

No. 741,242.

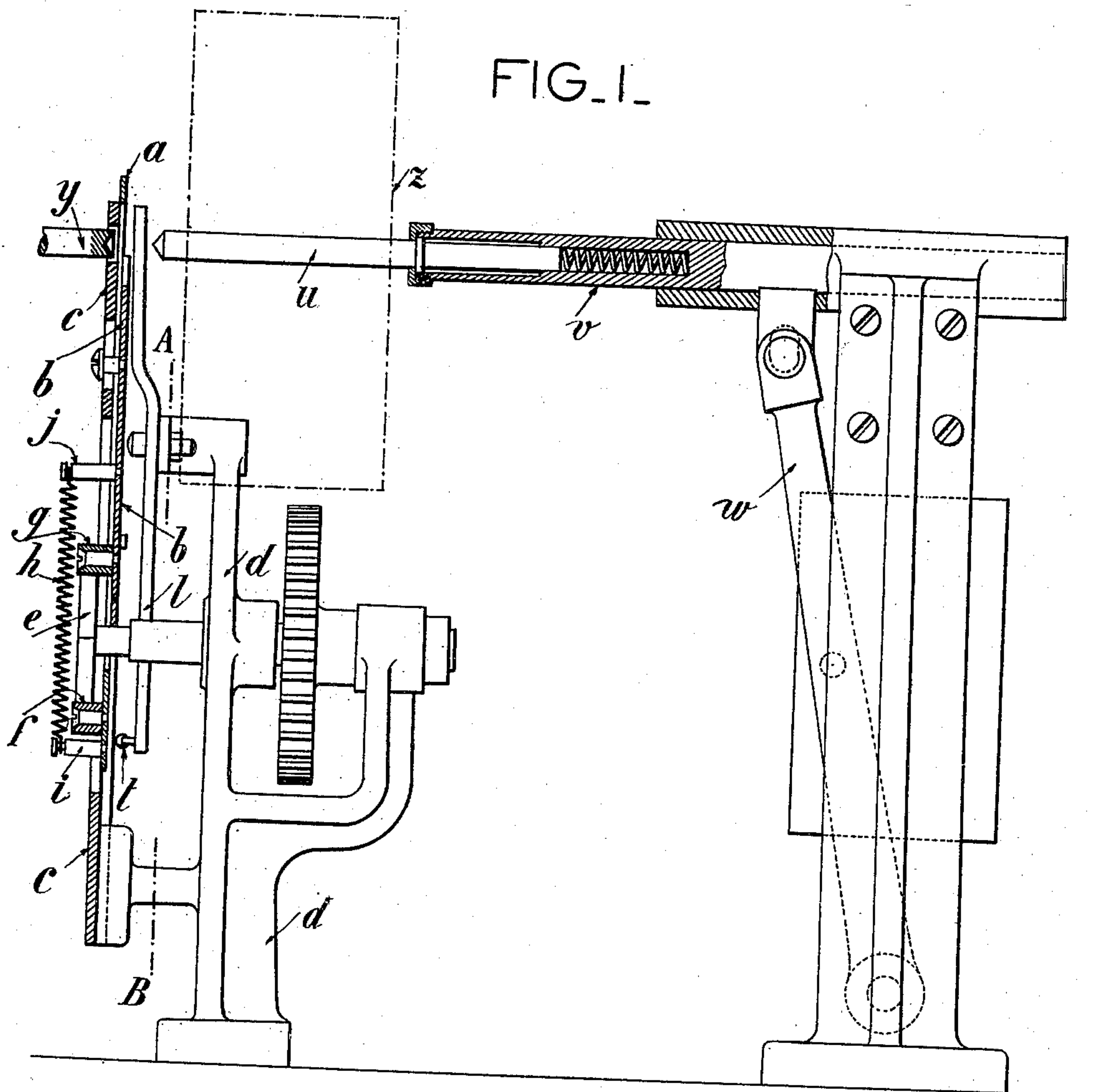
PATENTED OCT. 13, 1903.

A. GREILSAMMER.
CIGARETTE MACHINE.

APPLICATION FILED JUNE 9, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES

H. M. Kuehnel
Wm M. Goldenf.

INVENTOR

Alphonse Greilsammer

BY *Richard R.*

ATTORNEYS

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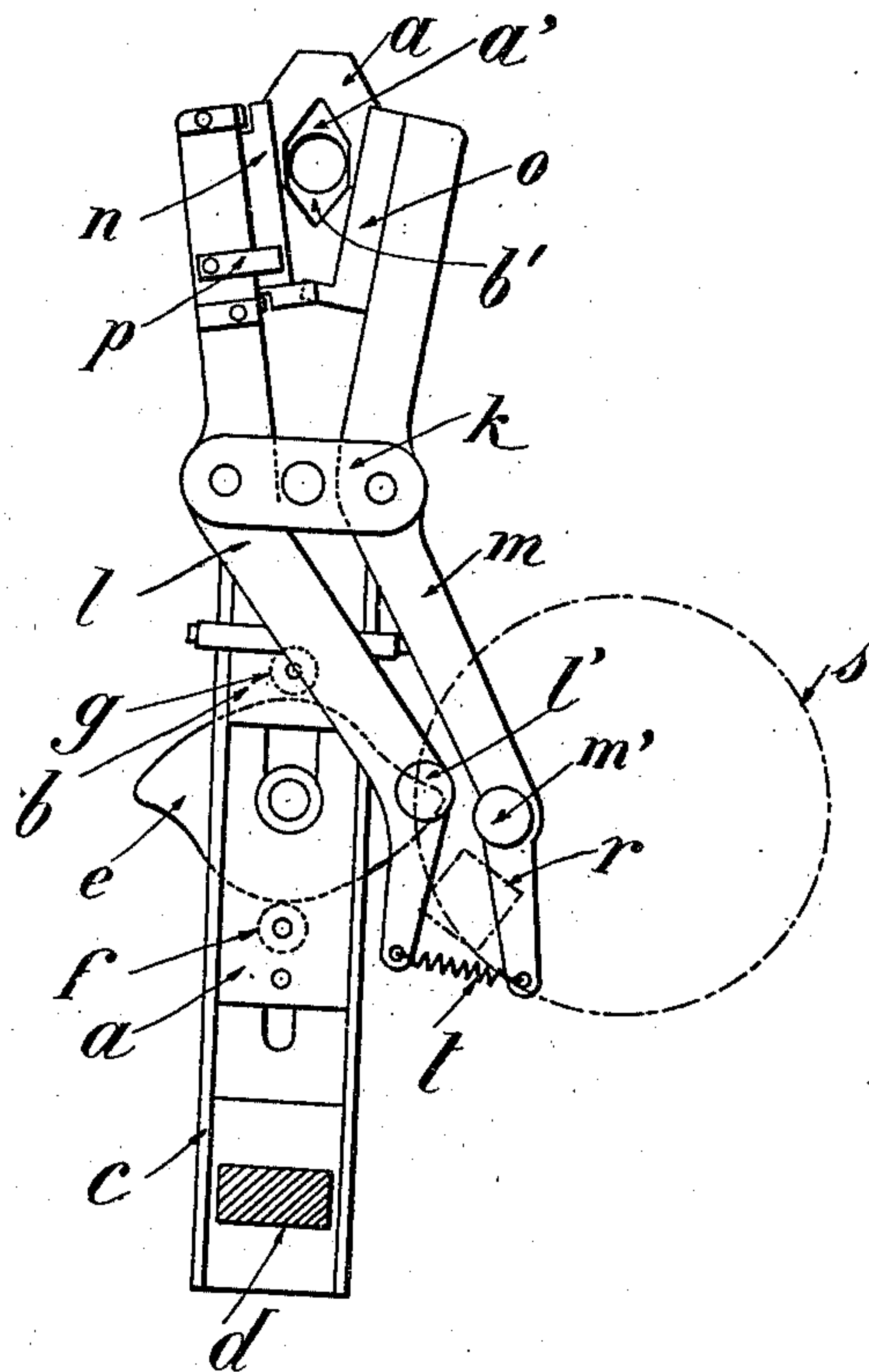
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2 SHEETS—SHEET 2.

FIG. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALPHONSE GREILSAMMER, OF PARIS, FRANCE.

CIGARETTE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 741,242, dated October 13, 1903.

Application filed June 9, 1903. Serial No. 160,759. (No model.)

To all whom it may concern:

Be it known that I, ALPHONSE GREILSAMMER, a citizen of the Republic of France, and a resident of No. 3 Rue Saulnier, Paris, in the
 5 Republic of France, have invented certain new and useful Improvements in Cigarette-Machines, of which the following is a specification.

This invention relates to a device adapted
 10 for use in cigarette-machines in which the cigarette-tubes are clasped and milled; and the object thereof is to allow of making cigarette-tubes, and hence cigarettes, with one end closed. For this purpose the tube of
 15 paper being once clasped and milled in the usual manner its free end, which has been cut, is cramped by the action of two plates, which move close to each other in opposite directions in a plane perpendicular to the axis
 20 of the tube, and is then tucked in against the mandrel of the tube by a spindle animated with a reciprocating motion.

In the annexed drawings, Figure 1 is a front elevation view of the device incorporating this invention, certain parts being shown
 25 in section. Fig. 2 is a cross-section through line A B of Fig. 1.

The device comprises two plates *a* and *b*, arranged in juxtaposition and adapted to
 30 slide in a support or guide-plate *c*, secured to a frame *d*. These plates move in opposite directions by the action of a cam *e*, mounted on a shaft driven by the motor-shaft of the machine. For this purpose the plates *a* and
 35 *b* are provided, respectively, with rollers or studs *f* and *g*, upon which the cam is adapted to act in its rotary motion. A spiral spring *h*, the ends of which are attached to pins *i* and *j*, made, respectively, integral with the
 40 plates *a* and *b*, brings back said plates one to each other after they have been separated by the cam *e*. The plate *a* is provided at its upper end with a notch *a'* of a reversed-V shape, and the plate *b* is provided with a corresponding notch *b'* of a straight-V shape.
 45 These notches are adapted to cramp one of the ends of the cigarette-tubes when the plates *a b* are moved toward each other.

Pivoted on a cross-bar *k*, secured to the
 50 frame *d*, are arranged two bent levers *l* and *m*, carrying, respectively, the cutting-blades

n and *o*, forming scissors and adapted to cut the cigarette-tubes when they move toward each other. The blade *n* is hinged on the lever *l* and bears against the blade *o* by the
 55 pressure of a flat spring *p*. The moving of the cutting-blades one toward each other is insured by an abutment or cam *r*, mounted on a disk *s*, driven by the motor-shaft of the machine, as seen in dotted lines in Fig. 2. 60
 During the rotation of the disk *s* the cam *r* meets two studs or rollers *l'* and *m'*, mounted, respectively, on the levers *l* and *m*, and separates them one from the other, causing the blades to approach each other. A spring *t* 65
 brings back the levers *l m* to their normal position after they have been separated by the cam *r*. The ends of the cigarette-tubes after being cramped by the plates *a b* are
 70 tucked in by a spindle *u*. This spindle is mounted in a resilient manner in a rod *v*, animated with a reciprocating motion by the action of a lever *w*, driven by any suitable mechanical means.

The device hereinabove described works as
 75 follows: The tube of paper is clasped and milled in the usual manner around the mandrel *y*. The free end, which has been cut, lies opposite the notches *a' b'* of plates *a b* and projects from these plates a small distance, 80
 varying according to the diameter of the tubes. The end of the tube being thus placed, when the machine is started the plates *a b* approach each other toward the axis of the tube and their notches *a' b'* are caused to 85
 cramp or strangle the free end of the tube. The plates *a b* are then separated and let pass the tapered point of the spindle *u*, which tucks in the cramped edge of the tube against the tapered recess of the end of the mandrel *y* 90
 and produces the entire closing of the free end of the tube. The tube thus closed advances of the proper length of the cigarette and enters the transport-barrel *z*, (shown in dotted lines,) while the spindle *u* is brought 95
 back and is cut by the blades *n o*. The free cut end of the tube which projects from the mandrel *y* is then closed in the manner described, and so on, while the tubes which have one of their ends closed are carried by 100
 the transport-barrel *z* to be filled with tobacco in the usual way.

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

1. A device adapted for use in cigarette-machines in which the cigarette-tubes are clasped and milled, comprising two plates *a* and *b* arranged in juxtaposition and adapted to move in opposite directions, said plates being provided with respective notches *a'* and *b'* between which one of the ends of the cigarette-tubes is adapted to be cramped, a spindle *u* adapted to receive a reciprocating motion in the direction of the axis of the mandrel *y* of the cigarette-tubes, and a pair of cutting-blades *n o* working as scissors between the spindle and mandrel to cut the tubes, substantially as and for the purpose set forth.

2. A device adapted for use in cigarette-machines in which the cigarette-tubes are clasped and milled, comprising two plates *a* and *b* arranged in juxtaposition and adapted to move in opposite directions, said plates being provided with respective notches *a'* and *b'* between which one of the ends of the cigarette-tubes is adapted to be cramped, rollers or studs *f* and *g* respectively secured to the plates *a* and *b*, a rotating cam *e* adapted to act on said rollers or studs *f* and *g*, pins *i* and *j* respectively fixed to the plates *a* and *b*, a spiral spring *h* having its ends attached to said pins *i* and *j*, a spindle *u* adapted to receive a reciprocating motion in the direction of the axis of the mandrel *y* of the cigarette-tube, and a pair of cutting-blades *n o* working as scissors between the spindle and mandrel to

cut the tubes, substantially as and for the purpose set forth.

3. A device adapted for use in cigarette-machines in which the cigarette-tubes are clasped and milled, comprising two plates *a* and *b* arranged in juxtaposition and adapted to move in opposite directions, said plates being provided with respective notches *a'* and *b'* between which one of the ends of the cigarette-tubes is adapted to be cramped, a spindle *u* arranged in a resilient manner in the direction of the axis of the mandrel *y* of the cigarette-tubes, a rod *v* in which said spindle *u* is mounted, adapted to receive a reciprocating motion, a pair of bent levers *l* and *m* pivoted on a cross-bar *k* fixed to the frame *d*, a cutting-blade *n* hinged to the lever *l*, a cutting-blade *o* fixed to the lever *m*, said levers working between the spindle and mandrel, a flat spring *p* bearing on the blade *n* and adapted to press said blade against the blade *o*, two studs or rollers *l'* and *m'* mounted respectively on the bent levers *l* and *m*, an abutment or cam *r* adapted to meet in its travel the studs or rollers *l'* and *m'*, and a rotating disk *s* upon which is mounted the abutment or cam *r*, substantially as and for the purpose set forth.

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

ALPHONSE GREILSAMMER. [L. S.]

Witnesses:

ANTOINE LAVOIX,
J. ALLISON BOWEN.