(No Model.)

2 Sheets—Sheet 1.

E. L. TEVIS.

TOBACCO STRIPPING MACHINE.

No. 467,143. Patented Jan. 12, 1892.

FIG. 1.

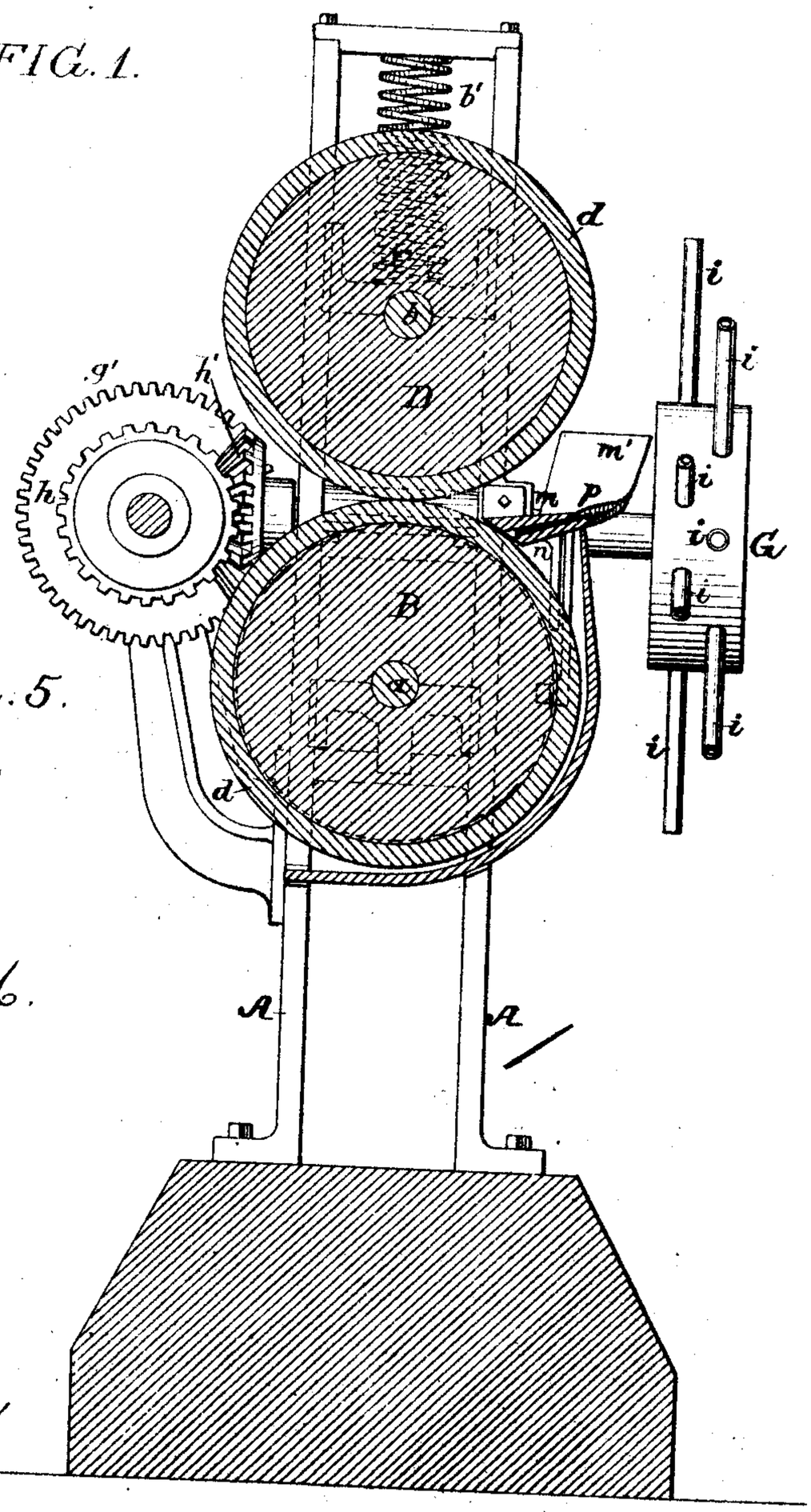


FIG. 5.

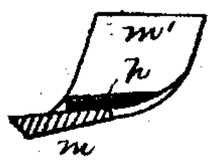
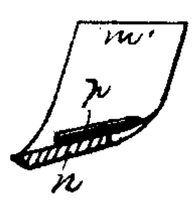


FIG. 6.



Witnesses:
R. Schleicher.
A. D. Goodwin.

Inventor.
Edwin L. Tevis
by his Attorneys
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(No Model.)

2 Sheets--Sheet 2.

E. L. TEVIS.

TOBACCO STRIPPING MACHINE.

No. 467,143. Patented Jan. 12, 1892.

FIG. 2.

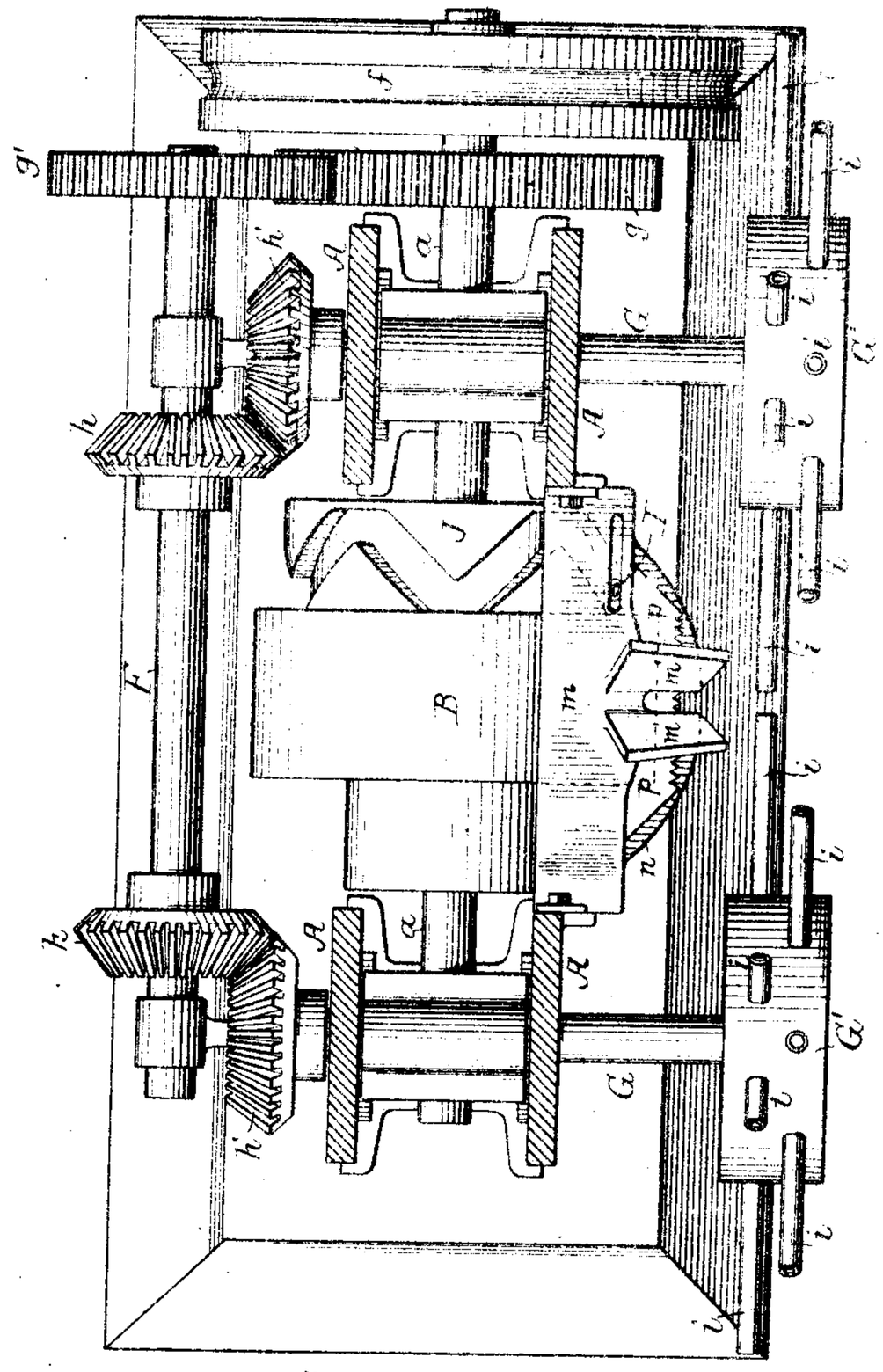


FIG. 4.

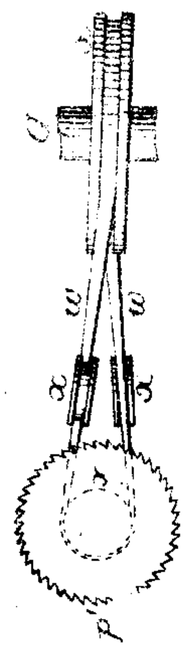
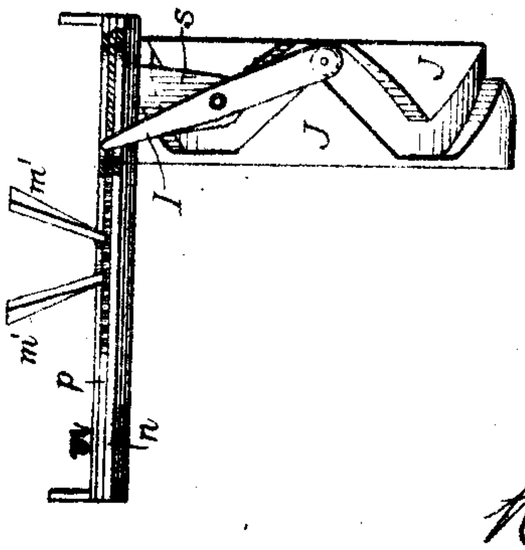


FIG. 3.



Witnesses:
R. Schleicher.
Ed. D. Goodwin.

Inventor:
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UNITED STATES PATENT OFFICE.

EDWIN L. TEVIS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-FOURTH TO ADON SMITH, JR., OF NEW YORK, N. Y.

TOBACCO-STRIPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 467,143, dated January 12, 1892.

Application filed April 25, 1891. Serial No. 390,381. (No model.)

To all whom it may concern:

Be it known that I, EDWIN L. TEVIS, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Tobacco-Stripping Machines, of which the following is a specification.

The object of my invention is to construct a machine for effectively performing the operation known as "stripping" tobacco—that is to say, the removal of the stem from the leaf; and this object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section of a tobacco-stripping machine constructed in accordance with my invention. Fig. 2 is a sectional plan view of the same, partly in elevation. Fig. 3 is a front elevation of part of the machine, and Fig. 4 is a diagram illustrating a modification of part of the machine. Figs. 5 and 6 are detached views illustrating certain other modifications.

A A represent suitable standards, in which are mounted bearings for the shafts *a b* of lower and upper rolls B and D, each of which has a coating *d* of rubber or other elastic or semi-elastic material, the bearing of the upper roll-shaft *b* being acted upon by a spring *b'*, tending to depress said upper roll with a yielding pressure. The shaft of the lower roll has a pulley *f* for receiving a driving-belt from any adjacent pulley, and on said shaft is a spur-wheel *g*, which meshes with a spur-pinion *g'* on a counter-shaft F, having bevel-wheels *h*, which mesh with bevel-pinions *h'* on short transverse shafts G, the latter carrying at their front ends brushing-drums G', each armed with projecting fingers *i*, preferably composed of short sections of rubber tubing or other strips.

Extending from one standard to the other in front of the rolls B D are plates *m* and *n*, the upper plate *m* having inclined wings *m'*, forming a trough with slotted bottom, and between these two plates is a cutting-blade *p*, having its front edge by preference toothed or serrated, as shown in Fig. 2. The cutting-blade *p* has an opening for the reception of the upper end of a lever I, which passes through a slot in the lower plate *n*, as shown in Fig. 3, and is hung to a depending bracket *s* on said plate *n*, the lever being acted upon by a cam-groove formed in the periphery of a disk J on the shaft of the lower roll, so that a rapid reciprocating motion is imparted to the cutting-knife *p*. When the butt-end of the stem of the leaf is laid in the trough formed by the wings *m'*, the leaf portion will hang down below said trough, the action of the fingers *i* of the brushing-drums tending to straighten out the leaf, which in its natural condition is curled up around the stem. As the leaf is fed inward, the stem is caught between the upper and lower rolls and is rapidly drawn forward, and at the same time the depending leaf portions are cut off close up to the stem by the action of the reciprocating knife, this action continuing until the stem is no longer of sufficient size to be retained by the trough formed by the wings *m'* or to resist the downward thrust of the fingers *i* of the brushing-drums, whereupon the leaf is discharged downward into any suitable receptacle and the detached stem is fed forward and delivered from the rolls B D. By this means leaf after leaf may be rapidly acted on by the machine, and one attendant can have charge of the feeding of a number of machines, so that the stripping of the tobacco can be effected much more rapidly and at much less expense than the usual hand-stripping process, and more effectively also than in any tobacco-stripping machine with which I am familiar.

Various means may be employed for actuating the cutting-knife, and, if desired, said knife may have a rotary motion, instead of a reciprocating motion. For instance, in Fig. 4 I have shown a rotary knife *p'*, driven from one of the shafts G by means of a belt *w* and pulleys *x*.

If desired, the knife *p* may be guided on the upper plate *m* and the lower plate may be omitted, as shown in Fig. 5; or, on the other hand, the upper plate may be omitted and the lower slotted plate may serve as the support for the stem of the leaf, as shown in Fig. 6.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The combination, in a tobacco-stripping machine, of a pair of feeding-rolls, a slotted trough serving as a support for the stem of the leaf, and a moving knife for cutting the stem from the leaf, substantially as specified.

2. The combination, in a tobacco-stripping machine, of a pair of feed-rolls, the trough having flaring sides and slotted bottom, so as to form a support for the stem of the leaf, and the moving cutting-knife beneath said trough, substantially as specified.

3. The combination of the feed-rolls, the stem-supporting trough, the slotted plate beneath the same, and a moving cutting-knife between said trough and plate, substantially as specified.

4. The combination of the feed-rolls, a support for the stem of the leaf, a reciprocating knife, and a grooved cam-disk on one of the feed-roll shafts for actuating said knife, substantially as specified.

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

EDWIN L. TEVIS.

Witnesses:
EUGENE ELTERICH,
HARRY SMITH.