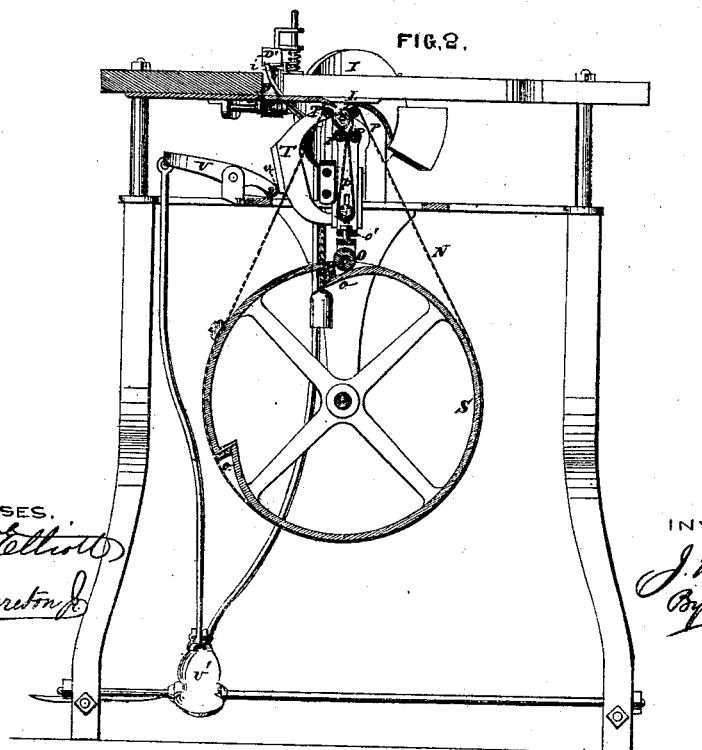
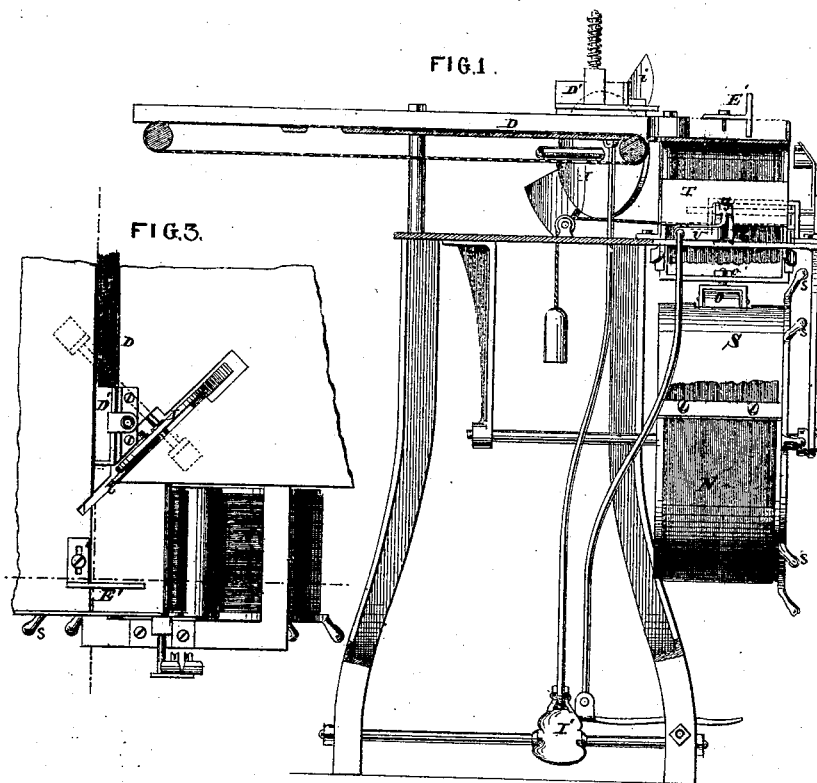


J. WETTSTEIN.
MACHINE FOR MAKING CIGARS.

No. 115,002.

Patented May 16, 1871.



WITNESSES.

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JOHN WETTSTEIN, OF BALTIMORE, MARYLAND, ASSIGNOR TO HIMSELF
AND JOHN T. HENNAMAN, OF SAME PLACE.

Letters Patent No. 115,002, dated May 16, 1871.

IMPROVEMENT IN MACHINES FOR MAKING CIGARS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN WETTSTEIN, of the city of Baltimore, in the State of Maryland, have invented a new and useful Improvement in the Machinery for Making Cigars; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side view of my improved machine;

Figure 2 is an end elevation of the same; and

Figure 3 is a plan of a part thereof.

The improvement which I desire at this time to patent is an improvement on the machinery described in the specification of Letters Patent of the United States issued to myself and J. Thomas Hennaman on the 23d November, 1869, numbered 97,255, and consists, mainly, in simplifying the means of producing a finished cigar, as therein described.

By referring to said Letters Patent it will be seen that, although it was intended to finish a cigar on one machine, yet, in order to do so, it was necessary, after wrapping the binder round the filling, to reverse the motion of the machine, so as to obtain enough space on the revolving band N to complete the wrapping, unless, perhaps, the operator pressed the lower end of the lever S, fig. 2, inconveniently low, increasing his or her labor.

The result was that, in practice, the machine was divided, and one part used to bind the filling or lump, as it is called in the original specification, and the other to complete the cigar by wrapping the bound filling into the proper shape. This led to the idea of so perfecting the machine as to complete the cigar without interrupting the process of making it, by passing it from one machine, or part of the same machine, to another. This I have accomplished in the following manner.

In the first place, and following the process of making a cigar in my description, instead of a wheel revolved by gearing, and carrying a knife that cut off the amount of filling required as it was forwarded from the groove or channel D, I use a knife, *i*, with a curved cutting-edge, at one end of a lever, I, pivoted and counterbalanced so as to hold it up till wanted, when it is brought down by the foot of the operator bearing on a treadle, I', to which the lever is connected.

In the original specification the wheel carrying the knife required to be kept constantly revolving.

In my improvement the knife is brought down only at the instant it is wanted, the counter-balance raising the knife when the cut has been made.

In the former patent the specification describes two feeding-rollers that forwarded the tobacco from the groove or channel D, and steadied it under the edge of the knife.

In my present improvement these rollers are dispensed with, and I use a clamp or presser, which the operator presses by hand when enough tobacco has passed beyond the opening for the movement of the knife for a filling or lump, and retains it firmly until cut off, as above described.

This clamp is shown in the drawing at letter D' held up by a spiral spring when not in use.

The length of the filling is regulated by a guide-plate, with a set-screw moving in a slot, shown in the drawing at the letter E'.

In the machine first patented as aforesaid, after the filling had been cut off, it was placed in the jaws formed by the upper and lower pairs of rollers shown in the original drawing, fig. 4, at L L' M M', over which rollers passed the moving band that rolled the cigar into shape, binding and wrapping it; but the movement of this band was limited, as already said, by the lever S, so that, after the filling was bound, it had to be taken out, in practice, and the moving band turned back, as it were, by raising the lower end of the lever, so as to gain space on the band, to which the bound filling might be returned and the cigar wrapped and finished by again depressing the lever S.

To obviate the practical inconvenience that experience proved to exist in this particular, I have substituted a drum, S, with spokes *s* on its outer edge, within easy reach of the hand of the operator, enabling him or her to continue the movement of the moving band N by applying the hand to the spokes in succession until the filling has been first bound and afterward wrapped, making, as the drum S moves in one direction, what is called a right-hand cigar, and when its motion is reversed a left-hand cigar, the two cigars being merely bound and wrapped in opposite directions.

In the specification of my original patent the lower rollers M' and M, above referred to, were stationary vertically, and one of them opened and closed from and toward the other. This was found not to be the best mode of construction, looking to the various sizes of cigars.

My improvement in this respect consists in fixing the lower rollers P in a frame, *p*, at a proper distance from each other, the said frame *p* being movable vertically in this wise:

An arm projects downward from the bottom of the frame, and has at its lower extremity a friction-roller, O, that falls at the proper times into depressions *o* in the surface of the drum S, and thus lowers and raises the frame by a species of cam movement.

When the operator moves the drum, in the operation of binding and wrapping, the depressions in the drum cause the proper contemporaneous movement in the rollers in question.

Inasmuch as it is necessary, having regard to the various kinds of cigars to be manufactured, that the movement vertically of the lower rollers should be under control, this is accomplished by a set-screw, *o'*, on the friction-roller, that works upon the drum as aforesaid.

In the original specification the upper rollers were closed after the filling was placed in the jaws by the movement of one of them, produced by the complicated contrivance shown in the drawing of the first patent. (See fig. 4.)

In my present improvement I dispense with this and use a lever, *U*, with a friction-roller, *u*, at its upper arm pressing against the frame that carries the upper movable roller *T'*, or the jaw *T*, carrying the same toward or away from the stationary upper roller *L*, the lever being worked by a treadle, as shown in the drawing at letter *U'*.

Intending improvements on the original machine, I have not deemed it necessary to reiterate the specification thereof at this time, but refer to it whenever necessary to illustrate or explain my present invention.

What I claim in the above, and desire to secure by Letters Patent, is—

1. In combination with the groove or channel *D*, for containing the tobacco to be forwarded, an end-

less band, forming the bottom of the said groove, and a clamp, *D'*, for holding the tobacco near the point where it is to be cut, the knife *i* so mounted as to move in a plane oblique to the channel *D*, to cut the filling with tapered ends, and provided with a counter-balance to retract said knife automatically, in readiness for a new cut.

2. The combination of the lever *U*, treadle *T*, (with its connecting-rod,) and the movable upper roller *T'*, controlled by said lever and treadle, with the fixed rollers, and endless band *N*, as and for the purposes set forth.

3. The hand-wheel *S*, constructed with projecting spokes, in combination with the endless band *N* and rollers *P*, *P'*, *L*, and *T'*, the whole being arranged for reversed or alternate movement, as and for the purposes described.

4. The combination of the wheel or drum carrying the movable band, with the recesses or cavities on the surface thereof, whereby the lower rollers are raised or depressed in the manufacture of the cigar, and the frame carrying said rollers.

JOHN WETTSTEIN.

Witnesses:

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CHAS. G. KERR.