(No Model.) 3 Sheets—Sheet 1.

A. C. SINE.

CASH RECEPTACLE.

No. 594,293. Patented Nov. 23, 1897.

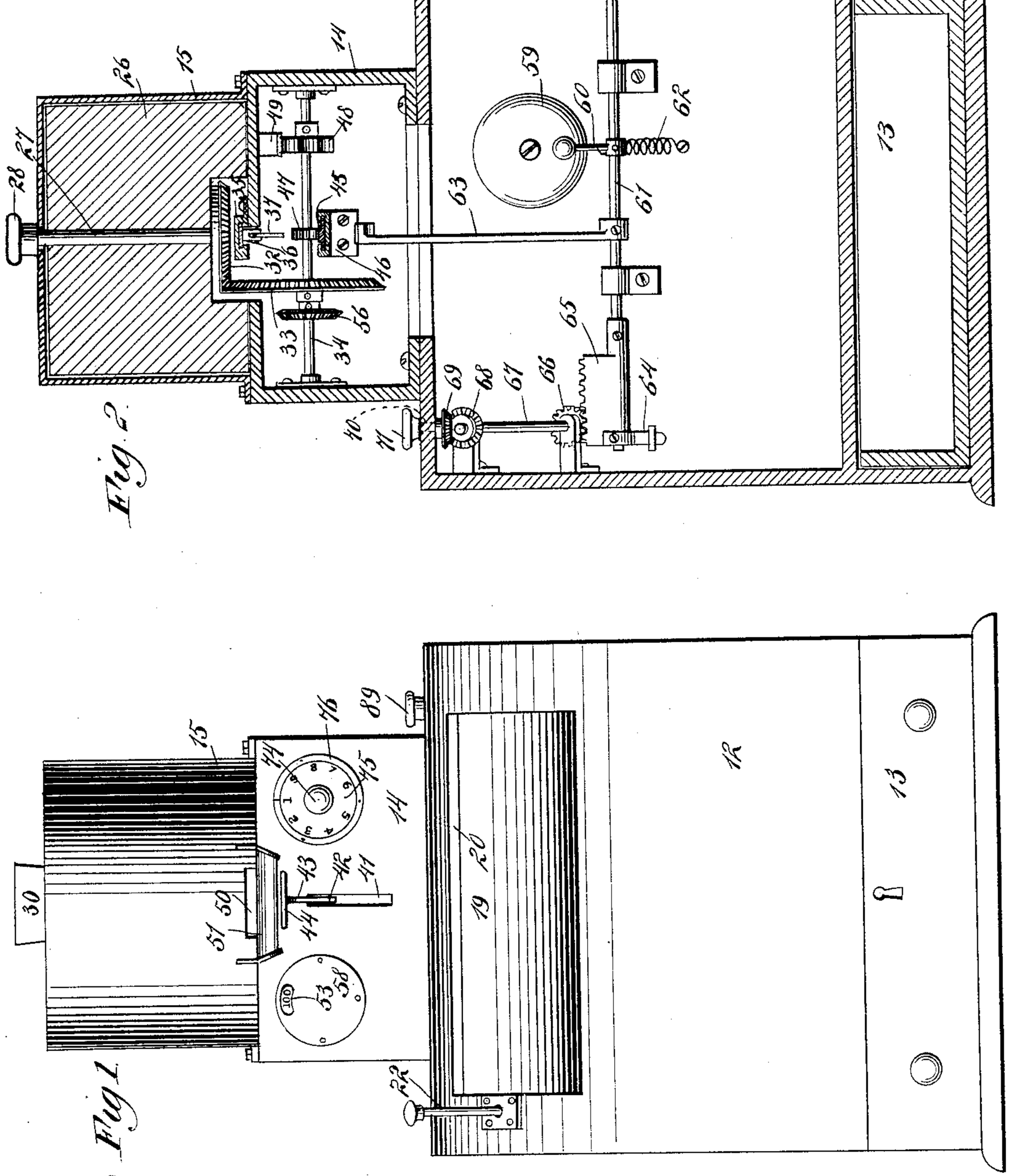

Fig. 2.

Fig. 1.

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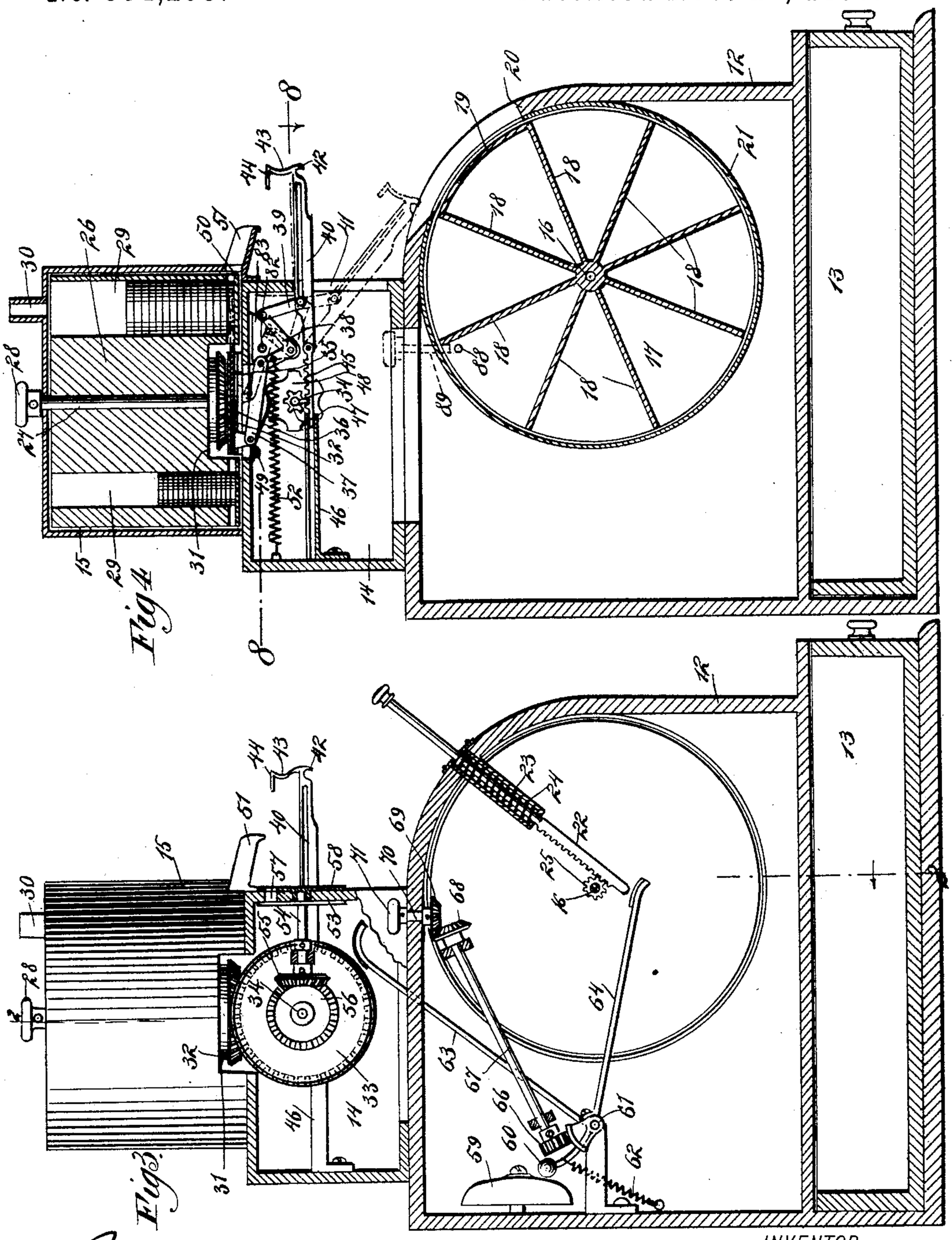

Fig 4.

Fig 3.

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Fig 5.

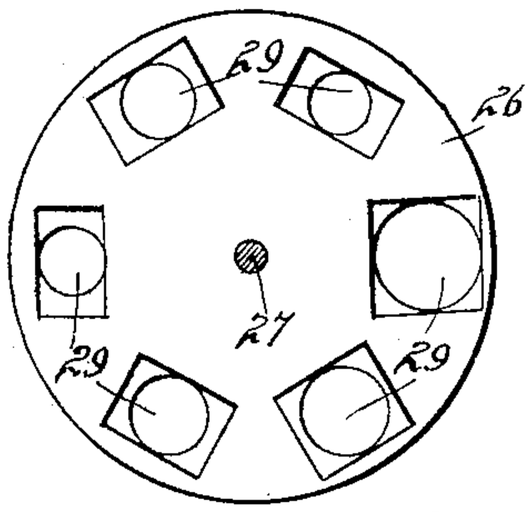


Fig 6.

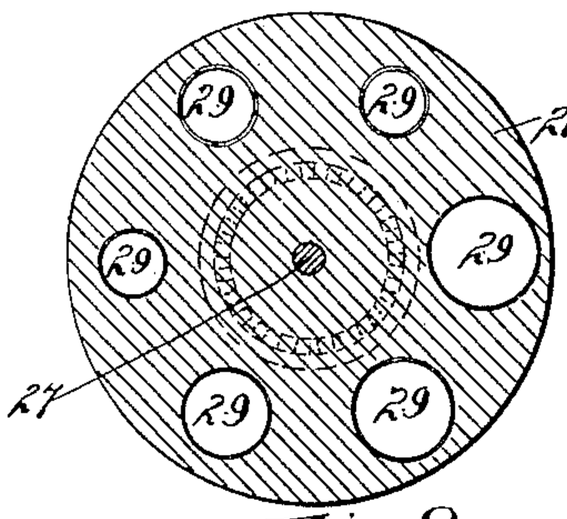


Fig 7.

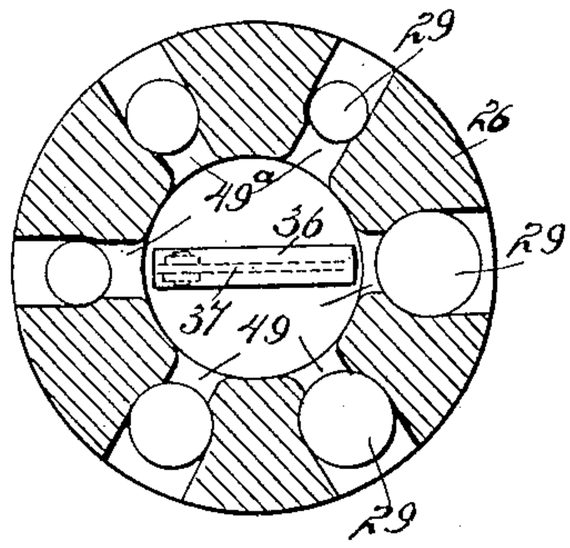


Fig 8.

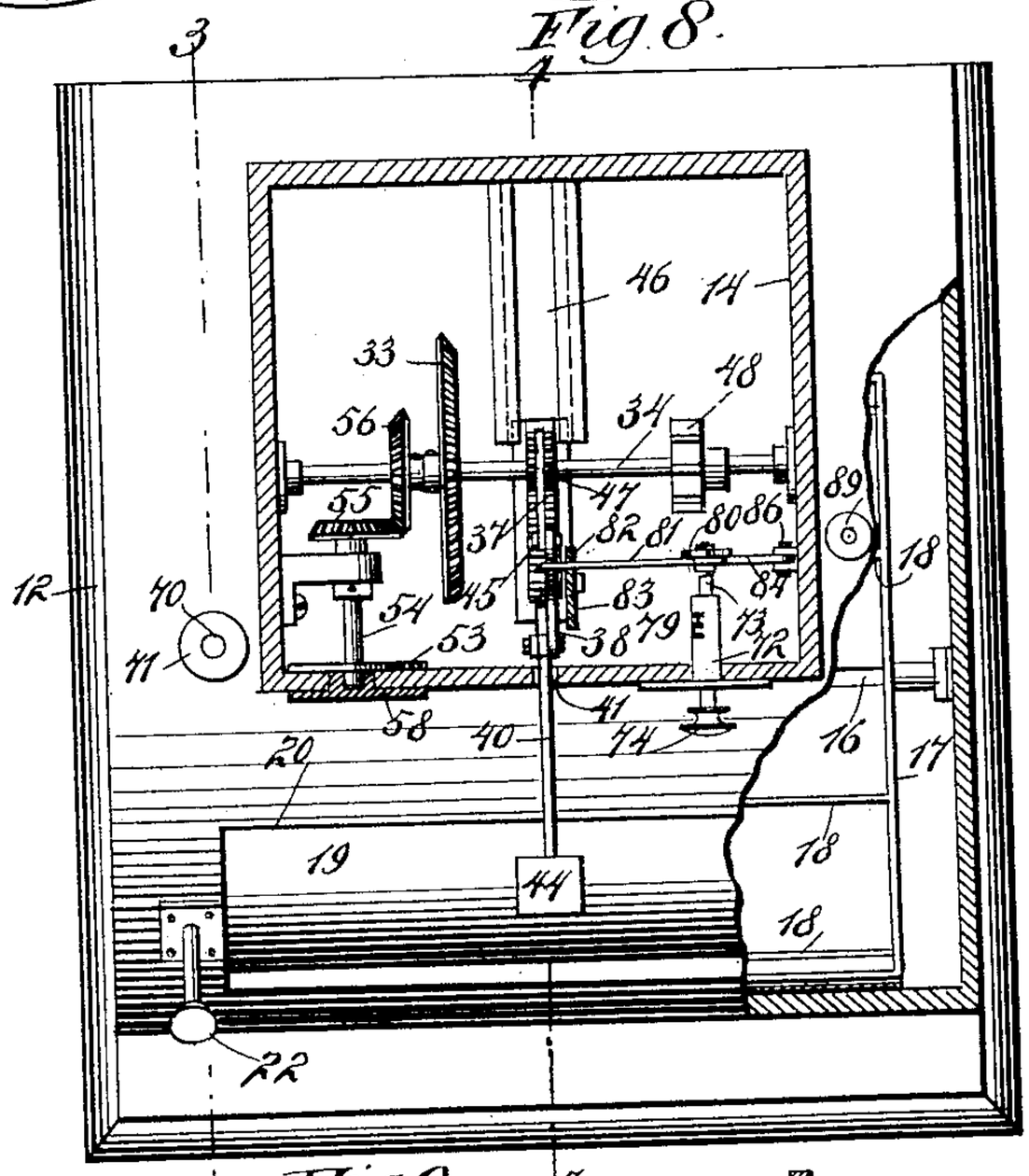


Fig 9.

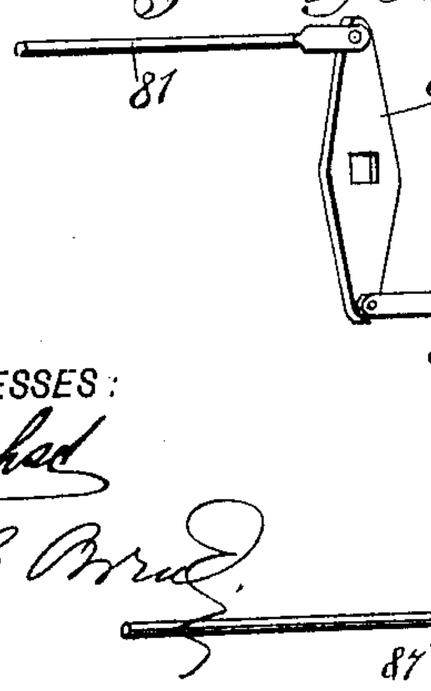


Fig 10.

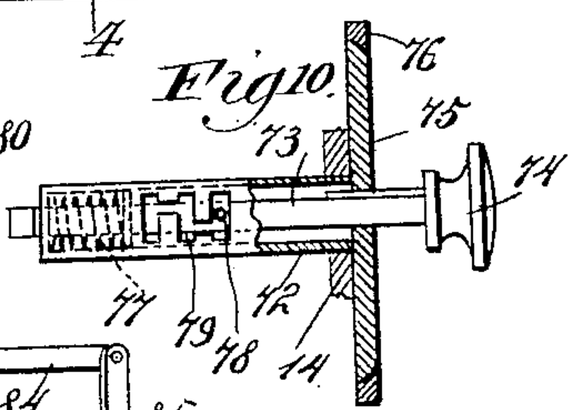
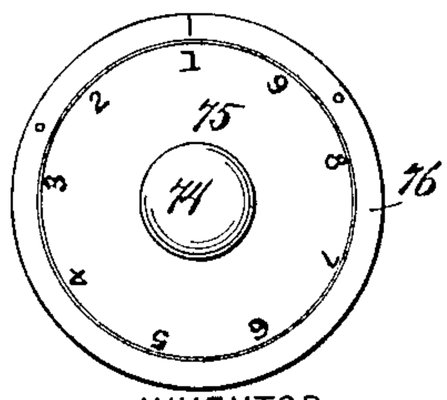


Fig 11.



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UNITED STATES PATENT OFFICE.

ALPHEUS C. SINE, OF STANFORD, KENTUCKY.

CASH-RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 594,293, dated November 23, 1897.

Application filed June 4, 1897. Serial No. 639,391. (No model.)

To all whom it may concern:

Be it known that I, ALPHEUS CHRISTY SINE, of Stanford, in the county of Lincoln and State of Kentucky, have invented a new and Improved Cash-Receptacle, of which the following is a full, clear, and exact description.

This invention is a cash-receptacle designed to receive both coin and notes and having certain mechanism by which the currency may be readily placed in the receptacle and taken therefrom according to the requirements of the operation being performed.

This specification is the disclosure of one form of my invention, while the claims define the actual scope of the conception.

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 front elevation of the invention. Fig. 2 is a sectional elevation on the line 2 2 of Fig. 3. Fig. 3 is a sectional view on the line 3 3 of Fig. 8. Fig. 4 is a sectional view on the line 4 4 of Fig. 8. Fig. 5 is a plan view of the coin-carrier. Fig. 6 is a sectional view taken approximately midway the coin-carrier. Fig. 7 is a sectional view taken through the lowest portion of the coin-carrier. Fig. 8 is a sectional view on the line 8 8 of Fig. 4. Fig. 9 is a perspective view of the bolts for locking the apparatus. Fig. 10 is a sectional view of a commutation-lock which I employ, and Fig. 11 is a face view of the dial of the lock.

This apparatus has a main or base casing 12, at the foot of which is a drawer 13, and on top of which is a top casing 14, supporting a shell 15, which holds a rotary coin-carrier, in which coins may be placed or from which they may be removed at will. The casing 14 holds the gearing by which the coin-carrier is operated, and the casing 12 carries a receptacle for notes and also an alarm mechanism by which notice is given when the apparatus is operated.

The receptacle for the notes has a shaft 16 revolubly mounted in the casing 12 and running transversely therethrough. Fixed on the shaft 16 are two circular heads 17, connected by a series of transverse partitions 18, forming eight compartments, one of which is closed by a concavo-convex plate 19, normally visible through an opening 20, formed in the casing 12. Rigidly attached to the interior of the casing 12 and surrounding the heads 17 and partitions 18 is a cylindrical plate 21, that forms the sides of the receptacle for the notes. By turning the shaft 16 so as to turn the partitions 18 the compartments formed by these partitions may be successively presented at the opening 20, and by these means the notes may be placed in and removed from the receptacle. The receptacle for the notes is turned by means of a rack-bar 22, sliding through the front of the casing 12 and through a tube 23, which holds an expansive spiral spring 24, the toothed portion of the bar 22 engaging with a pinion 25 on the shaft 16. By pushing the bar 22 inward the shaft 16 may be revolved, so as to place the desired compartment of the note-receptacle opposite the opening 20. The disposition of the spring 24 is such as to automatically return the note-receptacle to the position shown in Fig. 4.

In order to hold the note-receptacle at the desired position after the same has been adjusted, I provide a pin 89, movable through the top of the casing 12 and into the spaces between the partitions 18. When the note-receptacle has been adjusted, the pin 89 is placed in position and the note-receptacle is held until it is desired to change the position of the note-receptacle.

The coin-carrier consists of a cylinder 26, revoluble on a vertical post 27, extending through the top of the shell 15, and provided at its upper end with a thumb-wheel 28. The cylinder 26 has a series of vertically-extending coin-stacks 29 therein, which stacks have varying diameters to accommodate the varying sizes of the coins. The upper end of each stack 29 flares outward, so as to meet with the inlet-chute 30, carried on the top of the shell 15. The carrier 26 may be turned through the medium of the knob 28, whereby any of the desired stacks 29 may be placed beneath the chute 30. This operation permits of the insertion of the coin into any of the stacks.

The lower end of the cylindrical carrier 26

has a centrally-disposed annular recess 31, in which is located a bevel-gear 32, meshing with a bevel-gear 33, fixed on a shaft 34, mounted horizontally in the top casing 14. The upper side of the casing 14 is broken away to permit the gear 33 to extend into the shell 15. The upper side of the casing 14 rigidly carries a guide 35, in which an ejector-plate 36 is slidable, the plate 36 and the guide 35 being located within the recess 31 of the coin-carrier 26. Pivoted to the ejector-plate 36 is a link 37, in turn connected with a bell-crank lever 38, mounted in bearings in the casing 14. Pivoted to the bell-crank lever 38 is a link 39, in turn pivoted to a slotted plate 40, capable of sliding and swinging through a slot 41, formed in the front side of the casing 14. The front end of the plate 40 has a finger-pull 42 attached thereto, which finger-pull is extended upward to form a thumb-push 43, which is in turn extended inward to form a depressor-plate 44. The inner end of the plate 40 is pivoted to a rack-bar 45, that slides in guides 46, rigidly held on the interior face of the rear wall of the casing 14. Fixed to the shaft 34 is a pinion 47, with which the rack-bar 45 meshes, whereby as the rack-bar moves the shaft 34 is revolved. Attached to the shaft 34 is a star-wheel 48, pressed by a leaf-spring 49, whereby the shaft 34 is held from idle movement. The coin-carrier 26 has at the face of each stack 29 a slideway 49ª. These slideways 49ª are radially disposed, so that the ejector-plate 36 may move through them. The ejector-plate 36 reciprocates forward and rearward in a fixed line. This discharges the coin through an opening 50 in the shell 15 and over a chute 51, projecting forward and downward from said opening 50.

When it is desired to remove a coin from the carrier 26, the bar 40 is pushed, whereby the shaft 34 is turned. This communicates movement to the carrier 26 and adjusts the same axially on the post 27. When the proper axial adjustment of the carrier 26 has been reached, the bar 40 is pushed down, whereupon the ejector-plate 36 is reciprocated through one of the slideways 49ª, and the desired coin is ejected through the opening 50. A retractile spring 52 is attached to the bell-crank lever 38 and to the casing 14, whereby the parts are returned to their normal positions. The finger-pull 42 is used in drawing the bar 40 out from the casing 14. The thumb-push 43 is engaged by the thumb of the operator as the bar 40 is pushed inward, and the depressor-plate 44 is engaged by the back of the hand of the operator, so as to depress the bar 40, leaving the palm of the operator's hand in position to receive the coin that drops from the chute 51.

To indicate the position of the carrier 26, I provide a dial 53, which is fixed on a shaft 54, suitably mounted in the casing 14 and having a bevel-gear 55 engaging with a similar gear 56, fixed on the shaft 34. The casing 14 has an opening 57 therein, through which the dial 53 may be read. The front of the casing 14 is provided with a plate 58, that indicates the position of the dial 53, and has an opening formed therein which registers with the opening 57. As the shaft 34 is turned motion is communicated to the shaft 54, which in turn rotates the dial 53. The dial 53 has characters written thereon, the characters corresponding with the denominations of the coins that are contained within the stacks 29. When the desired character appears through the opening 57, the operator will then know that the appropriate stack 29 is opposite the ejector-plate 36.

The alarm mechanism has a bell 59, sounded by a hammer 60, swinging on a transverse rock-shaft 61, mounted in the casing 12, and actuated by a retractile spring 62. The shaft 61 has two arms 63 and 64. The arm 64 projects upward into the casing 14 and beneath the plate 40, so that when said plate is pushed downward the arm 63 is engaged and moved downward also. This rocks the shaft 61 outward, and when the pressure on the arm 63 is released the spring 62 will return the hammer 60 to engagement with the bell and sound the same. As the rack-bar 22 is moved into the casing 12 to adjust the receptacle for notes the rack-bar 22 engages with the arm 64, which arm is thereby moved downward and the shaft 61 is rocked outward to sound the bell in the manner before described. By these means the bell is sounded whenever either the coin-receptacle or the note-receptacle is touched. The shaft 61 is slidable longitudinally in its bearings, so that it may be properly adjusted relative to the parts 40 and 22, and so also that the alarm mechanism may be thrown out of gear, if desired. The sliding of the shaft 61 is accomplished by means of a rack 65, attached to the shaft 61 and engaged by a pinion 66, fixed on the shaft 67, that extends forward and upward and carries a bevel-gear 68, meshing with a pinion 69. The pinion 69 is carried on a short shaft 70, journaled in the casing 12 and running vertically through the same, a knob 71 being provided for the upper end of the shaft 70, whereby the said shaft may be operated.

I provide a commutation-lock whereby the coin and note receptacles are held from operation should it be desired to lock the apparatus. This device has a tubular casing 72, made fast within the top casing 14, and turning within the casing 72 is a tumbler-shaft 73, the outer end of which has a knob 74. Splined on the shaft 73 is a dial 75, held against the casing 14 by an overhanging rim 76. The casing 72 contains an expansive spiral spring 77, which presses the tumbler-shaft 73 outward. The tumbler-shaft 73 has a pin 78, which works in an irregular complex slot 79, formed in the tubular casing 72. By turning the knob 74 the dial 75 is turned relatively

to the rim 76, so that the movements of the dial may be noted. The tumbler-shaft 73 slides freely through the dial 75 and also slides relatively to an arm 80, provided with a square opening to receive the squared inner portion of the tumbler-shaft 73. The position of the pin 78 in the slot 79 is such that the shaft 73 can perform but a very small fraction of a complete revolution except when the shaft is in one position. This certain operative position being known and the manner of reaching it being also remembered, by turning the knob 74 the shaft 73 may be manipulated to release the lock and permit the shaft to be rocked sufficiently to impart a perceptible movement to the arm 80. One end of the arm 80 carries a bolt 81, movable through an opening 82, formed in a plate 83, depending from the upper side of the casing 14. The bolt 81, moving through the plate 83, engages the bell-crank lever 38 and prevents the movement thereof. The lower end of the arm 80 has a link 84 pivoted thereto, and the link 84 is pivoted to a lever 85, fulcrumed in the lower portion of the casing 14 and on an arm 86. (Shown in Figs. 8 and 9.) The lever 85 carries at its lower end a bolt 87, movable horizontally in the casing 12 and adapted to enter an opening 88, formed in one of the heads 17, as shown in Fig. 4. By these means the note-receptacle also may be locked.

Various changes in the form, proportion, and minor details of my invention may be resorted to without departing from the spirit and scope thereof. Hence I do not consider myself limited to the exact construction herein shown, but believe that I am entitled to all such variations as come within the terms of my claims.

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

1. The combination of a rotary coin-carrier with vertically-extending stacks therein designed to receive varying denominations of coins, a gear turning concentrically to the axis of the coin-carrier, a gear mounted on an axis running at right angles to the axis of the coin-carrier, and meshing with the gear of the coin-carrier, a sliding bar having a slot therein, a rack-bar pivoted to the sliding bar and geared with the shaft of the second-named gear, a bell-crank lever, a link establishing a connection between the bell-crank lever and the slotted bar, an ejector-plate coacting with the coin-carrier, and a link connecting the ejector-plate with the bell-crank lever.

2. The combination of a rotary coin-carrier turning on a vertical axis and having a series of vertically-extending coin-stacks, the coin-carrier also having a centrally-located recess in its lower end, and a series of slideways run radially past the lower ends of the coin-stacks, an ejector-plate normally held within the recess of the coin-carrier, a link pivoted to the ejector-plate, a bell-crank lever to which the link is pivoted, a second link pivoted to the bell-crank lever, and a swinging bar to which the second link is also pivoted.

3. The combination of a rotary coin-carrier, a shaft geared therewith whereby to turn the coin-carrier, a rack-bar geared with the shaft and serving to turn the same, a slotted bar pivoted to the rack-bar, a bell-crank lever in connection with the slot of the said slotted bar, an ejector-plate for the coins of the coin-carrier, and a connection between the bell-crank lever and the ejector-plate.

4. The combination of an alarm, a rock-shaft mounted adjacent thereto, means carried by the rock-shaft whereby to operate the alarm, an arm fixed to the rock-shaft, a cash-receptacle mounted adjacent to the arm, and a slidable rack-bar capable of turning the cash-receptacle and of engaging the arm whereby to throw the rock-shaft.

5. The combination of an alarm, a rock-shaft mounted adjacent thereto, means carried by the rock-shaft whereby to operate the alarm, an arm carried by the rock-shaft, means for engaging the arm whereby to swing the same, a rack-bar fixed to the rock-shaft, and a pinion engaging with the rack-bar whereby to slide the rack-bar and move the said arm relatively to the means for operating the same.

6. The combination of a coin-carrier, means for operating the coin-carrier, a note-receptacle, means for operating the note-receptacle, a rock-shaft mounted adjacent to said elements, two arms fixed to the rock-shaft and respectively engaged by the operating means for the coin-carrier and note-receptacle, an alarm, and means carried by the rock-shaft whereby to operate the alarm.

7. A cash-receptacle having a casing with an opening therein, and a note-receptacle revolubly mounted within the casing and having a series of compartments capable respectively of registering with the opening in the casing, one of the compartments having a cover-plate adapted to normally close the opening in the casing.

8. The combination of a cylindrical casing with an opening run through one side thereof, and a cylindrical note-receptacle revolubly mounted within the casing and loosely engaging the interior sides thereof, the note-receptacle having compartments respectively registering with the opening in the casing, and one of the compartments in the note-receptacle being closed by a plate extending across the mouth of said compartment so as to form a dummy compartment.

9. The combination with a casing having an outlet-orifice therein, of a coin-carrier mounted to turn on a vertical axis and having a series of vertical coin-stacks therein, the coin-carrier also having a recess in its lower end, the recess being located inward from the coin-stacks and being in communication therewith by radial slots formed in the

coin-carrier, a gear-wheel, located within the recess and attached to the coin-carrier, gearing in connection with said gear-wheel whereby to turn the coin-carrier, a horizontal ejector-plate normally held within the recess of the coin-carrier and movable radially independently of the coin-carrier so as to eject the coin from the stacks thereof, and for reciprocating the ejector-plate.

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Witnesses:
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A. A. MCKINNEY.