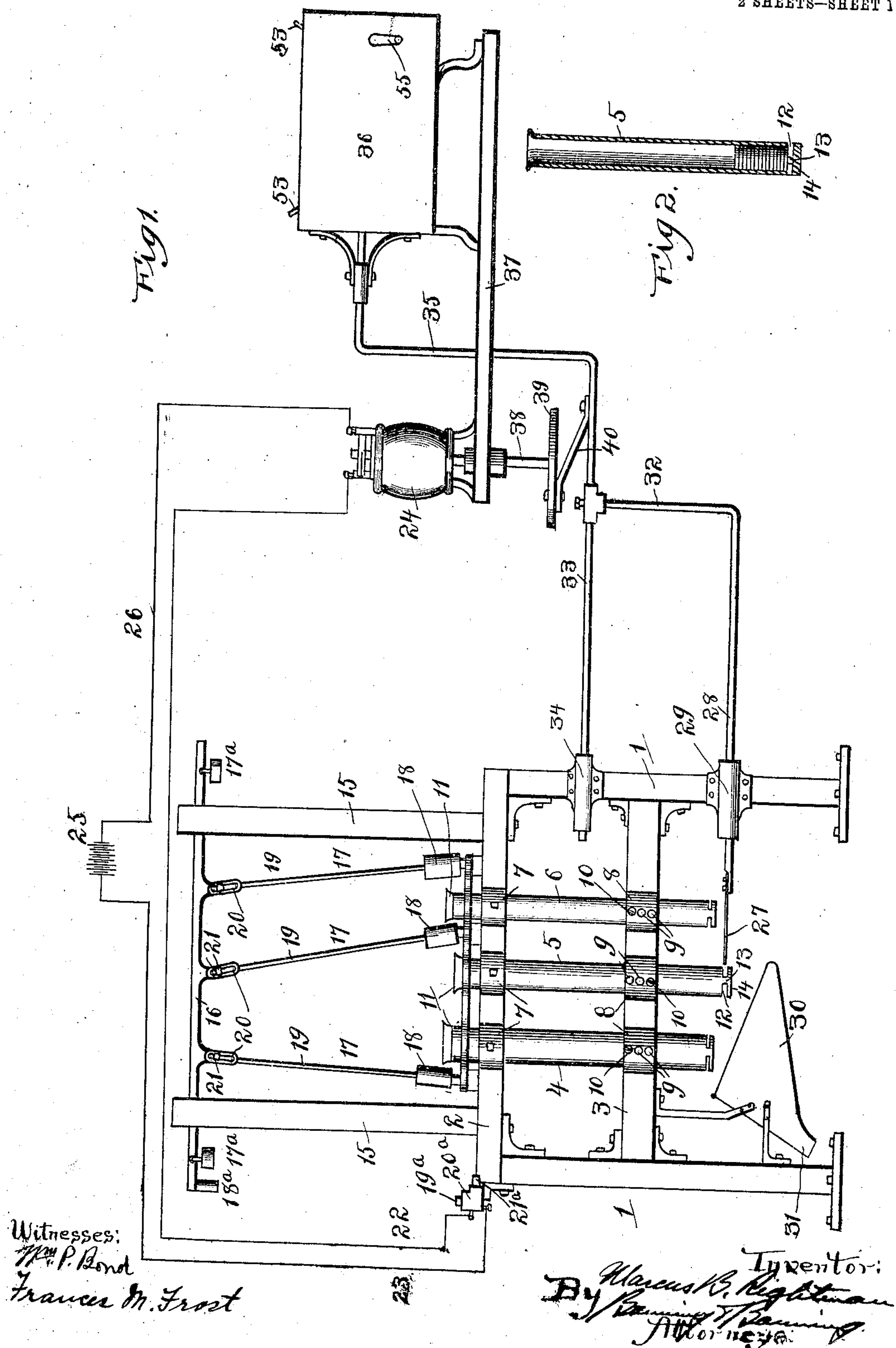


**No. 841,446.**

PA  
M. B. RIGHTMAN.  
COIN COUNTING MACHINE.  
APPLICATION FILED FEB. 1, 1906.

PATENTED JAN. 15, 1907.

2 SHEETS—SHEET 1

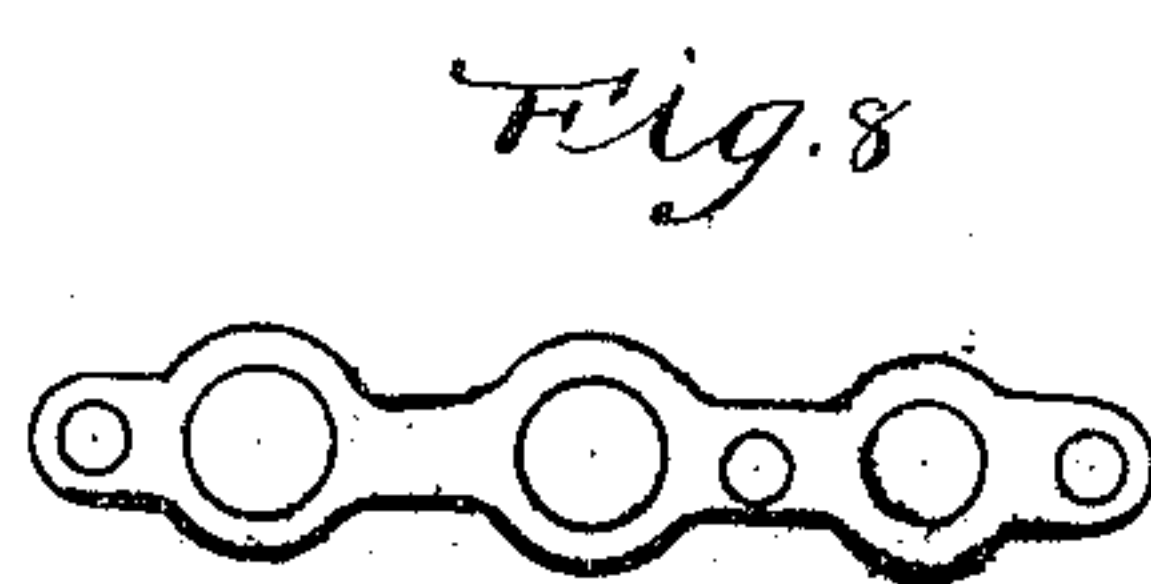
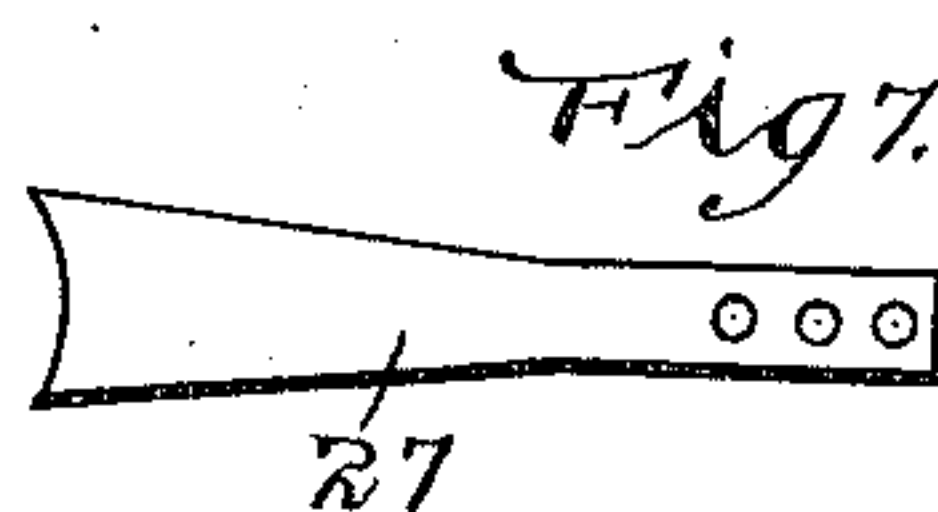
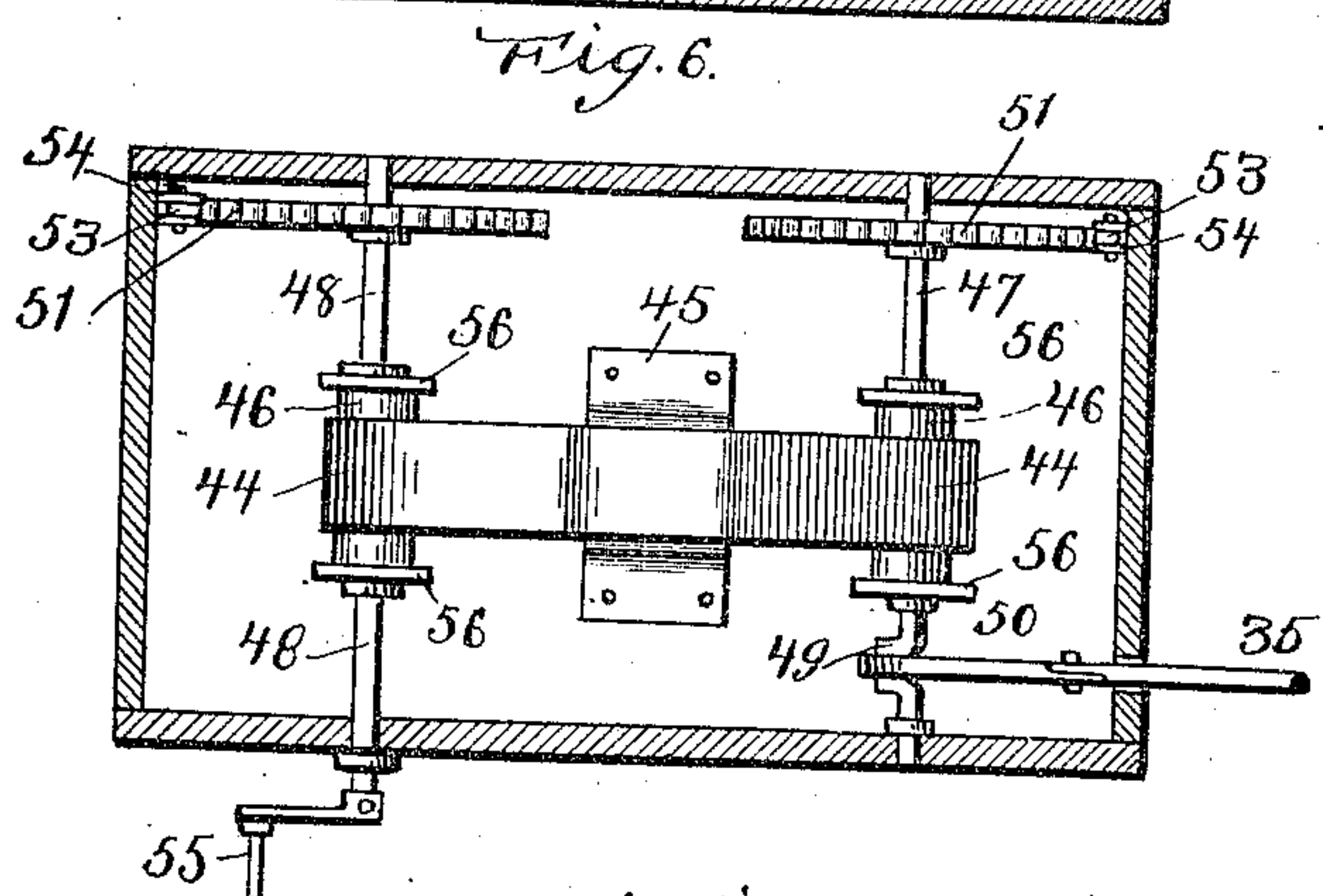
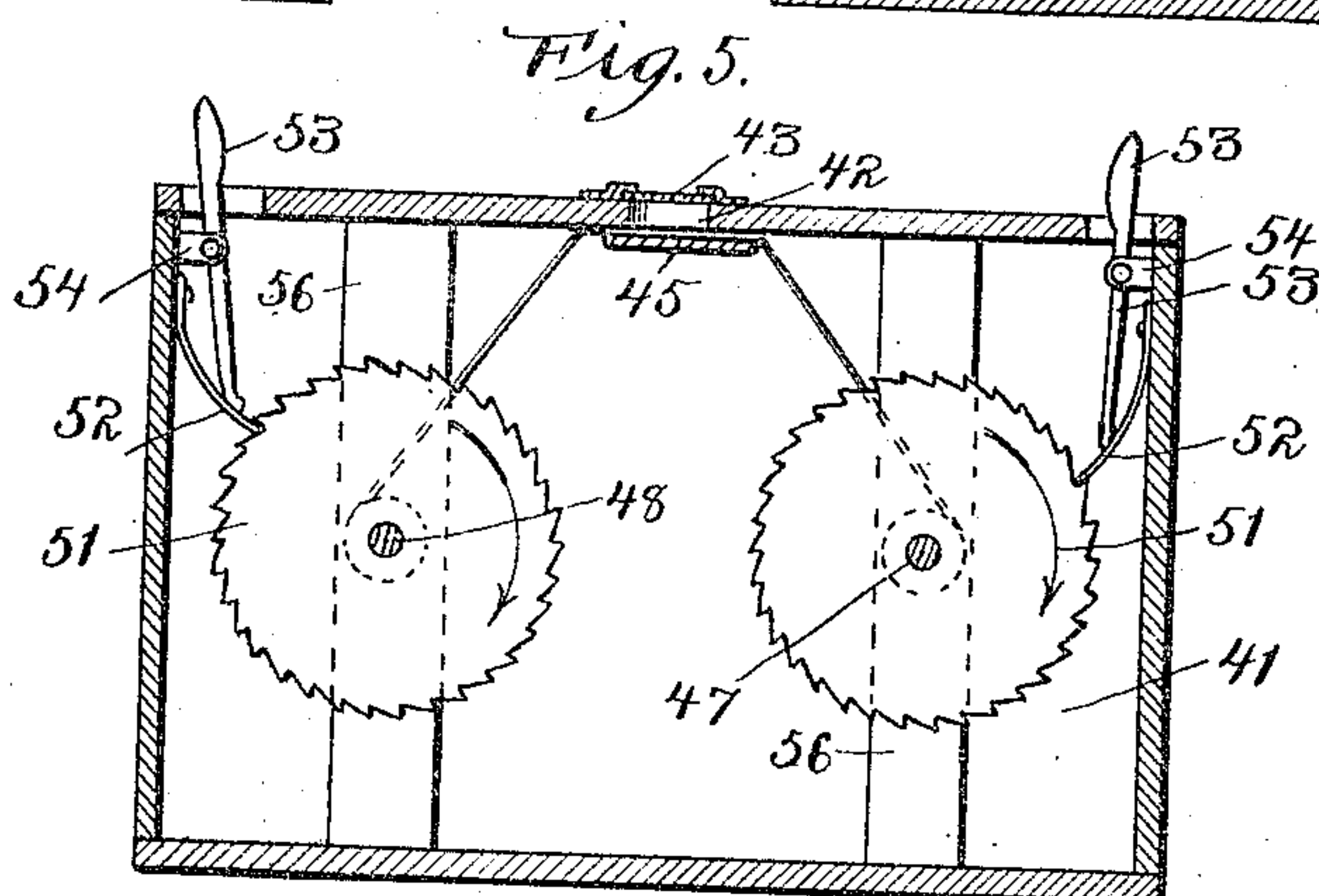
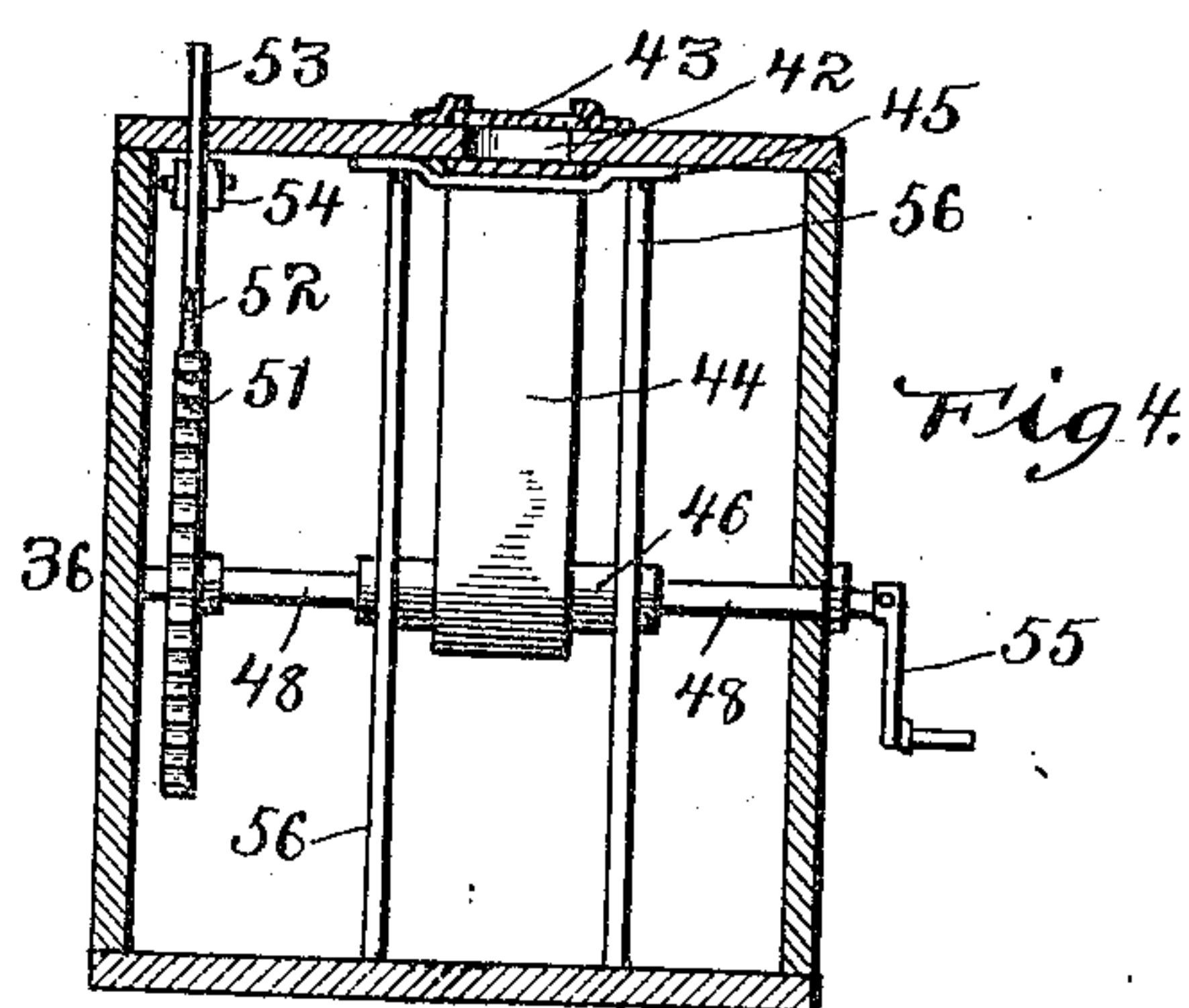
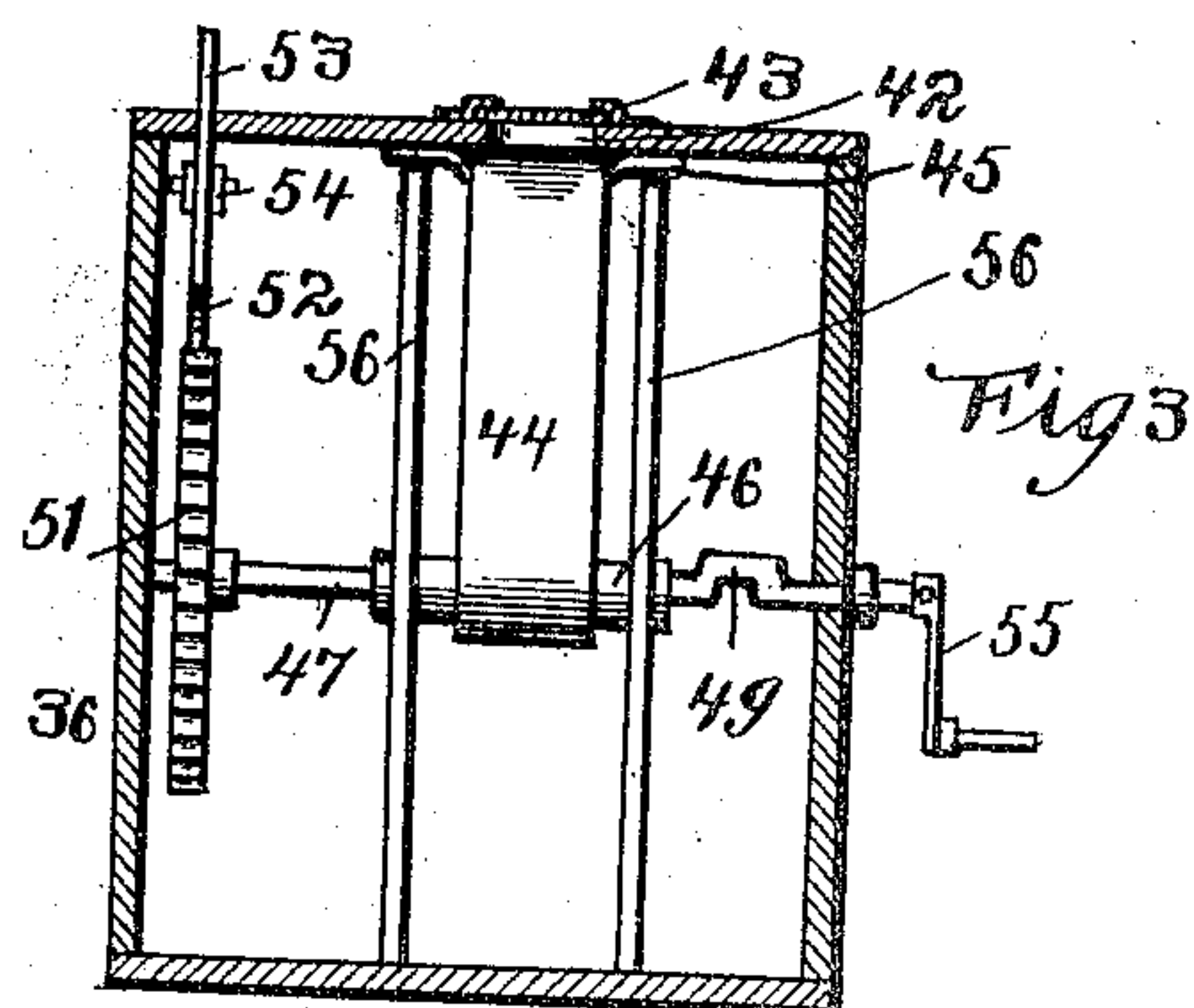


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2 SHEETS—SHEET 2.



Witnesses:  
Wm. P. Bond  
Francis M. Frost.

Inventor:  
Marcus B. Rightman  
By *Banning & Banning*  
Attorneys.



# UNITED STATES PATENT OFFICE.

MARCUS B. RIGHTMAN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF  
TO ALEXANDER B. SEELENFREUND, OF CHICAGO, ILLINOIS.

## COIN-COUNTING MACHINE.

No. 841,446.

Specification of Letters Patent.

Patented Jan. 15, 1907.

Application filed February 1, 1906. Serial No. 298,990.

*To all whom it may concern:*

Be it known that I, MARCUS B. RIGHTMAN, a subject of the Czar of Russia, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Coin-Counting Machines, of which the following is a specification.

This invention is intended for use in banks, mercantile houses, or other establishments in which it is necessary to count and register a large number of coins daily; and the object of the invention is to provide mechanism for rapidly and automatically counting coins of different denominations.

Another object of the invention is to provide means for automatically stopping the operation of the machine after a predetermined number of coins have been counted, thereby shutting off the power and preventing an unnecessary and wasteful use of power after the counting operation has ceased.

The invention consists in the counting and registering mechanisms, and in the means by which the two mechanisms are simultaneously operated, and in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of the entire mechanism; Fig. 2, a sectional elevation of one of the coin-chutes; Figs. 3 and 4, cross-sectional views of the register; Fig. 5, a longitudinal sectional view of the same; Fig. 6, a sectional plan view of the same; Fig. 7, a view of the coin-striker, and Fig. 8 a detail of one of the braces for holding the coin-chutes in place.

The mechanism as a whole consists of a frame or standard having uprights 1, an upper cross-rail 2, and an intermediate cross-rail 3. The frame or standard serves as a support for a plurality of vertical coin-chutes 4, 5, and 6, of substantially the same length and having different diameters to accommodate coins of different denominations—as, for instance, dollars, half-dollars, and quarters. The coin-chutes are secured to the top rail by means of upper collars 7, through which the chutes pass, and are secured to the intermediate rail by lower collars 8, the chutes being slidably mounted within the collars and adapted to be adjusted to various degrees of vertical elevation. In order to provide for this adjustment, the lower

collars are provided with a plurality of screw-holes 9 and into any one of which may be inserted a screw 10 for holding the chute in adjusted position. The chutes are tubular in form, and each is provided with a flaring mouth 11 at the upper end, and the lower end of each chute is provided with a discharge-slot 12, cut substantially the entire distance around the tubular wall of the chute, leaving connecting-necks 13, which prevent the displacement of the closed bottom 14 of the chute.

Secured to the upper cross-rail are a pair of standards or posts 15, which serve as guide-ways for a slidable cross-rod 16, to which are secured a plurality of plungers 17, each having a head 18 and a shank 19, the latter terminating in a slotted end 20, adapted for the passage therethrough of a thumb-screw 21 for securing the shank to the cross-rod 16. The cross-rod 16 is provided with weights 17<sup>a</sup> for forcing down the coins within the chutes and is further provided at one end with a contact 18<sup>a</sup>, which is adapted to depress a button 19<sup>a</sup> on an electric switch 20<sup>a</sup> for breaking the current which operates an electric motor to be hereinafter described. The switch is provided with a second button 21<sup>a</sup>, adapted to close the circuit, and from the switch lead circuit-wires 22 and 23, the former of which leads to an electric motor 24 and the latter of which leads to a suitable source of electric supply 25, from which source a circuit-wire 26 leads to the motor and completes the circuit.

The coins are discharged by means of a reciprocated spade-shaped striker 27, which is secured to the end of a reciprocating rod 28, passing through a journal-mounting 29 on one of the uprights, and the end of the striker is positioned to enter into the coin-discharge slot of one of the tubes at every forward thrust of the reciprocating rod, knocking out the lowermost coin into a funnel-shaped hopper 30, having a discharge-mouth 31. The striker is removably secured to the end of the rod and is of suitable size and shape to operate on coins of any particular denomination, and it is the intention to provide a different striker for each of the coin-chutes, the discharge-slots of course being of different sizes to accommodate coins of different denominations. The reciprocating rod 28 terminates in an upturned end 32, which is connected



with a guide-rod 33, which latter is slidably mounted at one end in a bearing 34 and at the other end 35 is suitably bent or turned to reciprocate within a register 36, adapted to automatically count the number of coins discharged daily into the chute or tube. The electric motor 24 and register 36 are suitably mounted on a table 37, and the motor has depending therefrom a shaft 38, having on its end a wheel 39, which latter is adapted to be revolved by the motor and is connected, by means of a crank 40, with the reciprocating guide-rod 33, so that at each reciprocation of the rod a coin of the selected denomination will be discharged from the chute and simultaneously the register will be operated to record the discharge.

The register consists of a box 41, having in its top an opening 42, covered by a piece of glass 43, beneath which sight-opening runs a tape 44, which is held in proximity to the sight-opening by means of a bracket 45, between which and the opening the tape passes, and the ends of the tape are carried by spools 46, mounted upon shafts 47 and 48, the former of which is provided with a crank 49, which is connected with the reciprocating rod 35 by means of a link 50, and each of the shafts has mounted thereon a ratchet-wheel 51 for preventing the return movement of the spools. The ratchet-wheel has cooperating therewith a spring-dog 52, which engages the teeth of the ratchet-wheel, and the spring-dogs are adapted to be thrown out of engagement by the movement of levers 53, pivoted to ears 54, the inner ends of which levers rest against the springs and are adapted when the levers are drawn together to simultaneously release both of the springs from the ratchet-wheels, allowing the tape to be turned back by means of a handle 55 on the shaft 48. The two shafts are journaled within vertical supporting-rods 56, which extend from top to bottom of the box.

In operation the cross-rod and plungers are raised to their elevated position, and one or more of the plungers is swung out of its chute and serves as a support for maintaining the cross-rod in elevated position. Coins of the selected denomination are then poured into the proper chute until the latter is filled, after which the proper striker for the selected denomination is secured to the end of the reciprocating rod, and the empty coin-chutes are elevated sufficiently above the end of the filled coin-chute to prevent interference with the operation of the striker. The tape is then turned to the proper position and the motor-circuit closed, which starts the operation of the electric motor and begins the counting operation. The coins fall down by gravity and by the pressure of the weighted plunger and are knocked out one at a time from the discharge-slot and into the receiving-hopper, and simultaneously with each re-

ciprocation of the striker the shaft 47 of the register will be moved a revolution, carrying with it the tape, which has inscribed thereon suitable figures to indicate the number of coins counted.

With the discharge of the last coin the plunger will reach the bottom of the chute, closing the opening therein, and simultaneously the button controlling the current will be depressed, shutting off the current and stopping the operation of the motor. It will be seen from the foregoing description that the device is one which is adapted for use with coins of different denominations, and that the operations of the device are automatic, enabling the counting operation to be recorded upon a desk within easy access of an accountant or other operator, and that the counting operation will be extremely accurate and can be performed much more rapidly than by hand.

What I regard as new, and desire to secure by Letters Patent, is—

1. In a device of the class described, the combination of a coin-chute having near its lower end a slot in its side adapted to discharge coins therefrom, a reciprocating striker adapted to enter the slot with each forward thrust and discharge the lowermost coin therefrom, a register, a connection between the striker and the register, and an electric motor adapted to operate the striker, and a circuit leading to the motor and adapted to be broken simultaneously with the discharge of the last coin, substantially as described.

2. In a device of the class described, the combination of a coin-chute provided with a discharge-slot in its side, a plunger entered into the chute, a slidable cross-rod to which the plunger is pivoted, a striker adapted to enter the discharge-slot and discharge therefrom the lowermost coin, and a register connected with the striker and adapted to be operated simultaneously therewith, substantially as described.

3. In a device of the class described, the combination of a coin-chute provided with a discharge-slot in its side, a plunger entered into the chute, a slidable cross-rod to which the plunger is pivoted, a striker adapted to enter the discharge-slot and discharge therefrom the lowermost coin, a register connected with the striker and adapted to be operated simultaneously therewith, an electric motor for operating the striker, and an electrical connection adapted to be broken by the fall of the cross-rod simultaneously with the discharge of the last coin, substantially as described.

4. In a device of the class described, the combination of a plurality of coin-chutes adapted for use with coins of different denominations, a support to which the chutes are simultaneously secured, each of the

chutes having a slot in its side near its lower end, a striker adapted to be positioned to enter the slot of the selected coin-chute and discharge coins successively therefrom, means for reciprocating the striker, a register connected with the striker and adapted to be operated simultaneously therewith to register each discharge, an electric motor for op-

erating the striker, and a circuit leading to the motor and adapted to be broken simultaneously with the discharge of the last coin, substantially as described.

MARCUS B. RIGHTMAN.

Witnesses:

WALKER BANNING,  
FRANCES M. FROST.