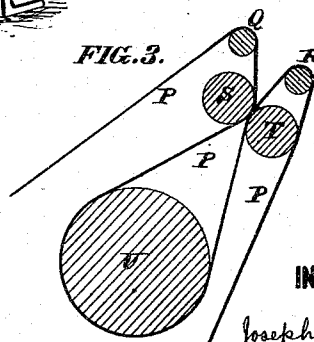
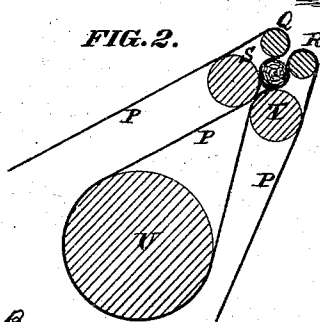
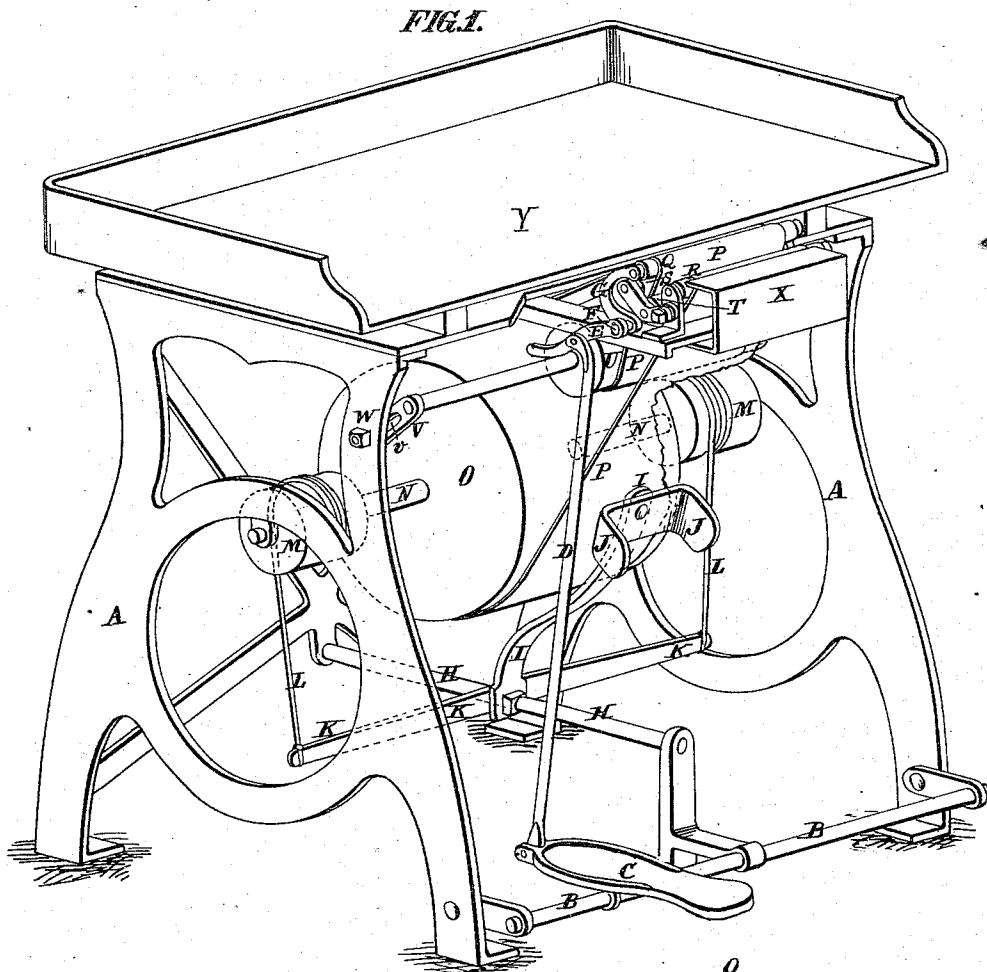


J. WETTSTEIN, Dec'd.
 JOSEPHINE WETTSTEIN, Admr'x.
 Cigar-Machine.

No. 160,492.

Patented March 2, 1875.



ATTEST:

Robert Burns.
 Henry Farmer.

INVENTOR:

Josephine Wettstein Admr'x. of
 John Wettstein Dec'd.
 By Knight Bro. Attys.

UNITED STATES PATENT OFFICE.

JOSEPHINE WETTSTEIN, OF HIGHLAND, ILLINOIS, ADMINISTRATRIX OF
JOHN WETTSTEIN, DECEASED.

IMPROVEMENT IN CIGAR-MACHINES.

Specification forming part of Letters Patent No. **160,492**, dated March 2, 1875; application filed
July 21, 1874.

To all whom it may concern:

Be it known that JOHN WETTSTEIN, late of Highland, Madison county, Illinois, invented certain Improvements in Cigar-Machines, of which the following is a specification:

This machine is intended especially for the purpose of applying the binder to the filler or lump, and in various respects it may be considered as an improvement on Patents Nos. 97,255 and 115,002, granted to said Wettstein and J. T. Hennaman, dated respectively November 23, 1869, and May 16, 1871. In the former cases, special mechanism was provided for bunching the tobacco, or furnishing it in proper quantity and form to the rolling device, by which the lumps or fillers were compressed and rolled into proper form, the said rolling device consisting of an endless belt or belts wrapped around rollers, and which, in various modifications, is present in all three cases. In the present improvement the special bunching mechanism is dispensed with, the bunch being placed directly into the rolling device, and the binder applied to it by introduction of the end of the binder and rotation of the bunch.

The improvement in the present case consists in, first, the combination of the movable pressure-roller, three fixed rollers, and endless belt with the curved lever, in whose ends the movable roller is journaled, and the treadle by which said movable roller is forced inward to compress the bunch. In the Patent No. 115,002 this motion was had by a somewhat complicated arrangement, differing materially from the device here shown; the lower rollers, also, in that patented device being movable, while in the present case they are fixed.

The second part of the improvement consists in the combination of the drum, to which the apron-belt is fixed, (and from which it receives motion,) a shaft, to which the drum is attached, and pulleys, with right and left hand belts, which are wound upon said pulleys and extend to the ends of a cross-lever on a rock-shaft, having an upwardly-extending arm carrying a knee-stirrup, by which the drum is oscillated, to cause the movements of the apron-belts upon the pressure-rollers in rolling the

lump or filler. This construction has great advantages over that of the former patents, where the apron-belt was actuated by hand.

In the present improvement both of the hands are left free to handle the tobacco, and it is not necessary to stoop to apply the hands to the lever S of Patent No. 97,255, or drum S of Patent No. 115,002.

In the former patents the pressure-rollers lie transverse to the machine, so that their ends are toward the operator; whereas, with the present machine, the sides of the rollers are toward the operator, and they are placed directly in front of the operator, so that, with both hands free, he can apply the binder to either end of the lump or filler, and wrap it thereon with a right or left hand coil alternately, a single motion of the knee-lever to right or left sufficing to apply the binder to the lump or filler.

Figure 1 is a perspective view of the improved machine. Fig. 2 is a diagram, showing the operation of the rolling device. Fig. 3 shows the rolling device open for reception of a bunch.

A is the frame. B is the treadle-bar, on which the treadle C is hinged. D is the treadle-pitman, connecting the treadle to a lever, E, on a rock-shaft, F, carrying two curved arms, G, in whose ends the moving pressure-roller Q is journaled. H is a rock-shaft, pivoted in the frame, and carrying a knee-lever, I, by which it is rocked. The lever I has a knee-stirrup, J, to receive the knee of the operator. K is a cross-lever upon the rock-shaft H, and to the ends of this lever are attached cords or belts L, which are coiled around and have their ends attached to the pulleys M upon the ends of the rock-shaft N. The rock-shaft N carries a drum, O, around which passes an endless belt or apron, P, which is secured to the drum at one point to prevent it slipping thereon. From the drum the apron-belt passes up to and over the rollers Q R, the latter of which turns in stationary bearings, and the former of which is journaled in the ends of the arms G. From the rollers Q R the belt P runs down between rollers S T, which turn in fixed bearings, and from the rollers S T the belt extends down be-

neath the roller U, which is journaled in brackets V, secured to the frame by screw-bolts W, passing through slots *v* in the brackets, so as to allow the roller U to be adjusted to regulate the tightness of the belt P. X is the feed-rest for the binder, and Y is the table for the tobacco.

The operation is as follows: The operator inserts the lump or filler within the belt, between the rollers Q R S T, and the roller Q is forced inward, as seen in Fig. 2, by the treadle C, which acts through the pitman D, lever E, rock-shaft F, and curved lever G, to thus close the roller Q on the filler. Then, by moving the knee-lever I to one side, the bunch is rotated. The end of the binder is then introduced between the rollers Q R, and will be wound around the bunch either in a right or left hand coil, according to the direction in which the knee-lever is moved in applying the

binder as it lies on the table X. The treadle is then released, and the roller Q is moved out by the weight of the treadle, when the bound filler or bunch may be removed.

The following is claimed as new, and as the invention of said JOHN WETTSTEIN:

1. The movable roller Q, fixed rollers R S T, and belt P, in combination with the arm E, rock-shaft F, arms G G, rod D, and treadle C, for adjusting the roller Q, as and for the purpose set forth.

2. The drum O, shaft N, and pulleys M, in combination with belts L, cross-bar K, and knee-lever I J, for operating the drum O, as and for the purpose specified.

JOSEPHINE WETTSTEIN,

Administratrix of John Wettstein, dec'd.

Witnesses:

JOHN BLATTNER,

GUST. BREPPLA, Jr.