

George W. Tanner,
Imp^t in Cigar Machines.

117482

PATENTED JUL 25 1871

Fig. 1.

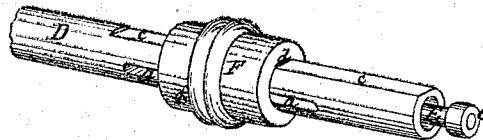


Fig. 2.

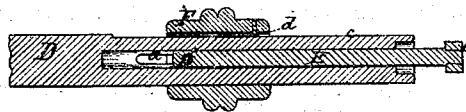
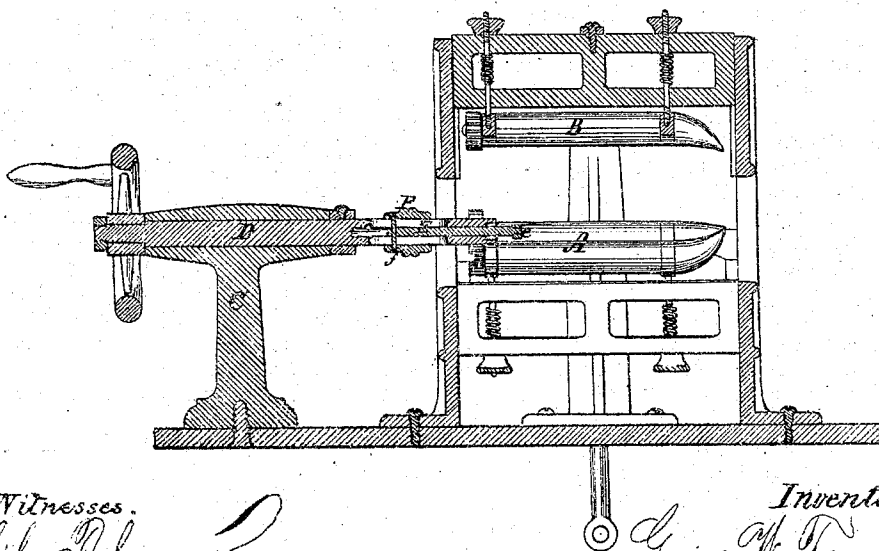


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE W. TANNER, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN CIGAR-MACHINES.

Specification forming part of Letters Patent No. 117,482, dated July 25, 1871.

To all whom it may concern:

Be it known that I, GEORGE W. TANNER, of the city and county of Providence and State of Rhode Island, have invented a certain new and useful Improvement in Cigar-Machines.

My improvement relates to that class of machines which has a separate set of bed-rollers and pressing-rollers; and consists in combining with said rollers and their main shaft an adjustable frictional gauge-rod; and I do hereby declare that the following specification, taken in connection with the drawing furnished and forming a part of the same, is a clear, true, and exact description thereof.

Referring to the drawing, Figure 1 represents, in perspective, a portion of the driving-shaft with my improved adjustable frictional gauge placed therein. Fig. 2 represents the same in longitudinal vertical section. Fig. 3 represents, in longitudinal vertical section, a machine in which my gauge is employed.

My improvement is particularly adapted for use with the machine substantially as described in the Letters Patent granted to myself and F. D. Bliss, July 5, 1870. That machine is represented and described in said patent as being provided with a forked spindle located longitudinally in the center of the main shaft, and with its projecting or forked end surrounded by the several rollers.

A represents the several bed-rollers, and B the pressing-rollers. C is a standard, sustaining the main or driving-shaft D, to the end of which a crank is attached. E is the frictional gauge-rod, fitted to a cylindrical recess within the main shaft. Its head *e* is a smooth-faced disk. F is a circular knob, fitted to the exterior of the main shaft and secured to the frictional gauge-rod stem by the pin *f*, which passes through a longitudinal slot, *a*, in the main shaft. The exterior of the main shaft on one side is flattened, forming the plane surface *c*. Within the knob F is a flat spring, *d*, which presses with frictional contact against the plane surface, and by such contact holds the gauge-rod in any desired longitudinal position. By this arrangement it is adapted for use in the

manufacture of long or short cigars, and leaves the operator free to use his hand, after having adjusted the gauge-rod, for the rolling or making of the filler, and then, when the wrapper has been applied, the gauge-rod may be again set, so as to force the cigar against fingers, which form the tip. By adding this device to the machine, substantially as described in the patent referred to, with rollers partially roughened or longitudinally corrugated, it will perform the entire operation of making the cigar excepting the cutting or squaring of the fire end, which may be done in any of the well-known methods.

I am aware that forked spindles have heretofore been used in combination with a longitudinally-acting spring for forcing it out of the main shaft against the filler embraced by the rollers; and also that a similar device without frictional application has been used as a forcing-rod, as is, for instance, exhibited in the Letters Patent granted to myself and F. D. Bliss, dated July 26, 1870.

In the case of the spring-spindle first referred to a continual pressure is exerted longitudinally against the tobacco in the rolls. When a short cigar is being made the pressure is lessened, because the spring is more completely extended. When a long cigar is being made the pressure is increased, for the spring is shortened or compressed. Therefore the tips of the cigar would be made with an unequal compression and varied in form. With my improvement the results are more uniform, as the gauge-rod is set by the hand and eye to suit each particular cigar while being made.

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

The gauge-rod E, provided with a disked head, a knob, and a frictional device, in combination with the main shaft and the several rollers of a cigar-machine, substantially as described, for the purposes specified.

GEORGE W. TANNER.

Witnesses:

CLINTON D. SELLEW,
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