

(No Model.)

3 Sheets—Sheet 1.

G. M. HATHAWAY.
CIGAR WRAPPER CUTTER.

No. 420,451.

Patented Feb. 4, 1890.

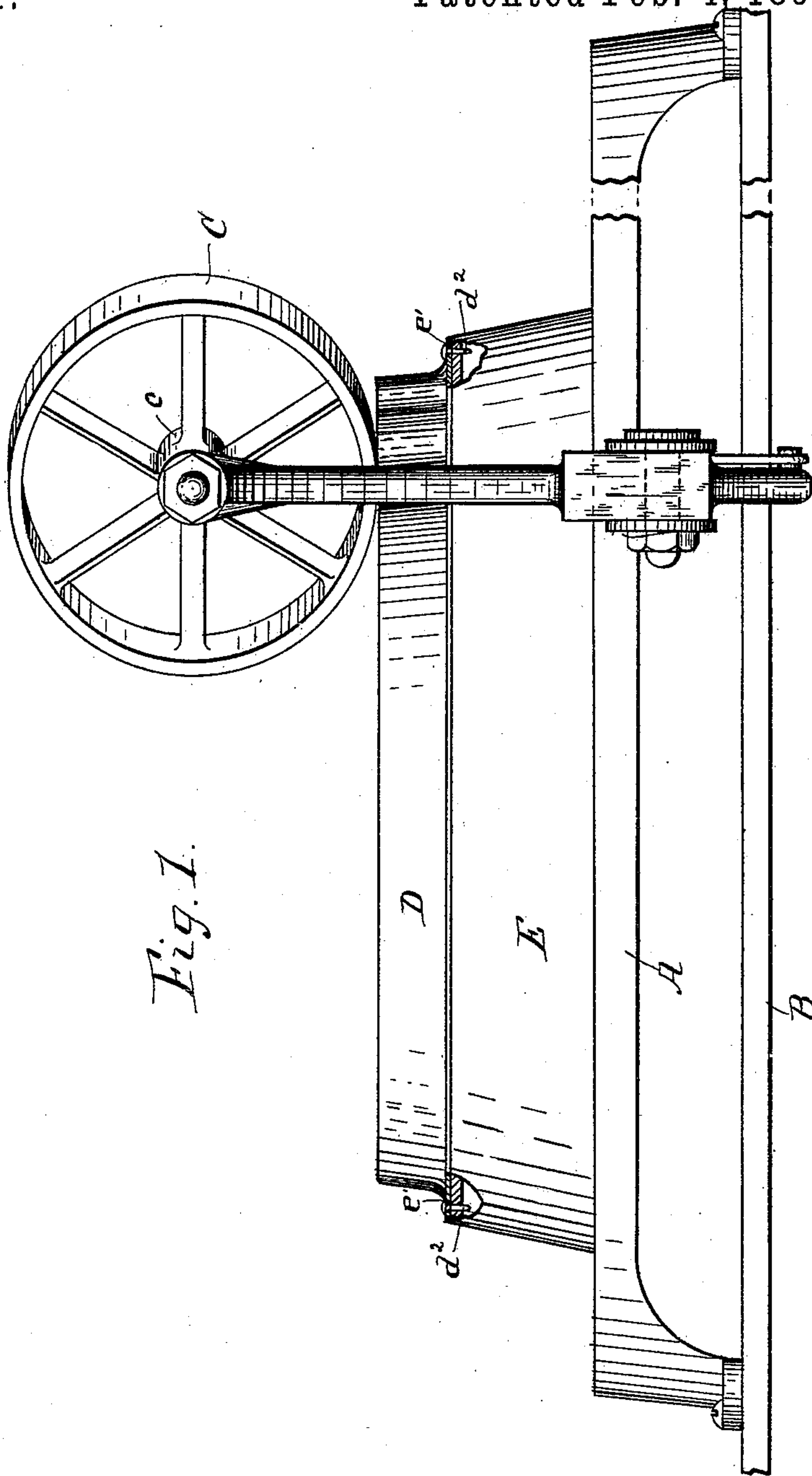


Fig. 1.

George M. Hathaway.
INVENTOR.

WITNESSES

Frank D. Dorian
John A. Johnson

By Chas. P. Barber
Attorney

(No Model.)

3 Sheets—Sheet 2.

G. M. HATHAWAY.
CIGAR WRAPPER CUTTER.

No. 420,451.

Patented Feb. 4, 1890.

Fig. 2.

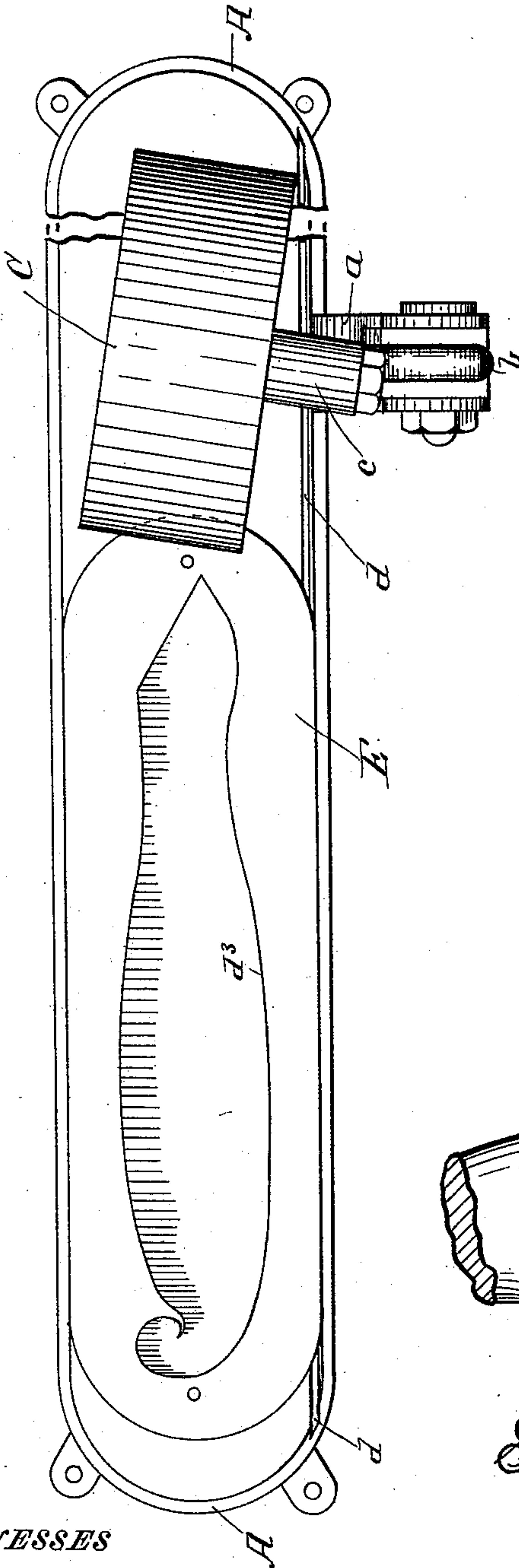
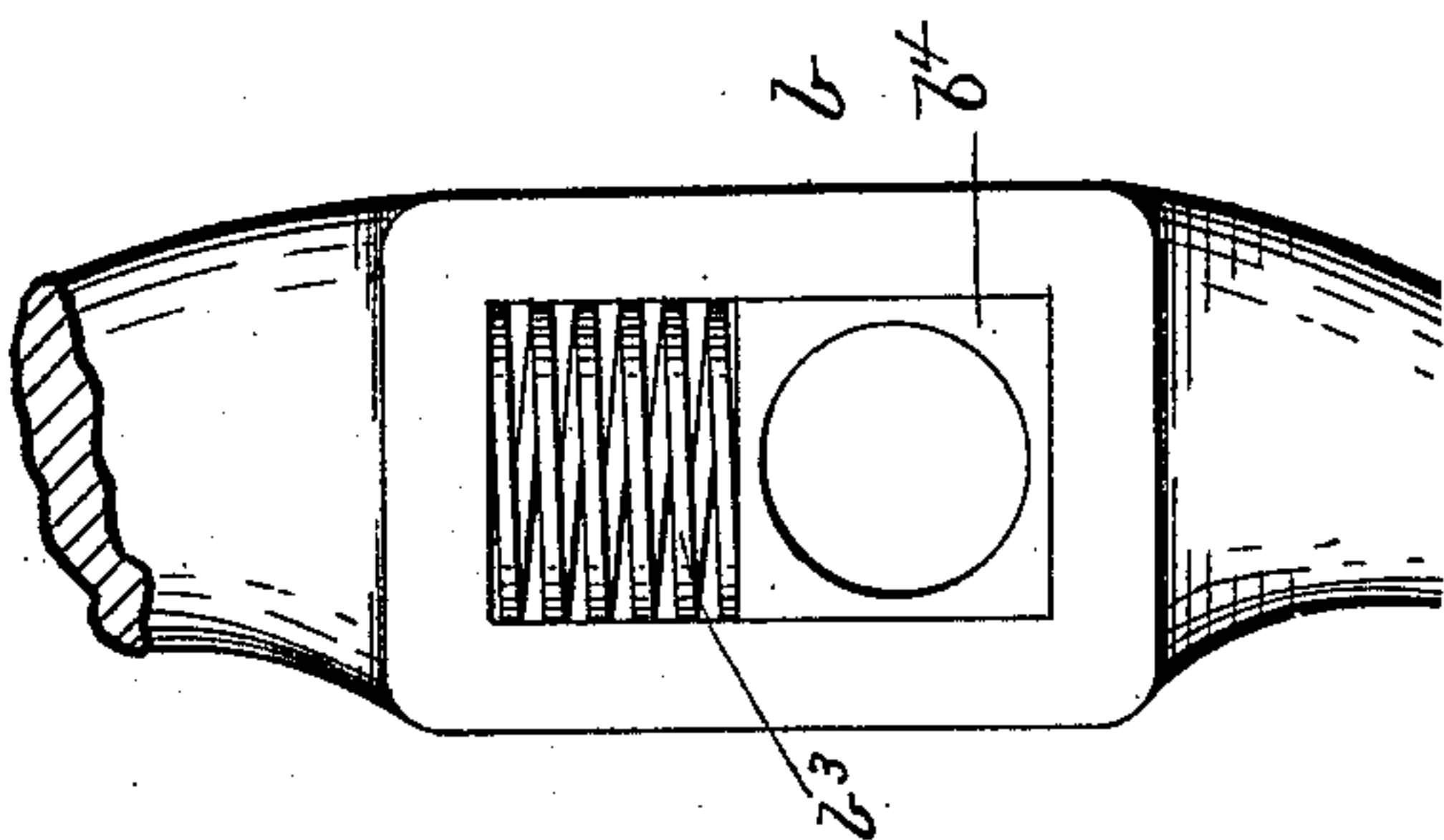


Fig. 3.



WITNESSES

Frank Dorian
J. M. L. Robinson

INVENTOR,

By Chas. E. Barber
Attorney

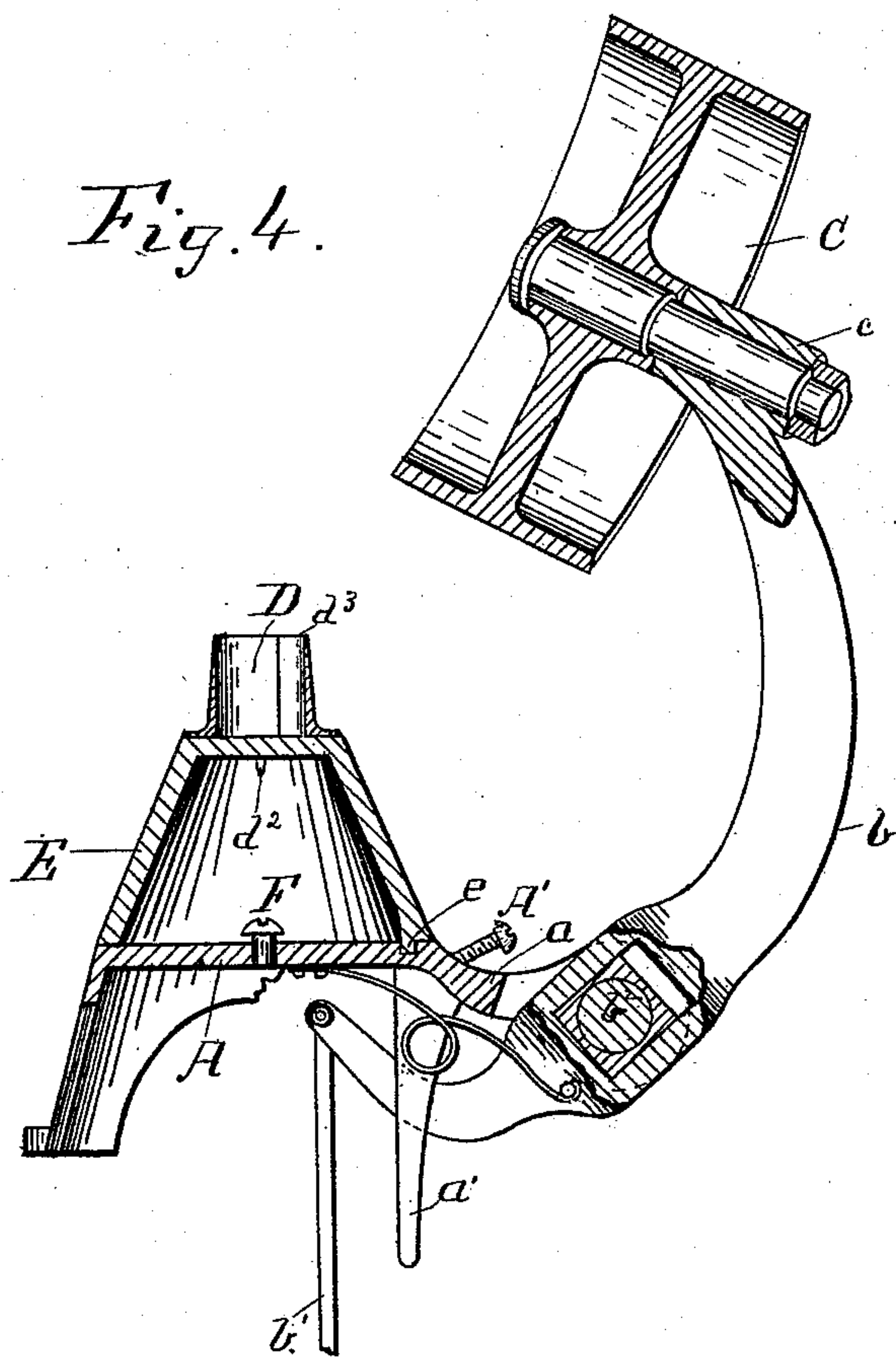
(No Model.)

3 Sheets—Sheet 3.

G. M. HATHAWAY.
CIGAR WRAPPER CUTTER.

No. 420,451.

Patented Feb. 4, 1890.



George M. Hathaway
INVENTOR,

WITNESSES

Frank Dorian

A. May Robinson

By Chas E. Barber
his Attorney

UNITED STATES PATENT OFFICE.

GEORGE M. HATHAWAY, OF NEW YORK, N. Y.

CIGAR-WRAPPER CUTTER.

SPECIFICATION forming part of Letters Patent No. 420,451, dated February 4, 1890.

Application filed March 18, 1889. Serial No. 303,814. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. HATHAWAY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Cigar-Wrapper Cutters, of which the following is so full, clear, and exact a description as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved device. Fig. 2 is a top plan view of the same; and Fig. 3 is a detail section view of the pivotal adjustable elastic bearing for the lever-arm which supports a roller, the uses of which will be hereinafter fully explained. Fig. 4 is a transverse section taken through the lever-arm and wheel.

The object of my invention is to provide a cigar wrapper or binder cutter by the use of which an operator can cut the greatest number of sheets for cigar-wrappers or other analogous articles in the shortest possible time, with the least expense of physical force and the least waste of material and space.

Another object of my invention is to provide a cutter by the use of which the wrappers when cut may be stored in a compact form with the least trouble and with the least liability to displacement and consequent destruction; and to that end it consists in providing a knife such as will be hereinafter described, which is secured to the sliding carriage, where it is designed and constructed to remain until a certain predetermined number of wrappers shall have been cut, when the knife may be removed and the cut wrappers taken therefrom without liability of displacement or distortion and destruction.

Another object of my invention is to construct a cutter which when used will serve effectually to cut the tobacco-leaf, and one in which the liability of the dulling of the cutting-edge of the knife will be reduced to the minimum. This latter object I accomplish by so adjusting the set-screw A' (which serves to limit the forward movement of the roller) that it will project a proper distance above the projections a, as will be hereinafter fully explained.

The objects generally of my invention are to provide a cutter which will be at once cheap and efficient, and one capable of being operated by one not specially skilled in the art, and one which, by reason of its extreme simplicity and cheapness, will be within the reach of the most modest manufacturer.

In the accompanying drawings, A designates a bed-plate, which is secured in any suitable manner to a table or bench B. This bed-plate is provided with legs or projections which elevate it slightly from the bench or table B. One side of the bed-plate A is provided with a projection a, which in this instance consists of a pair of perforated lugs, between which is pivotally secured an arm b, to the upper end of which is secured a shaft c, and which shaft extends obliquely across the line of the bed-plate and above the bed-plate, and upon which shaft is journaled a rotatable wheel C.

To the lower end of the lever b is pivotally secured a suitable foot-lever connection b'. Below the bed-plate, and for convenience beneath the projection a, I provide a stop a', which extends down below the line of the lower portion of the bed-plate and in the path of the lower end of the lever or arm b, stopping the lever or arm at a point which shall have been predetermined to bring the wheel C to such a position as to make its face parallel with the horizontal cutting-edge of the knife.

b² designates a journal having its support in the projections a. This journal passes through an opening in a sliding bearing-box b⁴, which bearing-box is itself located within an opening formed in the extremity of the lever or arm b. Arranged above said box is a spring b³, which tends to press the box to the bottom of the opening in the lever or arm b, thus automatically raising said lever or arm, and with it the wheel C, a sufficient distance above the cutting-edge of the knife D to facilitate the removal and replacement of the leaves of tobacco.

The bed-plate A is also provided with a horizontal groove d. A sliding carriage E is provided with corresponding projections or guides e e, which slide within the groove d, and serve to guide the plate and knife in their horizontal longitudinal movement beneath

the roller C. The cutting-knife D is provided with suitable dowel-pins d^2 , which extend down through corresponding perforations e' in the sliding carriage E. Any other equivalent fastening device may be substituted for these dowels, as will be readily understood.

The knife D is made in the form of a shell, having its upper edge d^3 made sufficiently sharp to cut the tobacco-leaves when they are pressed against it with sufficient force to sever the fiber of the leaves, and when they are cut the wrapper will fall down into and within the walls of the cutter D, which is generally made sufficiently deep to accommodate from twenty-five to fifty, thus retaining and protecting them against displacement.

The cutter may or may not be provided with a register to indicate the number of wrappers cut. The lug which limits the forward movement of the wheel C may be made in the shape of a set-screw and put above and in front of the upper pivotal point of the lever or arm b , and it may be made adjustable, as shown at A'. By arranging the wheel C to extend obliquely across and above the cutter D, I secure a slight shearing cut, which serves to effectually sever all of the fibers of the leaf operated upon, and thus prevent damage to the wrapper caused by a portion of the leaf remaining intact with the wrapper, as is frequently the case with cutters now in use.

The bed-plate A is provided with a stop F, which projects up from the bed-plate and limits the movement of the sliding carriage, as shown in the drawings.

It will be readily understood that the cutters D may be made any size and shape to suit the varying sizes, shapes, and brands of cigars, and since the knives are readily removable they can be interchanged at pleasure.

The operation of my device is as follows: The sliding carriage, having been previously put into position on the bed-plate, is slid back so that its inner end comes just beneath the forward surface of the rotating wheel C. The proper cutter is selected and secured to the sliding carriage, as described. The leaf is placed over the cutter, and the wheel C is tilted forward until the lower portion of the lever or arm b strikes against the projection, which limits the forward movement of the wheel C and brings the face of the rotatable wheel C parallel with the cutting-edge of the cutter D. The foot-lever is then depressed

with sufficient force to depress the spring b^3 , which will bring the lever and the wheel down so that the wheel is approximately in contact with the upper cutting-edge of the cutter D. The sliding carriage, cutter, and leaf having been previously grasped by the hands of the operator, the carriage, cutter, and leaf are slid along the bed-plate the entire length of the cutter, and the pressure of the wheel on the top of the leaf forces it against the cutter with sufficient force to cut the wrapper, which drops down below the cutting-edge of the cutter and within its side walls, as has been previously described. The wheel C is then tilted back out of the way, the scraps of the leaf which has just been cut removed, and the process is then repeated.

Having now described the construction, objects, uses, and advantages of my invention, what I believe to be new and desire to secure by Letters Patent, and what I therefore claim, is—

1. In a cutter of the character described, a bed-plate, a sliding carriage adapted to move on said bed-plate, and provided with a cutter of the desired shape, in combination with a vertical and tilting lever-arm which is adapted to raise and lower the wheel and is mounted on the bed-plate or framing, and is provided with an arbor extending horizontally and diagonally across the cutter, and carrying a rotating wheel which also extends across the cutter obliquely, substantially as and for the purposes described.

2. In a cutter of the character described, a bed-plate provided with a track, and a sliding carriage thereon carrying a cutter, in combination with a vertical and tilting lever-arm mounted on the bed-plate or framing and having an elongated opening at its pivotal point, a sliding bearing-box in said opening, and a spring which operates on said bearing-box to automatically raise said lever-arm, said arm carrying an arbor upon which is journaled a roller extending across the cutter obliquely, and a treadle connected to the lever-arm, all constructed and combined to operate as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE M. HATHAWAY.

Witnesses:

FRANK DORIAN,
CHARLES E. BARBER.