No. 607,365.

Patented July 12, 1898.

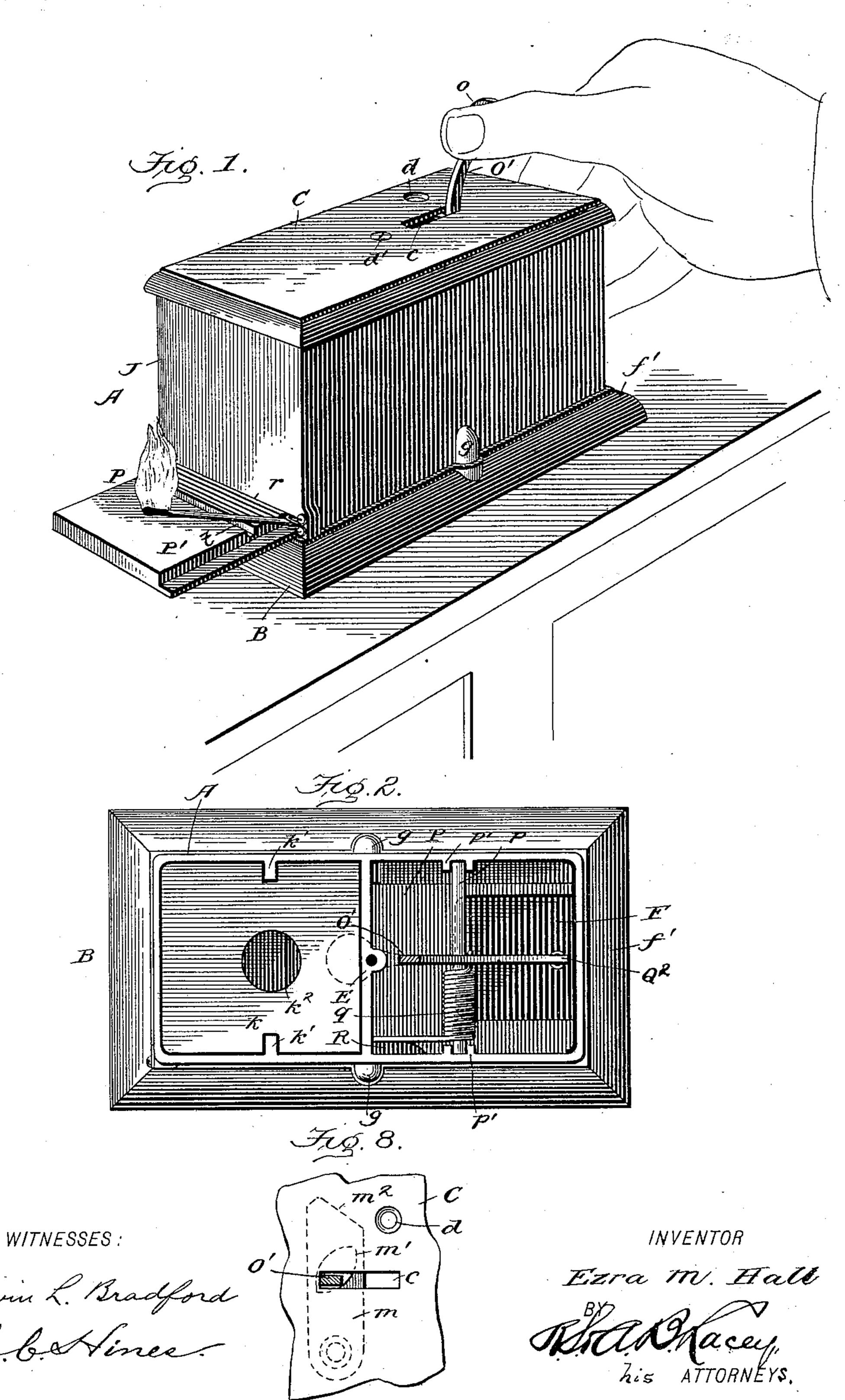
E. M. HALL.

COMBINED CIGAR TIP CUTTER AND MATCH SAFE.

(Application filed Feb. 21, 1898.)

(No Model.)

2 Sheets—Sheet 1.



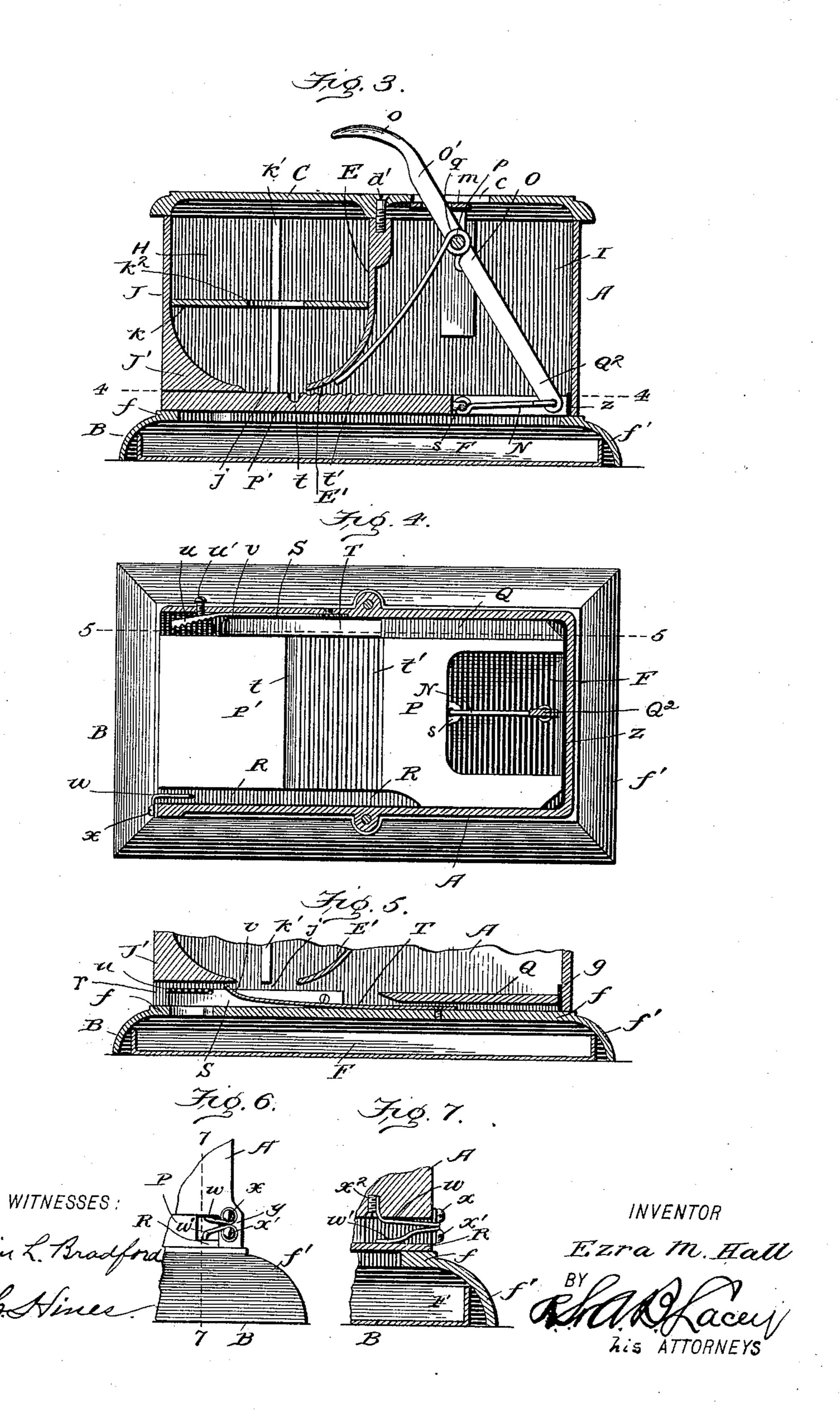
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2 Sheets-Sheet 2.



United States Patent Office.

EZRA MERIT HALL, OF LA CROSSE, WISCONSIN, ASSIGNOR OF ONE-HALF TO FRANK A. BIGELOW AND VOLNEY A. BIGELOW, OF SAME PLACE.

COMBINED CIGAR-TIP CUTTER AND MATCH-SAFE.

SPECIFICATION forming part of Letters Patent No. 607,365, dated July 12, 1898.

Application filed February 21, 1898. Serial No. 671,117. (No model.)

To all whom it may concern:

Be it known that I, EZRA MERIT HALL, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State 5 of Wisconsin, have invented certain new and useful Improvements in a Combined Cigar-Tip Cutter and Match-Safe; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will 10 enable others skilled in the art to which it

appertains to make and use the same.

My invention relates to improvements in cigar-tip cutters of that class in which a cutting-blade moving across the cigar-tip-re-15 ceiving aperture and actuated by a hand-lever is employed to cut off the tip; and the primary object of my invention is to provide a cigar-cutter having a match-reservoir and a match-delivery device adapted to be operated 20 simultaneously with the cutter to deliver a lighted match to the smoker for convenience in lighting his cigar. The detailed objects and advantages of the invention will appear in the course of the subjoined descritption.

With the accomplishment of these ends in view my invention consists in certain novel features of construction, combination, and arrangements of parts, as will be hereinafter more fully described, and specifically set forth

30 in the appended claims.

The invention is illustrated in the accom-

panying drawings, in which—

Figure 1 is a perspective view of a cigarcutter embodying my invention, illustrating 35 its manner of use. Fig. 2 is a top plan view of same with top plate or cover removed. Fig. 3 is a central vertical longitudinal section. Fig. 4 is a horizontal section on line 4 4 of Fig. 3; Fig. 5, a vertical longitudinal 40 section on line 5 5 of Fig. 4; Fig. 6, a broken detail view showing the match-clamp in front elevation; Fig. 7, a longitudinal section of same on line 77, showing the match-clamp in side elevation; Fig. 8, a top plan view of 45 a portion of the top plate or cover.

Like reference - letters designate corresponding parts throughout the several views

of the drawings.

A represents the body portion of the casing 50 or housing of the cutter, which rests upon a base-plate B and is closed by a top plate or

cover C. This top plate or cover is provided with a longitudinal slot c and an aperture d, in which the tip end of the cigar to be cut off is inserted in the usual manner and is secured 55 to the body of the casing by a screw d', which enters a threaded opening in a transverse division-wall E on the interior of said body portion. I may, however, hinge the coverplate to the casing-body or secure it thereto 60 by a spring-clasp, so that it may be readily and conveniently lifted up or detached whenever it is desired to have access to the casing. The base-plate is open at the center and formed with surrounding side and end flanges 65 f, which support the casing-body A, and with a hollow rim f'. In the chamber formed by this rim a shallow tray or pan F may be placed to receive the match-stems and cigartip cuttings dropping from the casing. The 70 body portion of the casing A may be secured to this base-plate in any desired manner; but in the present instance screws projecting upward through openings in the flanges f and entering threaded orifices in bosses g on the 75 sides of said body portion are provided for this purpose.

The interior of the casing is divided into two independent compartments H I by the division-wall E, the lower end E' of which is 80 curved toward the end wall J of the casing to form, with an inwardly-projecting flange J', extending from said end wall, a bottom for the said compartment H, which serves as a match-reservoir, said bottom being provided 85 with a comparatively narrow eduction slot or opening j, through which the matches discharge. In this reservoir is a follower-plate k, which is notched to receive and slides on guide-flanges k', and this plate may be pro- 90 vided with a finger-opening k^2 or its equivalent for convenience in removing it.

The cutter-blade m is pivoted at one end to the under side of the cover-plate C, and is formed with an angularly-disposed elliptical 95 slot m' and a cutting edge m^2 , which is adapted to cut off the tip end of the cigar inserted through aperture d. Extending through this slot is the upper arm O' of an operating-lever O, which projects through the slot c in the 100 cover and is provided at its outer end with a finger or thumb piece o. This lever is rigidly

mounted on or cast integrally with a rockshaft p, journaled in bearing-recesses in the upper ends of bearing-ribs p', formed on the side walls of the case, and the lower arm Q² 5 of said lever projects down into the compartment I. A spiral spring q, surrounding said shaft, has one end bearing against the divisionwall E and its other end connected with the lever and serves to retract the lever. The

10 mode of operation of these parts will be readily understood. Below the match-reservoir and arranged to slide on the side flanges of the base-plate B is a reciprocating match-delivery plate P, the 15 front portion P' of which is adapted to be projected exteriorly through an opening r below the flange J'. The rear end of this plate is bifurcated to enable the cuttings to drop through to the tray F, and between the arms: 20 of this bifurcation the plate is provided with an eye s, to which is connected one end of a link or connecting-rod N, the opposite end of said rod being connected to the lower end of the lever-arm Q², whereby the delivery-plate 25 and cutter-blade are operated simultaneously upon moving the lever. The said front portion P' of the delivery-plate normally rests under the match-reservoir H and fits snugly against the flange J', so as to retain the 30 matches in position. It is formed with a transverse groove t, designed to receive but a single match at a time, and ribs or corrugations t' in rear thereof. These ribs or corrugations allow the matches to have limited 35 up-and-down movement at each reciprocation of the delivery-plate, whereby they are loosened up and prevented from sticking together. The body portion of the match-delivery plate. is made somewhat narrower than the casing, 40 so that the ends of the match contained within the groove t will project laterally therefrom, and in order to compensate for this I provide the plate with flanges Q R, located on opposite sides thereof, which bear against 45 the opposite sides of the casing and insure the movement of the plate in a direct line. The flange Q extends from the rear end of the plate to the corrugated portion t', and the flange R from said corrugated portion to the 50 outer end of the front-plate portion P'. By this construction a space is formed at one side of the plate in advance of the flange Q, into which the head of the match projects to contact with a scratch-plate and stop-plate at 55 that side, while a space is also afforded at the opposite side above flange R, into which the end of the match stem or splint projects and in which the match-clamp at the front of the

casing is located, as will now be described. The main scratch or igniter consists of a plate S, secured by a screw at one end and formed at its opposite end with a serrated flange or rasp u, which is arranged in the path of the match-head and immediately be-

65 low the flange-wall J'. Projecting through the wall of the casing is a set-screw u', which bears against said serrated flange or rasp,

whereby the latter may be adjusted to operate upon different lengths of matches. A spring-metal stop-plate T is located in rear 70 of the striker-plate, and one end of this stopplate is secured to the contiguous side flange f of the base-plate B, while its free end v is curved upwardly and bears against the under side of the flange-wall J'.

The operation of the parts thus far described is as follows: The tip end of the cigar is inserted in the aperture d and the lever O then moved toward the rear end of the casing in the manner shown in Fig. 1 to oper-80 ate the cutter-blade m, which cuts off the tip. At the same time the match-delivery plate is moved forward by the lever-arm Q² and the head of the match rides over the curved end v of the stop-plate T and comes in contact 85 with the serrated flange or rasp u of plate S, which ignites it. The further movement of the delivery-plate projects the front end \mathbf{P}' thereof exteriorly through the opening r, and the lighted match is thrown out of the groove 90 t at an angle, as shown in Fig. 1, in position to be conveniently removed for lighting the cigar. The retractor-spring q restores the parts to their normal position. As above stated, the match-head rides over the curved 95 end v of stop-plate T and is then immediately ignited by the serrated flange u. When this takes place, the said end v assumes its normal position and prevents the ignited match from moving inwardly, thereby avoiding ig- 100 nition of the matches in the reservoir H.

In order to prevent the match delivered from being thrown off the delivery-plate by the outward movement of the same and at the same time insure its proper displacement 105 from groove t, I have provided a novel form of clamp device. This consists of a wire having its central portion secured by bindingscrews x x', entering threaded orifices in a boss y, formed at one side of the casing at 110 the base of the front wall J. The ends w w'of this wire project inwardly in close relation from said screws a short distance and are then bent at right angles and spread apart and enter the casing above flange R, the ex- 115 tremity of the end w being secured by a screw x^2 to the under side of flange-wall J' and the extremity of the end w' being free and resting on said flange R. In operation the end of the match projecting above flange R is re- 120 ceived between the clamp-wires at the instant the head of the match is ignited and is clamped thereby. When the front portion of the delivery-plate projects through the opening r, the lighted end of the match, being 125 unconfined, is thrown out of groove t, while the opposite end thereof is firmly held by the clamp device until released by the operator.

From the above description, taken in connection with the accompanying drawings, the 130 construction and operation of the invention will be readily understood, and it will be seen that a simple, convenient, and efficient construction of combined cigar-tip cutter and

match-safe is provided. It is obvious that changes in the form, proportion, and minor details of construction may be made within the scope of the invention without departing 5 from the spirit or sacrificing any of the advantages thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to

secure by Letters Patent, is—

1. In a cigar-tip cutter, the combination of a casing provided with a match-reservoir, a cutter, a reciprocatory match-delivery device, means for operating said cutter and delivery device, an igniting-plate provided at its free 15 end with an igniting-face, and a set-screw for adjusting said free end of the plate, substantially as described.

2. In a cigar-tip cutter, the combination with a casing provided with a cigar-tip aper-20 ture and a match-reservoir, a cutter, a horizontal reciprocatory match-delivery plate arranged below said reservoir, a match-igniter extending parallel with the plate and having an igniting-face adjustable toward or from 25 the adjacent side edge of said plate, a stopplate arranged in rear of the face of the igniter to prevent the return of a fed match, and means for operating said cutter and match-delivery plate, substantially as de-30 scribed.

3. In a cigar-tip cutter, the combination of a casing having a cigar-tip aperture and a match-reservoir, a cutter, a match-delivery plate adapted to be projected through an 35 opening in the wall of the casing, means for operating said cutter and match-delivery plate, an adjustable match-igniter, a stop to prevent the return of a fed match, and a clamp independent of said igniter and stop 40 device to receive and hold the unignited end of the match, substantially as described.

4. In a cigar-tip cutter, the combination of a base-plate, a casing resting thereon and provided with a cigar-tip aperture and a match-45 reservoir, a cutter below said aperture, a match-delivery plate mounted to slide horizontally on the base-plate and to be projected through an opening in the casing, said plate being provided with a match-receiving 50 groove, means for simultaneously operating said cutter and delivery-plate, and a matchigniter extending parallel with the deliveryplate and having an igniting-face arranged to project into the path of the head of a match 55 resting thereon, substantially as described.

5. In a cigar-tip cutter, the combination of a base-plate, a casing resting thereon and provided with a match-reservoir and a cigar-tip aperture, a cutter below said aperture, a 60 match-delivery plate below the reservoir pro-

vided on opposite sides thereof with flanges arranged at the front and rear of its center and sliding on the base-plate, means for operating the cutter and delivery-plate, and a match-igniter secured to the casing in front 65 of the said rear side flange of the delivery-

plate, substantially as described.

6. In a cigar-tip cutter, the combination of a base-plate, a casing resting thereon and provided with a match-reservoir and a cigar-tip 70 aperture, a cutter below said aperture, a match-delivery plate below the reservoir provided on opposite sides thereof with flanges arranged at the front and rear of its center and sliding on the base-plate, means for op- 75 erating the cutter and delivery-plate, an igniting-plate secured to the side wall of the casing in front of the rear side flange of the delivery and having a free end provided with an igniting-face, and a set-screw for adjust- 8c ing the said free end of the igniting-plate, substantially as described.

7. In a cigar-tip cutter, the combination of a base-plate, a casing resting thereon and provided with a match-reservoir and a cigar-tip 85 aperture, a cutter below said aperture, a reciprocatory match-delivery plate provided with a transverse match-receiving groove and flanges arranged on opposite sides thereof and at the front and rear of its center, means 90 for operating the cutter and delivery-plate, a stop-plate secured to the base-plate below the match-reservoir in line with and in advance of the said rear side flange of the delivery-plate, and adapted to prevent the re- 95 turn of a fed match, and a match-igniter secured to the casing adjacent to said stop-plate and having an igniting-face arranged in advance thereof, substantially as described.

8. In a cigar-tip cutter, the combination of 100 a base-plate, a casing mounted thereon and provided with a match-reservoir and an opening in one of its walls immediately above the base-plate, a reciprocatory match-delivery plate provided on opposite sides thereof with 105 flanges arranged at front and rear of its center and with a transverse match-groove, means for operating the plate, a match-igniter secured to the casing in advance of the said rear side flange of the delivery-plate, and a 110 clamp to receive and hold the unignited end of the match arranged in the said opening of the casing above the front side flange of the delivery-plate, substantially as described.

In testimony whereof I affix my signature 115 in presence of two witnesses.

EZRA MERIT HALL.

Witnesses:

JOHN JACOB ESCH, WALTER C. WINTER.