

MEYER & SCHILD.

Cigar Machine.

No. 98,877.

Patented Jan. 18, 1870.

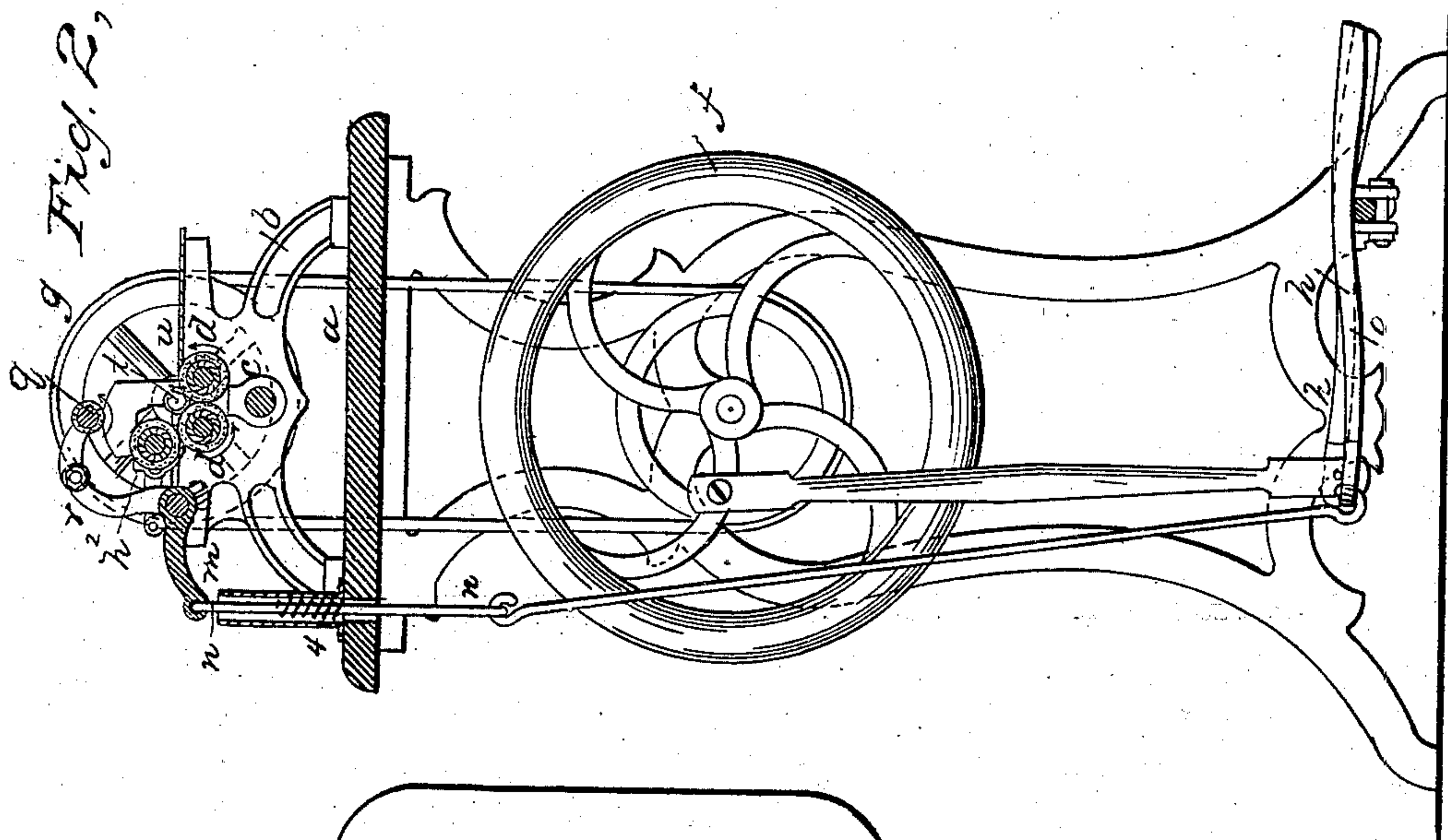


Fig. 1,

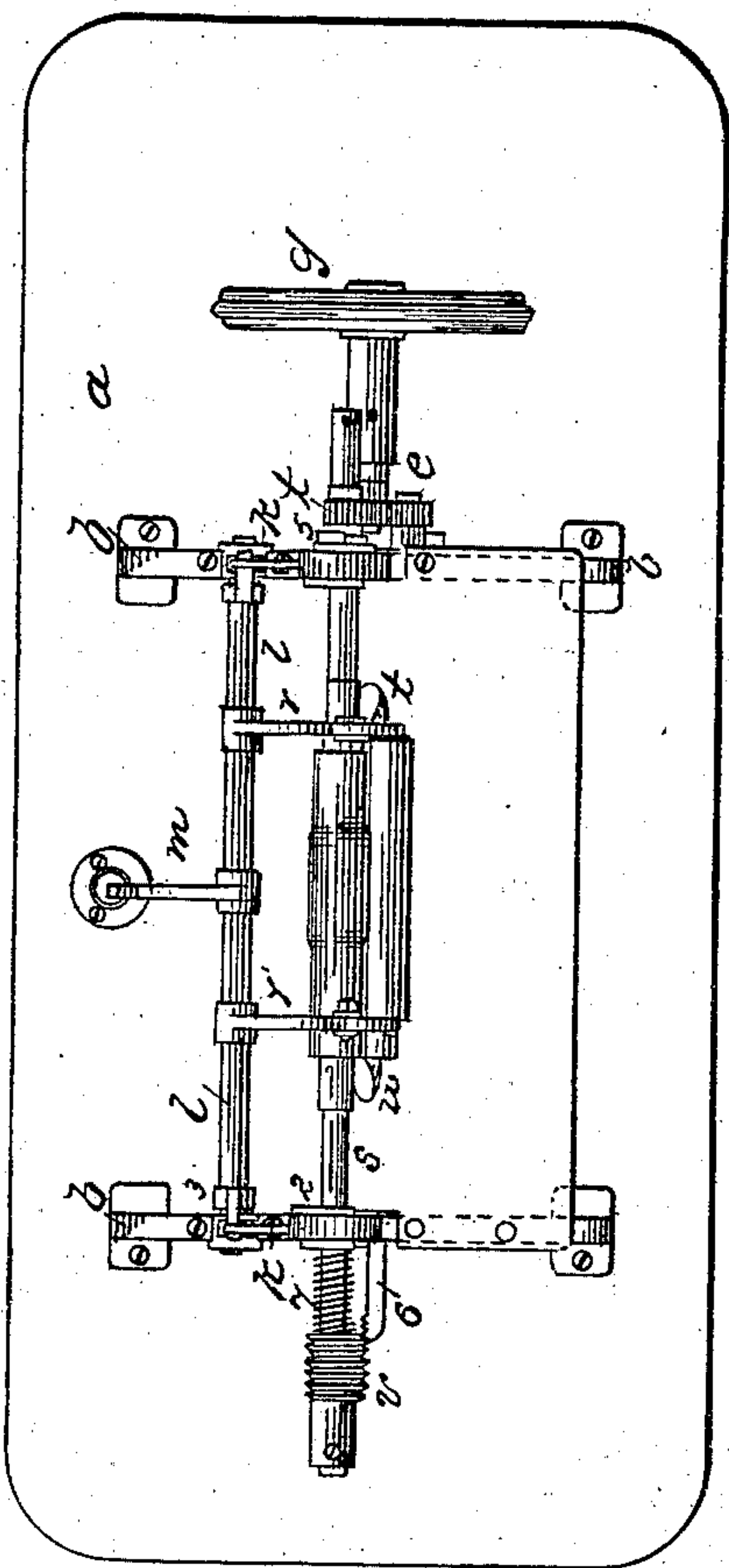
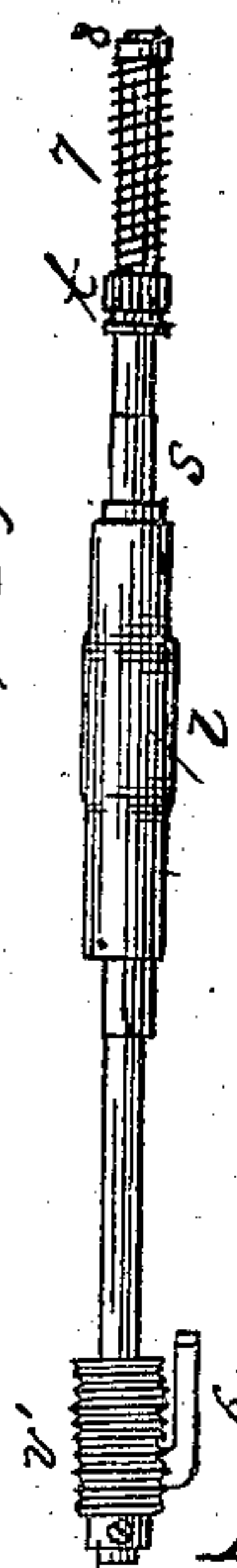


Fig. 3,



Witnesses:
 Chas. H. Smith
 Geo. W. Miller

Inventors:
 Fred Meyer
 Henry Schild
 by L. W. Schull

United States Patent Office.

FREDERICK MEYER AND HENRY SCHILD, OF NEW YORK, N. Y., ASSIGNORS TO GEORGE J. PRENTICE, OF SAME PLACE; SAID PRENTICE ASSIGNS TO LEWIS PRENTICE, OF NEW YORK CITY.

Letters Patent No. 98,877, dated January 18, 1870; antedated January 10, 1870.

IMPROVEMENT IN CIGAR-MACHINES.

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

To all whom it may concern:

Be it known that we, FREDERICK MEYER and HENRY SCHILD, of the city and State of New York, have invented and made a new and useful Improvement in Cigar-Machines; and we do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a plan of the said machine.

Figure 2 is a vertical section through the centre of the rollers, and transversely of the same.

Figure 3 is a plan of the endwise-moving roller, as fitted to move in the opposite direction to that in which it moves, as shown in fig. 1.

Similar marks of reference denote the same parts.

Cigar-machines have before been made in which four rollers are employed to roll up the bunch of tobacco, or to put on the wrapper in finishing the cigar, and these rollers have been fitted to open, for placing the tobacco between the rollers, and for removing the cigar; and to one of the rollers an endwise movement has been given, in order to press the tip of the cigar into the die that gives shape to the end.

Our invention relates to a means for accomplishing the end-movement of the said roller, in either one direction or the other, in a more simple manner than heretofore, and so that the act of opening the rollers for delivering the cigar shall liberate the mechanism that causes the end-movement, so that the roller will be returned to a normal position.

In the drawing—

a represents a table, on legs or a frame.

b b, the frames of the machine, secured to *a*, and tied together by the rod *c*.

d d are the lower standing rollers, rotated by gearing at *e*, and

f is the fly-wheel, with a belt to the wheel *g*, that drives the gearing, in any usual manner. The fly-wheel *f* may be driven by the treadle *h*, or otherwise.

The roller *i* is set in boxes 2 2, that can be slid back in the frames *b*, by the links *k*, to cranks 3, on the rock-shaft *l*. This rock-shaft *l* is operated by an arm, *m*, and rod *n*, to a treadle, *o*.

Upon the table *a* is a socket, through which the

rod *n* passes, and within the same is a spring, 4, that brings the parts to their normal position, and exerts the power that is required for causing the roller *q* (carried by the arms *r r* from *l*) to press with necessary force upon the cigar being made, and thereby cause said cigar to be of proper density for smoking, instead of too loose or too tightly pressed, when the foot-treadle is employed to give said pressure, as heretofore.

The shaft *s* of the roller *i* is fitted to slide endwise in its bearings 2 2, and the driving-pinion *t* rotates the same by a feather and slot, the pinion being held in position by a fork, 5, taking a neck in the pinion.

To give end-motion to the roller *i* and shaft *s*, so as to force the tip of the cigar into the die *t* on the bed *u*, as the wrapper is rolled around the same, we employ the screw-pinion *v*, taking the stationary teeth or rack 6, that is operative to give said end-movement by the act of revolving the rollers in making the cigar, and, when formed, the act of drawing back the roller *i* liberates the screw *v* from 6, and allows the spring 7 to give the roller the reverse end-movement to its normal position.

When the shape of the half leaf, forming the wrapper, is such that the tip of the cigar has to be pressed toward the left into the tip-die *w*, the screw *v* is removed, and the left-handed screw-pinion *v'* fig. 3, is substituted, and the spring 7 placed at the other end of the shaft *s*, between the pinion *t* and a collar, 8; thereby the movement is reversed.

What we claim, and desire to secure by Letters Patent, is—

The fixed rack 6, in combination with the worm-pinion *v*, shaft *s*, roller *i*, and sliding boxes 2 2, substantially as set forth, so that the pinion *v* is disconnected from the rack 6, by drawing back the roller *i*, as specified.

In witness whereof, we have hereunto set our signatures, this 20th day of April, 1869.

FR. MEYER.

HENRY SCHILD.

Witnesses:

CHAS. H. SMITH,

GEO. T. PINCKNEY.