J. F. TYGH.

Machines for Stripping and Booking Tobacco Leaves.

No. 149,006. Patented March 24, 1874.

FIG. 1.

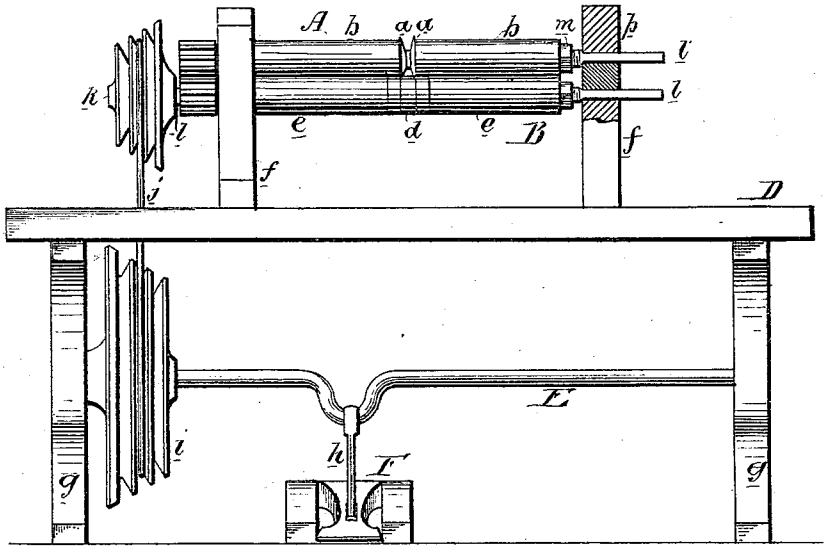


FIG. 2.

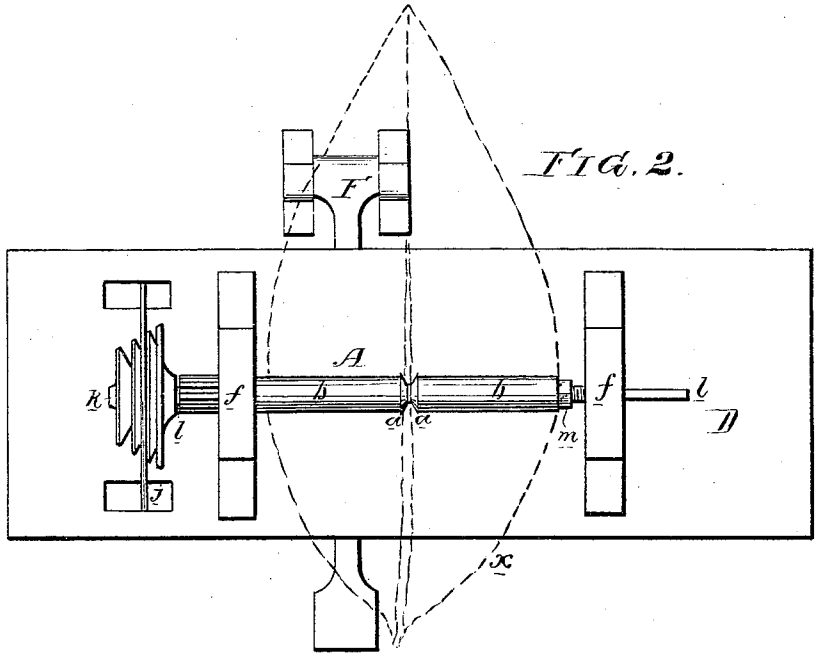
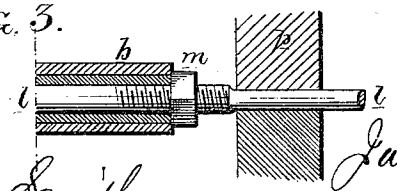


FIG. 3.



Witnesses Harry Smith
Thomas McIlvain

James F. Tygh
by his Attys.
Howson and Sons

AM. PHOTO-LITHOGRAPHIC Co. N. Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

JAMES F. TYGH, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR STRIPPING AND BOOKING TOBACCO LEAVES.

Specification forming part of Letters Patent No. **149,006**, dated March 24, 1874; application filed January 24, 1874.

To all whom it may concern:

Be it known that I, JAMES F. TYGH, of Philadelphia, Pennsylvania, have invented a Machine for Stripping and Booking Tobacco Leaves, of which the following is a specification:

The object of my invention is to simultaneously strip and book tobacco leaves by passing them between elastic rolls A and B, having cutters *a a* and a cutting-surface, *d*, as shown in the front elevation, Figure 1, and plan view, Fig. 2, of the accompanying drawing.

The rolls A and B have their bearings in standards *f f*, secured to a table, D, in the opposite legs *g g* of which turns a crank-shaft, E, to be rotated by a treadle, F, or by any ordinary driving appliances, and having near one end a grooved cone-pulley, *i*, from which motion is transmitted, through a band, *j*, to a similar but smaller pulley, *k*, on the shaft *l* of the lower roll B, the latter being geared to the upper roll A, as shown in the drawing, so that both may be rotated at the same speed. The central portion *d* of the lower roll consists of wood or other comparatively hard material, which will form a suitable bed for the cutters *a a*, by which the stem is removed or stripped from the tobacco leaf. These cutters are formed, in the present instance, by grooving a steel disk to a sufficient depth to receive the stem; but they may consist of two separate disks, rendered adjustable from and toward each other, so as to suit different widths of stems. The elastic portions *b* and *e* of the two rolls, at either side of the cutting devices, consist of rubber or other elastic or yielding material.

In using the machine, each tobacco leaf, *x*, Fig. 2, is passed between the rolls, the central stem entering the space between, and being stripped from the leaf by the cutters, simultaneously with the smoothing or booking of the wings of the leaf by the elastic portions of the rolls.

In order to permit the cutters and elastic portions of the rolls to be readily removed and replaced without disturbing the gearing, I prefer to construct the rolls as shown in the enlarged sectional view, Fig. 3, the central shaft *l* being threaded near one end and being provided with a nut, *m*, by which the surface portions of the roll are forced against a shoulder at the opposite end of the shaft, and thus securely held in place. On simply removing the bearings *p* and unscrewing the nut, the surface portions of the roll can be removed and replaced without detaching the shaft from the machine or interfering with the gearing.

I claim as my invention—

In a machine for stripping and booking tobacco leaves, the combination of an elastic roller, A, and steel cutters *a a*, with an elastic roller, B, and its hard portion *d*, all 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:

WM. A. STEEL,

HARRY SMITH.