

*Martin V. McKinney's Machine for Folding, Wrapping,
And Heading Cigars.*

[23.]

Fig 4 119,040.

Patented Sep. 19, 1871.

Fig 2

Fig 3.

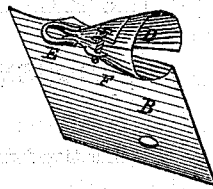
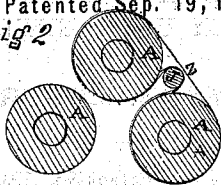
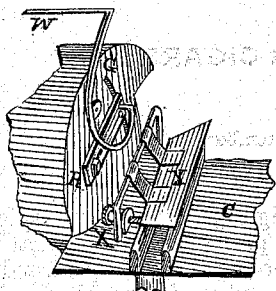
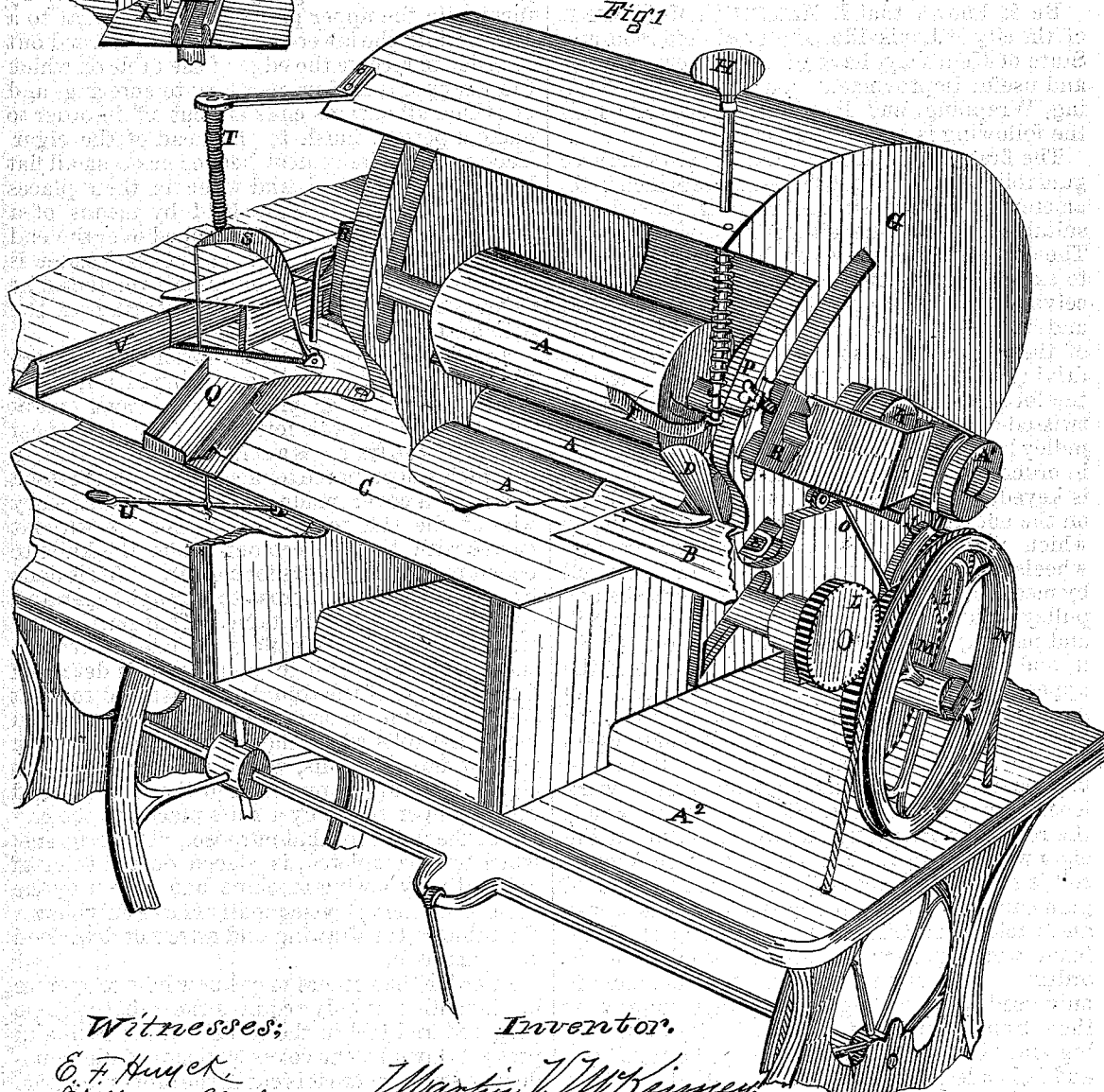


Fig 1



Witnesses;

E. F. Huyck
Willie F. Clarke

Inventor.

Martin V. McKinney

UNITED STATES PATENT OFFICE.

MARTIN V. McKINNEY, OF LOUISVILLE, KENTUCKY, ASSIGNOR OF ONE-HALF HIS RIGHT TO HENRY U. FRANKEL, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR MAKING CIGARS.

Specification forming part of Letters Patent No. 119,040, dated September 19, 1871.

To all whom it may concern:

Be it known that I, MARTIN V. McKINNEY, of the city of Louisville, county of Jefferson, and State of Kentucky, have invented a certain new and useful Improvement in a Machine for Folding, Wrapping, and Heading Cigars, of which the following is a specification:

The first part of this machine consists in three gum rolls about one and three-quarters inch in diameter and about six inches long, placed in a suitable frame, made either of wood or metal. The ends of the spindles of these rolls are made to extend outside of the frame sufficiently to receive the necessary driving-wheels or sheaves, and immediately under these spindles in the side of the frame there is a stud-pin, on which the driving-pulley works. This pulley is made in the form of a sheave on the face in order that a twisted-cord belt may be used. This driving-pulley has a long barrel-shaped hub on the inside in order to steady it, and on which a cog-wheel is keyed, which gears into other similar wheels on the end of the spindles of the lower rolls, by which they receive motion from the driving-wheels and by them transmit it to the upper roll by means of a twisted cord working over a sheave-pulley inside of the cog-wheel on the lower roll, and passing up over an idler immediately above it, and over a sheave-pulley on the end of the upper roll. The spindle or journal of this roll passes through a slot opening in the side of the frame, and works in the end of two small levers outside of the frame, one end of these levers being secured thereto in such a manner as to work loosely on pins screwed into it, so as to permit the roll to be raised up in order to take out the cigar when finished. This roll and the back lower roll is sometimes covered with a band made of gum canvas. This band passes over the upper and back lower rolls with the inside part of the band working over outside of a small idler in order to hold it out of the way. This band is only used when rolling fine cuttings, to prevent them from passing out over the back roll in folding and heading, which is done by the rolls first, and is headed by a small device fitted in a hole in the frame exactly in the center of the space between the rolls with the large part to the rolls. This device for heading is made out of a small piece of sheet-brass, somewhat in the shape of a cone cut through the center, so as to be in two

pieces, and made slightly open at one side by turning in the upper part somewhat similar to a scroll, while the lower edge is slightly turned out in order to receive the edge of the table on which the wrapper is laid preparatory to entering, and on which all surplus ends are cut off in order to make a perfect finish to the head of the cigar. Each part of the conical header has a small flat lug on the small end, and when in their places lie flat together, and are held by means of a strong clevis-shaped spring slipped over the end outside of the frame. This cone or header is made so as to be adjustable, and is regulated by a temper-screw at the side, the spring on the ends yielding as it expands or closes up.

The second part of this invention relates more especially to the operating table, which is made in the form of an L, projecting in front and at the left side. On this left side of the table, near the end of the frame, is a small adjustable trough, in which the prepared tobacco is laid and pressed down by a cover made to slide on a stationary wire at the side to hold it in its place while it moves with the tobacco out under the knife to be cut in proper lengths for a cigar. This is done by a knife working across the trough, operated by a treadle under the table. That part of the trough outside of the knife is intended to receive the cut and deliver it to the rolls; it is detached from the rest of the trough and fastened to a flat piece of metal, so arranged as to turn around facing the rolls where the cut is discharged from the box into the rolls, where it is formed into a cigar, the wrapper put on, and the end trimmed in the proper shape by a knife placed at the corner of the frame for that purpose. This machine, when thus completed, is placed on the table of any ordinary sewing-machine and driven by the same machinery; consequently I have only shown the table in the drawing and have not described any part of it.

In order that others may know how to operate my invention, it only requires the tobacco to be prepared and laid in the trough on the table and pressed down by the cover, and moved along under the knife, where it is cut in the proper lengths, dropped in the box, carried around and delivered to the rolls. It is there formed, the wrapper put on, and the head completed by means of the conical header at the end of the rolls; the upper roll being made adjustable is easily raised, when the

cigar can be taken out. It is by means of this adjustable roll that the cigar is shaped, the ends of the roll being raised or lowered as the case may require; and it is also by this means that the cigar is pressed up against the header in order to finish the end, when it is taken out completed.

Having thus fully described the nature and object of my invention, a more complete understanding of it may be had by reference to the drawing.

Figure 1 is a perspective view of the machine, with a part of the table and frame left out in order to show the rolls and interior machinery. Fig. 2 is a sectional view of the rolls, showing the gum-canvas belt and idler over which it passes. Fig. 3 is a view of the adjustable header with the table plate in front. Fig. 4 is a view of the operating table and left end of the frame, showing the tobacco-trough and handle by which the upper roll is raised.

In the drawing, A A A are the rolls. B is the header-table. C is the operating table. D is the adjustable header. E is the clevis-shaped spring on the end of it. F is the set-screw, by which it is adjusted. G is the frame of the machine. H is the handle of the trimming-knife. I is the knife on the lower end. J is the idler, over which the band Z passes. K K are the sheave-pulleys on the rolls. A' is an idler, over which the cord band passes. L L are cog-wheels on the end of the lower rolls. M is the main driving cog-wheel.

N is the sheave-pulley. O is a cord belt. P is a set-screw. Q is the movable box on the table for feeding the machine. R R are the levers of the upper roll. S is the knife for cutting the tobacco. T is the spring for raising it. U is the treadle by which it is operated. V is the side of the tobacco trough. W is the handle by which the upper roll is operated. X, the set-screws in the side of the tobacco-box or trough. Y is the sliding cover of the trough. Z is the gum-canvas band on the rolls.

Having thus described the drawing, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the slotted frame G, the adjustable upper roller A having levers R R and handle W, the lower rollers A A and header D, all constructed and arranged substantially as described.

2. The conical header D, formed of two parts, connected at their smaller ends by spring E and adjusted by set-screw F, substantially in the manner and for the purpose set forth.

3. An adjustable tobacco trough, provided with sliding cover Y, in combination with a swinging box Q, substantially as described.

MARTIN V. MCKINNEY.

Witnesses:

E. F. HUYCK,

WILLIE F. CLARKE.

(23.)