No. 689,671. Patented Dec. 24, 1901.

F. P. HERMIDA.

CIGARETTE CUTTER.

(Application filed June 13, 1901.)

(No Model.) 3 Sheets—Sheet 1.

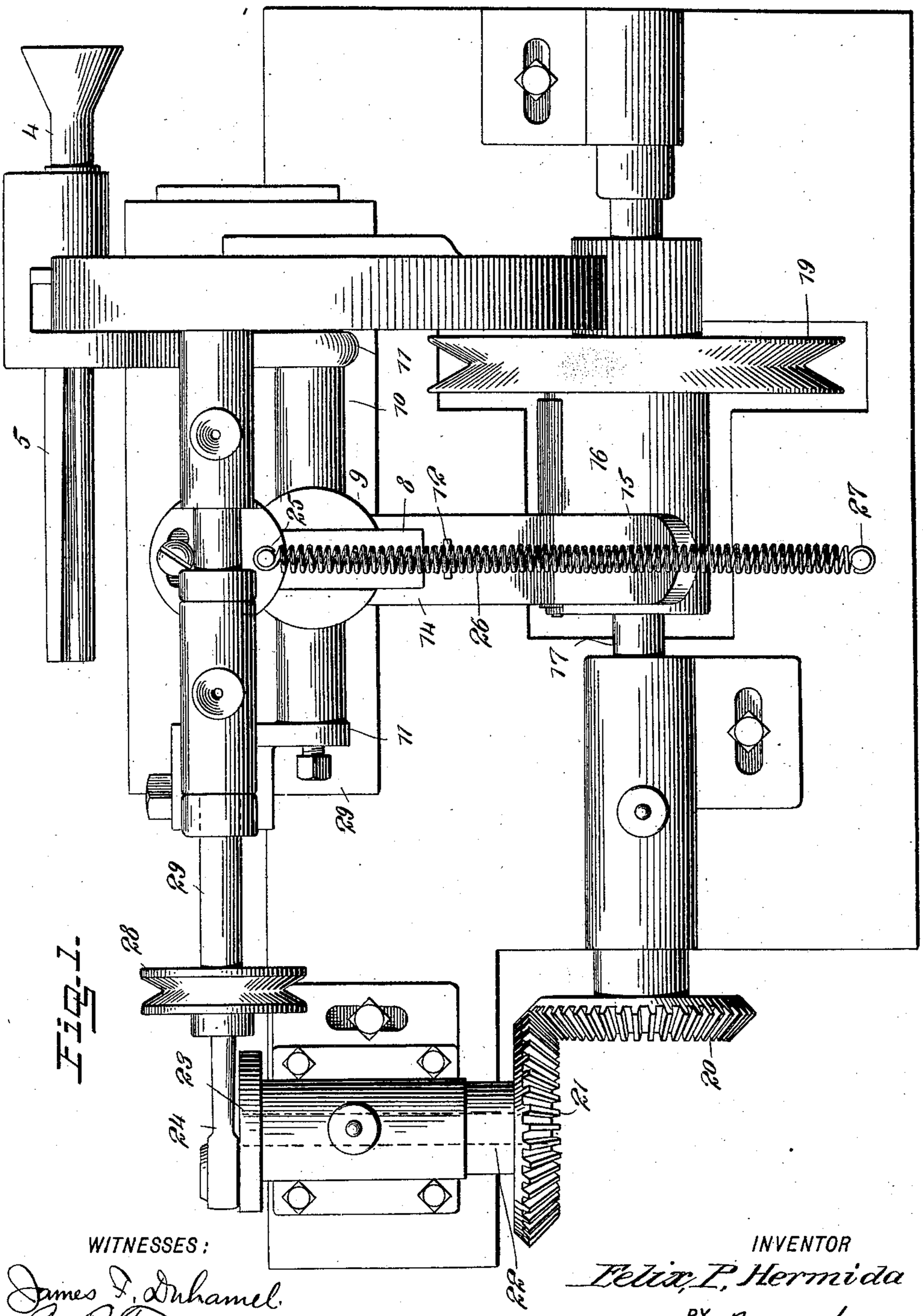

Fig. 1.

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Fig. 2.

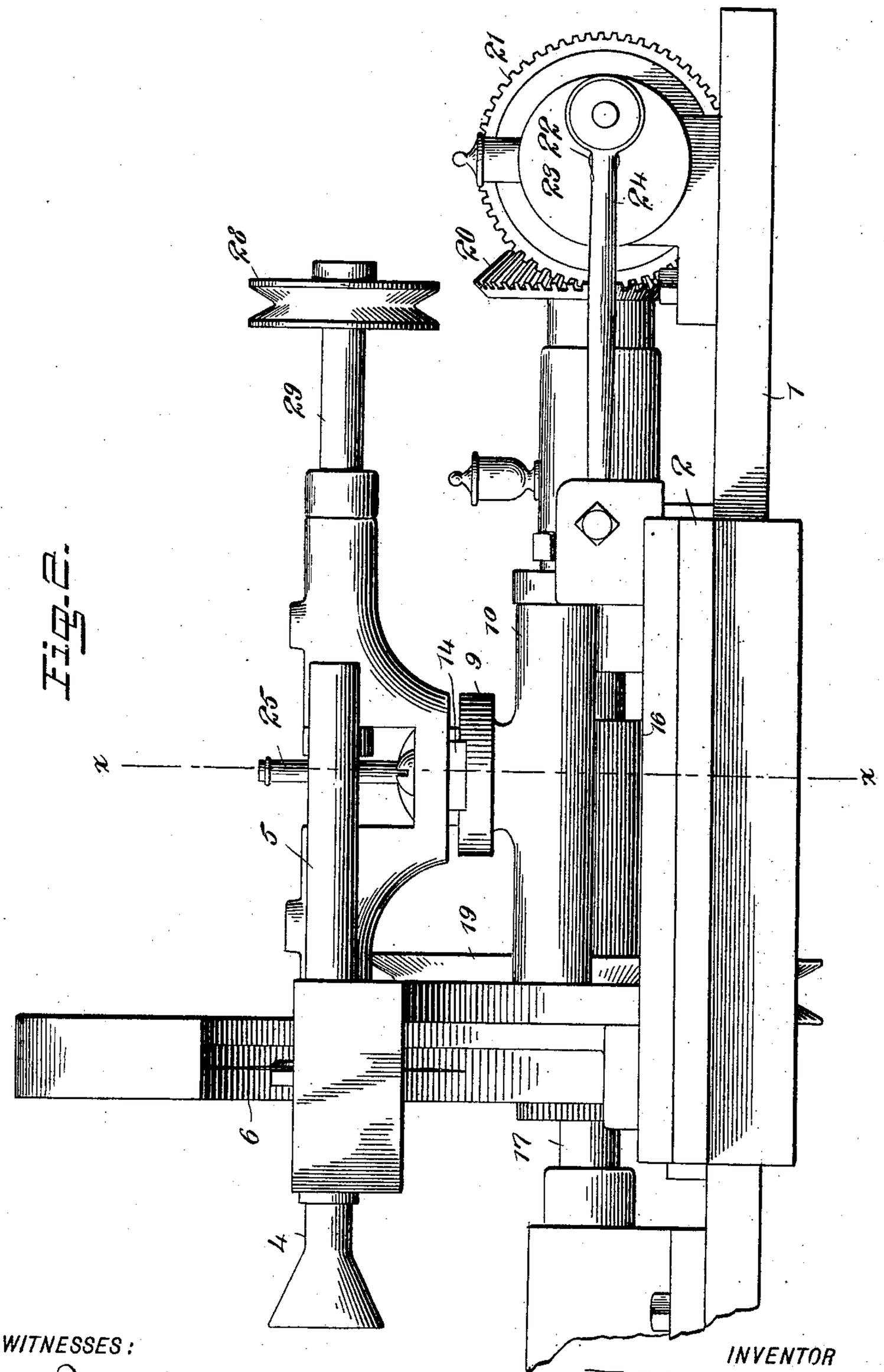

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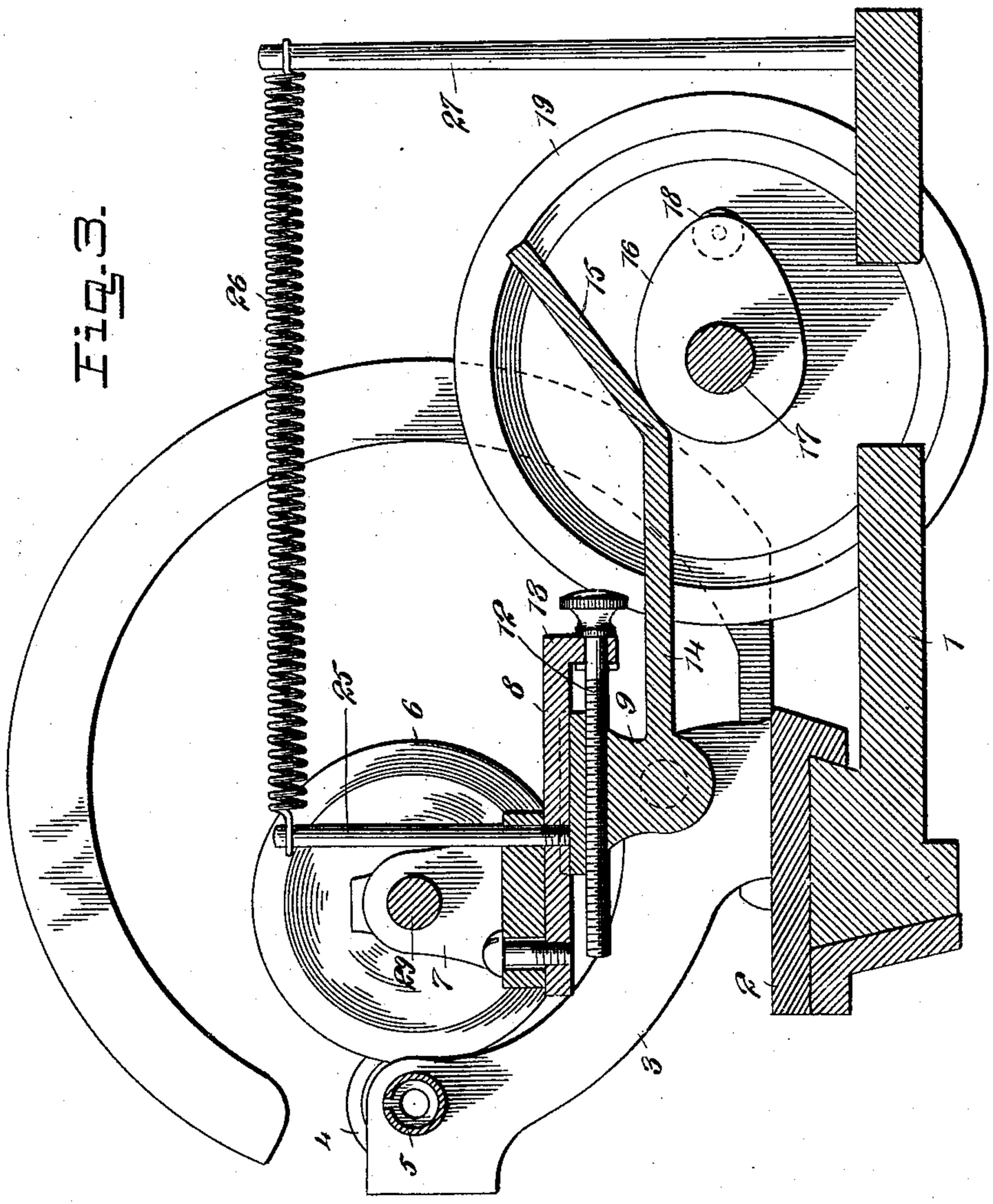
Fig. 3.



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UNITED STATES PATENT OFFICE.

FELIX PEREZ HERMIDA, OF SAN JUAN, PORTO RICO, ASSIGNOR OF TWO-THIRDS TO WILLIAM T. TOWNES AND OCTAVE J. VILLERE, OF SAN JUAN, PORTO RICO.

CIGARETTE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 689,671, dated December 24, 1901.

Application filed June 13, 1901. Serial No. 64,410. (No model.)

To all whom it may concern:

Be it known that I, FELIX PEREZ HERMIDA, a citizen of Cuba, and a resident of San Juan, Porto Rico, have invented a new and Improved Cigarette-Cutter, of which the following is a full, clear, and exact description.

This invention relates to improvements in machines for cutting cigarettes from the long lengths received from the cigarette-forming machine; and the object is to provide a cutter so constructed as to travel with the movement of the cigarette length leading from the forming-machine, thus making a straight cut without danger of tearing the paper.

I will describe a cigarette-cutter embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a cigarette-cutter embodying my invention. Fig. 2 is a front elevation thereof, and Fig. 3 is a section on the line *x x* of Fig. 2.

Referring to the drawings, 1 designates the bed-plate of the machine, upon which a carriage 2 is mounted to slide. Supported by an arm 3, extended upward from the carriage, is a tube 4 for receiving the cigarette from the forming-machine, and also a discharge-tube 5. The tube 4 is made funnel-shaped or flaring at the end, so as to insure the entrance of the cigarette. Also mounted on the carriage is a cutting-disk 6. This cutting-disk, as here shown, has bearings in uprights 7, attached to a slide-plate 8, adjustable on a block 9, supported on a rock-shaft 10, having bearings in brackets 11, attached to the carriage. The cutting-disk is adjustable toward and from the tubes 4 and 5 by means of a screw 12, engaging in a downwardly-extended portion 13 of the plate 8 and passing through a tapped opening in the block 9. From the block 9 a plate 14 extends rearward, and has an upwardly-extended portion 15, designed to be engaged by a cam 16, mounted on a main shaft 17. The part of the cam 16 designed to engage with the portion 15 of the rearwardly-extended plate is made in the form of a roller 18. This may be made of hardened steel, so that the wear will be very slight.

On the main shaft 17 is a driving-pulley 19, and on the end of said shaft is a bevel-gear 20, meshing with a gear-wheel 21 on a counter-shaft 22, and on the forward end of this counter-shaft is a crank-disk 23, to the crank-pin of which is connected one end of a pitman 24. The other end of the pitman is connected to the carriage 2. From a post 25 on the block 9 a spring 26 extends to a connection with the post 27, extended upward from the base of the machine.

In operation as the formed cigarette length is fed from the forming-machine into the tube 4 the carriage carrying the cutter will be moved toward the forming-machine by means of the pitman 24. When the full length of the cigarette has been fed into the cutting-machine, the cam 16 will cause a rocking of the block 9 to move the cutter into engagement with the cigarette and cut through the same, the cutting-disk being kept in rotation by means of a band engaging with a pulley 28 on the shaft 29 of the cutter. While thus cutting the cigarette the cutting-disk will be moved with the carriage away from the forming-machine and at the same rate of speed that the cigarette is fed from the forming-machine. After cutting through the cigarette the spring 26 will return the cutter to its rearward position.

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

1. A cigarette-cutter, comprising a sliding carriage, a rock-shaft on the carriage, a plate adjustable transversely of the rock-shaft, a screw for causing the adjustment of the plate, a rotary cutter carried on the plate, a cam-plate extended from the rock-shaft, and a cam for engaging with the cam-plate.

2. A cigarette-cutter, comprising a sliding carriage, a rock-shaft on the carriage, a plate adjustable transversely of the rock-shaft, means for causing the adjustment of the plate, a rotary cutter carried on the plate, a cam for causing a swinging movement of said cutter in one direction, and a spring for swinging it in the opposite direction.

3. A cigarette-cutter, comprising a sliding

carriage, a rock-shaft on the carriage, a plate adjustable transversely of the rock-shaft, a rotary cutter carried by said plate, a cam-plate extended from the rock-shaft, a rotary cam for engaging with the cam-plate, a post extended upward from the carriage and a spring connected at one end to said post and at the opposite end to a fixed part.

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

FELIX PEREZ HERMIDA.

Witnesses:
G. H. TOWNES,
A. H. NOBLE.