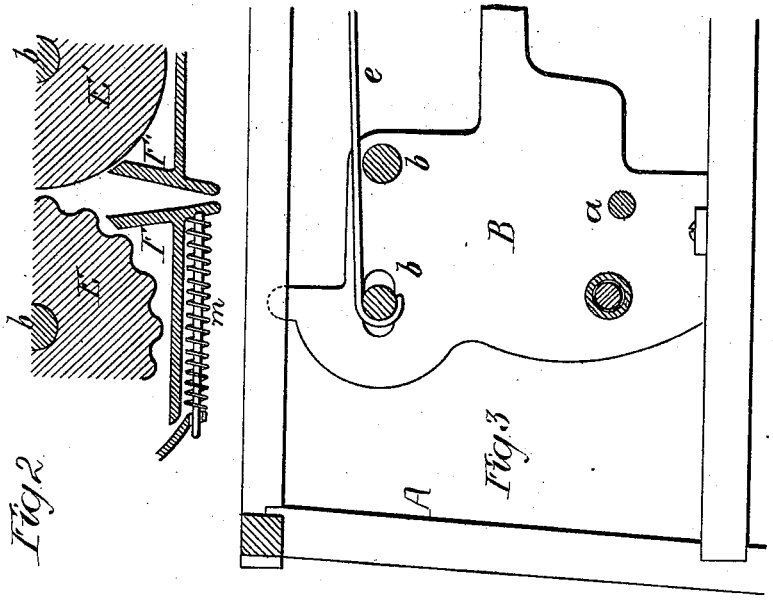
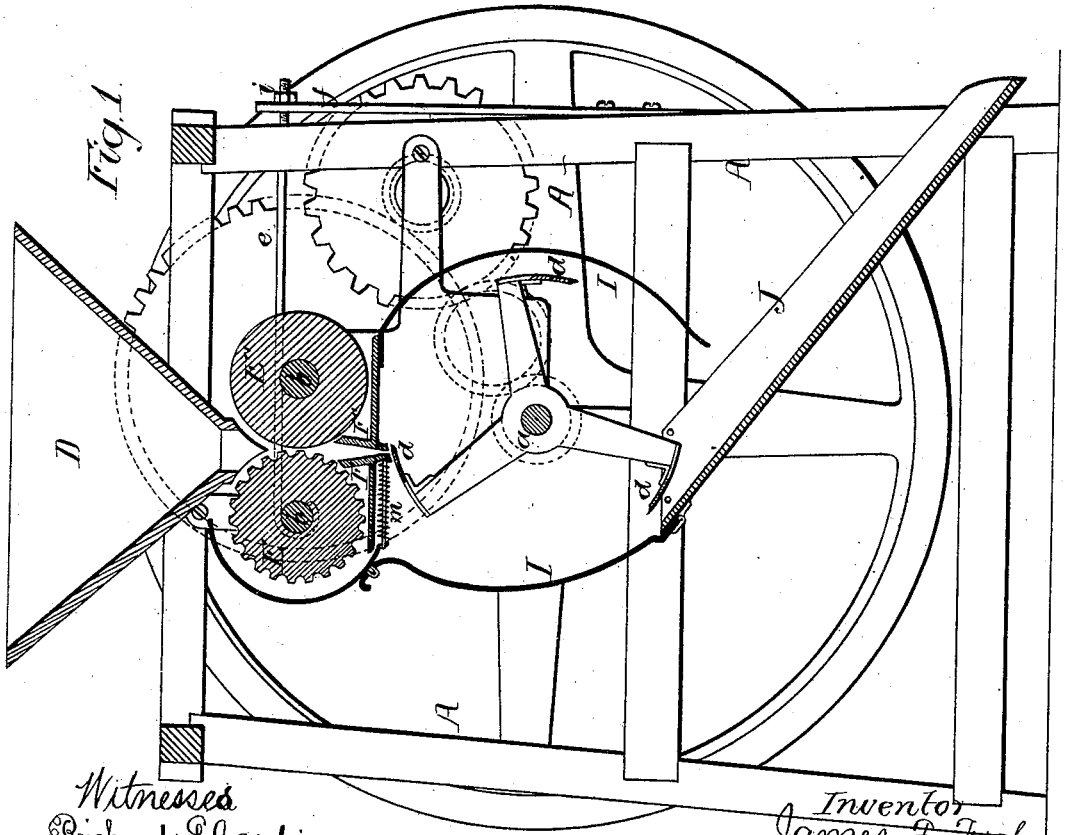
J. F. TYGH.

Machine for Cutting Tobacco.

No. 202,608. Patented April 16, 1878.





Witnesses
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UNITED STATES PATENT OFFICE.

JAMES F. TYGH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND PATRICK McCROSSIN, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR CUTTING TOBACCO.

Specification forming part of Letters Patent No. **202,608**, dated April 16, 1878; application filed July 16, 1877.

To all whom it may concern:

Be it known that I, JAMES F. TYGH, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Machines for Cutting Tobacco, of which the following is a specification:

The object of my invention is to construct a machine for cutting into short lengths tobacco intended for filling for cigars or other purposes—an object which I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical sectional view of my improved tobacco-cutting machine, and Figs. 2 and 3 detached views of parts of the same.

The ordinary method of producing the short pieces of tobacco required for "fillers" for cigars has been to rub the dried leaves over perforated plates or sieves, through openings of the proper size, in which the tobacco is forced. This plan is objectionable, not only on account of the labor involved, but because of the loss consequent upon treatment of the leaves in a dry state, whereby a portion of the leaves is reduced to a condition too fine for use for the purpose intended.

In my machine I overcome these difficulties by cutting the tobacco into suitable lengths by means of knives, so that it can be operated upon when in a wet or damp state, and much more rapidly than usual.

In the drawings, A represents one of the side frames of the machine, of which side frames there are two, arranged at a suitable distance apart. In these frames, or in plates B secured to the same, are formed bearings for the cutter-shaft *a*, feed-wheel shafts *b*, and other minor shafts, carrying gearing, through the medium of which the various parts are driven from a suitable operating-shaft.

The cutter-shaft *a* has, at or near each end, a hub provided with radial arms, to the outer ends of which are secured cutting-blades *d*, three being shown in the present instance, but more or less being used, if desired.

At the top of the machine is a hopper, D, and immediately beneath the same two feed-rolls, E E′, carried by the shafts *b*, the feed-roll E being, by preference, ribbed, so as to insure a proper feeding action.

The openings in the side plates B, through which the journals of the roll E pass, are elongated, as shown in Fig. 3, and each journal is embraced by the hooked end of a rod, *e*, the outer end of which passes through a spring-bar, *f*, secured to one of the side frames A, and is threaded and provided with a nut, *i*, bearing against the outside of said spring-strip *f*. By operating this nut the pressure of the feed-roll E upon the tobacco can be regulated, while at the same time said roll is at liberty to yield to accommodate itself to any inequalities in the thickness of the same.

Immediately beneath the feed-rolls E E′ are arranged two plates, F F′, enlarged at the inner ends, so as to form clamping-jaws, through which the tobacco is forced by the feed-rolls, and by which it is firmly held while being subjected to the action of the cutting-blades *d*. One of these clamping-jaws is fixed, and the other is acted upon by a spring, *m*, so that it is at liberty to yield laterally for the same purpose as the roll E.

The rotating cutters *d* are inclosed by a suitable casing, I, and beneath the same is a chute, J, into which the cuttings fall, and by which they are directed to a suitable receptacle.

As the hopper D is immediately above the feed-rolls E E′, the machine is self-feeding, the tobacco, when wet or damp, having sufficient weight to cause it to descend until it is within the control of the feed-rolls.

The length of the pieces to be cut can be readily varied by changing the speed of the feed-rolls in relation to that of the cutter-shaft, or by varying the number of knives carried by the latter.

The above machine affords a much more ready and effective means of accomplishing the object aimed at than the usual plan, as hereinabove described.

I claim as my invention—

The combination of the feed-rolls and the clamping-jaws F F′ with a rotating shaft, *a*, parallel to the axes of the rolls, and carrying one or more cutting-knives, *d*, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES F. TYGH.

Witnesses:
HERMANN MOESSNER,
HARRY SMITH.