N. H. BORGFELDT.

TOBACCO-STEM FLATTENER.

No. 189,296. Patented April 10, 1877.

Fig: 1

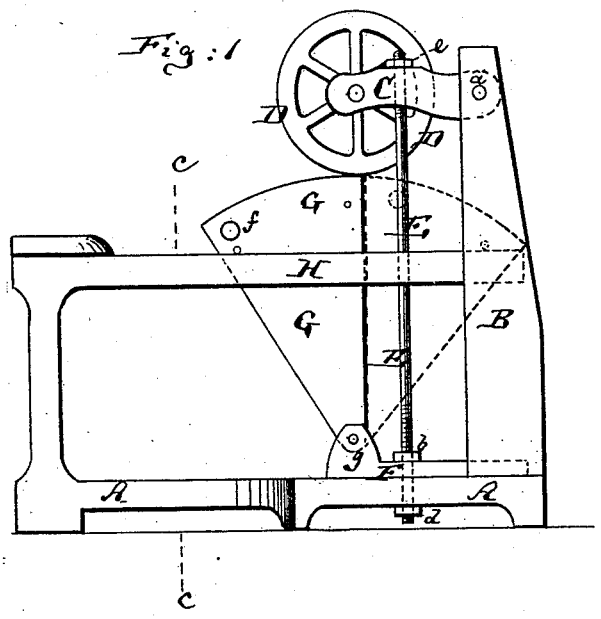


Fig: 2

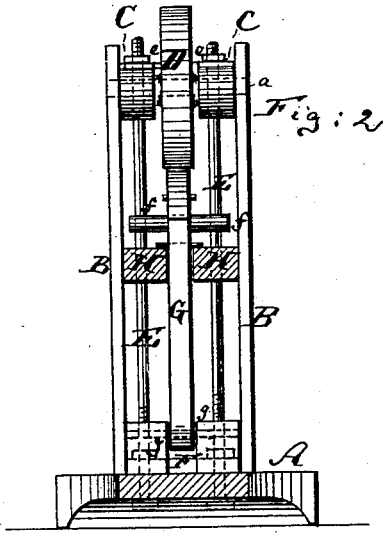
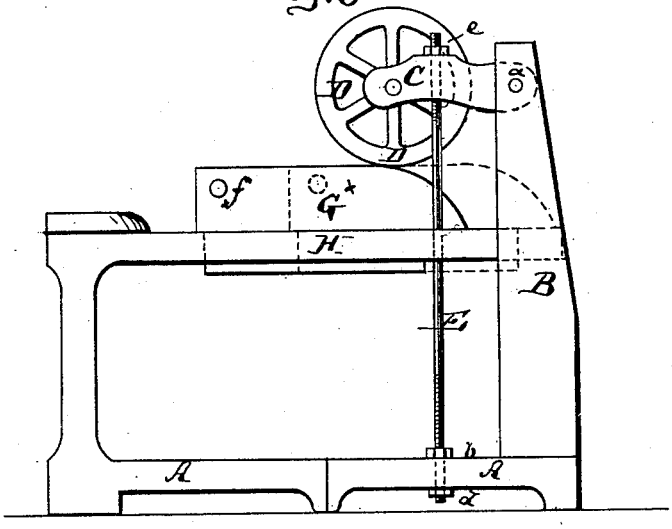


Fig: 3



Witnesses

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UNITED STATES PATENT OFFICE.

NICHOLAS H. BORGFELDT, OF NEW YORK, N. Y.

IMPROVEMENT IN TOBACCO-STEM FLATTENERS.

Specification forming part of Letters Patent No. **189,296**, dated April 10, 1877; application filed December 16, 1876.

To all whom it may concern:

Be it known that I, NICHOLAS H. BORGFELDT, of New York city, in the county and State of New York, have invented a new and Improved Tobacco-Stem Flattener, of which the following is a specification:

Figure 1 is a side elevation of my improved tobacco-stem flattener. Fig. 2 is a vertical cross-section of the same on the line *c c*, Fig. 1. Fig. 3 is a side elevation of a modification of the invention.

Similar letters of reference indicate corresponding parts in all the figures.

This invention has for its object to p)duce a machine for flattening or pressing the stems of tobacco-leaves, to prepare them for the manufacture of cigars and other goods.

The invention consists in combining a movable—that is, oscillating or reciprocating—table, having suitable handles, with a compression-roller for flattening the stems, and also in combining such table and roller with guide-rails, and in the general combination of parts that constitute the machine, all as hereinafter more fully described.

In the drawing, the letter A represents the bed-plate of the machine, from which two posts, B B, project upwardly. In these posts is hung the shaft or pivot *a* of the frame C, that bears the pressure-roller D, said frame, with its pressure-roller, being capable of vibrating on the pin *a*. The vibrating frame C is, by a couple of vertical or inclined rods or bolts, E E, connected with the bed-plate A, said rods passing also through a block, F, that rests upon the bed-plate, for purposes hereinafter to be pointed out.

The block F is held on the bed-plate by nuts *b* on the rod, which nuts bear upon the block F, while other nuts *d*, that are also applied to said bolts, bear against the under side of the bed-plate A, a third series of nuts, *e*, being applied to the upper ends of said rods to bear upon the vibrating-frame C. By means of the bolts E and nuts *e* the frame C can be adjusted so that the roller D will press with greater or less force upon the tobacco, and so that, as the edge of the roller wears, it may be caused to follow the surface of the leaf-supporting table. This supporting-table G I prefer to make in shape of a segment, and to hang it in lugs *g*, that project from the block F, its segmental edge being beneath the pressure-roller D. I provide the segmental table with suitable handles *f f*, and guide it between stationary rails or guideways H H, as shown.

The attendant places a leaf of tobacco upon the edge of the segmental table, so that the stem will lie lengthwise on said table, and pushes the table by the handles under the pressure-roller, and by the same handles draws the table forward again from under the pressure-roller. Such double motion of the table and leaf is sufficient to cause the pressure-roller to properly compress the stem of the tobacco-leaf, provided always that the length of the bolts E has been properly adjusted.

In place of the vibrating table G, having handles *f*, I may use a reciprocating table, $G^{\times}$, as shown in Fig. 3, which, being guided upon the rods H H, will substantially produce the same result as the table G, although requiring perhaps more labor and causing more friction.

I claim as my invention—

1. The combination of the movable table G, having handles *f f*, with the adjustable compression-roller D, substantially as herein shown and described.

2. The combination of the movable table G with the stationary guide-rails H H and adjustable compression-roller D, substantially as herein shown and described.

3. In combination with the bed-plate A, having two posts, B B, the vibrating frame C, pressure-roller D, bolts E E, block F, and table G, all arranged to operate substantially as herein shown and described.

NICHOLAS H. BORGFELDT.

Witnesses:

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