

(No Model.)

2 Sheets—Sheet 1.

E. A. MARTI.

DEVICE FOR MARKING AND CUTTING CIGARS.

No. 581,029.

Patented Apr. 20, 1897.

Fig. 1.

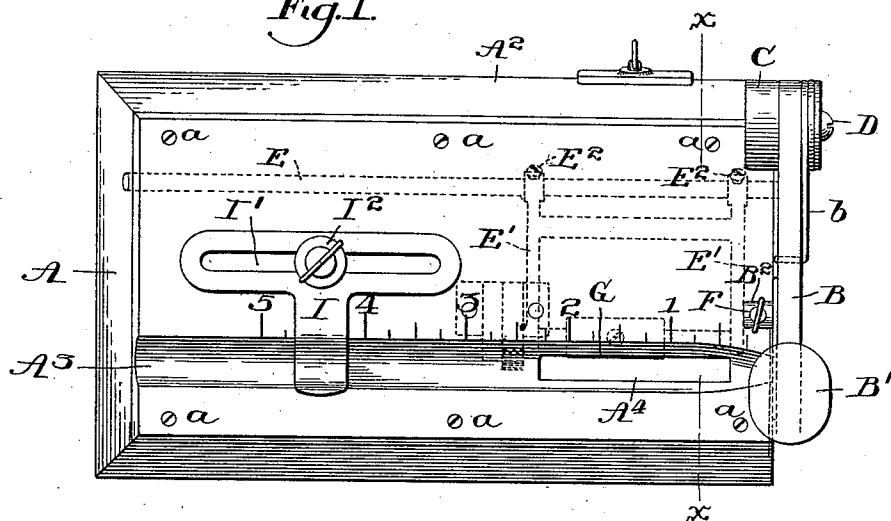


Fig. 2.

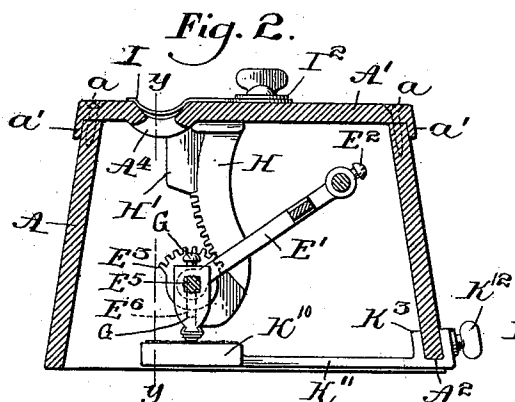


Fig. 3.

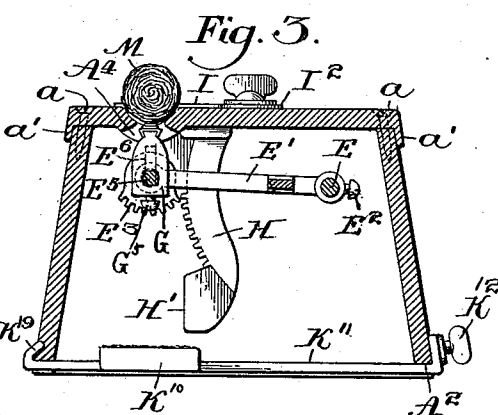
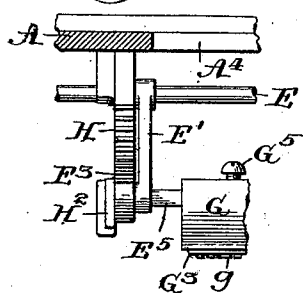


Fig. 2^a



Witnesses.

A. V. Groupe

John T. Polay

Fig. 4.

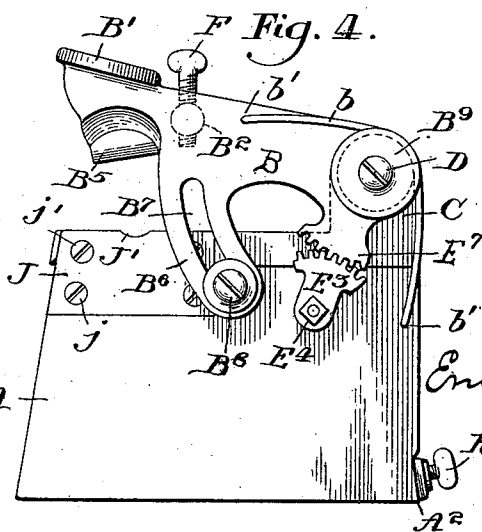
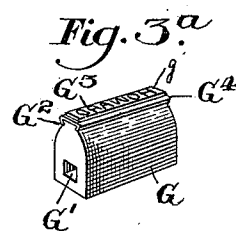


Fig. 3^a



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 5.

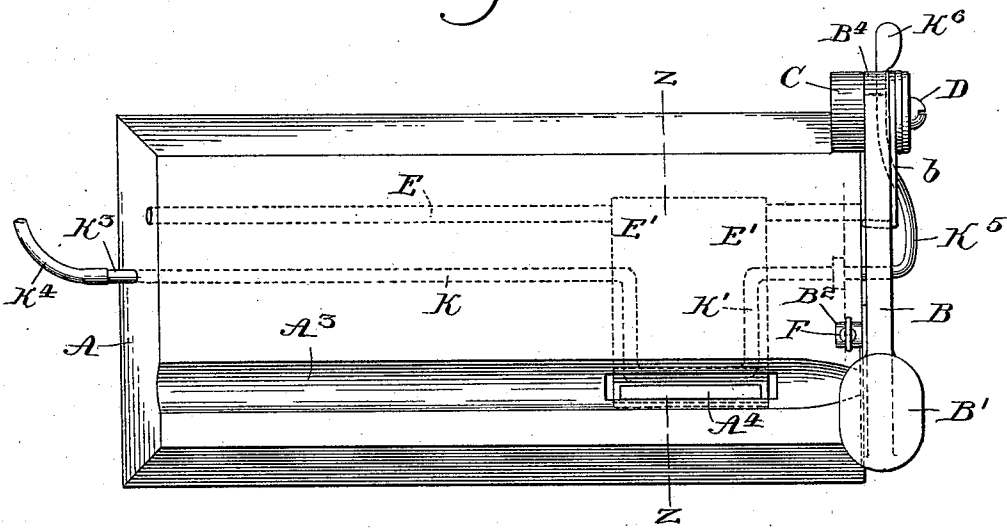


Fig. 6.

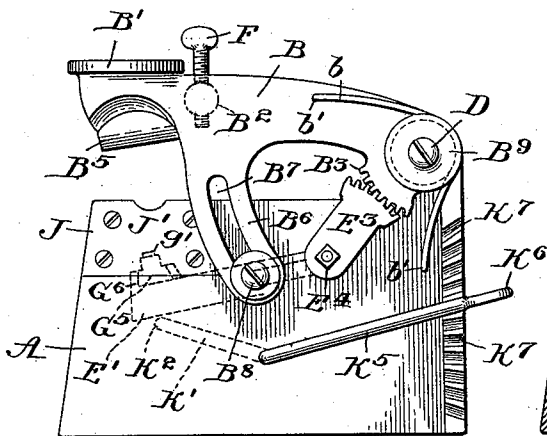
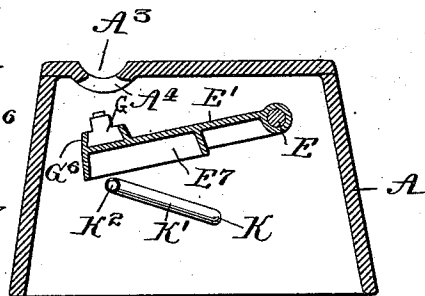


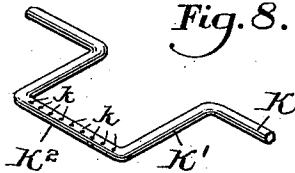
Fig. 7.



Witnesses.

A. V. Grouse
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Fig. 8.



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UNITED STATES PATENT OFFICE.

ERNESTO A. MARTI, OF PHILADELPHIA, PENNSYLVANIA.

DEVICE FOR MARKING AND CUTTING CIGARS.

SPECIFICATION forming part of Letters Patent No. 581,029, dated April 20, 1897.

Application filed June 9, 1896. Serial No. 594,820. (No model.)

To all whom it may concern:

Be it known that I, ERNESTO A. MARTI, a citizen of the Republic of Chile, South America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Devices for Marking and Cutting Cigars, of which the following is a full, clear, and exact description, reference being had to the drawings which accompany and form a part of this specification, in which—

Figure 1 is a top view of my invention in which a rotating printing device is employed and showing in dotted outline the working parts beneath the cover. This is the device which I prefer to employ. Fig. 2 is a vertical cross-section along the dotted line xx of Fig. 1 and showing the printing-type down on the inking-pad. Fig. 3 is a similar view to that shown in Fig. 2, but showing the printing-type raised and reversed in position and in position for marking the name upon the freely-exposed cigar M shown in position in the groove A³. Fig. 2^a is a detail sectional view of the printing apparatus along the dotted line yy , Fig. 2. Fig. 3^a is a perspective view of the printing block and type detached from the apparatus. Fig. 4 is a view from without of the end of the apparatus, the cutting-knife being shown raised and the printing device (not shown) being accordingly in the position shown in Fig. 2. Fig. 5 is a top view similar to Fig. 1, the marking device in this modification not being made reversible, as it reciprocates vertically, but being made of metal and heated artificially, so as to produce embossed or sunken letters in the moist surface of the cigar presented thereto. I do not, however, claim this method generically. Fig. 6 is an end view similar to Fig. 4, but showing this modification, the interior parts being shown in dotted outline and the adjusting device K⁵ (whereby the temperature of the marking-block G⁵ may be varied by adjusting the relative position of the heater K') being clearly illustrated. Fig. 7 is a vertical cross-section along the dotted line zz , Fig. 5; and Fig. 8 is a perspective view from the apparatus, as I prefer to make it when I use combustible gas as the heating agent.

The lettering in all the figures is uniform.

My invention relates to the construction and operation of an apparatus for marking upon the external surfaces of cigars a name or the like at the time when the cigar has been freshly made, and has not dried so as to produce a rupture of the external wrapper by the pressure required to permanently mark the same, the said marking being fixed by artificial means, either by ink or by heat, but preferably by means of ink applied from a pad or the like, and applied at the same time and by the same manipulation which is necessary for the cigar-maker to use, whether my marking device be used or not.

As is well known, when a cigar has been made by a cigar-maker on his board, the end to which the fire is to be subsequently applied is left rough, and the length of the cigars varies to some extent. To insure the cutting off of these blunt ends and an accurate gaging of the length of the cigar, the newly-made cigars as fast as completed are laid on a longitudinally-grooved wooden block, with a lever-cutter at one end, somewhat as shown in the top of Figs. 1 and 4, but only in general features similar thereto. When so laid in the groove for cutting off the blunt end, the cigar-maker holds the cigar with the left hand usually and depresses the cutting-lever with the right, thus cutting off the end to gage without taking his left hand from the cigar, which is then immediately laid in a receptacle until the number of cigars to be made has been thus accumulated. A strip of paper is usually pasted across the groove to indicate the position of the pointed end, so as to cut the cigars to a uniform length.

This machine and this manipulation are necessary in the manufacture of all cigars as a rule, and the cigar-maker's charges for piecework are based on this operation as a part of his manipulation. If now the cigar can be marked at the same time, and while moist and not liable to injury from fracture, and by precisely the same manipulation, and preferably by ink applied from soft type, it can be done without any added cost whatever, while if done subsequently in lots many wrappers will be injured necessarily, being partially dried, and if any special work is required of the cigar-maker, even at the time,

it will be correspondingly charged for and the cost of the cigars be correspondingly increased. In a large factory this may easily amount to several thousand dollars in a year.

5 The construction and operation of my invention will be clearly understood from an examination of the figures.

I use one of my machines at each cigar-maker's table, where he works, so that they
10 are as conveniently placed as the ordinary plain cutters previously used. My invention also relates to improvements in the cutting device itself and its coacting parts, and to the specific mechanism for taking up and applying the ink, as well as in the details of construction, which will be pointed out hereinafter.

Referring to the drawings, A is a box which forms a supporting-base for the cigars, open
20 beneath, the sides of which I prefer to make of wood, dovetailed together at the corners or otherwise securely joined, and with a thin metal cover A', secured, as shown in Figs. 2 and 3, by screws *aa*. I prefer to flange the cover at
25 *a' a'* to give additional security and strength of construction. In the modification shown in Fig. 5, in which heat is used, I prefer to make the whole box of cast or stamped metal.

In the figures I show the sides of the box
30 sloped outwardly from above downward, but I make the sides vertical if desired.

A longitudinal groove A³ extends along the top of the box, preferably in shape to conform to the contour of a cigar, as shown, and this
35 groove is provided toward the lever end with a longitudinal slot opening downward through the cover, (shown at A⁴.) This slot I prefer to make longer than the type-letters used for marking, so that the type-block can be set
40 to the right or the left, and thus mark the cigars nearer or farther from their blunt ends. Upon the top is shown a slotted gage I, secured to the cover by a thumb-screw I² and having its forward end, where it overlies the
45 groove A³, bent downward in the arc of a circle. This is to indicate the length of the cigar, the pointed end of which is placed against this gage, while not permitting the gage itself to break off the tip of the cigar, which it
50 would be likely to do if it extended directly across the groove. In rear of the groove, Fig. 1, is shown a series of lineal measures 1 2 3 4 5, which indicate the length of the cigar and the place at which to adjust the gage, as
55 required.

Secured to the cover is the raised support C, to which is attached, above the level of the cover, the forwardly and upwardly inclined lever B, which carries the shearing-cutter B⁵,
60 which shears across the end face of the cutting-support J, and which latter is notched at J' for the support beneath the end of a cigar during the process of cutting, so that the cutting-blade B⁵ will make an oblique or draw
65 cut and prevent the blunt end of the cigar from being forced forward or jammed by impingement of the blade B⁵ upon the same.

To insure accurate adjustment of the shearing-cutter, I provide the lever B with a downwardly-projecting arm B⁶, provided with a
70 curved slot B⁷, centered upon the pivoted support of the lever B, and in this curved slot is a screw, and collar B⁸, by tightening or loosening which the shearing contact may be given any closeness desired.

At the pivot D is a spring *b*, secured at one end to the lever and at the other to the box, as shown at *b' b'*, the spring being coiled around the pivot-support and held down by the collar B⁹, the whole secured by the pivotal
80 screw or rivet D. The thumb-piece B' is used by the hand to press down the lever. To regulate the sweep of this lever, so as to be able to adjust the projection of the type through the slot A⁴ to a greater or less extent, I provide a thumb-screw F, working through a laterally-projecting stud B² of the lever B, being
85 screw-threaded therein, and as this screw is lowered it will, by its abutment against the base beneath, arrest the downward movement of the lever B at different distances, and this
90 will correspondingly affect the pressure against the cigar of the type-block G.

In Figs. 1, 2, 3, and 4 is shown an inking-pad K¹⁰, which substantially rests upon the table
95 when the machine is in use, but to enable it to be carried about I attach it to the lower margin of the box by a clamp K¹² K¹³, the thumb-screw K¹² securing the same. Along this part of the box the lower edge is removed,
100 so as to afford room for the clamp, and in this way I adjust the pad laterally, so as to present a new surface when partially exhausted. I sometimes extend the clamp entirely across the lower edges of the box from side to side,
105 or from end to end, securing the clamp in a groove of the side of the box where its forward edge engages. I have shown this in Fig. 3, for illustration, at K¹⁹.

The printing or marking device consists of
110 a block G, (shown detached in Fig. 3^a), which carries the type-face *g* and which is adapted to be slid along a rod E⁵, (shown in Fig. 2^a), the rod E⁵ and the slot G' being, respectively, angular to insure a fixed position against rotation. The block G is secured at any point by
115 means of the set-screw G⁵, Fig. 2^a, so as to print upon the cigar at different distances along its length, the slot A⁴ being made long enough for this purpose.

The rod E⁵, Fig. 2^a, is journaled at its ends in arms E' E', which are secured at E² E² to a longitudinal shaft extended along inside the box, as shown. The arms E' E' may be
125 formed integral with the shaft E, and this is the way I prefer, when cheapness is an object, to construct them.

As shown in Fig. 2^a, the shaft E extends through the box from end to end, but I sometimes make it extend only part way toward
130 the left, seating its journaled end in a cross-bar or the like. While I show this mechanism as beneath the supporting-base, the same may be applied above or in rear of the cigar-

groove, if preferred. The bar or shaft E projects through the lever end of the box A and terminates in a toothed segment E³, secured by nut E⁴, or which may be formed integral with said shaft, if desired. This toothed segment E⁷ meshes into the toothed segment B³ of the lever, so that as the latter is depressed it will turn the shaft E in the opposite direction and carry up the arms E' E', the rod E⁵, and the marking-block G toward the slot A⁴ along the arc of a circle. Instead of this specific gear mechanism I sometimes, however, use other means for actuating the type-block G. The rod E⁵, which carries the printing-block G and its type-face g, is provided at its inner end with a toothed segment E³, and carries a vertical piece or rib E⁶ opposite the toothed part and at one end thereof adjacent to its pivot. From the under side of the cover of the box extends downward a curved rack H, into the teeth of which mesh the teeth of toothed segment E³.

The upper and lower parts of the rack H are unprovided with teeth, but have at one end of the said rack a vertical groove H' both above and below, in which the rib E⁶ engages after the semirotation of the toothed segment E³ has been completed, so that the last part of the movement of the block G is a sliding movement of said rotatable type-block in said vertical groove H', vertically upward toward the cigar as the said type-block ascends or vertically downward as it descends toward the inking-pad, the semirotation being performed between these points of movement. When applied in rear of the cigar-groove or above it, it will be understood that the above terms of direction of movement are modified accordingly.

The type I prefer to use, and which are shown at g, are those of rubber, and I attach these to the block G in any of the ordinary modes, but I show in Fig. 3^a a dovetail slide G², which carries the type and which is readily slipped over the expanded top of the block G, where it is held by friction or otherwise.

While I show the type as horizontal, when it is desired to follow the taper of a cigar accurately I form these type inclined and adjust the pad thereto, or I set the shaft E on a downward slope toward the left to accomplish the same purpose.

In the modification shown in Figs. 5, 6, 7, and 8 I do not make the type-block G reversible, but fix it rigidly to the arms E' E', its forward end being made concave, as shown at E', to insure even heating by distribution. It thus presents with the type upward and the heating device under the said concavity. The type-block is slid in by a dovetail, as shown at G⁶.

Underneath the marking device I place a horizontal tube K, which extends from end to end and is provided with an external inlet K³, supplied with gas through a flexible tube K⁴, connected with a source of supply. (Not shown.) This tube K is arched forward at

K' K² so as to present a series of small holes k k k, where the gas may be ignited under the marking-block G. The tube K is thence carried out under the lever B and then bent off at an angle to the rear, where it engages by spring-pressure in any one of a series of notches K⁷ K⁷ K⁷ at the edge of the box A, whereby the distance of the burners k k k from the block G may be adjusted at pleasure.

I do not specifically confine myself to the precise devices or construction shown, but vary the same to suit such requirements as may arise and as would be made by a mechanic skilled in the art to which this invention pertains and having this specification and drawings before him.

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

1. In a device for marking and cutting cigars, the combination of a supporting-base having a cigar-receiving groove, a lever-cutter adapted to reciprocate upon said support, and at the free end of said groove, an open slot through said support within said groove, an independently-rotating marking device adapted to reciprocate beneath said support and through said slot, and means whereby the reciprocation of said lever shall cause the reciprocation and independent rotation of said marking device, substantially as and for the purposes described.

2. In a device for simultaneously marking the sides and cutting off the blunt ends of freshly-made cigars, the combination of a longitudinal support, having a cigar-containing groove along its upper surface, a lever pivoted to and shearing against the free end of the groove of said support, a shaft beneath said supporting-cover and within a suitable box-shaped base, said shaft provided with one or more forwardly-extended lever-arms, a marking-block rotatively secured to said arms, an open longitudinal slot in said groove opening downward to said marking-block, and means for causing the descent of said lever to simultaneously act upon and rotate said shaft and carry said marking-block up through said slot, substantially as described.

3. In combination with a box provided with a longitudinally-grooved cover, and a lever-support, a cutting-lever pivoted to said support and extended forward along the end of said box, and provided with a hand-knob, or the like, for forcibly depressing the same, a spring for automatically raising said lever, a free open space above said groove for manipulating a cigar while said lever is depressed, and the end of said cigar cut off, a reciprocating and independently-rotatory marking device within said box operated by a lever secured to a longitudinal shaft within said box, means for gearing said shaft and said cutting-lever together so that the depression of said cutting-lever will elevate and rotate said marking device upon its supporting-arm, means for causing said rotation thereupon, a

slot within said groove adapted to receive said marking device and permit contact thereof to be made against the side of a cigar held in said groove, the whole constructed substantially as and for the purposes herein set forth.

4. In combination with the box, A, having groove, A³, slot, A⁴, shearing-plate, J J', inclined lever B, having draw-cut blade B⁵, thumb-knob, B', pivoted support-bearing, D, spring, b, gear, B³, longitudinal shaft, E, having gear, E', adapted to engage with B³ and be rotated thereby, and forwardly-extended arm, E', said arm supporting at its free end the rotatable marking-block, G, said block constructed to be independently rotated upon its axis, E⁵, the whole substantially as described.

5. In combination with a supporting-base, a cutting-lever adapted to shear against one end thereof, a shaft beneath said support rotated by the descent of said cutting-lever upon its pivoted support, lever-arms secured to said shaft, and a rotatable marking-block pivoted in said arms, a toothed gear segmentally adapted to engage with a rack, a rack adapted for the engagement of said toothed gear, the whole so constructed that by depressing said cutting-lever said shaft will be partially rotated, and said marking-block will be partially rotated on its bearings in said shaft-arms, together with a longitudinal slot through said support adapted to receive the said marking-block in its ascent, and an inking-pad beneath adapted to receive and ink the type of said marking-block in its descent, substantially as described.

6. The combination of supporting-base, A, cutting-lever, B, rotating toothed gear, B³ E¹, shaft, E, arms, E' E', journaled marking-block, G, segmental pinion, E³, rack, H, slot, A⁴, and inking-pad, K¹⁰, the whole adapted in a coöperative construction, substantially as described.

7. In combination with the box, A, having cover pierced by slot A⁴, cutting-lever B, rotatable marking-block, G, within said box and adapted to enter said slot in its ascent, the detachable and laterally-adjustable inking-pad, K¹⁰, K¹², substantially as described.

8. In combination with the box A, marking-block, G, adapted to reciprocate vertically beneath the cover thereof, the slot A⁴ along the upper surface of said box, said slot longer than said marking-block, and said marking-block supported upon a rod and adjustably secured thereto at any position along said slot, together with a cutting-lever adjusted to said box, substantially as shown and described.

9. In combination with the supporting-base, A, having groove A³ and slot, A⁴, in said groove, and reciprocating cutting-lever operating along the end of said base, together with cigar-marking block beneath said groove, and an adjustable screw-clamped gage, I, I², said gage having its flat forward

end, where it overlies said groove, A³, bent downward into said groove, to indicate, by its position, the desired length of said cigar upon the upper surface of said support, substantially as described.

10. In a cigar-cutting device, in combination with a supporting-base, having a longitudinal groove in the upper surface of the same, and a cutting-lever adapted to be reciprocated across the end of said groove, the laterally-adjustable gage supported alongside said groove and having its forward end bent down in said groove so as to conform thereto and adapted to extend transversely across the same, substantially as and for the purpose described.

11. In a device for marking and cutting the ends off freshly-made cigars, a supporting-base having its upper surface at all times freely exposed, a groove in said upper surface extended to the end of said base, an inclined cutting-blade adapted to reciprocate across said groove, a spring adapted to automatically elevate said blade, a marking device adjacent to said groove, means for independently rotating said marking device upon a separate journaled bearing, means for coördinating the rotation of said marking device with the reciprocation of said cutting-lever, and an inking device adapted to be placed in intermittent contact with said marking device, the whole so constructed that the cigar-maker may be able to use this device to simultaneously mark, emboss, or print letters or designs upon the exterior surfaces of said cigars.

12. In a device for marking and cutting cigars, in combination with a supporting-base, A, a pivoted cutting-lever, B, journaled to a support of said base, a reciprocating marking device adapted to operate against the side of a cigar while supported upon said base, and having its projecting end cut off by said lever, and an adjusting-screw, F, operatively connected with said lever, and abutting, in its descent, against a fixed part of said base, or conversely, and adapted, as it is set higher or lower, to limit the descent of the lever, B, to various distances, and thereby regulate the pressure of said marking device against said cigar, substantially as described.

13. In a cigar marking and cutting device, in combination with a longitudinally-grooved supporting-base, and a reciprocating cutter adapted to operate against one end thereof, a marking device, and means adjustably interposed between said supporting-base and said reciprocating part, or between parts operatively connected therewith, and regulate the limit of pressure of said marker against a cigar when held in said groove, substantially as described.

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