

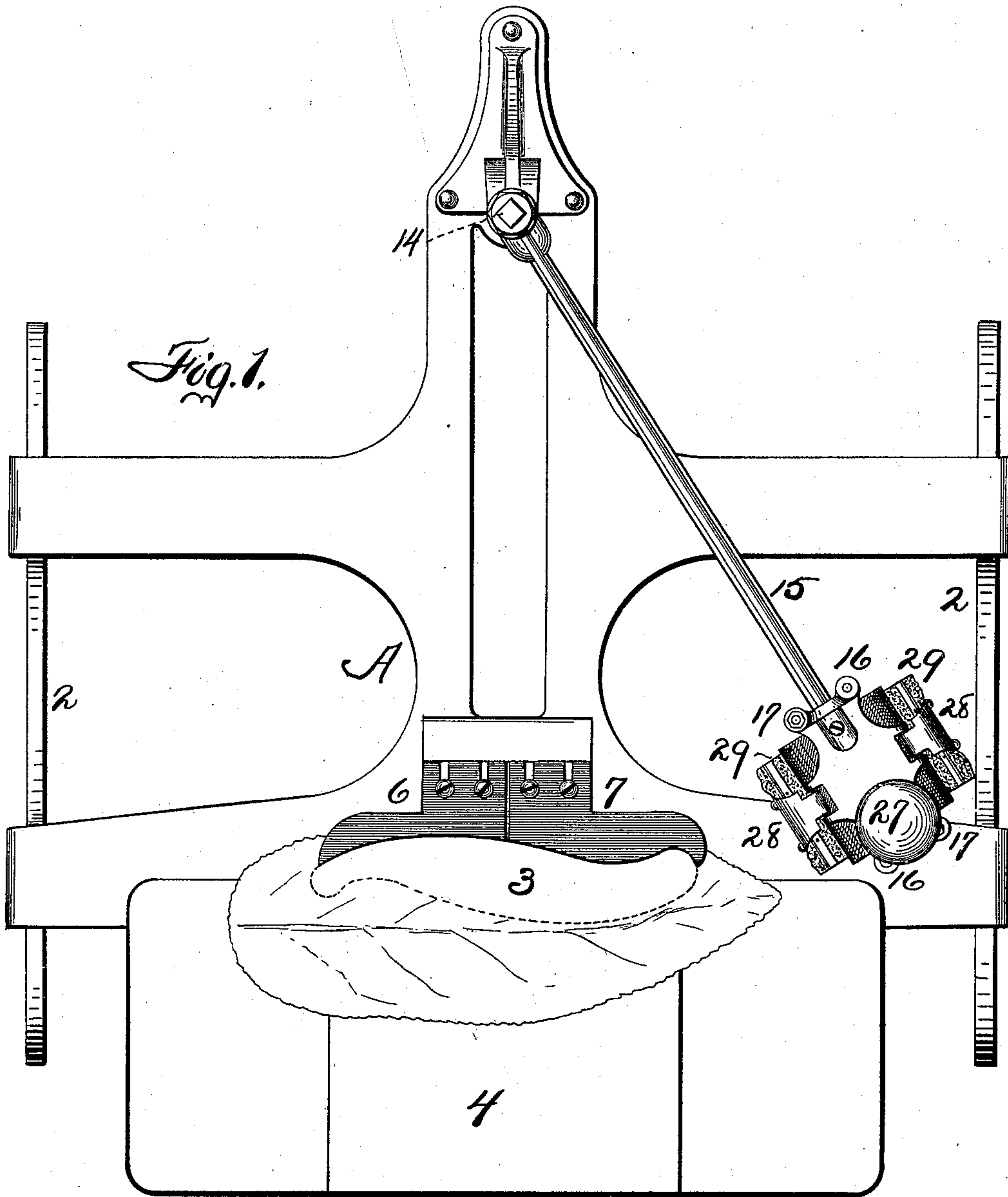
(No Model.)

4 Sheets—Sheet 1.

C. A. BAKER.  
CIGAR WRAPPER CUTTING MACHINE.

No. 596,467.

Patented Jan. 4, 1898.



WITNESSES:

*Charles W. Mowin*  
*Mary A. Franklin*

INVENTOR

*Chas. A. Baker.*

BY

*Smith & Arnison*  
ATTORNEYS.

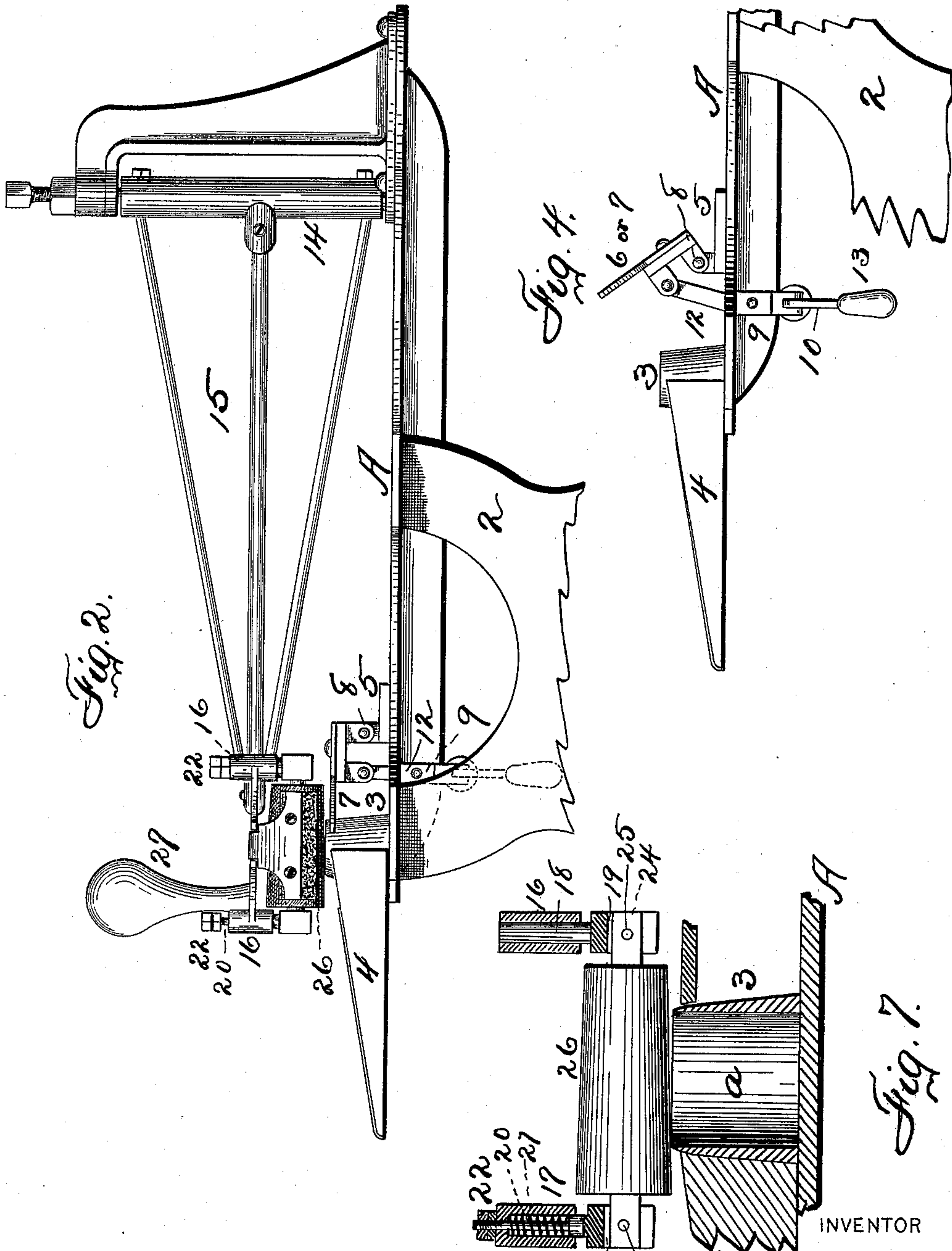
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WITNESSES:

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(No Model.)

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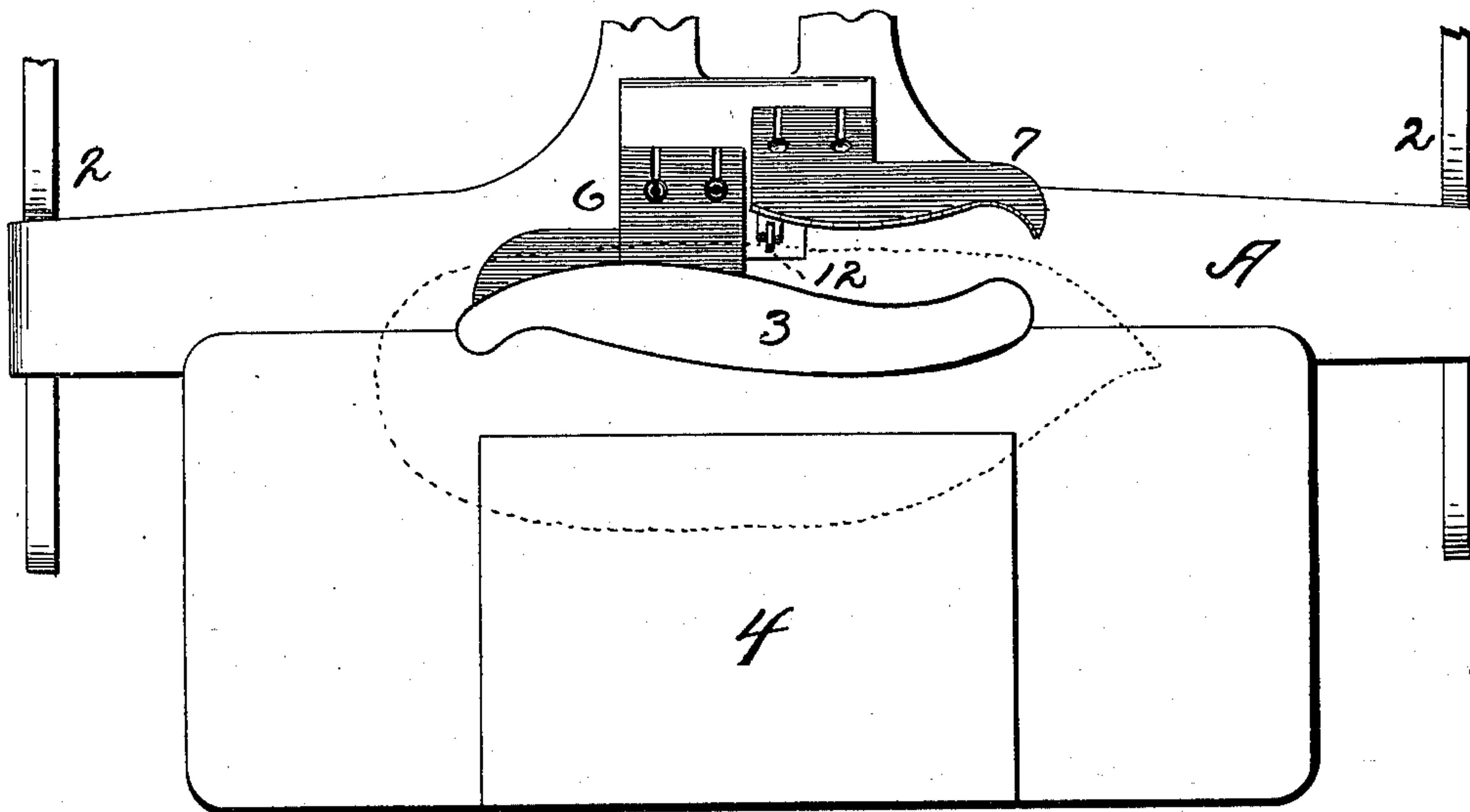


Fig. 3.

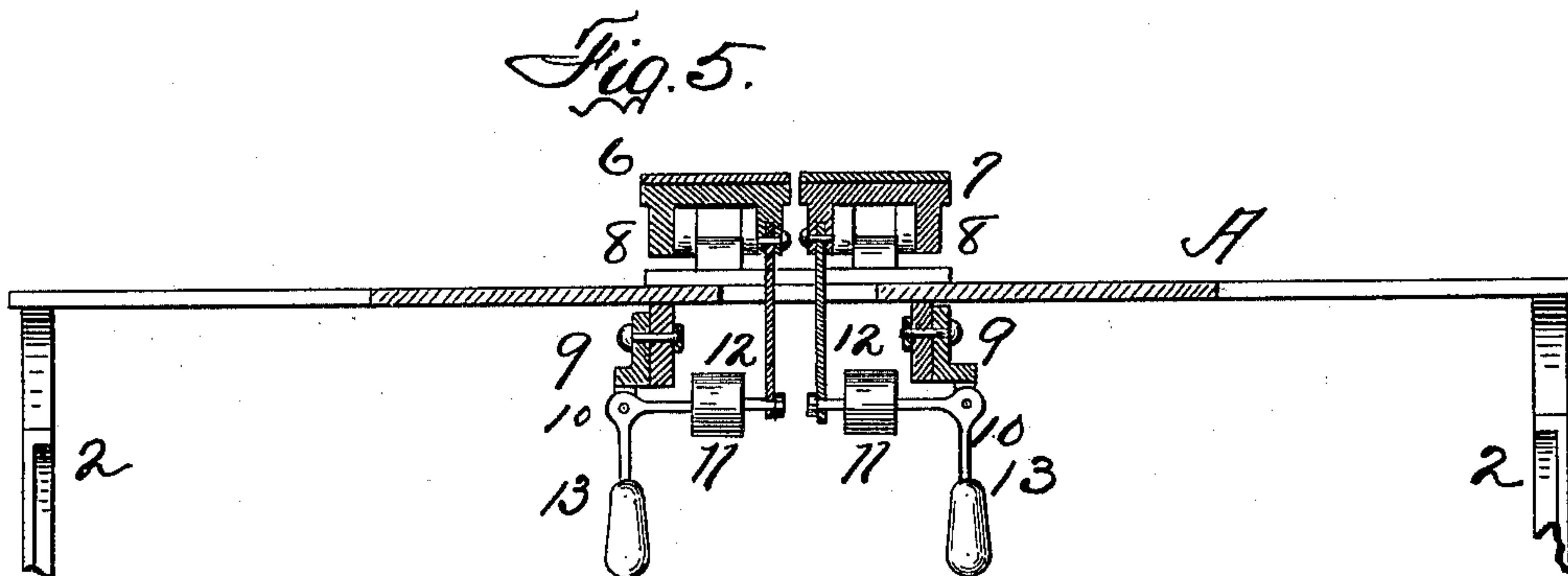


Fig. 5.

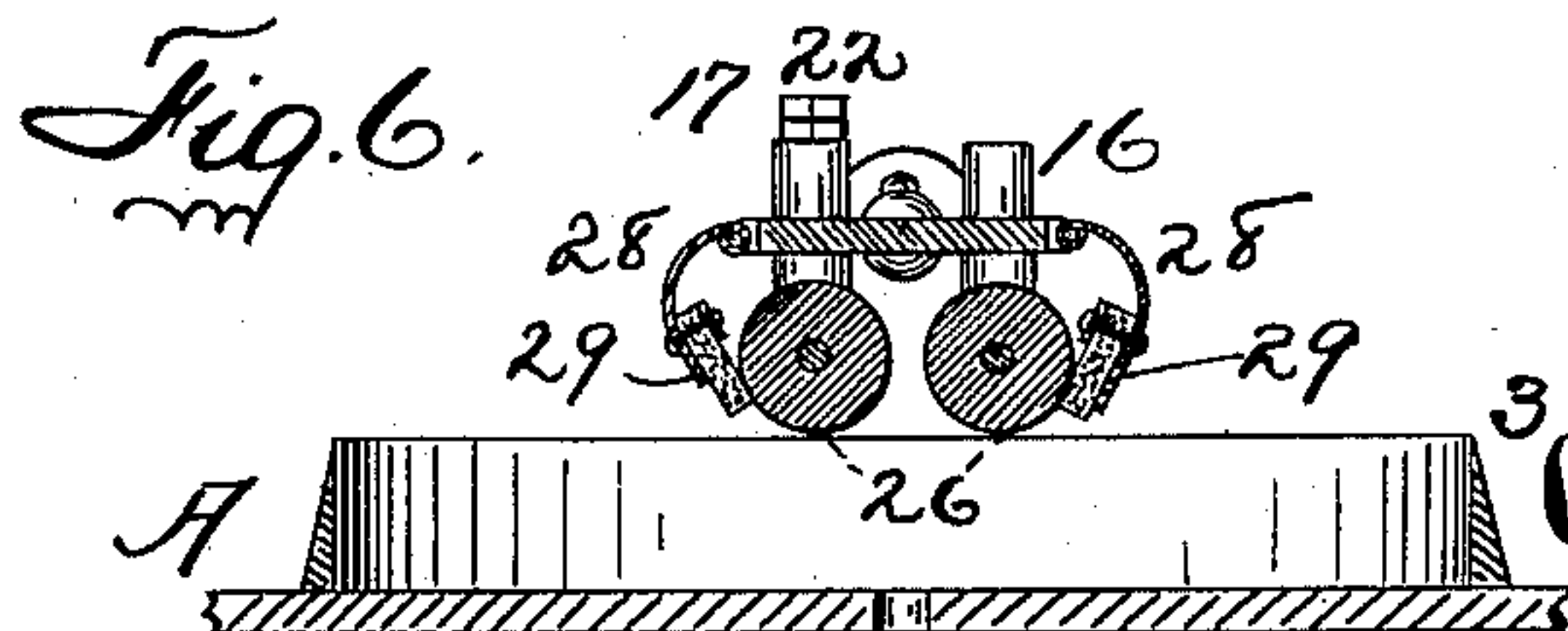


Fig. 6.

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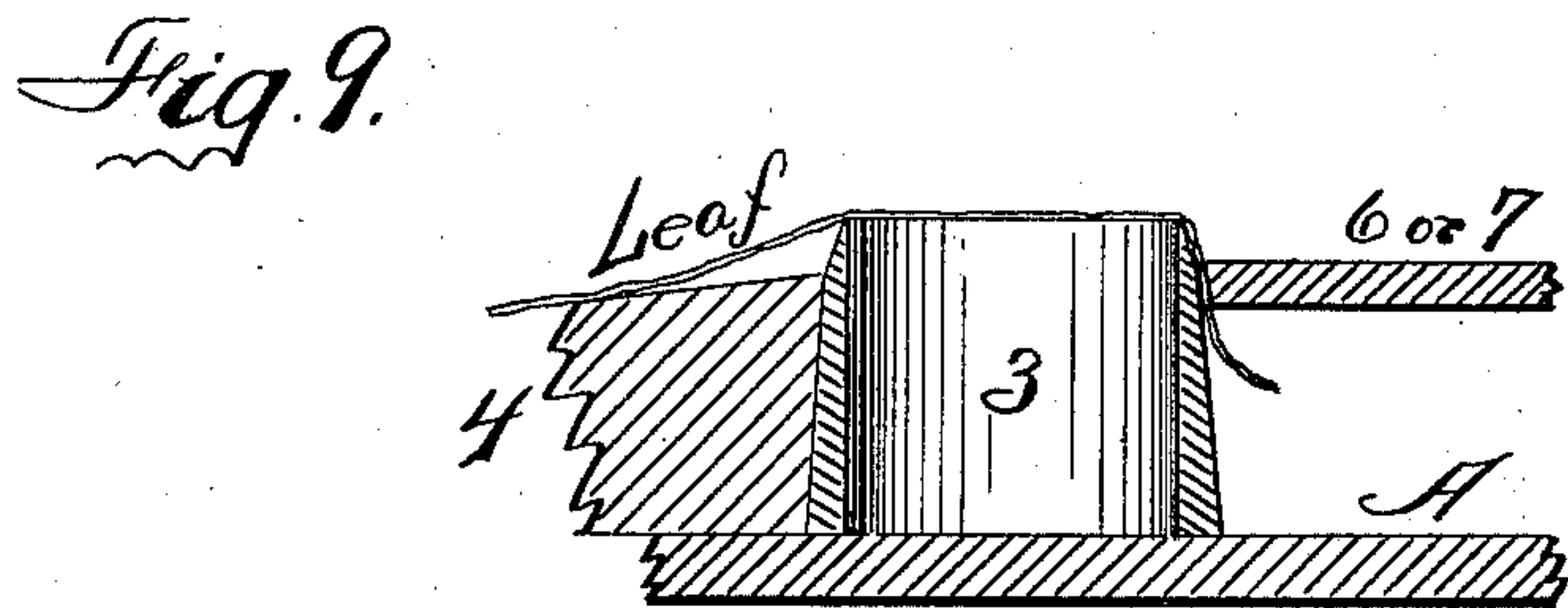
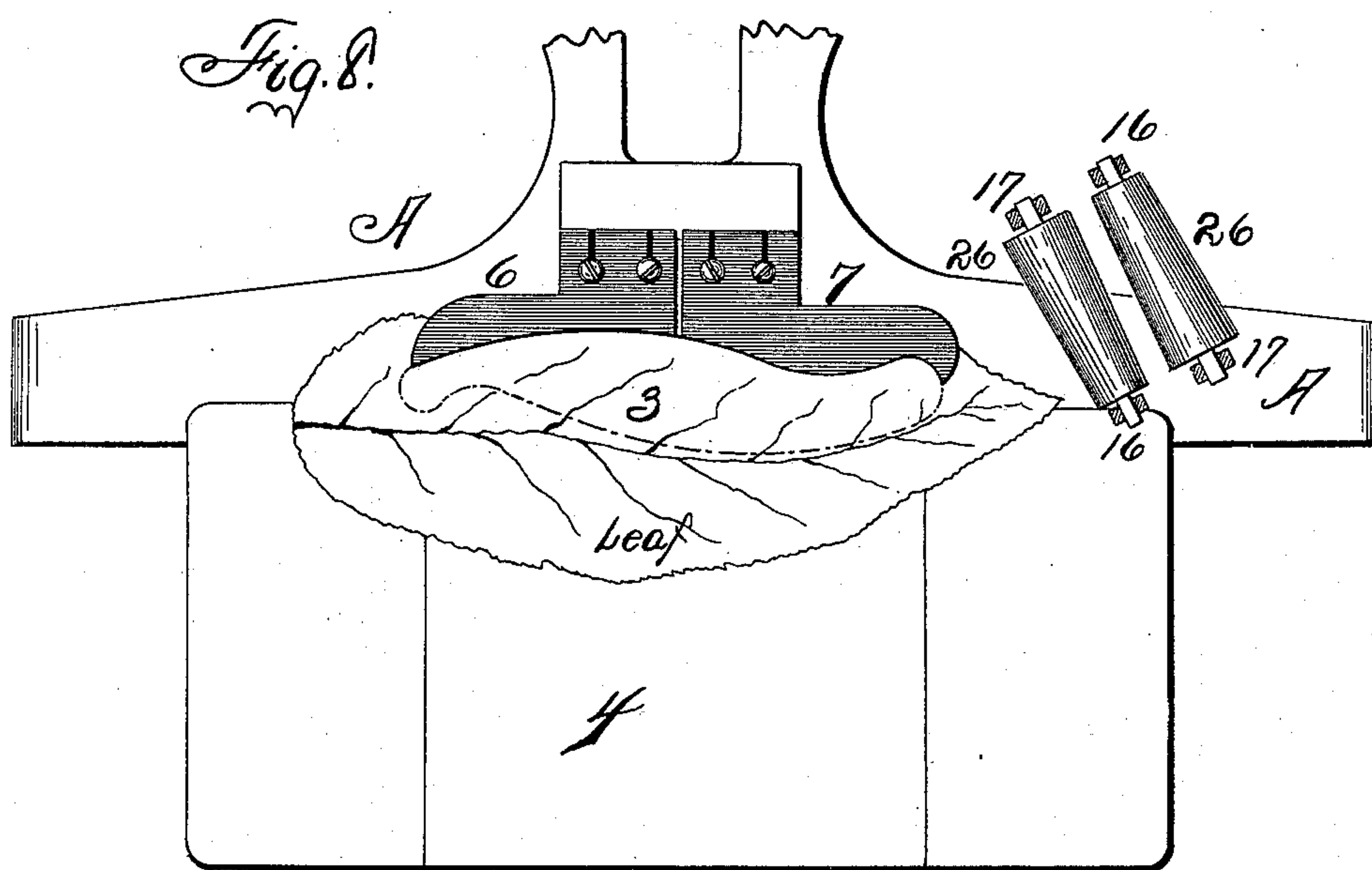
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4 Sheets—Sheet 4.

C. A. BAKER.  
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Patented Jan. 4, 1898.



WITNESSES:  
*Charles M. Marvin.*  
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# UNITED STATES PATENT OFFICE.

CHARLES A. BAKER, OF BINGHAMTON, NEW YORK, ASSIGNOR TO THE KEYES-  
BAKER CIGAR ROLLING MACHINE COMPANY, OF SAME PLACE.

## CIGAR-WRAPPER-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 596,467, dated January 4, 1898.

Application filed December 4, 1896. Serial No. 614,393. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES A. BAKER, of Binghamton, in the county of Broome, in the State of New York, have invented new and  
5 useful Improvements in Cigar-Wrapper-Cutting Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to cigar-wrapper-cutting machines, and particularly to that class  
10 which embody a stationary die or cutter having a continuous cutting edge of shape of the wrapper to be cut, means to hold the leaf while being cut, and a roller adapted to be  
15 traversed over said die and leaf to cut out the wrapper.

My object is to produce an improved machine embodying a die of suitable form; a wrapper holder or gripper composed of sections capable of separate operation and together holding more or less of the leaf upon the die; frusto-conical rollers mounted yieldingly upon parallel axes in a suitable frame connected to a pivot, whereby said rollers are  
25 swung in an arc of a circle and whereby each roller engages with an opposite side of the die, or with only one cutting edge thereof, and said wrapper-gripping sections are each weighted, so as to be normally in their closed  
30 positions, and are provided with laterally-swinging levers and link connections, whereby either section can be raised or opened independent of the other one, or both can be raised or opened simultaneously. A suitable  
35 bed and legs are also provided to carry the working parts of the machine as well as the stationary work-table.

It is constructed as follows, reference being had to the accompanying drawings, in which—

40 Figure 1 is a top plan of the machine in position for cutting a wrapper from a leaf. Fig. 2 is a side elevation of the machine. Fig. 3 is a top plan of the work-table, die, and wrapper-holder, showing one section  
45 open and the other closed. Fig. 4 is a side elevation showing the die, work-table, wrapper-holder open, and one of the operating mechanisms. Fig. 5 is a vertical section detailing the wrapper-holder sections and their  
50 operating mechanisms. Fig. 6 is a section detailing the presser-rollers, devices for oil-

ing them, and the cutting-die. Fig. 7 is a detail illustrating the yielding mounting of the presser-rollers, one roller being shown in elevation and the die in cross-section. Fig. 8  
55 is a top plan, on an enlarged scale, of the table, die, leaf, and grip sections and also showing the rollers conical and reversed. Fig. 9 is an enlarged section of the die, part of the table, and part of a gripper-section, showing  
60 the leaf gripped thereby.

A is a suitable bed erected upon standards 2, and 3 is a cutting-die having a cutting edge of the shape of the wrapper to be cut and here shown as interiorly recessed, as at *a*, to  
65 receive and retain the wrappers as they are cut until a large number are deposited therein, and all of them are kept in proper condition for use by their mutual dampness until removed in any suitable way to be used. A  
70 suitable work-table 4 is mounted in front of said die. Suitable supports 5 are erected upon the bed upon which the respective sections 6 7 of the wrapper holder or grip are separately mounted, as by a pivot or hinge  
75 joint 8, their front edges closely abutting against the rear outer face of the die, substantially as shown in Figs. 1, 7, and 9, and gripping the wrapper against it.

Upon a suitable support 9 a bell-crank lever 10 is pivoted, provided with a weight 11,  
80 and 12 is a link connecting said lever to a grip-section. Each section is provided with this mechanism, and they are here shown mounted so that by pressing a knee against  
85 the pendent arm 13 of said lever and forcing it inward that section is tilted upward, or both can be tilted simultaneously.

When a leaf is placed upon the die with its rear edge under the tilted grip-sections, one  
90 section can be lowered to partially grip it as to its rear edge or side against the rear wall of the die a little below the cutting edge, and then the leaf can be adjusted and manipulated as may be desired before the other section is lowered. This enables the operator  
95 to perfectly adjust the leaf before making the cut and much better than where the grip surrounds the entire die or is in one piece of substantially the shape of the rear half of the  
100 die, because so much more of the leaf is in sight while it is partially gripped, enabling



the operator to better avoid holes or heavy or thick ribs or damaged portions of the leaf, which are usually much more readily visible when the leaf is drawn taut or slightly stretched over the face of the die. When the lever 10 is released from strain, that grip-section is pulled down and held by the weight.

Upon a suitable part of the table an upright shaft 14 is suitably pivoted, and 15 is a suitable frame connected thereto and carrying the roller-frame. This comprises a table provided with tubular bosses 16 and recessed bosses 17. Into the bosses 16 suitable guide-pins 18 are inserted loosely, each pin being connected to a head suitably mortised or slotted, as at 19. Into the bosses 17 and their recesses bolts 20 and springs 21 are inserted, the nuts 22 being for adjusting the heads 22, which are also mortised or slotted, as at 23. In these mortises shafts 24 are suitably mounted, as by the transverse pivot-pins 25, and 26 are presser-rollers suitably journaled upon said shafts. They are frusto-conical in shape and are mounted in alternation, the small end of one beside the larger end of the other. A suitable handle 27 is provided to aid in swinging the roller-frame and its support upon the pivotal mounting. Normally the roller-shafts are more or less inclined from a horizontal, an end of each being forced down by the spring a distance regulated by the nuts 22 and being free to yield vertically when a roller is in engagement with the die. When the frame is swung, each roller first engages with the end of the die and the leaf thereon and cuts it substantially across such end. Then rising, it bears upon one side of the die only and cuts the leaf thereon. One roller cuts substantially the front half of the wrapper and the other substantially the rear half, each bearing upon the opposite side of the die, as shown in Fig. 7, when the rollers are set in alternation. Then as each roller reaches the end of the die and passes over it its spring will depress that end below the plane of the die. The hand-pressure of the operator, aided by the springs, causes the rollers to press the leaf upon the cutting edges of the die, and a wrapper is cut every time the rollers traverse the die in either direction. When the rollers are in engagement with the die, their shafts are substantially horizontal, the springs being compressed and from their conoidal form and arrangement each roller only engages with one side of the die. When they pass off from the end of the die, the springs again depress the large ends of the rollers.

Spring-controlled bars 28 are suitably connected to the table of the roller-frame, and suitable pads 29 are secured to said bars and held in contact with said rollers, being lubricated with a suitable oil to prevent the rollers from becoming gummed up from the tobacco and without damaging it.

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

1. In a cigar-wrapper-cutting machine, the combination with a die having a cutting edge of the shape of the wrapper to be cut, a wrapper-holder consisting of sections adapted to be operated independently of each other or jointly, whereby more or less of the leaf is clamped over the die, and a roller mounted upon an arm and carried over said die by the swinging of said arm upon its pivot as a center.

2. In a cigar-wrapper-cutting machine the combination with a suitable die, of a wrapper clamp or grip consisting of sections each clamping a portion of a leaf upon the die, and each adapted to be operated independently of each other or in unison with each other, and means for operating each section in combination with a pair of rollers and means to carry them over said die.

3. In a cigar-wrapper-cutting machine, the combination with a suitable die, of a frame adapted to swing upon a pivot, parallel shafts mounted in its free end, a frusto-conical roller journaled upon each shaft and each engaging with an opposite side of said die when carried over it in an arc of a circle when said frame is swung.

4. In a cigar-wrapper-cutting machine, the combination with a suitable die, of a frame adapted to swing upon a pivot, a pair of reversely frusto-conical rollers journaled in its free end upon parallel axes adapted to be oscillated vertically by the engagement of said rollers with said die whereby each roller engages with an opposite edge thereof when said frame is swung to carry them in an arc of a circle over said die.

5. In a cigar-wrapper-cutting machine, the combination with a suitable die, of a frame mounted to swing upon a pivot central to a circle of which it is a radius, and a pair of frusto-conical rollers mounted therein upon parallel shafts free to be oscillated vertically by their engagement with said die when carried over it in the arc of said circle by the swing of said frame.

6. In a cigar-wrapper-cutting machine, the combination with a suitable die, and a wrapper-leaf holder consisting of sections adapted to be operated separately or jointly to clamp the leaf upon the die, of a pair of axes mounted in the same plane, and reversely-conical rollers journaled thereon and oscillated vertically by their engagement with opposite edges of the die.

In witness whereof I have hereunto set my hand this 24th day of November, 1896.

CHARLES A. BAKER.

In presence of—

C. W. HEARY,

O. C. KINGSLEY.