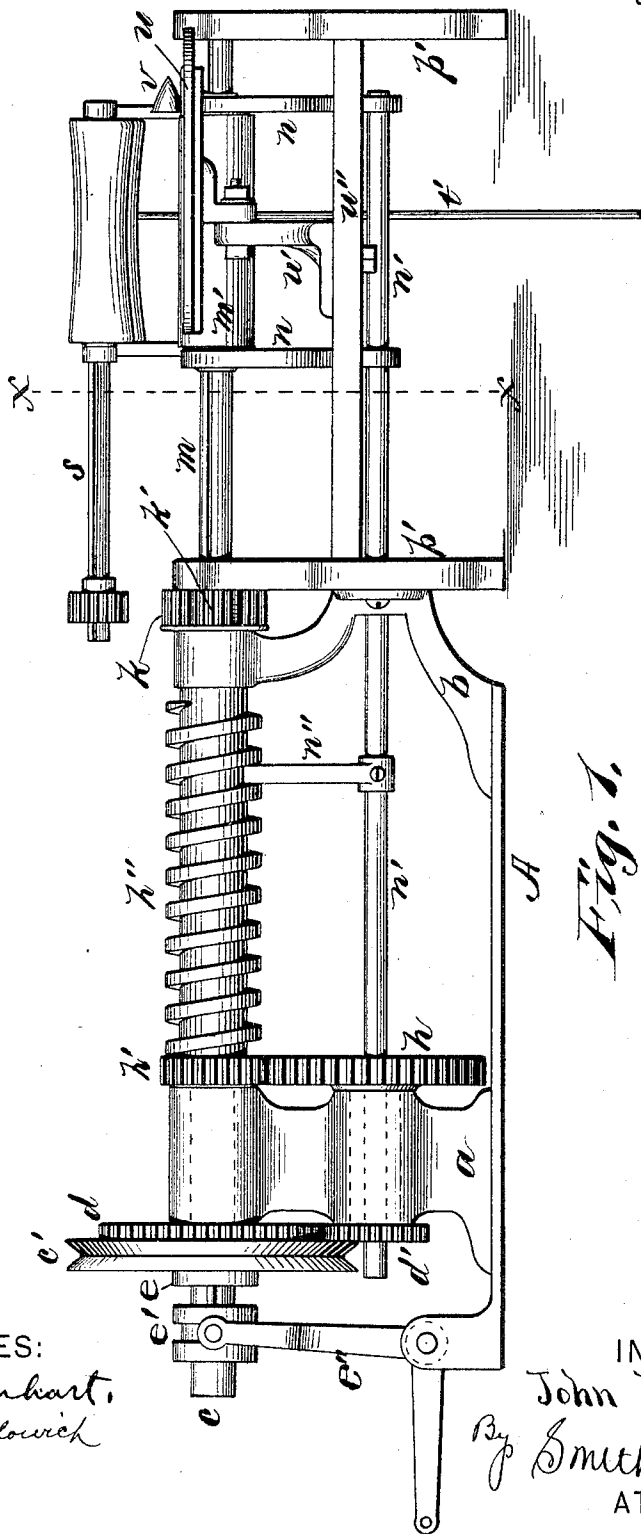


J. BUNN.
CIGAR MACHINE.

No. 581,692.

Patented May 4, 1897.



WITNESSES:
H. A. Carhart,
Eva Kopilowich

INVENTOR
John Bunn,
By Smith & Benson
ATTORNEYS.

(No Model.)

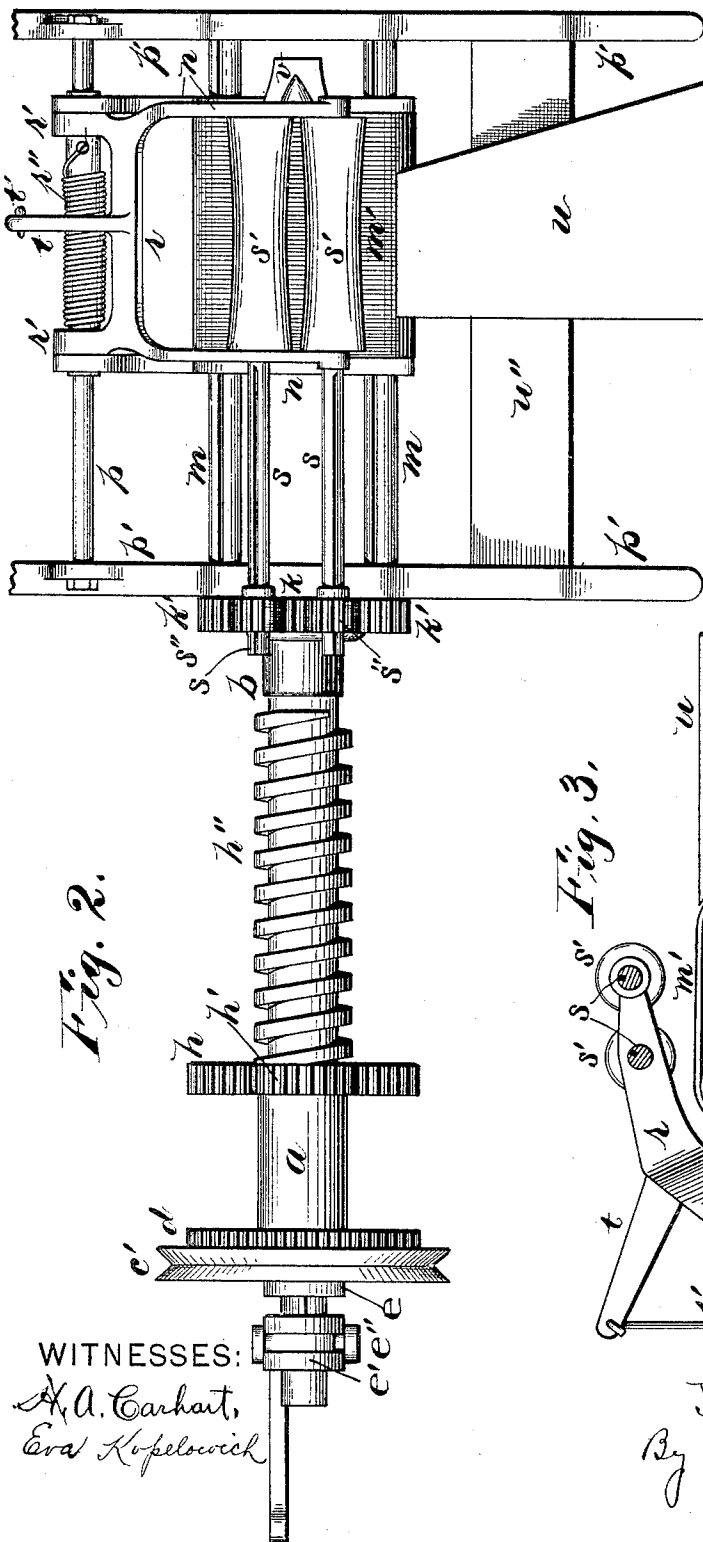
2 Sheets—Sheet 2.

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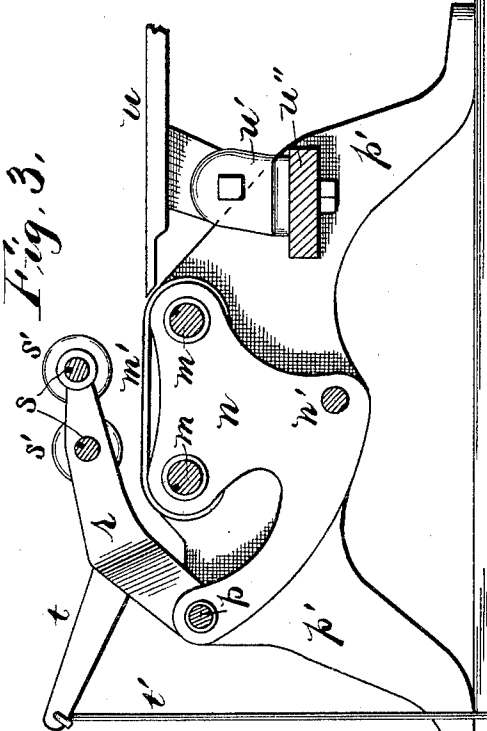
Fig. 2.



WITNESSES:

A. A. Carhart,
Eva Kopelovich

Fig. 3.



INVENTOR

John Bunn,
By Smith & Benson
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN BUNN, OF BINGHAMTON, NEW YORK.

CIGAR-MACHINE.

SPECIFICATION forming part of Letters Patent No. 581,692, dated May 4, 1897.

Application filed July 27, 1893. Serial No. 481,594. (No model.)

To all whom it may concern:

Be it known that I, JOHN BUNN, of Binghamton, in the county of Broome, in the State of New York, have invented new and useful
5 Improvements in Cigar-Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to cigar-machines.

My object is to produce an improved machine for this purpose in which the filling previously made and rolled into the binder is placed upon an endless apron driven by power, and the frame carrying the apron and bunch
15 is fed longitudinally, while being rotated, onto and into the wrapper, beginning at the tuck end and finishing at the head of the wrapped cigar, the wrapper-table remaining stationary while the wrapper is being drawn off from it
20 as it is wound onto the bunch. In this respect my machine differs from those in which the wrapper-table is moved longitudinally along the bunch, feeding the wrapper from one end of the bunch to the other, the bunch
25 holding and rotating mechanism remaining stationary, so that I accomplish the rolling by the combined longitudinal and rotary movement of the bunch.

My invention consists in the several novel
30 features of construction and operation hereinafter described and which are specifically set forth in the claims hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

35 Figure 1 is a side elevation. Fig. 2 is a top plan. Fig. 3 is a sectional elevation on line *x x*, Fig. 1.

A is the bed, upon which the standards *a b* are erected. In the standard *a* the drive-shaft *c* is journaled, and *c'* is the drive-pulley, and *d* is the drive-gear, both of which are
40 loose upon said shaft, the hub *e* of the drive-pulley constituting one member of a clutch, of which *e'* is the other, both being of ordinary construction, and *e''* is a bell-crank lever for
45 operating the clutch member *e'*. The gear *d* drives the pinion *d'*, and this, through the sleeve shown in dotted lines, journaled in the standard *a*, drives the gear *h*, the pinion
50 *h'*, and the worm *h''*, which worm is journaled in the standards *a* and *b*. A gear *k*,

secured upon the worm, drives the pinions *k'*, splined into the shafts *m*, and *m'* is an endless apron carried by drums splined onto the shafts *m* and secured to the side pieces *n*,
55 which constitute the frame hereinafter spoken of, their lower arms being secured to the propelling-rod *n'*, to which the arm *n''* is secured, in engagement with said worm, so that the rotation of the worm rotates said apron and
60 also causes the frame to traverse the shafts which carry it.

The rear upper arms of the frame are loose upon the guide-rod *p*. Secured in the standards *p'* and *r* is an upper or auxiliary frame,
65 its rear arms *r'* being also loose upon said guide-rod and within the main frame, and *r''* is a spring secured to and coiled around said rod and having its free end in engagement with the auxiliary frame to force its front end
70 down. In the front arms of said auxiliary frame shafts *s* are journaled, upon which the concave and straight rollers *s'* are secured, and *s''* are pinions splined onto these shafts and driven by the drive-gear *k* upon the worm-
75 shaft to rotate said rollers.

By means of an arm *t*, secured to the auxiliary frame, and a connecting-rod *t'*, connected thereto and to a suitable treadle, (not shown,) the front of the auxiliary frame is
80 lifted to permit of the placing of a bunch upon said apron, which lies partly between the rollers when they are lowered. The wrapper is placed upon the stationary table
85 *u*, supported by and pivoted upon a standard *u'*, carried by the cross-bar *u''*.

One end of the bunch is inserted into the concave head-holder or header *v* upon the table, which holds said bunch in position while it is being rotated by the travel of the
90 apron and between the rotating rollers, and then when by the action of the worms the frame is traversed as aforesaid the head is drawn out from said holder, so that the wrapper can be rolled or wound onto it. This rotation winds and rolls the wrapper onto the
95 bunch, and the travel of the frame carrying the bunch along the wrapper is completely rolled onto the bunch, and the cigar is finished, except that the wrapper must be secured at the head of the cigar. This longitudinal movement of the bunch effects the
100

rolling of the wrapper onto the bunch by the feeding of the bunch into it in the same manner as a cigar is rolled by hand.

It will be readily seen that when the cigar is rolled the clutch is operated to stop the operation of the worm and the operator can remove the finger *n''* from engagement therewith and then slide the frame back by hand ready to receive another bunch.

This invention is shown but not claimed in the patent issued to myself and others March 5, 1895, No. 535,048.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a cigar-machine, a stationary main frame suitably supported, a stationary wrapper-table mounted thereon, and a guide-rod across the rear of said frame, in combination with a bunch-carrying frame mounted upon and adapted to traverse the main frame, and engaging with said guide-rod, an auxiliary frame pivoted upon said guide-rod, and comprising side pieces, shafts journaled therein, and wrapper-rolling rollers mounted upon

and rotated by said shafts, and means to reciprocate said traversing frame upon said guide-rod and longitudinally across the end of the wrapper-table.

2. In a cigar-machine, the combination with the main frame, the guide-rod thereon, and the wrapper-table upon the main frame, of a traversing bunch-carrying frame, connected to and guided by said guide-rod, an apron upon the traversing frame, an auxiliary frame pivoted upon said guide-rod, and carried above the traversing frame, rotatable shafts journaled in the auxiliary frame, bunch-rolling and wrapper-winding rollers mounted upon said shafts, and means to simultaneously actuate said rollers and apron, and to reciprocate the traversing frame and rollers longitudinally upon said guide-rod and shafts.

In witness whereof I have hereunto set my hand this 7th day of June, 1893.

JOHN BUNN.

In presence of—

DAVID L. MAXFIELD,
C. H. HITCHCOCK.