J. I. ROBBINS.

Tobacco Cutter.

No. 54,017. Patented April 17, 1866.

Fig. 1.

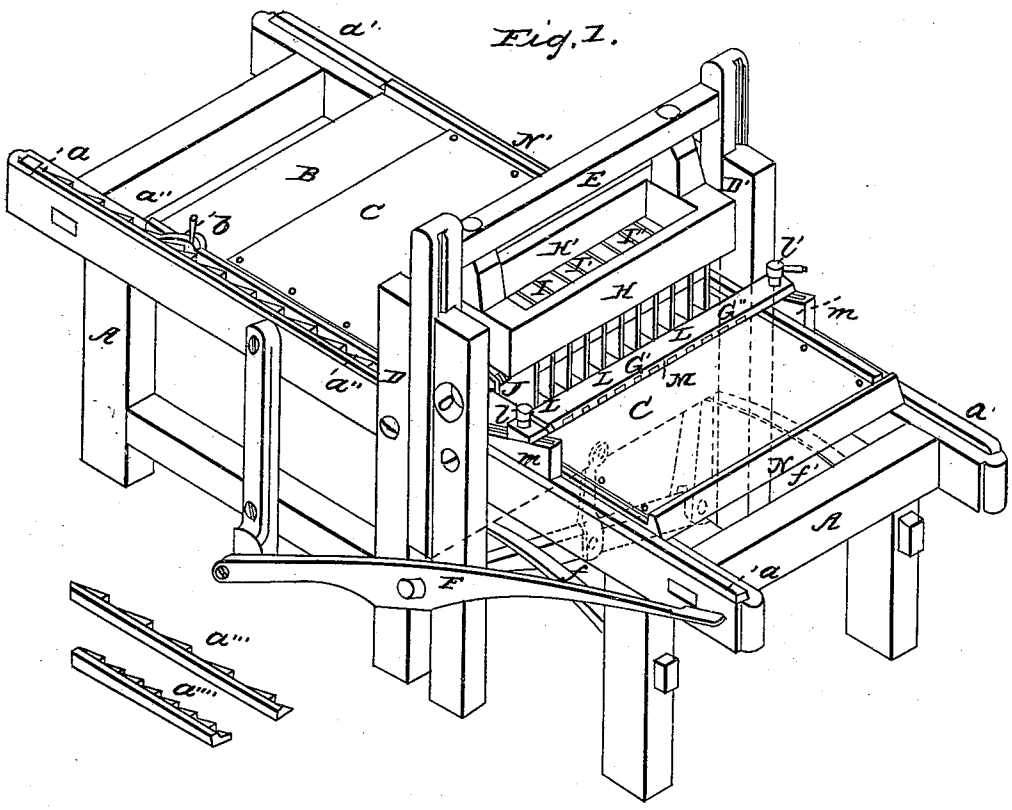
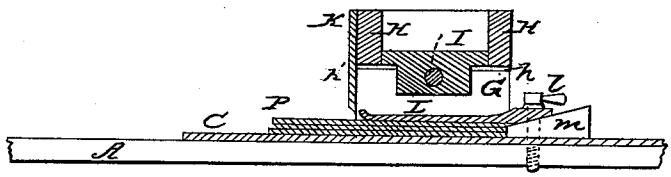


Fig. 2.



Witnesses:

W. Wagle

James H. Laymen

Inventor:

John I. Robbins

By Knight Bros.

attys

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN I. ROBBINS, OF CINCINNATI, OHIO.

IMPROVEMENT IN TOBACCO-CUTTING MACHINES.

Specification forming part of Letters Patent No. **54,017**, dated April 17, 1866.

To all whom it may concern:

Be it known that I, JOHN I. ROBBINS, of Cincinnati, Hamilton county, and State of Ohio, have invented certain new and useful Improvements in Tobacco-Cutting Machines; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a machine for cutting tobacco into lumps or plugs of any desired length and width, after the same has been pressed into sheets or slabs by means of hydrostatic or other power.

Figure 1 is a perspective view of a machine embodying my improvements. Fig. 2 is a longitudinal section through the knives.

A is a frame, having ways *a a'*, which serve as guides to the table B, on which the tobacco is placed before being cut. One of the ways, *a*, is provided with a ratchet-gage, *a''*, by which the length of the plug is regulated.

The table B is covered with a cushion or cutting-cloth, C, which may be made of india-rubber, leather, cork, sail-cloth, or any other suitable yielding material. *b* is a pawl attached to the table B, and which engages with the gage-rack *a''*.

D D' are standards, forming guides for a vertically-sliding gate, E, which is brought down for the effective or cutting stroke by means of the treadle F, and is retracted after cutting by the springs *f f'*; or, if desired, the treadles and springs may be dispensed with and the machine driven by a crank, pitman, or belt attached to any convenient power.

Attached to the sliding gate E is a rectangular frame, H H', which contains the knives for cutting the tobacco. The bottom of the pieces H H' are covered with metallic bars *h h'*, against which the upper parts of the series of longitudinal knives G G' G'', &c., rest.

I I' I'', &c., are blocks which separate the knives G a uniform distance, and also serve to regulate the width of the plugs by simply substituting blocks of different widths. The ends of these blocks are confined between the beams H H', their lower portions resting on the bars *h h'*, and are held securely in position by means of the screw J.

Attached to the rear of the beam H is a transverse knife, K, which extends entirely across the width of the slab or sheet of tobacco which is to be cut.

L L', &c., are adjustable fingers or tongues, which hold the tobacco down on the cutting-cloth C in the act of retracting the knives, and which also serve to clean the knives. These tongues are attached to a cross-piece, M, which is made adjustable to different thicknesses of tobacco by means of the slotted inclined planes *m m'* and set-screws *l l'*.

N N' are strips, which are secured to one end and side of the table B, and serve to keep the tobacco in a true position on the cutting-cloth C. O is an opening in the standard D, by which access is had to the screw J.

Operation: The table B having been drawn back to the rear end of the machine, as many thicknesses or slabs of tobacco P are placed on the cutting-cloth C as can be conveniently cut through at one stroke of the knives. The edges of the tobacco rest against the side strip, N', and the knives being brought down, the transverse cutter K removes the uneven end of the slab or slabs, which are then moved forward until the ends rest against the strip N. The table B is now advanced the length of a ratchet *a''*, carrying the tobacco with it, and at the termination of each and every movement of the table the gang of knives is brought down by the treadle F, thus dividing the slab into plugs, whose width is determined by the relative distances of longitudinal knives G G', &c. The length of the plug is regulated by the gage-racks, any one of a number of different sizes, such as *a'' a''' a''''*, being employed, as long or short plugs are desired.

One of the great advantages which my machine possesses over any tobacco-machine heretofore constructed consists in the fact that it will perform a less or greater amount of work without any alteration or addition to the machinery.

When a limited quantity of tobacco is to be cut a single slab is placed upon the table; but when a greater amount is needed five or six slabs may be placed, one upon another, on the table and cut with a single stroke of the knives.

I claim herein as new and of my invention—

1. The combination of knives K G and the

yielding cushion C, composed of india-rubber, leather, cork, sail-cloth, or any other suitable material.

2. The adjustable fingers or tongues L L′, &c., for preventing the tobacco from being lifted, and also for cleaning the knives.

3. The series of scales or gage-racks a'' a''' a'''' in the described combination with the sliding table B and pawl b, for regulating the length of the plugs.

In testimony of which invention I hereunto set my hand.

JOHN I. ROBBINS.

Witnesses:

JAMES H. LAYMAN,

GEO. H. KNIGHT.