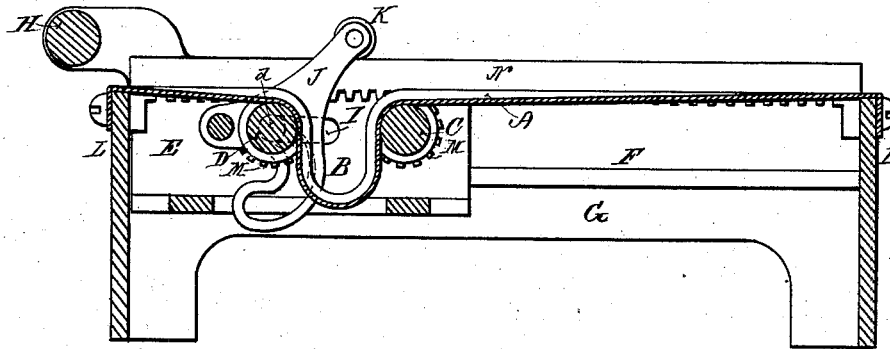


R. A. BRIGHT, Jr.  
Cigar Bunch Making Machine.

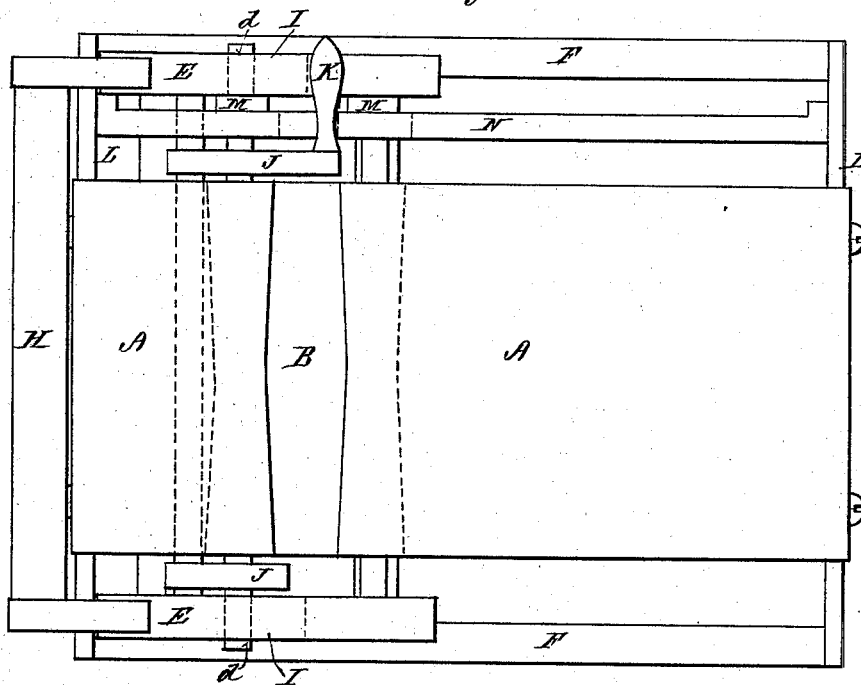
No. 217.261.

Patented July 8, 1879.

*Fig. 1.*



*Fig. 2.*



Witnesses.

*Socrates Scholfield*  
*James P. Randall*

Inventor.

*R. A. Bright, Jr.*

# UNITED STATES PATENT OFFICE.

RICHARD A. BRIGHT, JR., OF PROVIDENCE, RHODE ISLAND.

## IMPROVEMENT IN CIGAR-BUNCH-MAKING MACHINES.

Specification forming part of Letters Patent No. **217,261**, dated July 8, 1879; application filed September 11, 1878.

*To all whom it may concern:*

Be it known that I, RICHARD A. BRIGHT, Jr., of Providence, in the State of Rhode Island, have invented an Improvement in Cigar-Bunch-Making Machines, of which the following is a specification.

My invention relates to that class of cigar-bunch-making machines where a belt is employed, which is held in a bight between rolls, so as to form a pocket for receiving the fillers and rolling on the binder; and it consists in the employment of a flexible belt combined with either plain or hollowed rolls, which are to be suitably controlled in their movements by means of a rack and gears, or their equivalent.

Figure 1 is a longitudinal section. Fig. 2 is a plan view.

In the drawings, A is a flexible rubber belt, forming a cigar-shaped pocket, B, between the hollowed rolls C and D, which are suitably held in a carriage, E, made to move back and forth upon the slides F F of the frame G by means of a cross-bar or handle, H.

The bearings *d d* of the roll D are held in the opposite slots I I in the carriage E, and the roll D is moved back and forth, in order to open and close the pocket B, by means of the cam-lever J, to which is attached a handle, K. The belt A is secured at each end to the cross-pieces L L of the frame G.

To the shafts of the rolls C and D are attached the gears M M, which engage with the rack N, attached to the frame G. The gears M M and rack N serve to relieve the flexible belt A from the strain which would otherwise be thrown upon the belt alone when the carriage was moved back and forth with an inclosed filler.

In operating with this machine, the carriage is first to be brought back to the position shown in Figs. 1 and 2, with the handle of the

lever J thrown forward, thus opening the pocket B for the reception of the fillers. The binder is then placed upon the top of the belt, as usual in this class of cigar-machines, with one corner upon the fillers in the pocket B. The carriage is then to be pushed forward, the pocket B being first closed upon the fillers, and the binder will be rolled upon the filler in a proper and satisfactory manner. The pocket is then to be opened by means of the cam-lever J, and the bunch removed to the shaping-molds, as usual. The carriage E is then to be brought back, as before, and the operation repeated.

It is very desirable in cigar-machines to make a properly-tapered bunch, and to roll the binder thereon in a suitable manner, and it has not heretofore been practicable in a reciprocating machine to employ an elastic rubber belt for this purpose in combination with the rolls. The belts of such machines, when made of rubber, have therefore been made inelastic by means of a woven fabric, as usual in the manufacture of rubber cloth; but by the employment of the geared rolls C and D and the rack N, I am enabled to practically develop this improvement, and to roll the tapering bunches in a satisfactory manner.

Ordinary plain rolls similarly geared with the rack and with a non-elastic belt may also be advantageously employed in making straight cigars.

I claim as my invention—

The combination of the slides F F, reciprocating carriage E, rolls C and D, cam-lever J, belt A, gears M, and rack N, substantially as described.

RICHD. A. BRIGHT, JR.

Witnesses:

SOCRATES SCHOLFIELD,  
JAMES F. RANDALL.