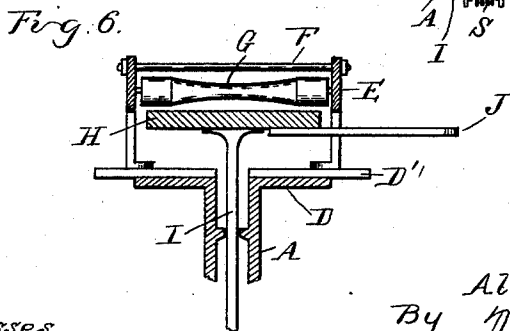
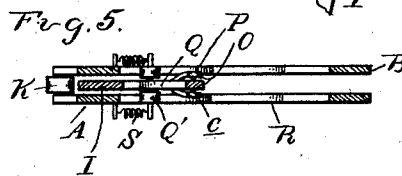
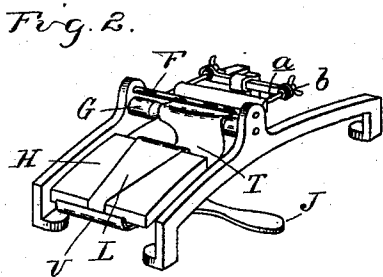
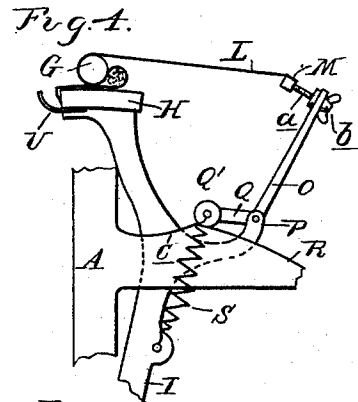
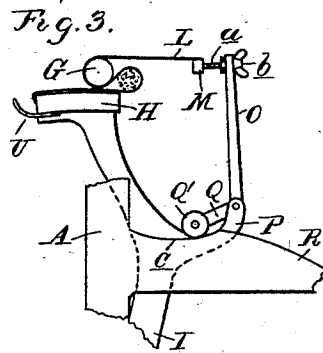
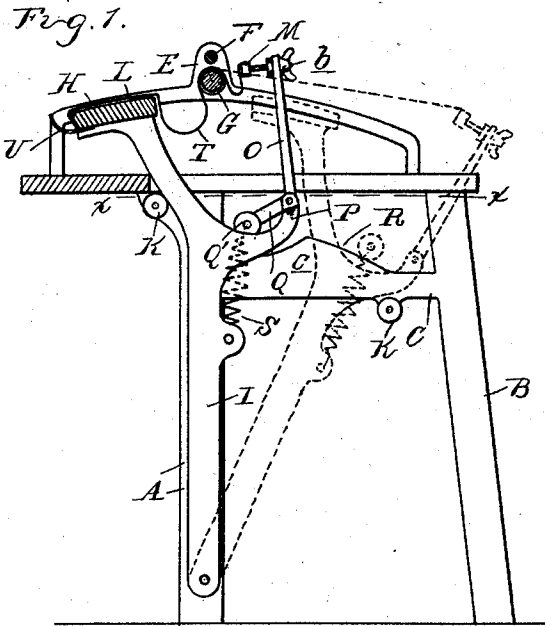


(No Model.)

A. SCHWEHR.  
CIGAR BUNCH MACHINE.

No. 524,565.

Patented Aug. 14, 1894.



Witnesses  
F. L. Hobby  
O. F. Barthel.

Inventor  
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By Thos. S. Sprague & Son  
Attys.

# UNITED STATES PATENT OFFICE.

ALBERT SCHWEHR, OF SANDUSKY, OHIO.

## CIGAR-BUNCH MACHINE.

SPECIFICATION forming part of Letters Patent No. 524,565, dated August 14, 1894.

Application filed January 27, 1894. Serial No. 498,186. (No model.)

To all whom it may concern:

Be it known that I, ALBERT SCHWEHR, a citizen of the United States, residing at Sandusky, in the county of Erie and State of Ohio, have invented certain new and useful Improvements in Cigar-Bunch Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the peculiar construction of the frame, oscillating, bunching table, and an apron, and a tension device or take up for the apron, carried by the bunching table support, and further in the construction, arrangement and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a longitudinal and vertical central section of my improved machine. Fig. 2 is a top perspective view of the same. Figs. 3 and 4 are elevations of the bunching table, apron and tension device showing the position of the parts at different points of the operation. Fig. 5 is a horizontal section on line  $x-x$  Fig. 1. Fig. 6 is a detail view of a section of the upper portion of the machine, taken through the table and brackets as shown in Fig. 1.

The frame of the machine consists of two separated posts A, at the front, the rear posts B, and the horizontal connecting bars C, preferably formed integral with the posts A. At the top of the posts are the side flanges or brackets D, to which is secured the table or top D'.

E are side frames secured to the sides of the table, and connected centrally by the cross bar F. Below the cross bar is the bunching roller G journaled in stationary bearings in the side frames.

H is the bunching table, which is supported at the top of the standard I pivoted in the lower end of the posts A, between the same, and is adapted to be oscillated by the handle J which projects to one side of the machine from the table.

K are rubber buffers which act as stops at front and back to limit the movement of the bunching table.

L is the bunching cloth or apron, tapering from its front end toward the rear, secured at its small end centrally on the front edge of

the bunching table, passing over the bunching roller and secured at its rear end to the bar M which is adjustably secured by the rods  $a$  and nuts  $b$ , to the tension or take up arm O. This arm is pivoted in a branch P of the standard I and has the actuating arm or lever Q carrying rollers Q' which bear upon the cam shaped way R on top of the connecting bars C, being held in contact therewith by the tension of a spring S.

The parts being thus constructed, the apron being adjusted to the desired length by the bolts and nuts  $a, b$ , the parts being in the position shown in Fig. 1 in full lines, the operator forms a pocket T in the apron between the roller and the rear edge of the table H, by depressing the apron, and into this places the necessary material to form the bunch. In this position, it will be seen that there is a slack portion or loop in the apron between the roller and the tension frame. The operator now takes hold of the handle J, and rocks the standard I on its pivot, carrying the table under the apron, and correspondingly moving the tension or take up frame. In this movement the roller Q' runs up the inclined face  $c$  of the cam way and rocks the tension arm sufficiently to take up the slack in the apron, as plainly shown in Fig. 3. The further movement of the table, rolls the bunch in the apron against the roller, and compacts and shapes it, and it is finally deposited in the trough U at the front edge of the table. As the table is moved under the bunching roller the roller Q' rolls on the cam way, which is so shaped as to take up the slack, as fast as formed by the compression of the bunch, and thus maintains the proper tension at every point, and yet gives desired slack to form the pocket between the roller and table, and prevents tumbling or shaking of the bunch while the pocket is being closed, yet taking up the slack so the rolling commences, with proper tension, as soon as the pocket is closed.

The roller G has the usual curved central portion over which the apron L passes. The apron, as stated, tapers toward the front point being in line with the center of the roll. By this means, as the table is moved below the roll and the tension applied, the apron will accommodate itself to the shape of the

roll and at the same time will be maintained under an even tension, thereby resulting in an even rolling effect to the bunch at all points during the formation thereof. A further advantage gained by tapering the apron is that which permits of an even adjustment thereof and uniform tension without the danger or annoyance of irregular tension or puckering and this whether the roller be curved or straight.

What I claim as my invention is—

1. In a cigar bunching machine, the combination with a bunching roller, a bunching table, and means for changing the relative position between the roller and table, of a movable tension device carried by the said changing means, and a tapered apron secured to the tension device and table respectively, tapered toward the table and passing over the roller substantially as described.

2. In a cigar bunching machine, the combination with a fixedly supported bunching roller, of an oscillating bunching table, an independently movable tension arm having an extension extending out at an angle from its lower end, a fixed cam with which said

extension engages, a swinging standard acting as a carrier for the table and on which the tension arm is pivoted, a spring connection between the standard and extension on the tension arm and an apron connected to the table and tension arm, substantially as described.

3. In a cigar bunching machine, the combination of a stationary bunching roller, an oscillating standard carrying the bunching table, an apron secured at one end to the bunching table, a rearwardly extending branch on the standard, a tension arm pivoted thereon to which the rear end of the apron is secured, a cam way, a projection on the tension arm engaging the cam for independently controlling the movement of said tension arm, whereby the slack in the apron is taken up at all points, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT SCHWEHR.

Witnesses:

OTTO KROMER,  
J. ERCKENER.