

(No Model.)

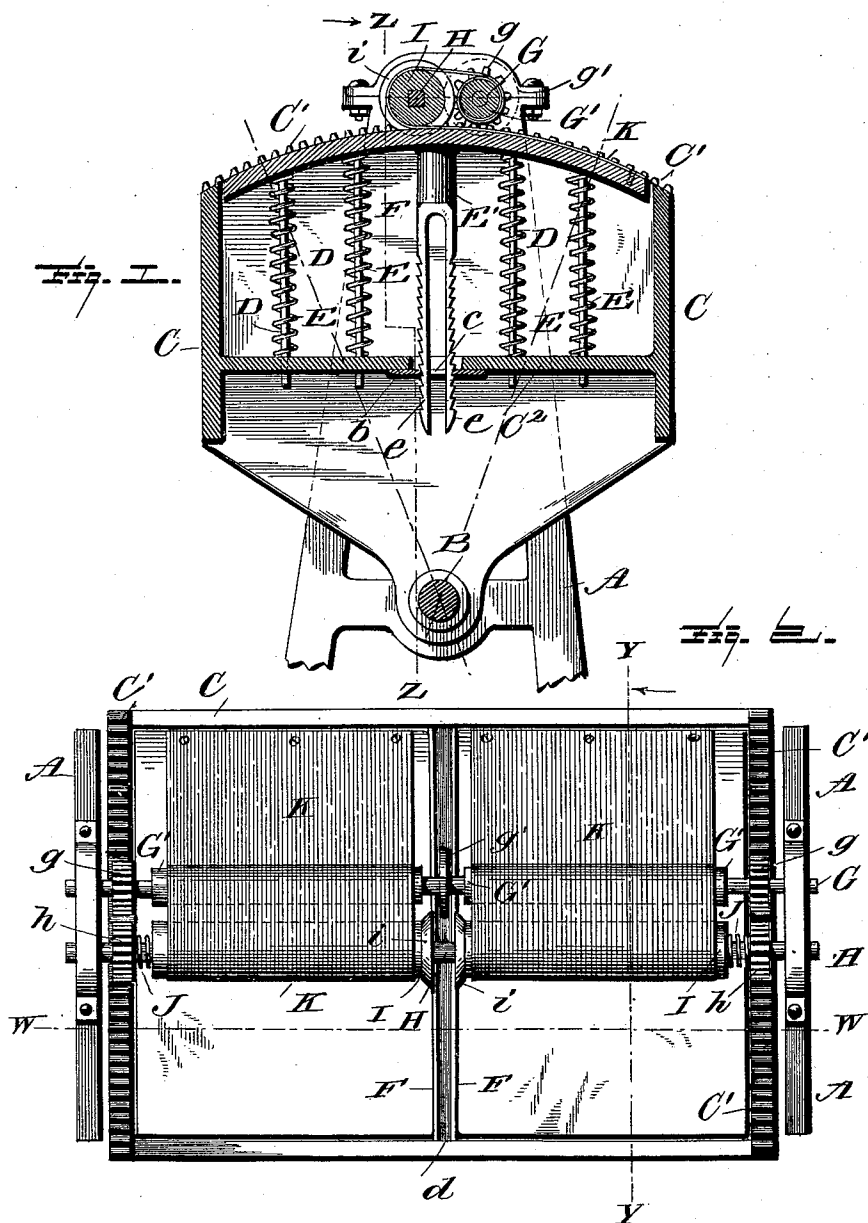
2 Sheets—Sheet 1.

C. BOWMAN.

MACHINE FOR STRIPPING AND BOOKING LEAF TOBACCO.

No. 479,550.

Patented July 26, 1892.



Witnesses
L. C. Hills
E. A. Bond

Inventor
Charles Bowman
per *Chas. H. Fowler*
Attorney

(No Model.)

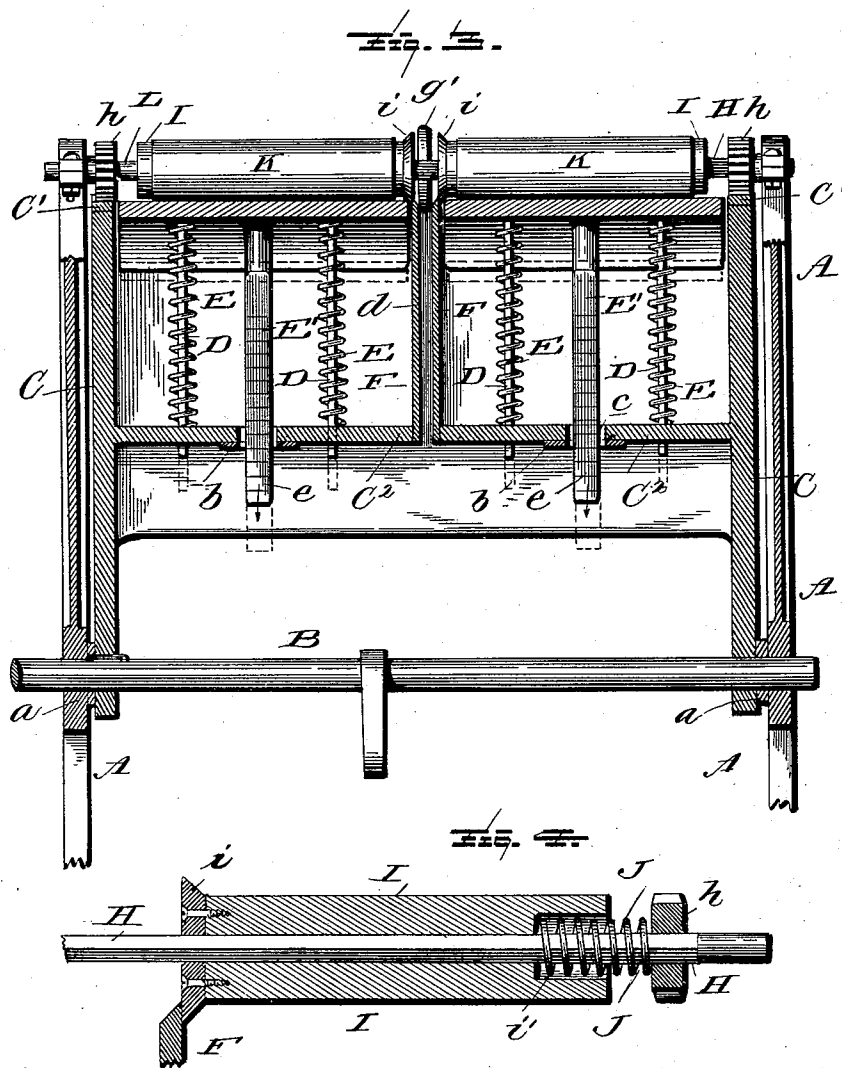
2 Sheets—Sheet 2.

C. BOWMAN.

MACHINE FOR STRIPPING AND BOOKING LEAF TOBACCO.

No. 479,550.

Patented July 26, 1892.



Witnesses
L. C. Hills.
E. A. Bond.

Inventor
Charles Bowman,
per Cha. N. Fowler
Attorney

UNITED STATES PATENT OFFICE.

CHARLES BOWMAN, OF HANOVER, PENNSYLVANIA.

MACHINE FOR STRIPPING AND BOOKING LEAF-TOBACCO.

SPECIFICATION forming part of Letters Patent No. 479,550, dated July 26, 1892.

Application filed January 16, 1892. Serial No. 418,218. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BOWMAN, a citizen of the United States, residing at Hanover, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Stripping and Booking Leaf-Tobacco; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in machines for stripping and booking leaf-tobacco; and it has for its objects, among others, to provide a simple cheap, yet efficient, machine by which the tobacco may be stripped and booked rapidly and properly with little power.

It has for a further object the improvement in the construction of the machine in general whereby it is not liable to get out of order or to be damaged during its operation.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a vertical cross-section through the machine on the line Y Y of Fig. 2. Fig. 2 is a top plan. Fig. 3 is a longitudinal vertical section on the lines W W of Fig. 2 and Z Z of Fig. 1. Fig. 4 is a sectional detail showing one of the cutting-disks and its shaft and spring.

Like letters of reference indicate like parts throughout the several views in which they occur.

Referring now to the details of the drawings by letter, A designates suitable supports or standards for supporting the operating parts. They may be of any desired form and should be provided with suitable boxes or bearings *a* for the shaft B, which forms the pivot of the table C. This table is designed to be rocked back and forth in any suitable manner and has upon each side edge a toothed curved rack C', as shown in

Figs. 1, 2, and 3, the table being divided into two equal parts, as seen in Figs. 2 and 3, and the top of each part is supported upon the rods D, the upper ends of which are secured to the under side of the said top in any suitable manner and their lower ends loosely fitted within holes in the partition C² of the table, as seen best in Figs. 1 and 3, springs E being provided around the said rods between the said partition and the under side of the top, so as to normally hold the top to its highest limit, but permitting depression of the said top, as will soon be described. Secured centrally to the under side of each top is a vertical arm or post E', the lower end of which is split or bifurcated, as seen in Fig. 1, and the outer faces of the bifurcations notched, as seen at *e*, to engage the edges of the plates *b*, secured to the under sides of the partition C² of the table beneath a suitable opening *c* therein, through which the bifurcated portions work, as seen in Fig. 1. The tops of the table are arc-shaped, as seen in Fig. 1.

The partition C² is separated at the center of the machine and to the adjacent ends of each of its parts is secured the vertical cutting-plate F, the two being oppositely beveled, as seen best in Fig. 3, and arranged a slight distance apart, so as to leave a passage *d* for the passage of the stem after it is removed, as will soon be described.

At the upper ends of the standards are provided suitable boxes or bearings for the shafts G and H, as seen in Figs. 1, 2, and 3. The shaft G has on each end a pinion *g*, which meshes with the racks on the side edges of the table, and at its center, just above the passage *d*, it carries a disk *g'*, which is arranged to run between the knives and serves to press the stem down after being cut from the leaf.

The shaft H, which may be either square or round, has at each end a gear-wheel *h* to mesh with the racks on the side edges of the table, and this shaft carries, also, the two steel rollers I, provided with the steel cutting-disks *i*, arranged to co-operate with the cutting-plates F on the table. These rollers are loose on the square shaft, as seen, and at their outer ends are provided, preferably, with the chambers or recesses *i'*, into which are held one end of

the springs J, the other ends of which impinge against the gear-wheels *h*, as seen best in Figs. 2 and 4.

K are pieces of canvas, each secured at one end to the front edge of each top, one for each top, and the other end of each, after passing back and under roller I and winding-drum G' on the shaft G, is wound around and secured to winding-drum G', as seen in Fig. 1. There are two pieces of canvas, two winding-drums G', and two rollers I, one for each top, as seen in Fig. 2.

With the parts constructed and arranged as above outlined the operation is as follows: The table-tops being normally at their outermost limit and the winding-drums at the edge of the table, which should be pushed back far enough to bring the parts in this position, and the canvas taken up by the winding-drums G', the table-tops are then ready for the tobacco. The tobacco-leaf is then spread upon the table-tops, with the stem opposite the passage *d* between the cutting-plates, and the machine is put in motion by hand or otherwise, the tobacco being held in position by the hands of the operator until the entire length has been traversed by the cutting-disks, which sever the leaf from the stem, which latter is driven out through the passage *d* by the disk *g'*. As the table-tops are moved back the two pieces of canvas unroll and the table-tops will be covered by the two pieces of canvas. As leaf after leaf is cut the table-tops will be automatically depressed, the notches on the bifurcations of the posts E' holding the tops as they are depressed, and when the desired quantity has been booked it is removed and the bifurcations pressed together to disengage them from their holding-plates, when the springs will force the tops up again to their normal positions.

What is claimed as new is—

1. In a tobacco-stripping machine, a pivotally-mounted table having arc-shaped tops and centrally-arranged cutting-plates, with a passage between them, rotary cutting-disks over the central part of the table and acting in conjunction with the cutting-plates, the rollers, and winding-drums, and pieces of canvas, and means operatively connecting the disks with the table, and means on the tops for holding them step by step as they are depressed, as set forth.

2. In a tobacco-stripping machine, a pivotally-mounted table having arc-shaped tops and centrally-arranged cutting-plates, with a passage between them, rotary cutting-disks over the central part of the table and acting in conjunction with the cutting-plates, the rollers, and winding-drums, and pieces of canvas, means operatively connecting the disks with the table, and springs for yieldingly supporting the said table-tops, and means on the tops for holding them step by step as they are depressed, as set forth.

3. In a tobacco-stripping machine, a pivoted table having depressible arc-shaped tops, cutting-plates centrally arranged, rotary disks acting in conjunction with the cutting-plates over the center of the table, means operatively connecting the disks with the table, the winding-drums G', and rollers I, the pieces of canvas, and the means connecting the same at one end to the table-tops and at the other end to the rollers, and means on the tops for holding them step by step as they are depressed, as set forth.

4. The combination, with the pivoted table having centrally-arranged cutting-plates and depressible arc-shaped tops, of the rollers, and winding-drums, and rotary cutting-disks, means operatively connecting the disks and table, whereby the disks are actuated through the movement of the table, and the pieces of canvas secured to said tops and to the rollers, and means on the tops for holding them step by step as they are depressed, as set forth.

5. The combination, with the pivoted table having depressible arc-shaped tops, of the springs supporting said tops, guides for the springs, the partition having an opening for the passage of the bifurcated post, and the notched bifurcated post carried by the top, as set forth.

6. The combination, with the pivoted table having depressible arc-shaped tops and the cutting-plates, of the springs supporting the tops, the partition, the notched bifurcated posts carried by the tops, the rotary cutting-disks, and means operatively connecting the disks and table, whereby the disks are actuated through the movement of the table, as set forth.

7. The combination, with the pivoted table and its depressible top, of the partition beneath the top and means for holding the top step by step as it is depressed, as set forth.

8. The combination, with the pivoted table having separated tops, with a passage between them, of the stripping mechanism and a disk arranged above said passage to guide the separated stem out of the machine, as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES BOWMAN.

Witnesses:

C. M. WINEBRENNER,
E. A. MICHAEL.