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MACHINE FOR TRIMMING AND MARKING CIGARS.
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UNITED STATES PATENT OFFICE.

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MACHINE FOR TRIMMING AND MARKING CIGARS.

SPECIFICATION forming part of Letters Patent No. 703,823, dated June 24, 1902.
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To all whom it may concern:

Be it known that we, ADOLPH W. WALDMANN, residing in Chicago, in the county of Cook and State of Illinois, and FRANK E. KAISER, residing in Cincinnati, in the county of Hamilton and State of Ohio, citizens of the United States, have invented a new and useful Improvement in Machines for Trimming and Marking Cigars, of which the following is a specification.

This invention relates to a new and improved construction of machines for simultaneously trimming and marking cigars designed to obviate objections to previous constructions of such machines.

The invention consists in the novel combinations of parts and devices and other novel features of construction hereinafter described, and pointed out in the claims.

In the accompanying drawings, forming a part of this specification, we show at Figure 1 a perspective of the invention, at Fig. 2 a plan thereof, at Fig. 3 a section on the line 3-3 of Fig. 2, and at Fig. 4 a section of the pivotal support of the movable knife and impressing device.

In said drawings, 1 represents the base or bed of the machine, adapted to be secured to a bench or other support by screws passing through the openings 7. In the bed 5 is a longitudinal recess 8 to receive the cigar to be operated upon, and at one end of the recess is an adjustable gage 9, whereby the length to which the cigar is to be reduced may be determined. Attached to the end of the bed is a stationary knife 10, coating with a movable knife, hereinafter described, in cutting off the end of the untrimmed cigar. The cutting portion of the knife is hollowed out to make its outline conform to the recess, as plainly shown.

The movable knife, preferably made in star form, is shown at 11 and is supported on a lever 12 by a central screw 13. A stud 14 enters one of the openings 15 in the knife and prevents any possible rotation of the knife while operating. The knife has a plurality of cutting-edge portions, and when one becomes dull it is turned on the screw 13, so as to bring another and fresh portion of the edge into acting position, the stud then entering another opening 15.

The lever 12 is depressed by hand to carry the knife into action, and to permit this it is pivotally supported by a pivot or shaft 16, secured to or integral with it and journaled in a box or sleeve 17, projecting laterally from a rigid arm 18, formed in one piece with the bed 5. A stop 19 on the lever is adapted to regulate the extent of movement given the lever by the operator by its contact with the arm 18. A spring 20 for retracting the lever encircles the shaft 16, and one end of such spring is secured in a cap 21, keyed to the shaft by a pin 22, and the other end bears against a shoulder 23 on that part of a frame 24 surrounding the sleeve 17 and supporting the marking devices.

The marking devices are supported in the frame 24 and are oscillated on the sleeve 17 simultaneously with the oscillation of the moving knife. The downward movements are caused by the laterally-extending arm 25, attached to lever 12, and an adjustable contact, preferably in the form of a set-screw 26, carried by said arm and bearing on the top plate 27 of the marking devices. By adjusting the screw 20 the extent of the depression given the marking devices may be regulated to suit the size of the cigars. The retraction of the marking devices is caused by the spring 28, having one end held by the stop 29 on the frame 24 and the other end by a shoulder 30 on the arm 18. The springs 20 and 28 are both torsion-springs, and one is practically independent of the other, although both are usually operated at the same time practically, one being put under tension slightly before the other and being released slightly after the other. A stop 31 on arm 18 limits the upward or retracting movements of frame 24.

The marking device proper consists of thin copper or other type-plate 32, having a U-shaped bend formed in its forward portion, and type 33, attached to the bottom of the
bent portion. This plate is positioned below the plate 27 and with the depending ridge 34, formed on the bottom of plate 27, fitting into the U-bend of the type-plate and is held in this position by a cross-bar 35 of the frame 24 and a screw 36, passing through the front member of the frame and the bent-up edge of the type-plate and into the ridge 34, as plainly shown at Fig. 3. There is preferably some elasticity in that part of the type-plate to which the type are attached, so that the type may conform somewhat to the surface of the cigar, and this elasticity may be obtained by making the U-bend therein some what deeper than the ridge 34, so that the metal of the plate may have room to yield upwardly.

The type are heated by gas from supply-pipe 37 through the elbow 38 and adjustable injector-pipe 39, supported in an arm 40 on the frame 24 surrounding the pivotal support. The injector delivers the gas into the open space between plate 27 and the type-plate, as seen at Fig. 3, and in order to economize the gas air is admitted to the injector 39 through the opening 41 (shown in said figure), and mingles with the gas before it issues from the tip in a manner well understood. A thimble 42, having an opening 43, adapted to be brought into register with the opening 41, is threaded on the injector, and by it the opening 41 may be wholly closed or partially closed at any time.

The operation of the machine will be fully understood from what has been above written and needs no further description.

It will be noticed that the flame of the burner is delivered against the upper surface of the rearwardly-projecting part of the type plate and that the type are heated by conduction, so that there is no possibility of contact by the flame with the acting face of the type, and no danger that its fumes or any of the products of combustion will reach or taint the cigar.

We claim:

1. The machine for trimming and marking cigars, comprising a pivoted operating-lever, and a spring for retracting the lever, in combination with a pivotedly-supported marking device, a separate spring for retracting said device, an arm projecting laterally from the operating-lever and over the marking device, and an adjustable contact carried by said arm and serving to actuate the marking device, and a stationary knife cooperating with said lever-knife, substantially as specified.

2. The machine for trimming and marking cigars, comprising a pivoted operating-lever, a knife carried by the lever, and a spring for retracting the lever, in combination with a pivotedly-supported marking device, a separate spring for retracting the marking device, an arm projecting laterally from the operating-lever and an adjustable contact carried by said arm and serving to actuate the marking device, and a stationary knife cooperating with said lever-knife, substantially as specified.

3. In a machine for trimming and marking cigars, the combination of a stationary knife, a movable knife, a swinging lever for operating the latter knife, a movable marking device, an arm projecting laterally from the lever and carrying a contact for operating the marking device, and separate springs for retracting said lever and said marking device, substantially as specified.

4. The machine for trimming and marking cigars, having in combination a stationary knife, a movable knife, a lever carrying the movable knife, and a marking device, an arm projecting laterally from the lever and carrying a contact adapted to engage and operate the marking device when the lever is depressed, both the lever and the marking device swinging on the same center, substantially as specified.

5. The machine for trimming and marking cigars, having in combination a stationary knife, a movable knife, a lever carrying the movable knife, and a marking device operated by said lever, both the lever and the marking device swinging on the same center and each having its own retracting-spring, substantially as specified.

6. The machine for trimming and marking cigars having a single operating-lever, carrying a knife and a laterally-extending arm provided with a contact-screw for operating the marking device and a swinging marking device, said lever and said marking device being both supported from and swinging on the same center, substantially as specified.

7. The machine for trimming and marking cigars having a single operating-lever, carrying a knife and a marking device both supported from and swinging on the same center, and each having its own independent retracting-spring, substantially as specified.

8. The combination with the hollow bearing 17, of the knife-carrying lever and its pivot passing through the bearing, the marking-device frame pivoted on the outside of said bearing, and a retracting-spring for said lever stayed by said frame, substantially as specified.

9. The combination with the hollow bearing 17, of the knife-carrying lever and its pivot passing through the bearing, the marking-device frame pivoted on the outside of said bearing, a retracting-spring for said lever stayed by said frame, and a separate spring for retracting the frame, substantially as specified.

10. The marking device for branding cigars, consisting of the thin type-plate having a U-shaped bend, a top plate having a ridge setting into the bend of the type-plate and
supporting the type, a supporting-frame, and a gas-burner for heating the type-plate said top plate and said type-plate being both extended rearwardly so as to inclose the flame 5 from the burner, substantially as specified.

11. In a branding and trimming machine for cigars, the combination of a swinging heated branding device and a swinging knife-lever actuating the branding device, but having only a momentary contact therewith at each operation, the lever and branding device being independently supported and each having its own retracting-spring, substantially as specified.

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