No. 648,699. Patented May 1, 1900.

C. F. MATSCHKE.

MACHINE FOR BOOKING TOBACCO LEAVES.

(Application filed Dec. 27, 1897. Renewed Dec. 21, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

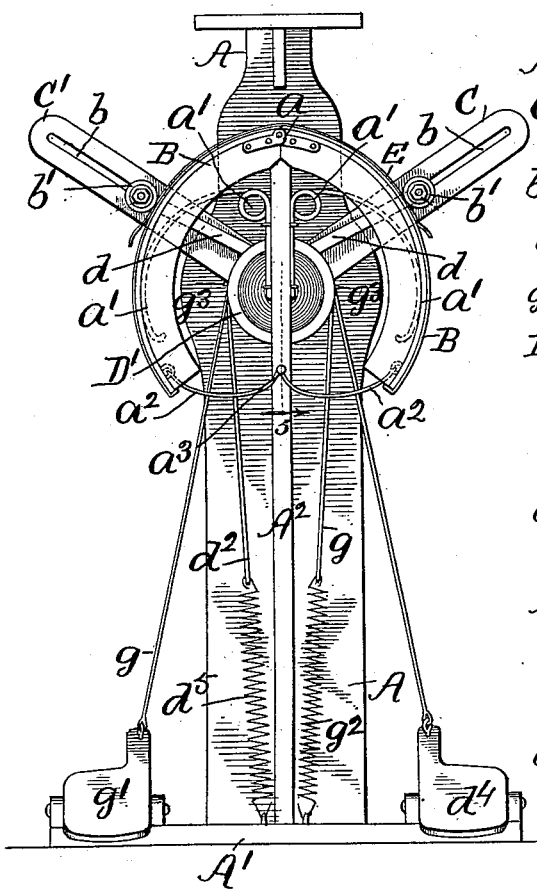

Fig. 2.

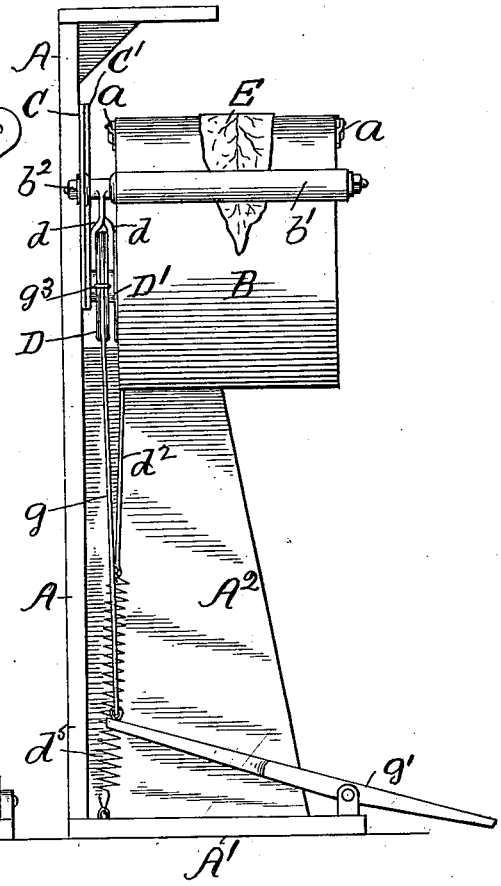

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Fig. 3.

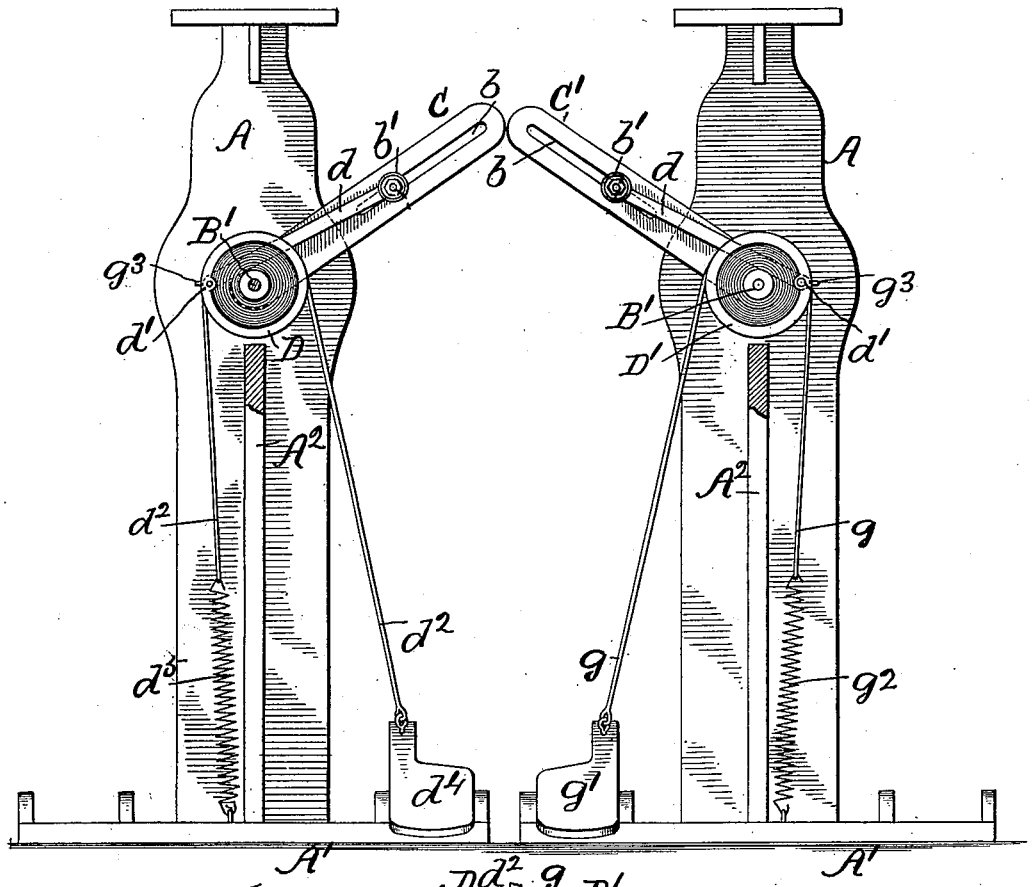
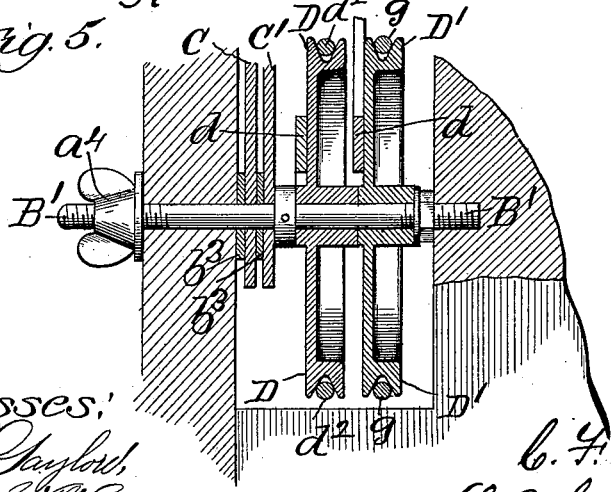


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES F. MATSCHKE, OF CHICAGO, ILLINOIS.

MACHINE FOR BOOKING TOBACCO-LEAVES.

SPECIFICATION forming part of Letters Patent No. 648,699, dated May 1, 1900.

Application filed December 27, 1897. Renewed December 21, 1899. Serial No. 741,190. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. MATSCHKE a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Machines for Booking Tobacco-Leaves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in that class of machines that are employed in stretching and booking leaf-tobacco, and has for its object to provide a simple and convenient device of this character that greatly facilitates this kind of work.

Figure 1 is a front elevation of a machine embodying the improved features. Fig. 2 is a side elevation. Figs. 3 and 4 are part elevations and part sections on a vertical line back of the working drum, the two parts being arranged in a reversed position; and Fig. 5, a broken-away vertical section on line 5, Fig. 1, looking in the direction indicated by the arrow, the drum part being omitted.

The supporting-pedestal consists of the back A, the base A′, and the center piece A^2. The drum B is composed of two semisections hinged together on the upper side, as at a, and is supported on the center piece of the pedestal. The drum is open on the under side, the adjacent ends being normally wide apart, as shown in Fig. 1. This provides for an inwardly-yielding movement of the adjacent ends of the two drum parts in the operation of working. The two companion springs a' a' have their inner ends attached to opposite sides of the center piece A^2, the outer parts being curved to correspond to and bear loosely on the inside of the drum parts, as indicated by dotted lines. In line with the open ends of the drum is located a spring-brace a^2, secured at its longitudinal center, as at a^3, the respective ends bearing loosely against the inside lower ends of the drum-sections. The springs and brace serve to return and retain the drum parts in their normal position and hold them sufficiently rigid for the purpose and at the same time yielding as the work requires.

A stationary shaft B′ is inserted through from the back side of the pedestal and ends in the center piece A^2, as shown in Fig. 5. A clamping adjusting-nut a^4 has a screw-threaded engagement with the rear projecting end of this shaft. On this shaft and close to the inner side of the back of the pedestal are loosely mounted the inner ends of the companion arms C C′. The outer part of these arms is provided with a slot b, through which is inserted one end of clamping-rollers b' b', projecting across the surface of the drum on opposite sides, as shown. These rollers are movably retained in place in the arms C C′ by a screw-threaded nut b^2. These arms are spaced by interposed washers b^3 b^3 and are clamped just sufficiently tight so that the outer ends can be moved up or down and remain in the position to which they are set in changing the position of the rollers with reference to the surface of the work-drum and the length of the leaves of tobacco. The companion sheaves D D′ are loosely mounted on the shaft B′ in advance of the arms C C′. These sheaves have a semirotary movement and have the inner ends of connecting-links d d pivoted thereto, as at d'. The outer ends of these links are connected to the rollers b' b'. A treadle or connection cord d^2 runs over sheave D and has one end attached to a foot treadle-board d^4, the opposite end being attached to the upper end of a retracting spiral spring d^5, the lower end of which is in turn fastened to the base of the pedestal. A companion treadle-cord g runs over sheave D′ and has one end attached to a foot treadle-board g', the opposite end being attached to the upper end of a spiral spring g^2, the lower end of which is attached to the base of the pedestal. The treadle-cords are firmly secured to the sheaves D D′ at one point by a clamp g^3, so that a pressure on the treadle-boards will cause the sheaves to rotate or partially turn on their axes.

E represents a leaf of tobacco clamped between the rollers and the surface of the drum. The clamping-rollers are held normally in contact with the surface of the drum by the action of the springs on the treadle-cords, all the other parts being shown in their normal position.

In practical working a pressure from the feet of the operator on the treadle-boards has the effect of rotating the companion sheaves and moving the clamping-rollers away from the surface of the drum to permit of the leaves of tobacco being placed in position to be stretched and booked. When the pressure is relaxed, the sheaves are turned in the opposite direction by the action of the springs connecting with the treadle-cords and the rollers automatically brought in contact with the body of tobacco at a point near the respective ends.

The drum parts are adjusted by their spring attachments—that is, spread out or contracted—as the work may require.

When shipping or storing the machines, the arms C C′ may be turned down parallel with the pedestal or supporting-frame, and thereby occupy much less space.

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

1. In a machine of the class described, the combination with a supporting-pedestal, of a drum, consisting of two parts movably hinged together at the top and open on the under side with a space between the adjacent ends, the companion springs, having their inner ends secured to the pedestal, their outer curved ends bearing loosely against the inside of the drum parts, and the spring-brace, having its respective ends in contact with the lower ends of the drum parts, whereby the drum-sections yield inwardly to the pressure of the work and are automatically returned to a normal position when the pressure is relaxed, substantially as described.

2. The combination with a drum, consisting of two parts movably connected together, of a stationary shaft, the companion arms, movably mounted on said shaft and slotted longitudinally, the clamping-rollers, having their respective rear ends loosely inserted in the slotted arms, the companion sheaves, loosely mounted on the stationary shaft, the links, connecting said clamping-rollers and sheaves, and means for rotating said sheaves, in moving said rollers nearer to or farther away from the working surface of said drum, substantially as described.

3. The combination with a drum, consisting of two parts movable with reference to each other and connected together at the top and open on the under side, of a stationary shaft, the slotted companion arms, loosely mounted on said shaft, the clamping-rollers, the companion sheaves loosely mounted on the stationary shaft, the links, operatively connecting said sheaves and rollers, the treadle-cords, running over and rotating said sheaves, the treadles, to which one end of said cords are attached, and the retracting-springs, connecting with the opposite end of said cords, substantially as described.

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

CHARLES F. MATSCHKE.

Witnesses:
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L. B. COUPLAND.