, and an automatic tobacco-projector adjustable for delivering or forcing out a greater or less amount of tobacco when said closure is opened, substantially as described.

2. A tobacco-box comprising a container for the tobacco, a pivoted closure for said container provided with a cutting-knife, a projector for automatically delivering or forcing the tobacco out under the knife when said closure is raised and means for actuating and locking said closure and retracting the projector, substantially as and for the purpose described.

3. A tobacco-box, comprising a container for the tobacco, a pivoted spring-actuated clo-

sure for said container provided with a cutting-knife, means for automatically delivering or forcing the tobacco out under the knife when said closure is raised, and a pivoted combined closing and locking lever, substantially as set forth.

4. A tobacco-box comprising a container for the tobacco, a closure for said container, means for delivering or forcing the tobacco out when said closure is opened, means for adjusting said delivering means for regulating the amount of tobacco delivered, and means for simultaneously closing and locking said closure.

5. A tobacco-box comprising a container for the tobacco, a closure for said container, automatic means for delivering or forcing the tobacco out when said closure is opened, and means for directly adjusting said delivering means for regulating the amount of tobacco automatically delivered.

6. A tobacco-box comprising an eduction-opening, an adjustable automatic projecting device for projecting a greater or less portion of the contained tobacco through said opening, and a closure for said opening controlling said projecting device.

7. A tobacco-box having an eduction-opening, a closure therefor, an automatic tobacco-projector, means for varying the movement of said projector to regulate the amount projected, and means for actuating the projector upon the opening of said closure, substantially as described.

8. A tobacco-box, comprising a container for the tobacco, a closure for said container, a knife carried by said closure, a projector for forcing the tobacco under the knife, means for retracting the projector and means for holding the tobacco against backward movement when the projector is retracted, substantially as described.

9. A tobacco-box, comprising a container for the tobacco, a closure for said container, a knife carried by said closure, a reciprocating bar or projector for forcing the tobacco out into the path of the knife, and a check for preventing a backward movement of the tobacco upon the retraction of the projector, substantially as described.

10. A tobacco-box, comprising a container for the tobacco, a spring-operated closure for the same, a knife carried by said closure, a spring-actuated ejector or projector for feeding the tobacco under the knife, a spring-bail carried by the cover for retracting the ejector, an adjustable trip for releasing the ejector, and a pivoted lever for closing and locking the closure, substantially as described.

11. A tobacco-box having an eduction-opening, a closure therefor, an automatic reciprocating tobacco-projector, means for varying the movement of said projector to regulate the amount projected, and means for actuating the projector upon the opening of said closure.

12. A tobacco-box comprising a container for the tobacco, a closure for the same, a knife carried by said closure, a reciprocating projector, and means governed by the closure for actuating said projector to force a predetermined amount of tobacco out under the knife, substantially as described.

13. A tobacco-box comprising a container for a plug of tobacco, a reciprocating ejector for moving the plug in one direction, means for preventing its movement in a reverse direction, a knife, and means for operating the knife to sever the plug, substantially as described.

14. A tobacco-box comprising a container for a plug of tobacco, an ejector, a trip, means for engaging the ejector to retract the same, said means in its retracting movement adapted to engage the trip and be released from the ejector, a knife, and means for operating the knife to sever the plug, substantially as described.

15. A tobacco-box comprising a container for a plug of tobacco, an ejector, an adjustable trip, means for engaging the ejector to retract the same, said means in its retracting movement adapted to engage the trip and be released from the ejector, a knife, and means for operating the knife to sever the plug, substantially as described.

16. A tobacco-box comprising a container for a plug of tobacco, a pivoted cover, an ejector, a trip, means actuated by the cover for retracting the ejector, said means in its retracted movement adapted to engage the trip and be released from the ejector, a knife, and means for operating the knife to sever the plug, substantially as described.

17. A tobacco-box comprising a container open at each end, one end to receive the plug and the other end to permit of its ejection, a pivoted cover, an ejecting device controlled by the movement of the cover, a knife, and means for closing the cover and forcing the knife to its work and for closing the plug-receiving end of the container, substantially as described.

18. A tobacco-box comprising a container for a plug of tobacco, said container having an eduction-opening, an ejector or feeder for the plug, a knife movable across the path of movement of the plug, a closure for said opening embodying means for actuating the knife to cut off a portion of the plug, and means for directly varying the movement of the ejector or container to regulate the thickness of the cut, substantially as described.

19. A tobacco-box comprising a container for a plug of tobacco, said container having an eduction-opening, an adjustable automatic ejector, a knife, a closure for said opening, and means coacting with said closure for governing the ejector and for operating the knife to sever a portion from the plug.

20. A pocket tobacco-box comprising a con-

tainer for the tobacco, said container having an eduction-opening and adapted to be adjusted to receive plugs of varying thickness, a closure for said eduction-opening, means for feeding the plug from said container through said eduction-opening, a cutter carried by the closure, and means for operating the closure to sever a portion from the plug.

21. A tobacco-box comprising a container for a plug of tobacco, an ejecting device adapted to intermittently engage the plug to project a portion thereof, and means for preventing back movement of the plug when the ejector is retracted, substantially as described.

22. A tobacco-box comprising a container for the tobacco, said container having a delivery-opening, a closure for said opening, an intermittently-acting ejector for engaging the plug and feeding the same forward to project a portion through said opening, means for projecting said ejector, and means controlled by the closure for retracting said projector and controlling the projection thereof.

23. A tobacco-box comprising a container having a delivery-opening, a closure for said opening, an intermittently-operable projector adapted to engage the plug and project a portion through said opening, a spring for projecting said projector and a device controlled by the closure for engaging said projector and retracting the same against the tension of said spring, and for releasing said projector to permit it to be projected by said spring.

24. A tobacco-box comprising a container having a delivery-opening, a closure for said opening, a projecting device operated intermittently to feed the tobacco forward and project a portion thereof through said opening, a spring for projecting said projecting device,

and interengaging connections between the closure and projecting device for retracting said projecting device upon the preliminary opening movement of the closure and then releasing said retracting device upon the further movement of the closure to permit the same to be operated by the spring to project the projector.

25. A tobacco-box comprising a container having a delivery-opening, a closure for said opening, a reciprocatory tobacco-projector, a spring for projecting said projector, means actuated by the closure for retracting said projector upon its preliminary opening movement, and a releasing device for releasing said means to permit the projection of the projector upon a further movement of the closure.

26. A tobacco-box comprising a container having a delivery-opening, a closure for said opening, a reciprocatory tobacco-projector, a holder or guide therefor provided with a contact portion, means for adjusting said holder or guide to regulate said projector to project more or less tobacco, a spring for projecting the projector, and means controlled by the closure for regulating the projector and retracting it to take a fresh bite upon the tobacco on a partial opening of said closure, and then upon the further opening of said closure to be released by said contact portion of the guide or holder to permit the projector to be projected, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JACOB A. HILL.

Witnesses:

BENJ. J. COWL,
H. B. WILLSON.