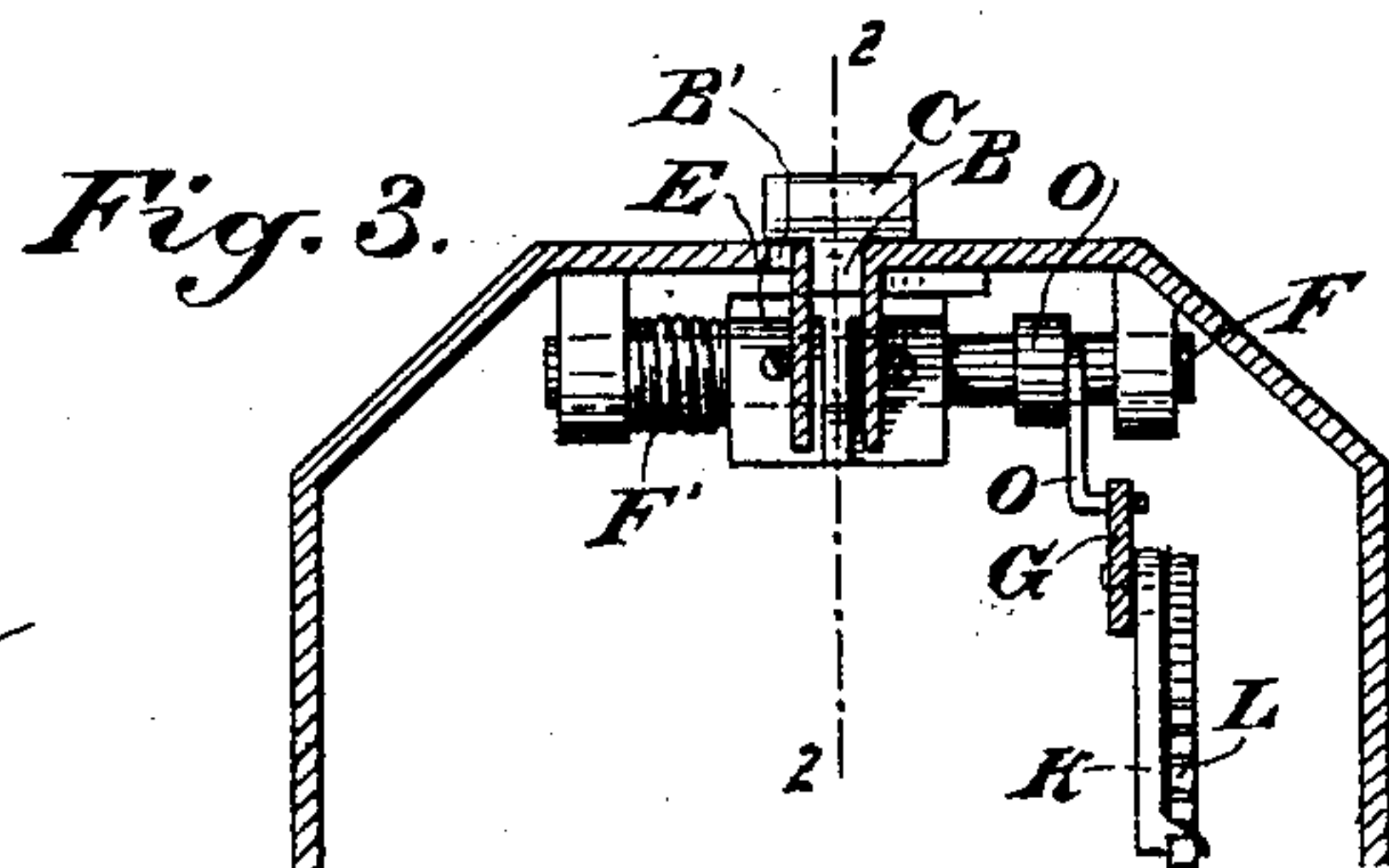
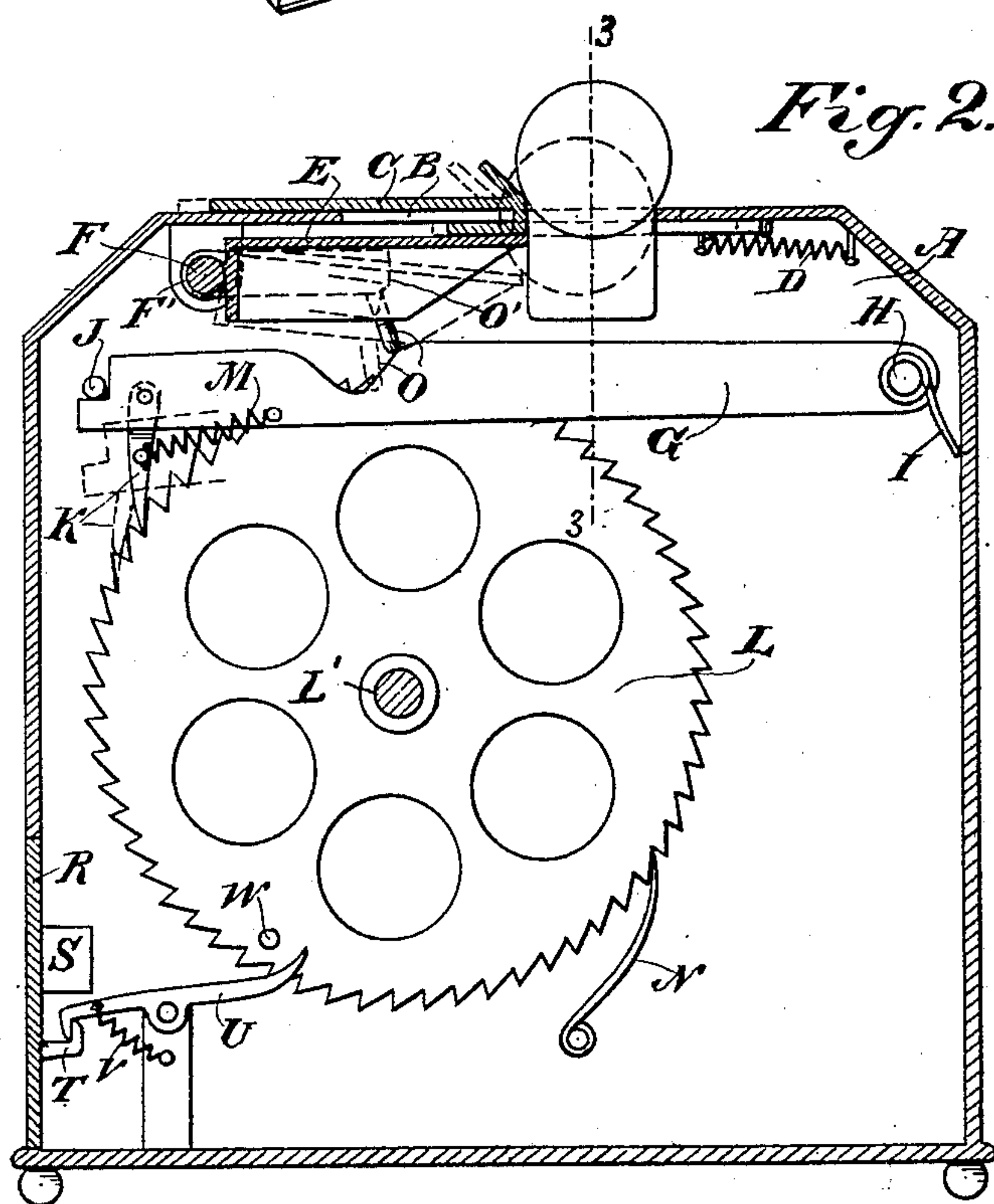
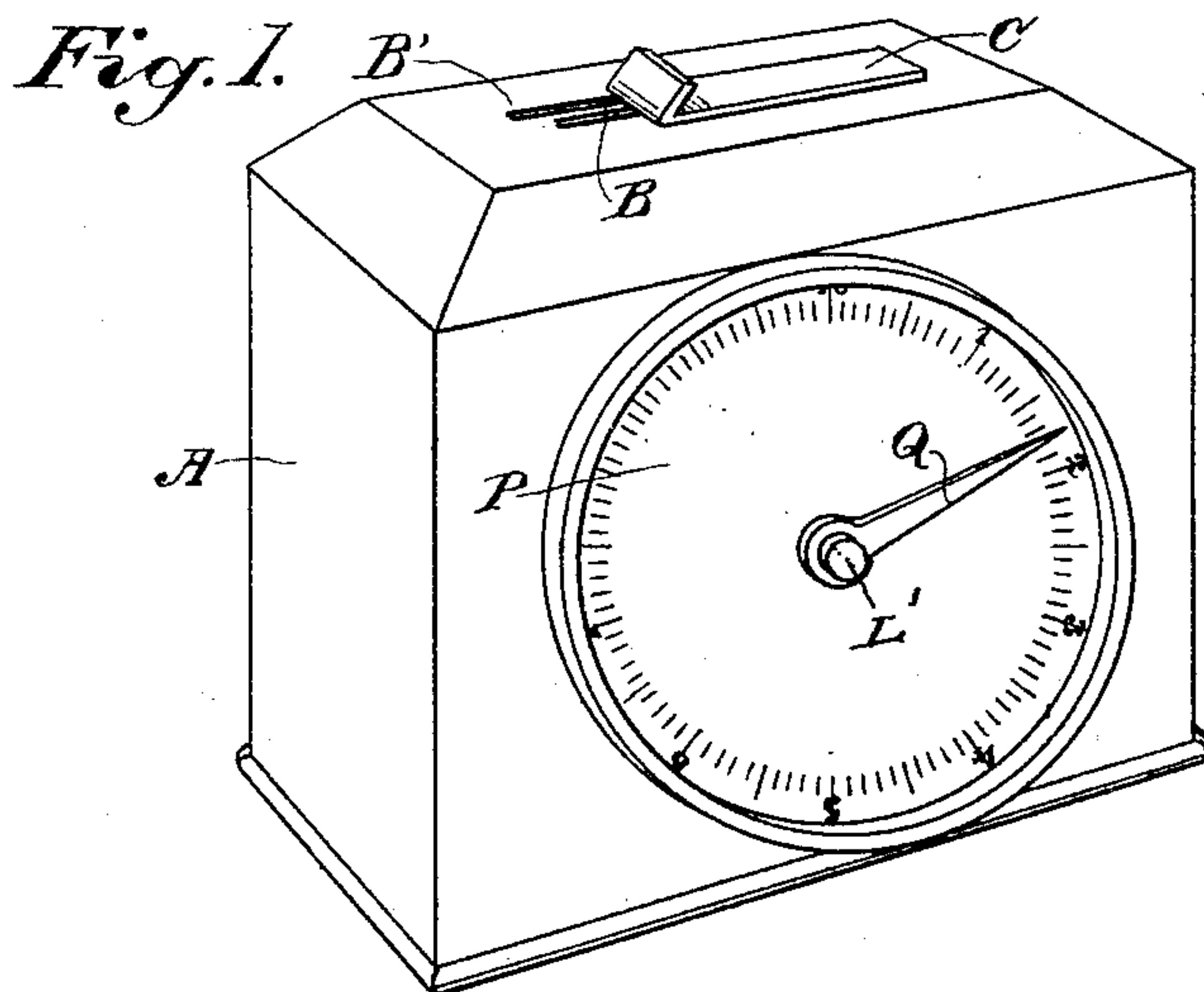


A. W. COFFIN.
REGISTERING TOY BANK.

No. 521,641.

Patented June 19, 1894.



Witnesses,
J. H. Hourse
H. F. Oscheck

Inventor,
Arthur W. Coffin
By Dewey & Co.
attys.

(No Model.)

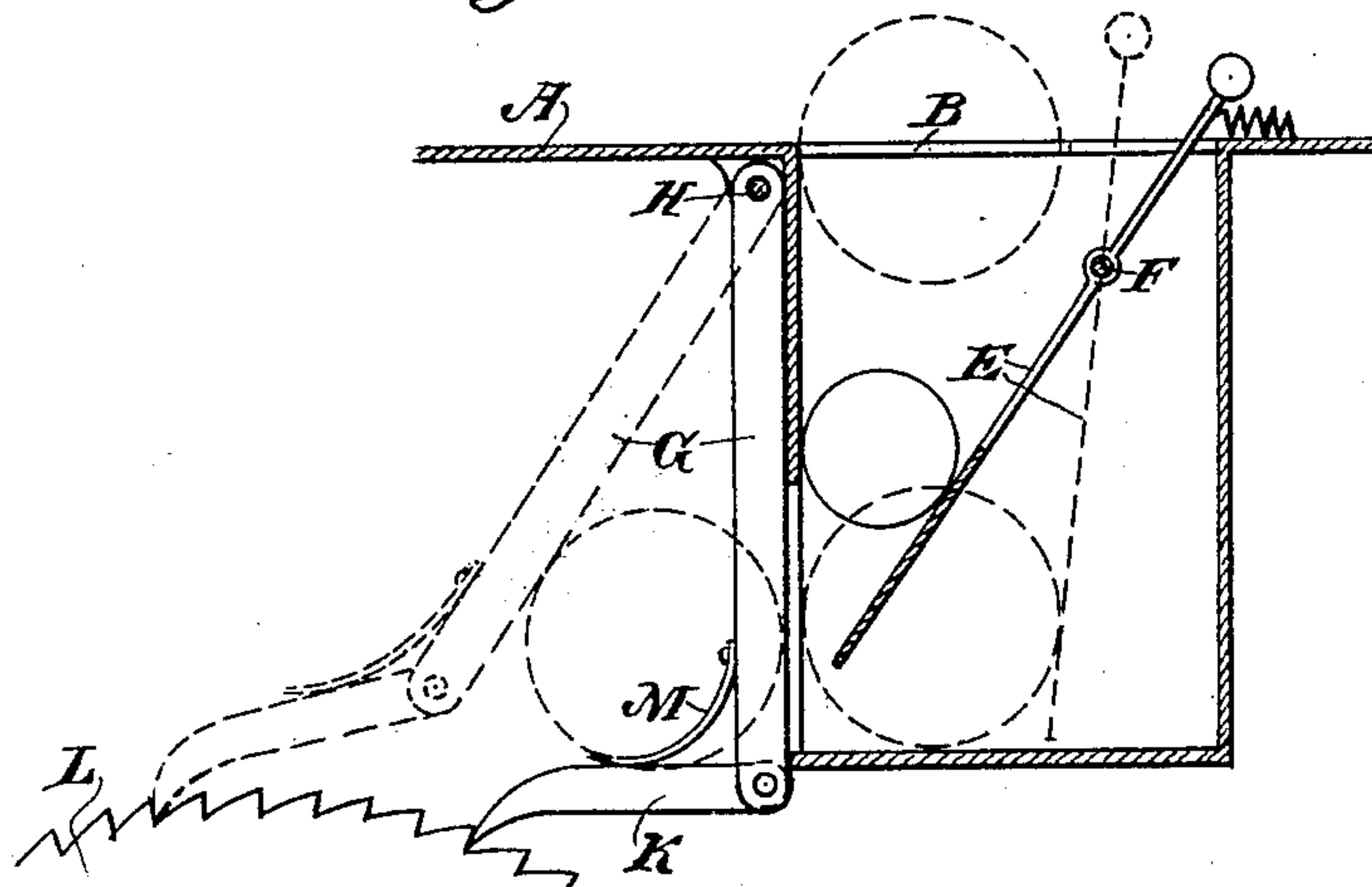
2 Sheets—Sheet 2.

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Fig. 4.



Witnesses,
C. B. House
H. F. Aschbeck

Inventor
Arthur W. Coffin
By Derwent Co.
attn

UNITED STATES PATENT OFFICE.

ARTHUR W. COFFIN, OF SAN FRANCISCO, CALIFORNIA.

REGISTERING TOY BANK.

SPECIFICATION forming part of Letters Patent No. 521,641, dated June 19, 1894.

Application filed January 30, 1894. Serial No. 498,514. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR W. COFFIN, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Deposit-Registering Banks; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device which I term a deposit registering bank.

It consists in certain details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is an exterior view showing the slidable plate partially displaced. Fig. 2 is a vertical section taken through 2—2 of Fig. 3. Fig. 3 is a vertical section taken through 3—3 of Fig. 2. Fig. 4 is a modification of my device.

The object of my invention is to provide a bank or receptacle for the deposit of various coins from time to time, and a means for registering the amount of each deposit and the total amount contained within the bank, and a mechanism which will operate automatically to release the door when any desired amount has been accumulated in the bank so that it may be removed at the pleasure of the owner.

A is the exterior casing which is made by casting or otherwise, of metal or material sufficiently strong for the purpose.

B and B' are slots made in the top of the box, the slot B being employed for the introduction of all silver coins, and the slot B' for nickels. Another slot may be made for gold coins or an independent receptacle may be similarly arranged for gold.

C is a movable plate adapted to close the openings and to be displaced when a coin is introduced. The distance that the plate is moved equals the diameter of the coin to be introduced if the plate slides over the openings as shown in Fig. 1. A spring D is connected with this plate so that it is normally drawn over the slot or opening to nearly or quite close it, but when a coin is introduced into the slot, one edge of the coin presses against the permanent side of the slot, while the other edge acts to force the sliding plate

C back sufficiently to admit the coin into the space below.

The registering apparatus is actuated by and depends upon the diameter of the coin. Two forms of intermediate mechanism are shown through which the coin acts to move the register. In Figs. 1, 2 and 3 the construction is as follows:—Within this space and below the plate C is a plate E fulcrumed as shown at F so that when a coin which has been introduced through the slot, forms contact with the free edge of this plate, it causes the plate to move around its point of support F to an extent depending upon the diameter of the coin which forms contact with it. Below the plate F is fulcrumed a lever G upon a fulcrum pin H and having a coil spring I upon this fulcrum pin which acts to normally hold the lever up with the free end in contact with the stop pin J at the opposite side of the inclosure. This movable end of the lever G carries a pawl K, and the end of this pawl engages the teeth of a wheel L which is journaled below the lever, and in one side of the space which is designed to contain the deposited coins. The pawl K is held yieldingly in contact with the teeth of the wheel L by a spring M, which yields sufficiently to allow the pawl to pass over the teeth when the lever moves back and causes it to engage the teeth so as to rotate the wheel when the lever is depressed.

N is a stop pawl which retains the wheel L at any point to which it may have been advanced by the pawl K.

The operation will then be as follows:—When a coin has been introduced, the first action is to force the slide C backward sufficiently to allow the coin to pass, one edge resting against the edge of the slot B, and the other against the edge of the slide. When the coin has passed the slide, it forms contact with the plate E, and tilts it on its fulcrum pin F. This action causes the plate E, or as shown in the present case, a projecting arm O extending from a crank arm O' on the shaft F to act upon the lever G and move it about its fulcrum H. This depresses the opposite end of the lever G and causes the pawl K to act upon the tooth of the wheel L. This wheel is so toothed that the diameter of a five cent silver piece will move the wheel

forward one tooth, the diameter of a ten cent piece will move it forward two teeth, a twenty-five cent piece five teeth, a half dollar ten teeth and a dollar will correspondingly advance it a number of teeth in proportion to its greater diameter, and the pawl N will retain the wheel at any point to which it may have been advanced. As soon as the coin passes the fulcrum plate E, it drops into the receptacle, and the action of the spring F' which surrounds the fulcrum shaft of this plate throws it back into position, the spring D also closes the slot through the plate C and the spring I raises the lever G to its normal position ready for the operation of another coin.

In Fig. 4 I have shown the plate E fulcrumed in a vertical position with a handle extending above the top of the box and movable back and forward in a slot. A spring holds the handle normally at one side and the plate thus stands at an incline forming a tapering channel into which the coin falls when introduced at the top. The coin remains in this channel resting against the lever plate E until the handle is moved across the opening and this moves the plate to allow the coin to fall upon the bottom and opposite the lower end of the plate. At this point is an opening α through which the coin is forced when the lever and plate are moved back to their normal position, and this causes the coin to act upon the swinging lever or plate G which in this case is just behind the opening α . This swinging lever carries the pawl K which acts to rotate the wheel L as before described, and it will be seen that the movement of the swinging lever and the pawl will be equal to the diameter of the coin which moves them when forced through the opening. The movements of the wheel are communicated to a hand or pointer of any usual or suitable construction.

Upon the exterior side of the case A is a circular dial P, subdivided into as many divisions around its circumference as there are teeth in the wheel, and by a suitable connection such as the shaft L' of the wheel L, the index hand Q which projects through the side of the box is moved over this scale one point for a five cent piece, two points for a ten, five for a twenty-five cent piece, ten points for a half dollar, and twenty points for a dollar. It will be seen by this that each coin that is introduced into the receptacle will be registered by this index, and the amount of each additional coin will be added to that which had previously been introduced.

In order to introduce nickel five cent pieces without operating the index farther than enough to register five cents, I have shown a supplemental slot B', the edge of the opening of which is sufficiently beyond that of the slot B so that when a nickel is introduced it will only press the slide C back a distance equal to that caused by a silver five cent piece placed in the other slot, and its operation upon the

fulcrum plate will be the same as that of the silver five cent piece, thus registering only five cents when it is introduced.

The door R is suitably hinged to the casing A and may be permanently locked by means of a lock indicated at S. An automatic locking device is also employed which consists of a hook T attached to the door, a tilting pawl lever U having a hook at one end which engages the hook T, and is held in engagement by means of a spring V while the other end of the lever extends up by the side of the ratchet wheel L. Upon this wheel is a projecting pin W so placed that when the amount of ten dollars, or other desired sum, has been introduced into the bank or receptacle, this pin will contact with the end of the lever U, will force it down until the opposite hook end is disengaged from the hook T on the door, and this allows the door to be opened so that the amount accumulated in the bank may be removed.

These banks are especially useful in connection with ordinary savings banks, and may be employed by those who can deposit only a small amount at one time, the small receptacle being used until an amount sufficiently large to deposit and enter in the bank book has been accumulated.

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

1. A deposit receptacle for coins of varying diameters and denominations, comprising a case or box with a slotted opening, a slide controlling the entrance to said opening and actuated by the passage of the coin, a mechanism actuated by the slide so that its amount of movement shall be dependent upon the character of coin deposited, and means for indicating the amount of said deposit.

2. In a deposit receptacle for coins, and in combination with a toothed wheel, a means for indicating its movement, and an exterior casing having a slot in its top, a slide exterior of the slot and normally closing its entrance, and a mechanism interposed between the slide and wheel for moving the latter a distance proportionate to the size of the coin inserted and the amount of movement of the slide, whereby coins of different denominations may be deposited and their combined values indicated.

3. A deposit receptacle for coins, consisting of an exterior case having a slotted opening in the top, a sliding spring-actuated covering plate by which the opening is normally closed, which plate is movable for the introduction of any coin into the slot, a fulcrum plate G movable by the pressure of an introduced coin, a toothed ratchet wheel, pawl, and intermediate lever mechanism whereby the passage of the coin acts to rotate the wheel and an index connected with the wheel to show the amount of the deposit, substantially as herein described.

4. A deposit receptacle for coins consisting

of an exterior case having a slotted opening in the top, a spring-actuated plate sliding over said opening to normally close it, said plate being moved back by the introduction
 5 of a coin, a fulcrum plate E situated below the opening having a spring by which it is normally held in position, said plate receiving the coin, and movable about its fulcrum to allow the passage of any coin, a second
 10 fulcrumed lever G movable simultaneously with the movement of this plate and to a distance governed by the diameter of the passing coin, a pawl carried by said lever, a ratchet wheel journaled within the case and con-
 15 nected with an exterior indicating and registering device, said ratchet wheel being moved by the action of the pawl whenever a coin is introduced, substantially as herein described.

5. A deposit receptacle for coins consisting
 20 of an outer case having a slotted opening in the top, a slidable, spring-actuated cover by which said opening is normally closed, said cover being movable by the introduction of any coin, an indicator and register upon the
 25 exterior of the case, an interior ratchet wheel and connected lever mechanism whereby the introduction of the coin acting thereon will rotate the ratchet wheel and move the indi-

cator, and a second slot made by the side of the first one and extending sufficiently be- 30
 yond it so that the introduction of a nickel five cent piece in this slot will operate the register to the same extent as the introduc-
 tion of a silver five cent piece in the first named slot, substantially as herein described. 35

6. The deposit receptacle for coins consist-
 ing of the exterior case having slotted open-
 ings in the top, a movable cover, lever plates,
 ratchet wheel, indicator and register and in-
 40 termediate connections whereby the indicator is moved whenever a coin is introduced into the receptacle, a door having a hook or catch,
 a lever adapted to engage such catch and re-
 45 tain the door in its closed condition while thus engaged, a pin upon the ratchet wheel adapted to strike the lever and disengage the
 latching device whenever the ratchet wheel
 has been rotated to the desired point, sub-
 stantially as herein described.

In witness whereof I have hereunto set my 50
 hand.

ARTHUR W. COFFIN.

Witnesses:

T. A. DUFFY,
 A. N. HINCHMAN.