

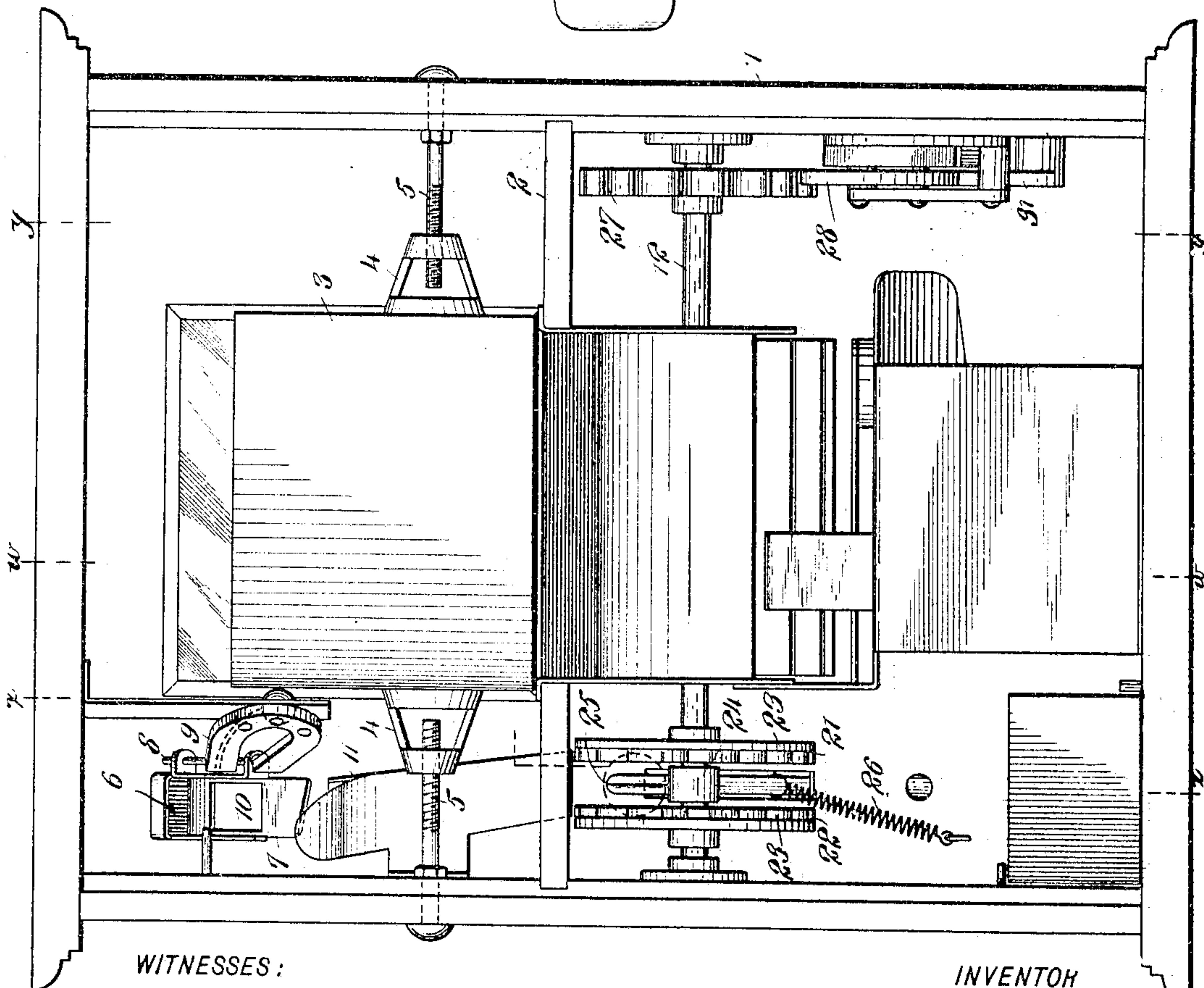
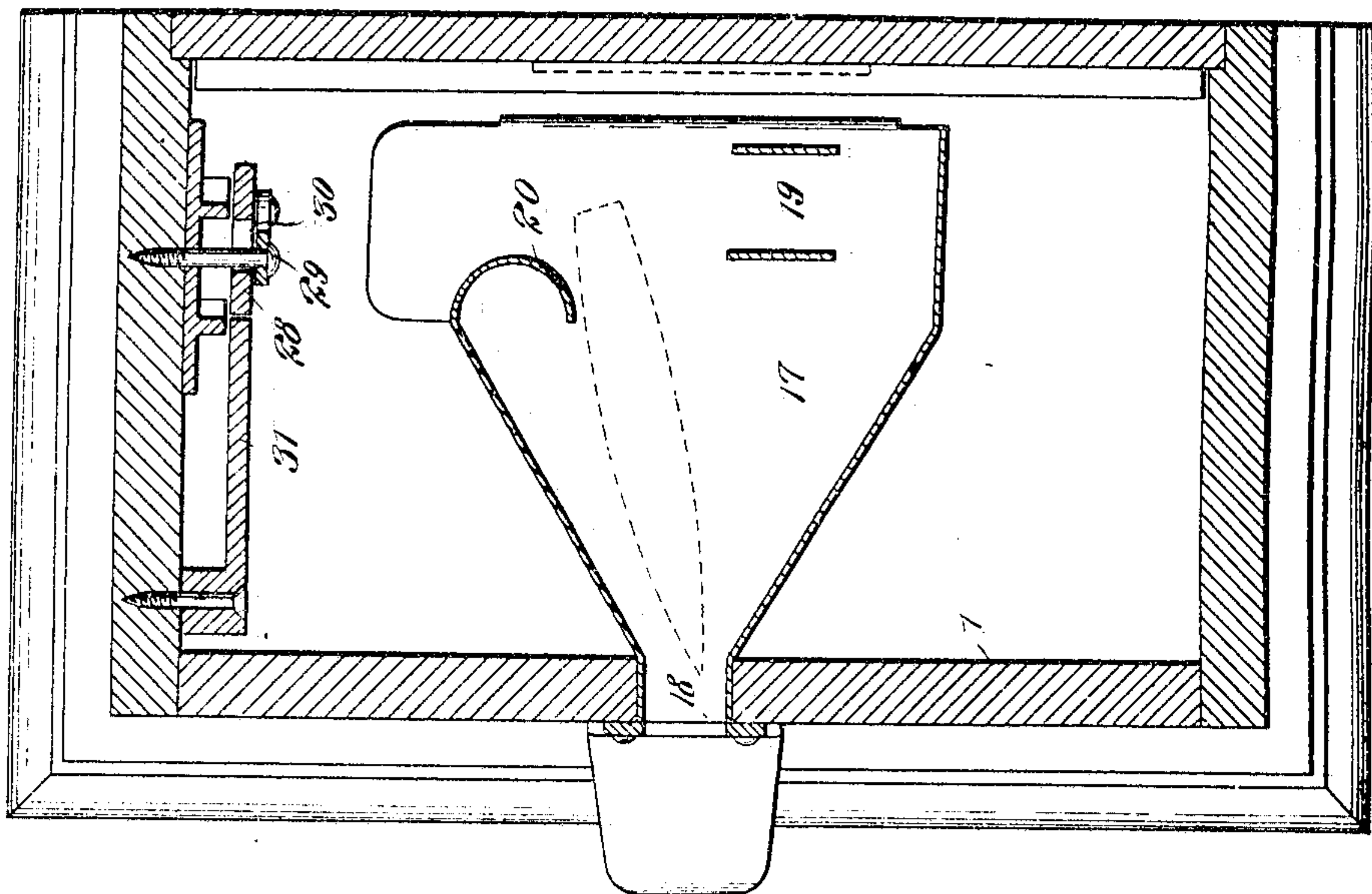
No. 782,258.

PATENTED FEB. 14, 1905.

W. McC. MACK.
VENDING MACHINE.
APPLICATION FILED JUNE 3, 1901.

3 SHEETS—SHEET 1.

Fig. 2



WITNESSES:

J. A. Doolley
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Fig. 1

INVENTOR

William McC. Mack

BY

Mum

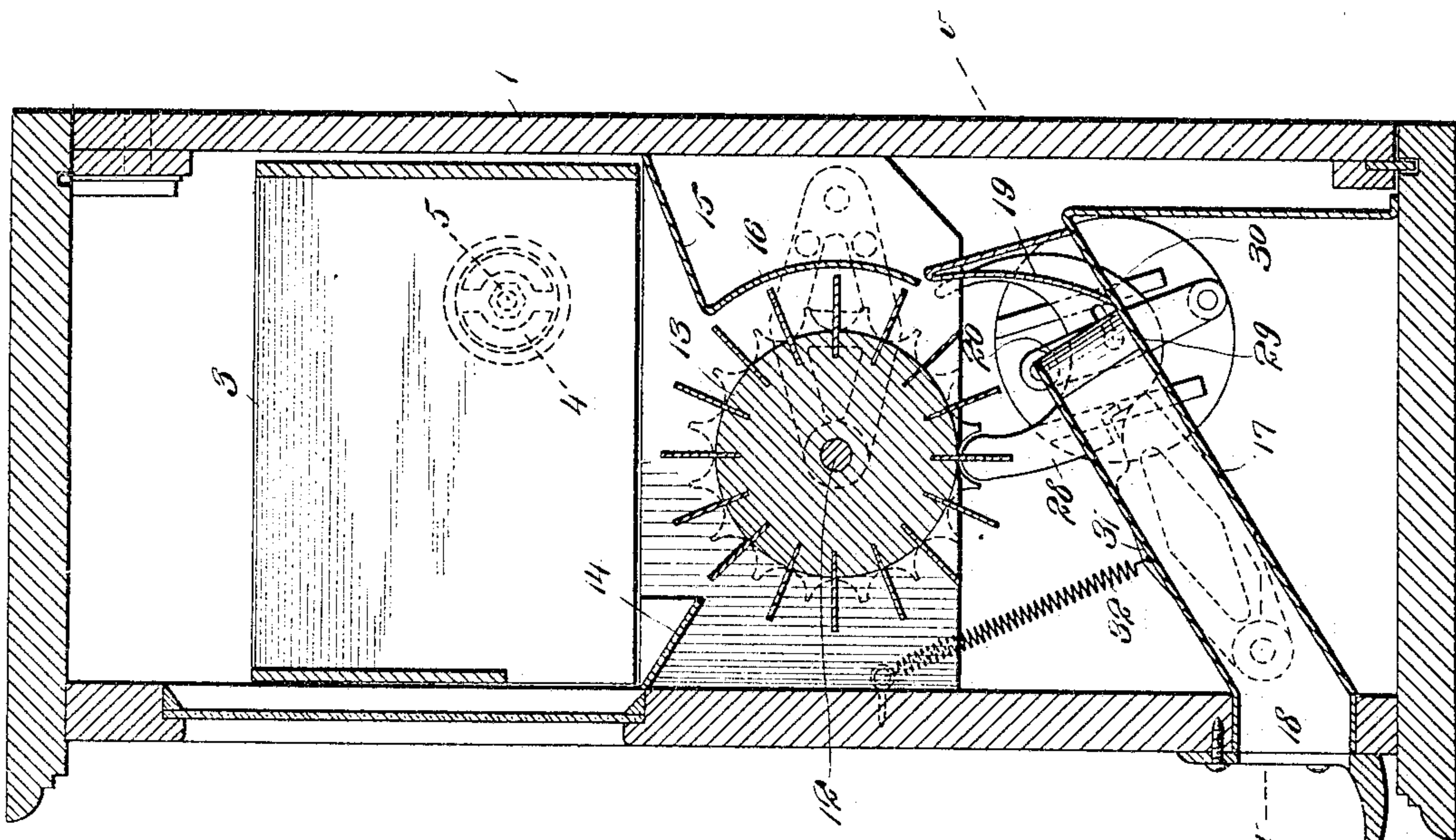
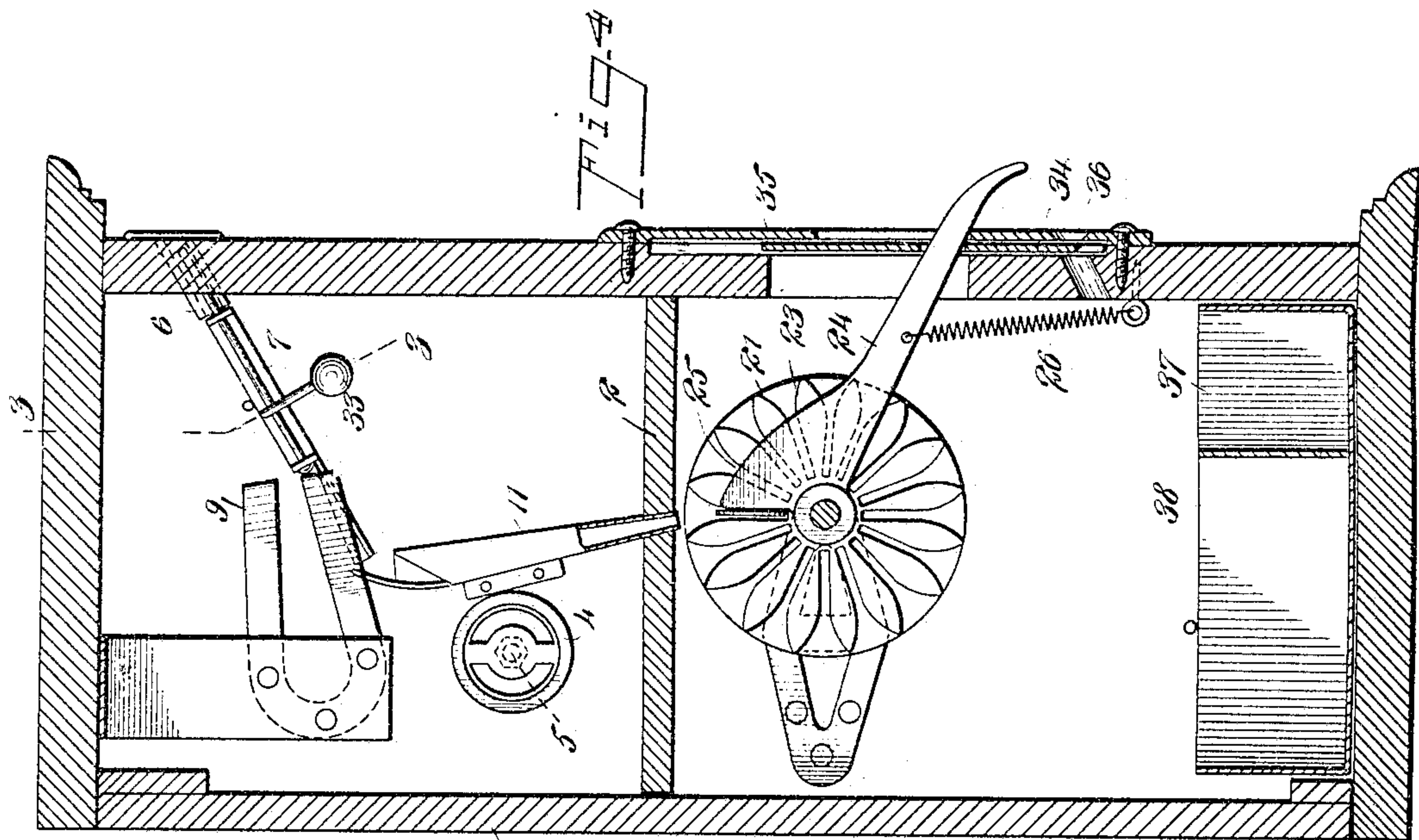
ATTORNEYS

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3 SHEETS—SHEET 2.



WITNESSES:
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Fig. 5

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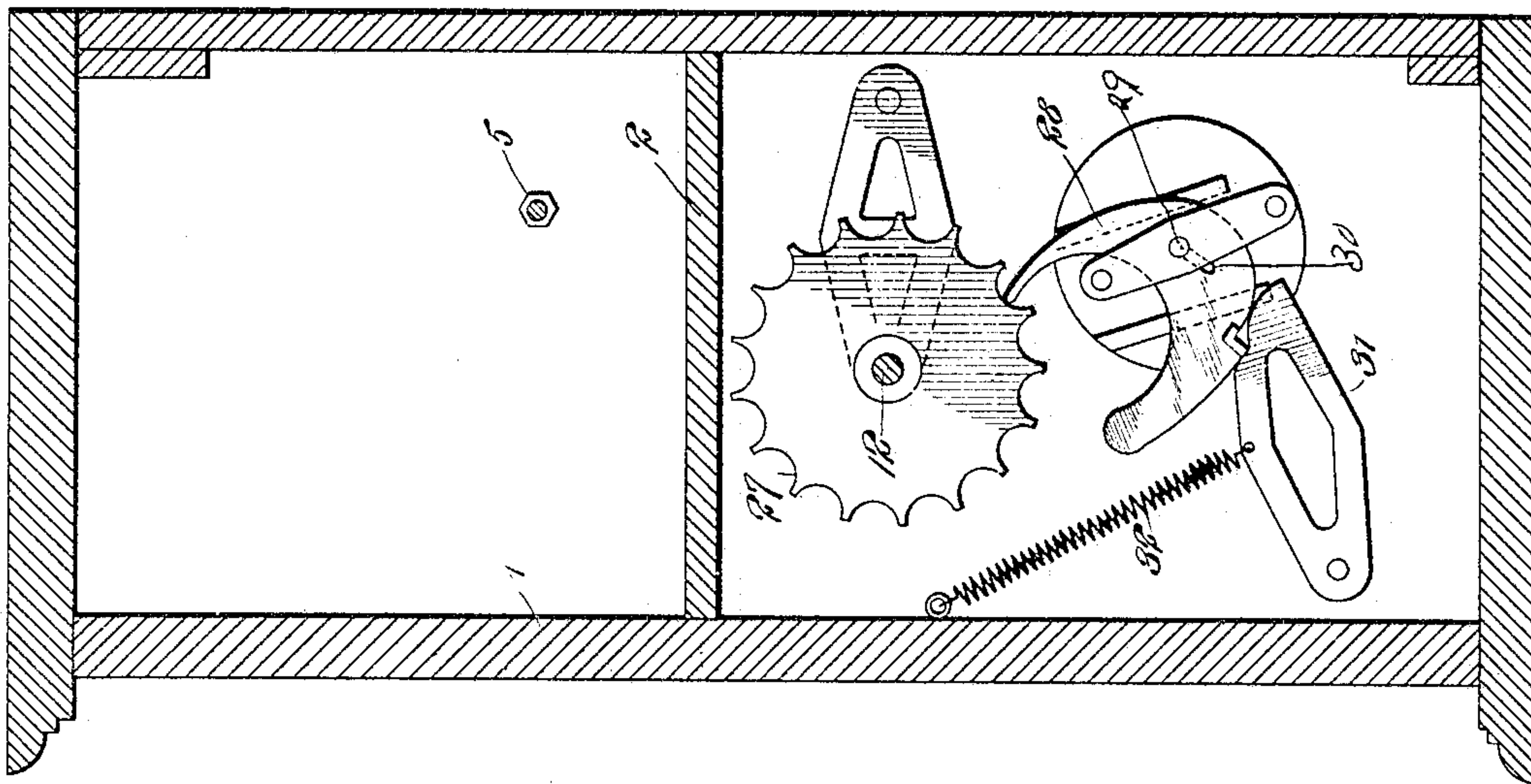
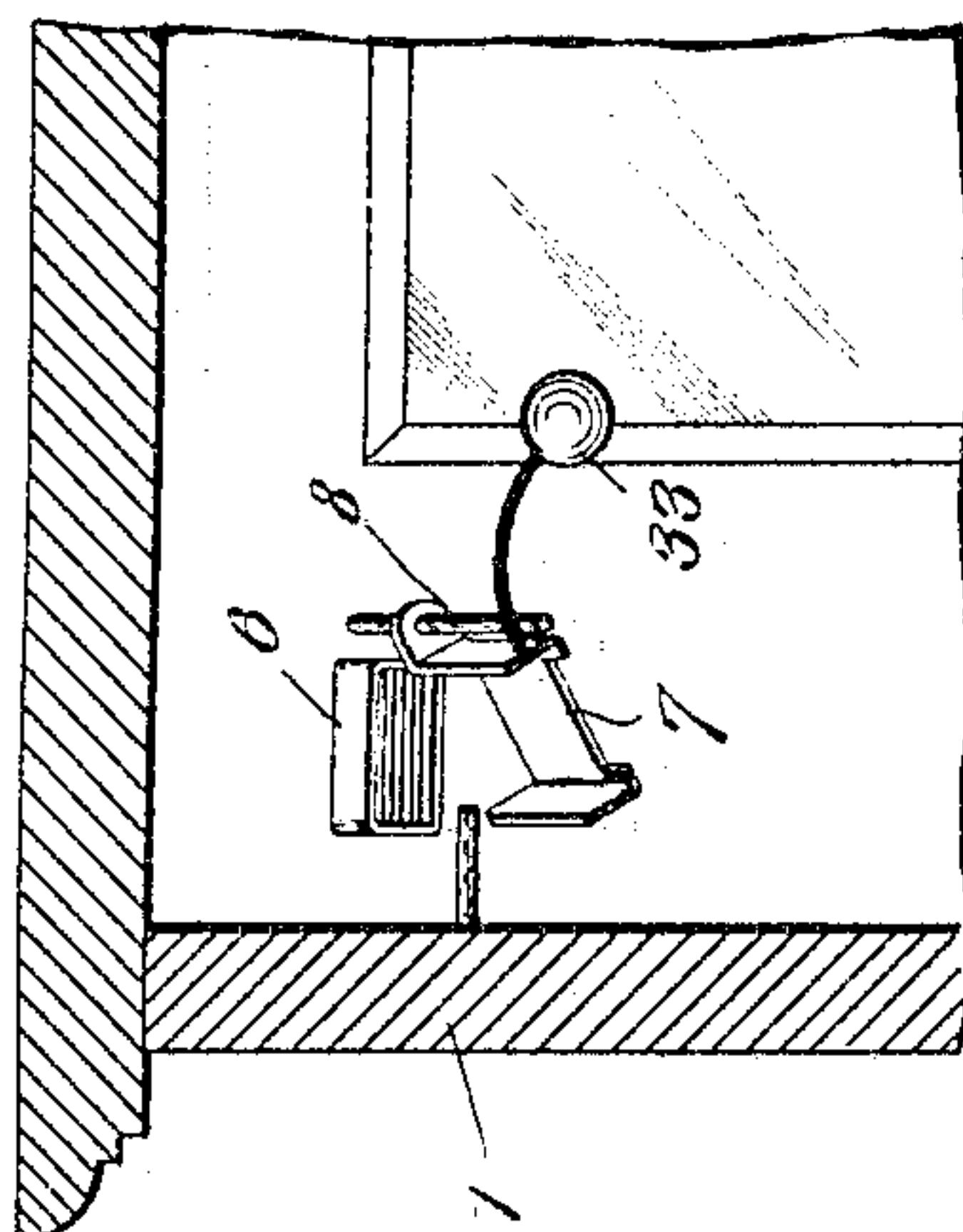
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3 SHEETS—SHEET 3.

Fig. 8



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Fig. 9

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UNITED STATES PATENT OFFICE.

WILLIAM McCOY MACK, OF WEST BUXTON, MAINE, ASSIGNOR TO
WILLARD URIAH PIKE, OF BUXTON, MAINE.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 782,258, dated February 14, 1905.

Application filed June 3, 1901. Serial No. 62,937.

To all whom it may concern:

Be it known that I, WILLIAM McCOY MACK, a citizen of the United States, and a resident of West Buxton, in the county of York and State of Maine, have invented a new and Improved Vending-Machine, of which the following is a full, clear, and exact description.

This invention relates to improvements in coin-controlled machines for vending cigars or like articles; and the object is to provide a machine of simple construction and having a simple means for preventing the operation of the machine by the insertion of a coin or other device other than the coin for which the machine is adapted, and, further, to so construct the device that only one cigar can be delivered at a time.

I will describe a vending-machine 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 rear elevation of a vending-machine embodying my invention with the back of the casing removed. Fig. 2 is a section on the line *vv* of Fig. 3. Fig. 3 is a section on the line *ww* of Fig. 1. Fig. 4 is a section on the line *xx* of Fig. 1. Fig. 5 is a section on the line *yy* of Fig. 1, and Fig. 6 is a section on the line *zz* of Fig. 4.

Referring to the drawings, 1 designates the casing, divided into upper and lower compartments by a partition 2. The upper compartment is designed to receive a box of cigars. I have here shown a cigar-box 3 as centered or held in place by means of clamp-nuts 4 on bolts 5, attached to the machine-casing. A short coin-chute 6 leads through the front of the casing at a downward incline and is designed to discharge coins or other articles upon a platform 7, which is also arranged at a downward incline. This platform 7 is mounted to swing at one side on a rod 8, and it is normally inclined laterally, so that should a coin or other device lighter than the coin designed for use in the machine slide upon said platform it will slide off at one side or

down the incline and fall into the machine-casing. Should an article or coin heavier than that designed to be fed upon the platform be used, its weight will cause it to tilt, throwing said device downward into the casing of the machine. Should an iron washer or other device capable of attraction by a magnet be inserted, it will be stopped and held by the permanent magnet 9, having its poles near one side of the platform 7. The platform 7 is also provided with an opening 10, through which pennies or other small coins will fall. Should a nickel, for which this machine is intended, be inserted, it will slide along the platform and drop into a hopper 11 to perform its service, as will be hereinafter described.

Arranged across the casing in the lower compartment is a shaft 12, upon the central portion of which a delivery-wheel 13 is mounted. This delivery-wheel is provided with a series of pockets, each one adapted to receive a single cigar which falls from the box 3. At the forward portion of the casing, at the upper portion of the delivery-wheel, is a downwardly and inwardly extended guide-plate 14 and at the rear side is a downwardly and inwardly extended guide-plate 15, having a portion 16 in the form of a segment or conforming to the shape of the wheel. This rear guide 15 16 will prevent the delivery of more than one cigar at a time, because the cigars in the pockets opposite the segment 16 will be prevented from falling out, while the cigar in the space or pocket immediately below it will fall out and drop upon an inclined platform 17, which discharges the cigar through a small opening 18 in the front of the machine at the bottom. It is desired that the cigar shall be tilted endwise. Therefore when a cigar drops upon the platform it will strike against a curved deflector-plate 19 at the upper end of the platform 17 and near one side, and the other end of the cigar will engage against the upper side of a curved deflector-plate 20 at the upper end of the platform and at the side opposite the deflector 19. As will be noted by the dotted lines in Fig. 2, by this construction the cigar will be caused to turn and discharge with the point first through the opening 18.

Fixed to the shaft 12 at one side of the delivery-wheel are coin-receiving disks 21 and 22. These coin-receiving disks are each provided on the inner side with radial teeth 23. The spaces between the teeth of one disk are arranged directly opposite the spaces between the teeth of the other disk, and into these spaces the coins are designed to drop, as indicated by dotted lines in Fig. 1. Mounted to swing on the shaft 12 between the coin-receiving disks is a lever 24, which extends outward through the front of the machine, and at its inner end it has an upward projection or lug 25, designed to engage with a coin. It is held normally downward by means of a spring 26, fastened at one end to the lever and at the other end to the casing.

On the shaft 12, at the opposite side of the delivery-wheel from that occupied by the coin-receiving wheels, is a stop-wheel 27. This stop-wheel is provided with a series of peripheral notches equal in number to the pockets of the delivery-wheel and also equal in number to the spaces for receiving the coins. This stop-wheel is normally engaged by the rounded end of a crescent-shaped dog 28, which is mounted to swing and to slide on a pin 29, said pin being passed through a slot 30 in said dog. A lever or arm 31 engages at its free end with a projection on the dog, and it is held normally upward by means of a spring 32.

In operation upon inserting a coin of suitable denomination it will slide down the platform 7 into the hopper 11 and thence to the coin-receiving disks. By swinging the lever 24 upward its projection or lug 25 will engage with the coin and impart a slight rotary movement to the shaft 12—that is, a movement sufficient to move the pocket containing a cigar below the lower end of the plate 16. During this movement the dog 28 will be rocked, causing its pointed end to engage against a tooth of the stop-wheel, moving the rounded end out of engagement with the wheel until the wheel is rotated a slight distance to free the pointed end. Then the dog will be forced quickly back to its normal position by means of the spring 32 and the lever 31, thus, as the rounded end of this dog fits snugly in a notch of the wheel, preventing any backward movement or forward movement of the delivery-wheel. It may be here stated that the platform 7 is held in its normal position by means of a counterweight 33, attached to an arm extended from the pivoted side of said platform.

In connection with the machine I provide a cigar-tip cutter which is operated by the re-

turn or downward movement of the actuating-lever 24. This tip-cutter consists of a blade 34, mounted to slide in a recess in the front of the casing and at the inner side of a plate 35. The sharpened end of this cutter is designed to move across an opening 36, in which the tip of the cigar is placed. When severed, the tip will fall into a tray 37, placed in the casing. This tray also has a compartment 38 to receive the coins passed from the coin-receiving disks.

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

1. In a coin-controlled vending-machine, a casing, a shaft mounted therein, a delivery-wheel in the casing, a pair of coin-receiving disks on the shaft, the said disks having on their inner faces radial lugs, the spaces between which are designed to receive coins, the opposite lugs being in fixed relation to each other, a lever mounted to swing on the shaft and having a projection for engaging with a coin received in the disks, and a retarding or stop device for the shaft, substantially as specified.

2. In a coin-controlled vending-machine, a casing, a shaft arranged therein, a delivery-wheel mounted on the shaft, coin-receiving devices on the shaft, means for operating the shaft by engaging with a coin in the receiving devices, a stop-wheel on the shaft and having notches in its periphery, a crescent-shaped dog having a blunt end and a sharp end, the blunt or rounded end being normally engaged with the stop-wheel, and a spring for moving said dog to its normal position, substantially as specified.

3. In a coin-controlled vending-machine, a casing, a shaft arranged therein, a delivery-wheel on the shaft and having pockets, a coin-receiving device on the shaft, means for operating the shaft by engaging with a coin in the receiving device, a stop-wheel on the shaft and having notches in its periphery equal to the number of pockets in the delivery-wheel, a curved dog mounted to swing and to slide, the said dog having a sharp end and a blunt end, the said blunt end being adapted to engage tightly in a notch of the stop-wheel, and means for moving the dog to normal position, substantially as specified.

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

WILLIAM McCOY MACK.

Witnesses:

HATTIE D. HOBSON,
CHARLES BUTLER.