

T. ERNST.
Cigar-Machines.

No. 140,906.

Patented July 15, 1873.

Fig. 1.

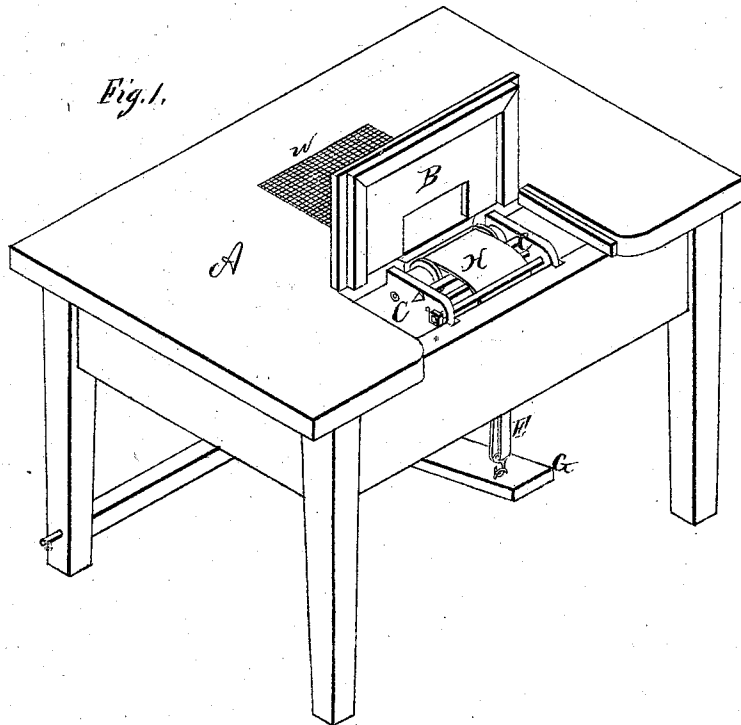


Fig. 3.

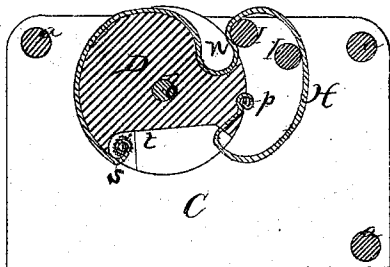
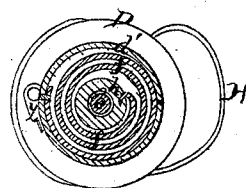


Fig. 4.



Witness:
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per

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Fig. 2.

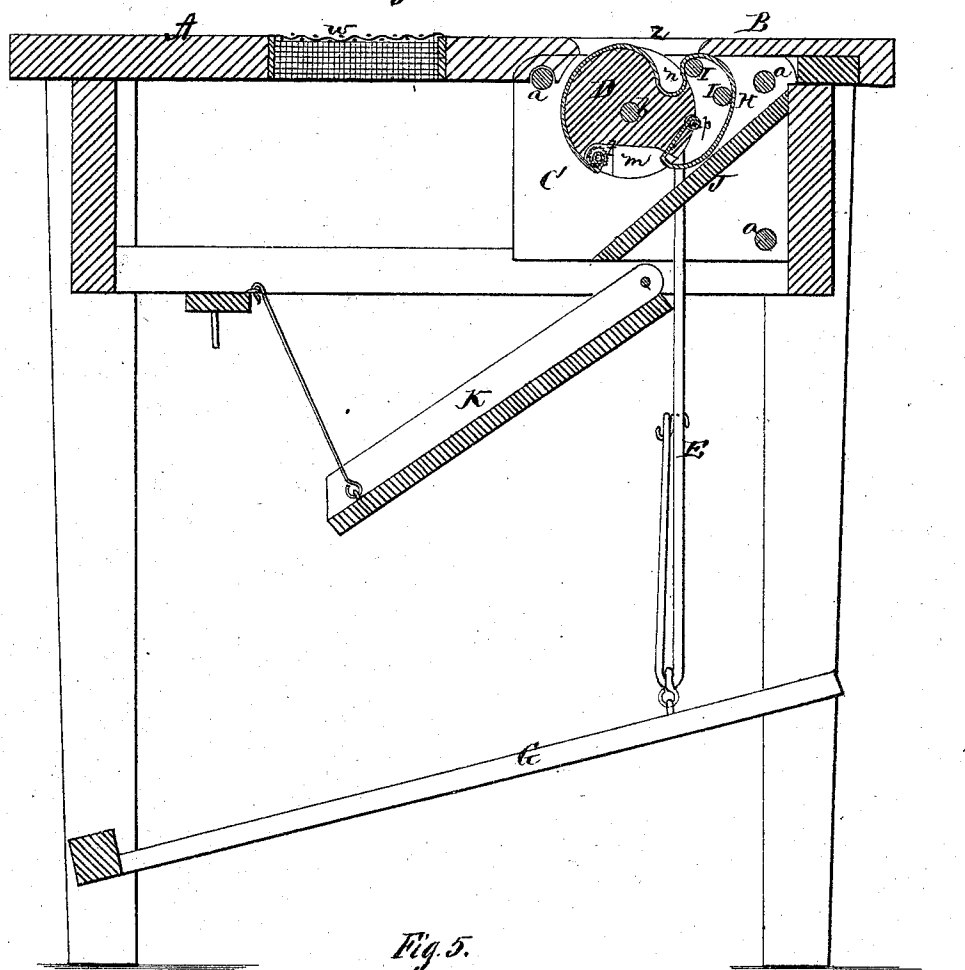
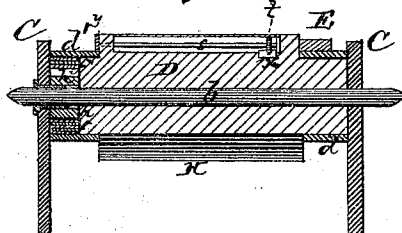
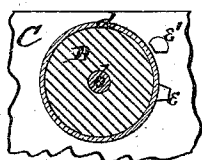


Fig. 5.



Witness :

W. D. Newman
to C. L. Everett.



Inventor.

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UNITED STATES PATENT OFFICE.

THEODORE ERNST, OF FORT MADISON, IOWA.

IMPROVEMENT IN CIGAR-MACHINES.

Specification forming part of Letters Patent No. **140,906**, dated July 15, 1873; application filed September 10, 1872.

To all whom it may concern:

Be it known that I, THEODORE ERNST, of Fort Madison, in the county of Lee and State of Iowa, have invented certain new and useful Improvements in Cigar-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a machine for rolling cigars, preparatory to placing them in the molds, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my entire machine. Fig. 2 is an enlarged transverse vertical section of the same; and Figs. 3, 4, and 5 are views of the roller and band which rolls the cigars.

A represents a table of suitable dimensions, a part of which is cut out, as shown, to form the hinged lid B. Under this lid, in the frame of the table, are placed, vertically, two metal plates, C C, connected by means of rods *a a*. Through these plates passes, also, a shaft, *b*, upon which is firmly secured a roller, D, the ends of which are made of smaller diameter than the main part, as shown in Fig. 5. Upon one of the ends is fastened a metal collar, *d*, having upon one side a lug or projection, *e*, and upon the inner side of the plate C, at this end, is a corresponding lug or projection, *e'*, these two lugs or projections acting as stops to the movement of the roller D. On the other end of the said roller is fastened a similar collar, *d'*, which, however, extends beyond the end of the roller, and within the same is placed a coiled spring, *f*, the outer end of which is riveted to the collar. The inner end of the spring *f* is bent as a hook and inserted in an inclined groove on a sleeve, *h*, attached to the plate C at this end of the roller, and through which the end of the shaft *b* passes. To the outside of the collar *d* is firmly attached a

strap, E, which is wound around said collar and connects with a treadle, G, underneath. A rapid downward pressure on this treadle revolves the roller D, and when the pressure is removed the spring *f* returns the roller to its former position, the lugs *e e'* acting as stops to both of said movements. The main part of the roller D is provided with two longitudinal recesses, *m* and *n*, as shown in Figs. 2 and 3. At one side of the recess *m* is a slot through to the face of the roller, through which is passed one end of a band, H, which is attached to a rod or shaft, *p*, and when the band is drawn out said rod or shaft sinks into a depression made for that purpose in the face of the roller. The band is passed around the roller D, and its other end attached to a shaft, *s*, which is placed at the other side of the recess *m*, it being inserted endwise. This shaft is provided with a small ratchet or cog wheel, *t*, and in the recess is a rib, *f*, which, when the shaft is in position, enters two of the cogs or teeth of said wheel and prevents the shaft from turning; the shaft being also prevented from sliding out of its bearings by a small lever, *y*, at the end of the roller. By this means the band may at any time be lengthened or shortened to suit the thickness of the cigars desired by merely unwinding from or winding upon the shaft *s*. The band H, in its passage around the roller D, passes around two small metal rollers I I, which have their bearings in the plates C C, and are arranged substantially as shown in Figs. 2 and 3. In the lid B is an opening, *z*, large enough to show the main part of the roller D and allow the tobacco to be laid on the same through said opening. The roller D with its stops is so arranged that when at rest the recess *n* will be on the upper side.

The various parts of this machine may be made of wood, iron, brass, or other suitable material.

This machine is intended to make the cigar with a binder on ready for the molds. The binder is placed across the roller with the end in the curved recess *n* and the tobacco on top of the same. By now pressing down on the treadle G the cigar will be rolled and fall down an incline, J, into a hinged box, K, underneath, ready for the mold. Directly above the box

K in the table A is an opening, *w*, covered with wire-cloth, so that the operator can at any time see if the box is filled.

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

1. The combination of the plates C C, roller D, shaft *b*, lugs *e e'*, coiled spring *f*, sleeve *h*, toothed wheel *t*, shaft *s*, and lever *y*, all constructed and operating substantially as and for the purposes herein set forth.

2. The arrangement, with the mechanism

herein described for making cigars, of the table A with wire-cloth-covered opening *w*, hinged lid B with opening *z*, incline J, and hinged box K, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 13th day of August, A. D. 1872.

THEO. ERNST.

Witnesses:

ALBERT KOOTZ,
C. L. EVERT.