(No Model.) 4 Sheets—Sheet 1.

C. A. SHATTUCK.

COIN CONTROLLED VENDING MACHINE.

No. 482,142. Patented Sept. 6, 1892.

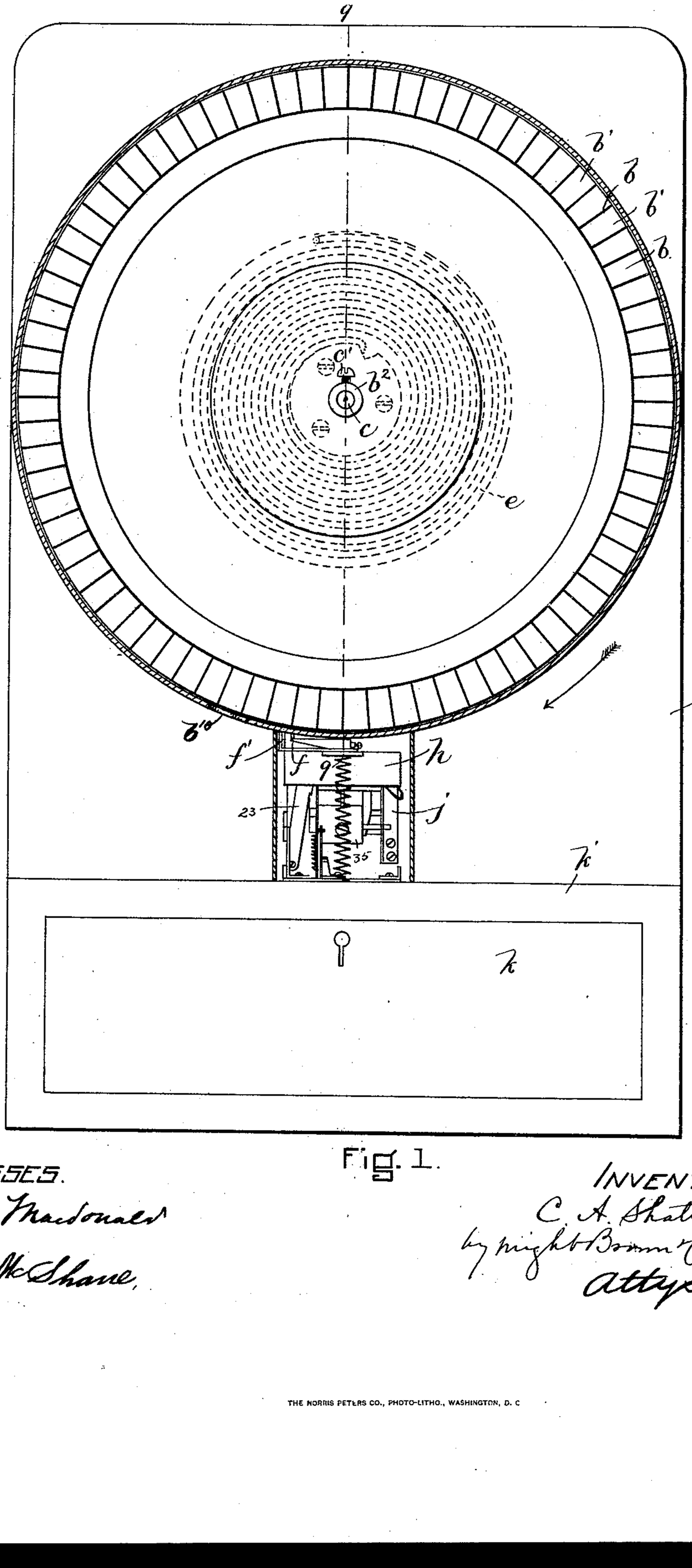

Fig. 1.

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G. G. Macdonald
B. A. McShane.

INVENTOR.
C. A. Shattuck
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(No Model.) 4 Sheets—Sheet 2.

C. A. SHATTUCK.

COIN CONTROLLED VENDING MACHINE.

No. 482,142. Patented Sept. 6, 1892.

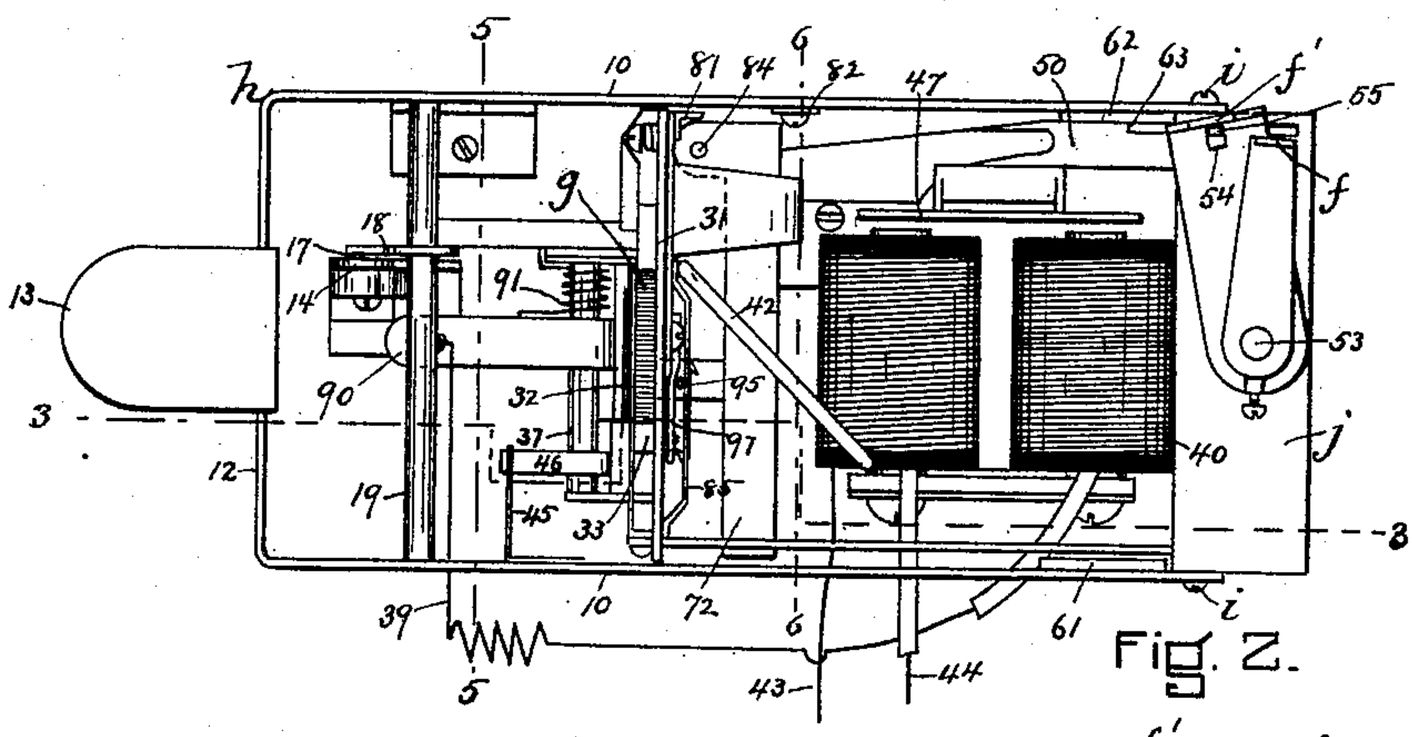

Fig. 2.

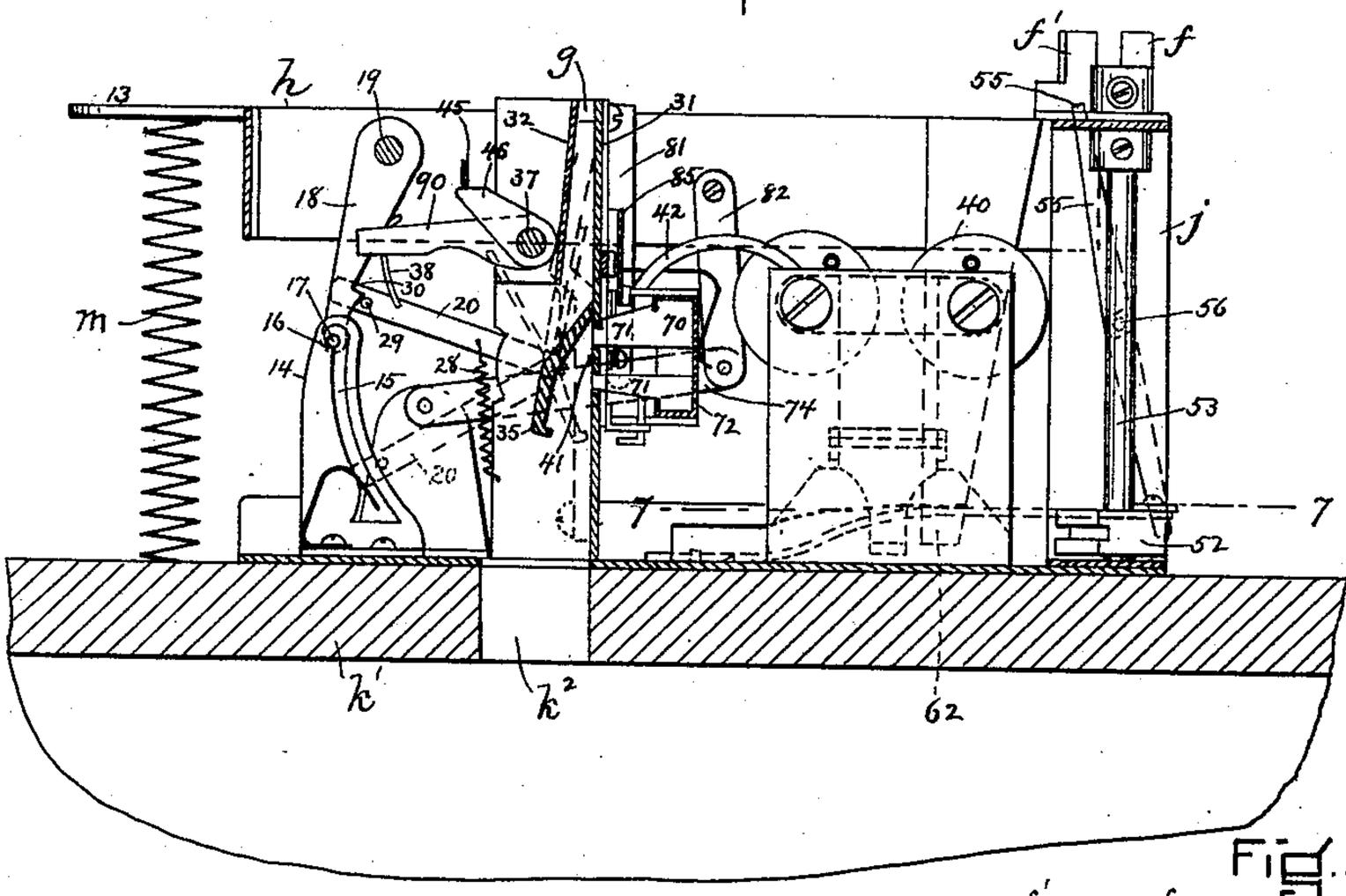

Fig. 3.

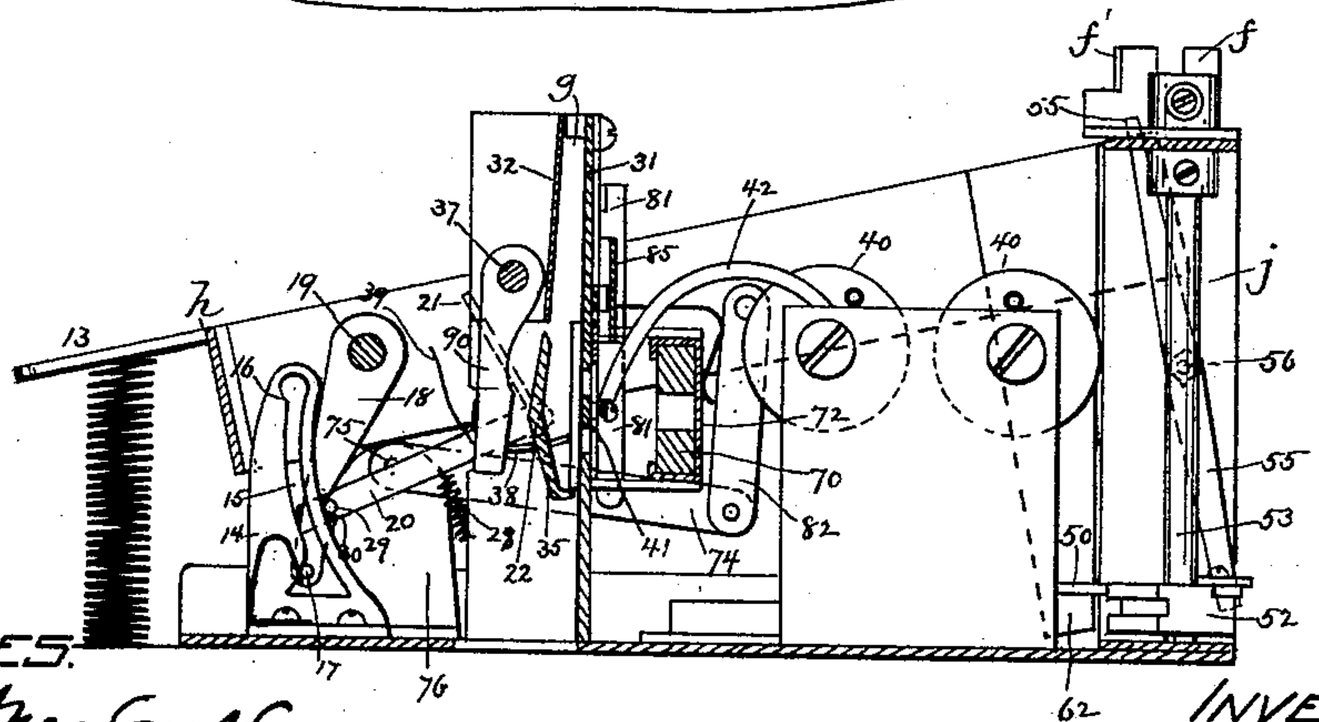

Fig. 4.

WITNESSES:
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(No Model.) 4 Sheets—Sheet 3.

C. A. SHATTUCK.

COIN CONTROLLED VENDING MACHINE.

No. 482,142. Patented Sept. 6, 1892.

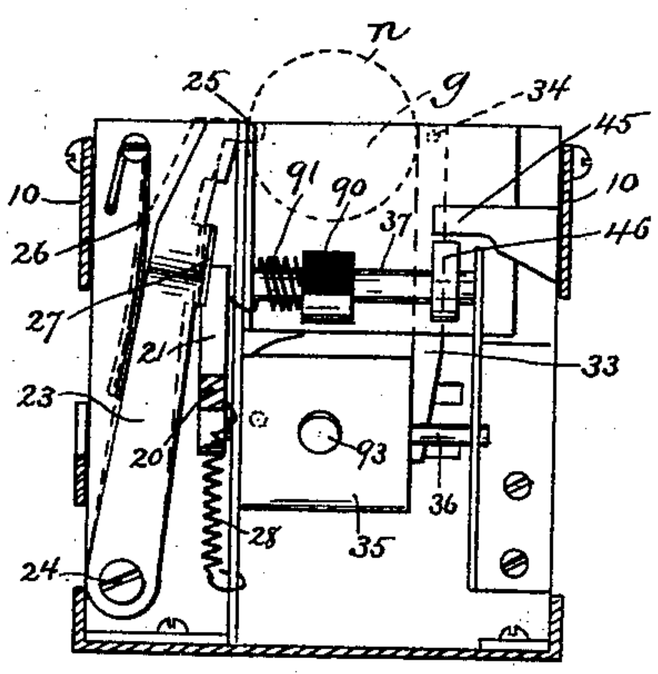

Fig. 5.

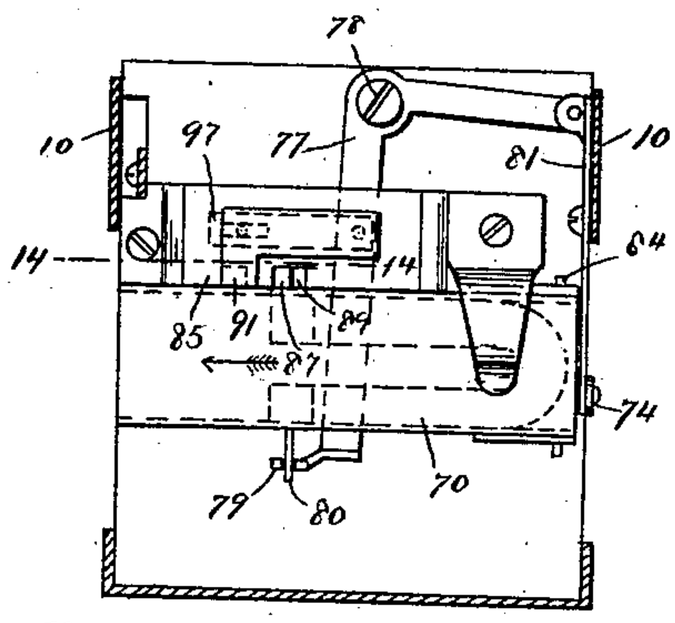

Fig. 6.

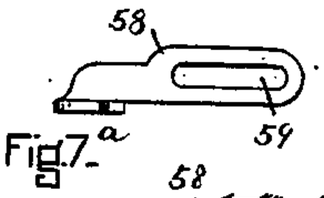

Fig. 7a.

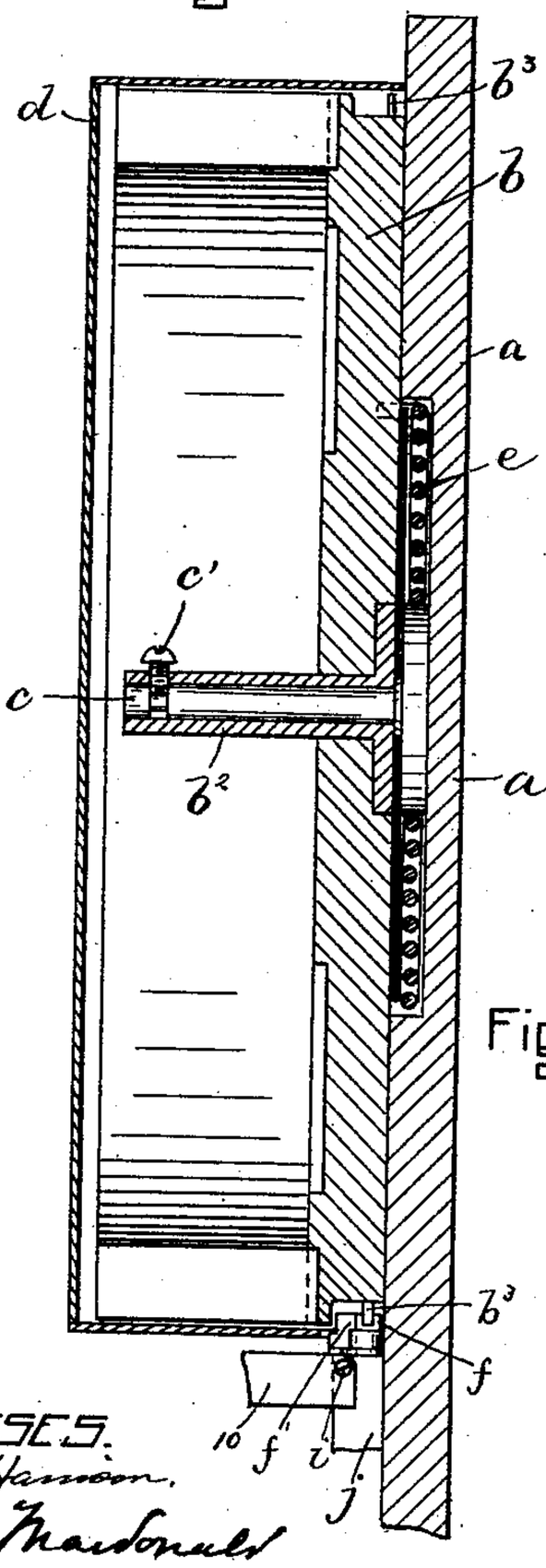

Fig. 9.

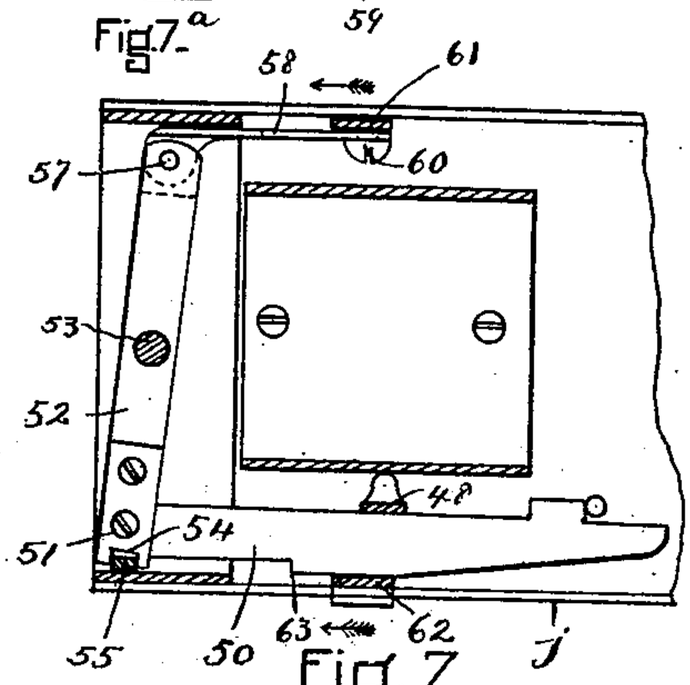

Fig. 7.

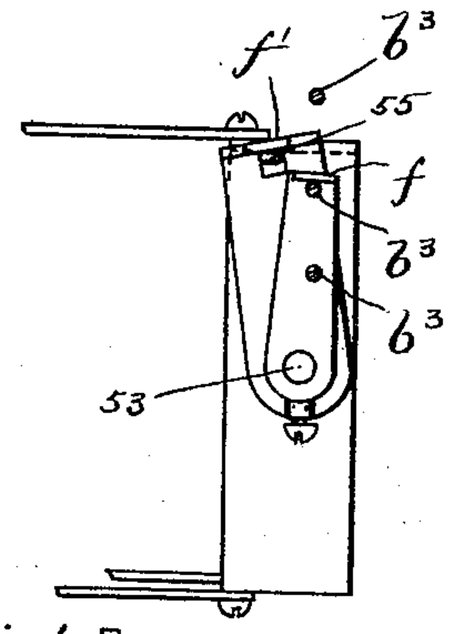

Fig. 8.

WITNESSES.
A. D. Harmon.
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(No Model.) 4 Sheets—Sheet 4.

C. A. SHATTUCK.

COIN CONTROLLED VENDING MACHINE.

No. 482,142. Patented Sept. 6, 1892.

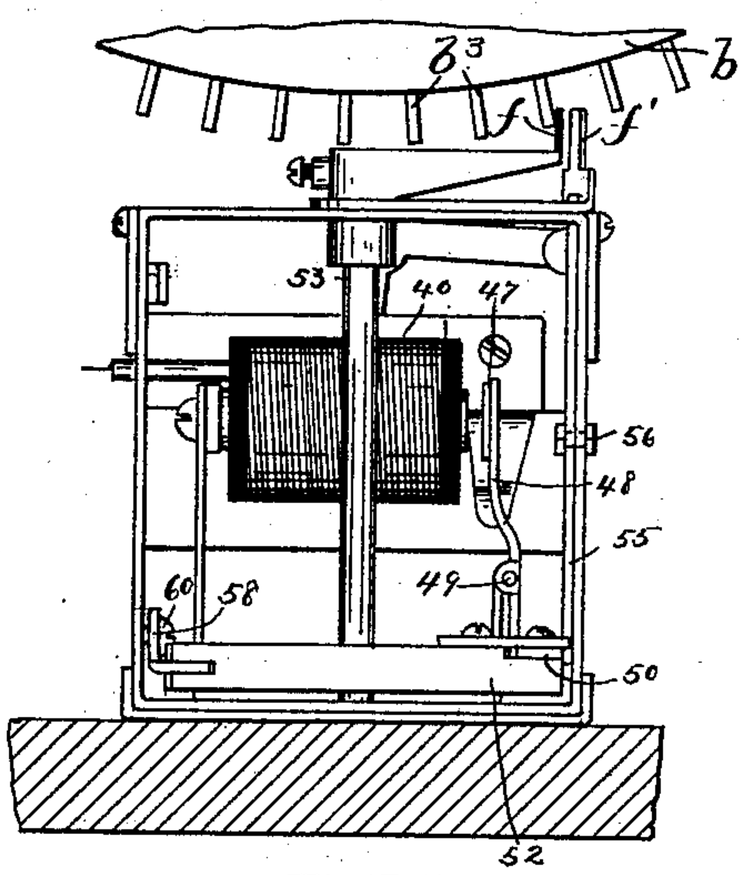

Fig. 10.

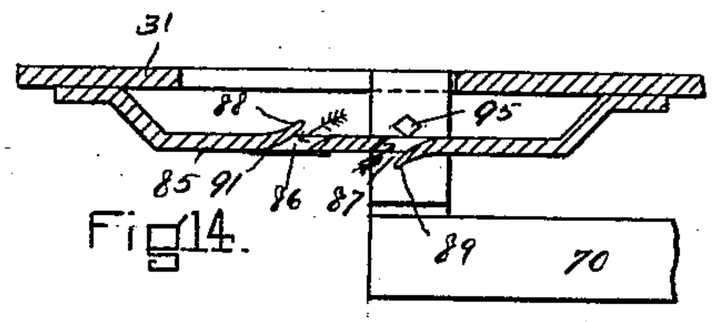

Fig. 14.

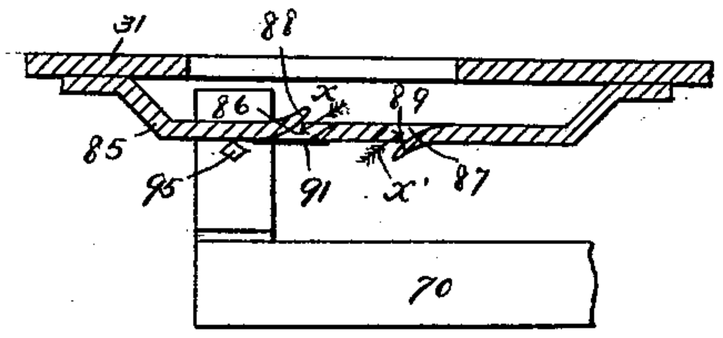

Fig. 15.

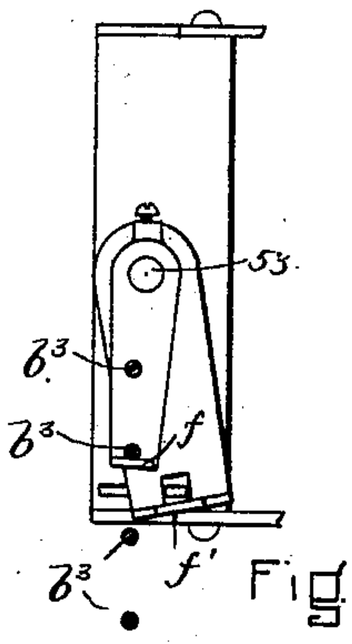

Fig. 12.

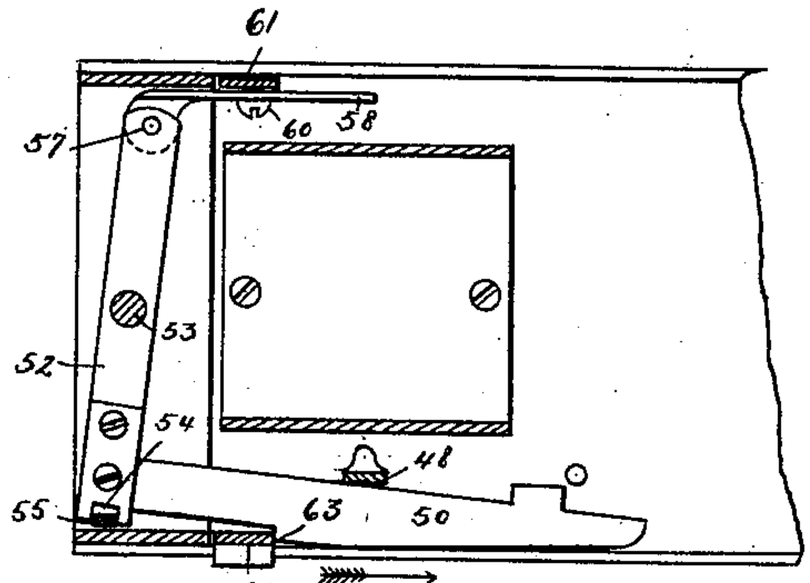

Fig. 11.

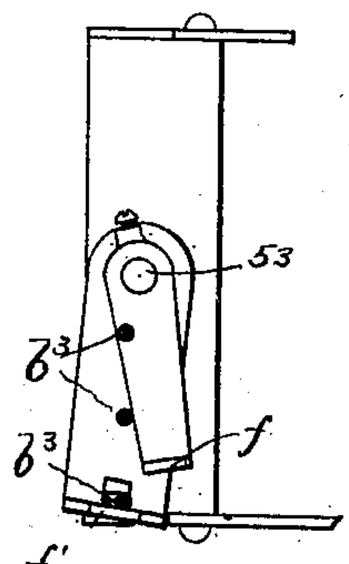

Fig. 13.

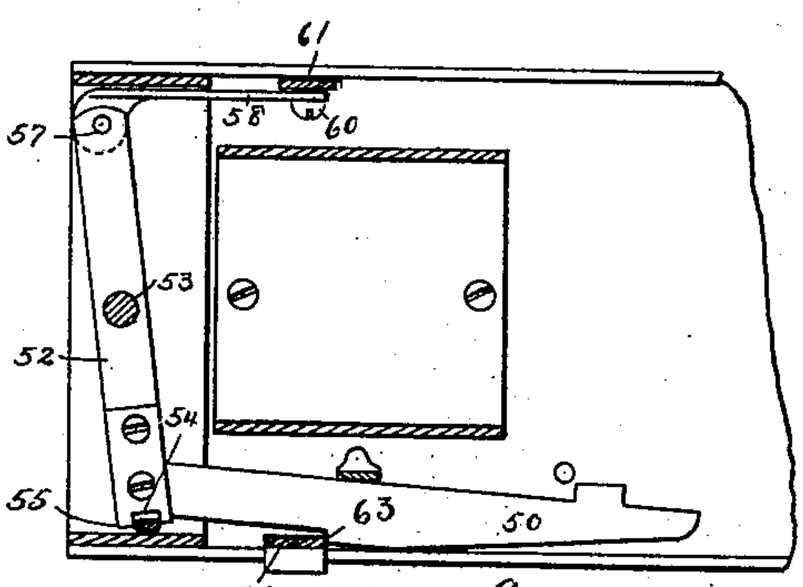

Fig. 11a.

WITNESSES.
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G. A. Macdonald

INVENTOR.
C. A. Shattuck
by Wright Brown Quinby & Priority
Attys.

UNITED STATES PATENT OFFICE.

CHARLES A. SHATTUCK, OF MALDEN, ASSIGNOR OF ONE-HALF TO HARRY L. AYER, OF WEST NEWTON, MASSACHUSETTS.

COIN-CONTROLLED VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 482,142, dated September 6, 1892.

Application filed January 18, 1892. Serial No. 418,444. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. SHATTUCK, of Malden, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Coin-Controlled Vending-Machines, of which the following is a specification.

This invention has for its object to provide a coin controlled or operated machine provided with electro-mechanical means for preventing the operation of the machine by a spurious coin or substitute for a coin, and of general simple construction and not liable to get out of order.

The invention consists in the several improvements, which I will now proceed to describe and claim.

In the accompanying drawings, forming part of this specification, Figure 1 represents a partial front elevation and partial section of a machine embodying my improvements. Fig. 2 represents a top view of the coin-operated mechanism. Fig. 3 represents a section on line 3 3, Fig. 2, showing said mechanism before the introduction of the coin. Fig. 4 represents a similar section showing the mechanism during the operation of releasing an article to be sold. Fig. 5 represents a section on line 5 5, Fig. 2, looking toward the right. Fig. 6 represents a section on line 6 6, Fig. 2, looking toward the left. Fig. 7 represents a section on line 7 7, Fig. 3. Fig. 8 represents a top view of the escapement device hereinafter referred to. Fig. 9 represents a section on line 9 9, Fig. 1. Fig. 10 represents an elevation of the rear end of the apparatus. Fig. 11 represents a view similar to Fig. 7, at a different stage of the operation. Fig. 11^a represents a view similar to Figs. 7 and 11, showing another stage of the operation. Figs. 12 and 13 represent top views of the escapement-pallets, said pallets being in a different position in Fig. 13 from that shown in Fig. 12. Fig. 14 represents an enlarged section on line 14 14, Fig. 6; and Fig. 15 represents a similar section showing a different stage of the operation.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents a suitable support, which is preferably a vertical standard or frame, to which is pivotally connected a wheel *b*, provided in its periphery with a series of pockets *b'*, each of which is adapted to hold one of the articles which the machine is to deliver. The machine here shown is intended to hold articles of the general form of cakes of chocolate, the pockets being substantially rectangular. The wheel is mounted upon a fixed stud *c*, which is secured to the standard *a*, the wheel having a hub b^2, which is fitted upon said standard. The wheel is detachably secured to the standard and prevented from being fraudulently withdrawn by a suitable means—such as a screw *c'*—entering a groove in the stud *c*, as shown in Fig. 9. The wheel is covered by a casing *d*, which is suitably locked and can only be opened by an authorized person, said casing preventing access to the screw *c'*.

e represents a spring which is attached at one end to the standard *a* and at its other end to the back of the wheel *b*, said spring normally rotating the wheel in the direction indicated by the arrow in Fig. 1, so that when the wheel is free to rotate it will be given a movement in the direction indicated. The wheel is normally arrested by means of an escapement, hereinafter described, comprising two arms or pallets *f* and *f'*, which are adapted to co-operate with a series of teeth or pins b^3, arranged on the periphery of the wheel *b*. Said escapement-pallets are normally locked, so as to prevent the rotation of the wheel, and are operated to permit the partial rotation of the wheel a sufficient distance to enable the latter to bring one of its receptacles *b'* over a delivery-opening b^{10}, Fig. 1, by means of mechanism which is normally locked, and is released and permitted to operate by the insertion of a coin in a chute *g*, the arrangement being such that the insertion of a coin in said chute releases or unlocks a lever *h*, which is pivoted at *i i* to the supporting-frame *j* and permits the depression of said lever by the operator. The depression of said lever is attended with the following results: First, a permanent magnet is moved in a direction crosswise of the chute, so that if a fraudulent device—such as a blank of iron or steel—is inserted in the slot said device will be removed by the magnet and prevented from co-operat-

ing in the operation of releasing the wheel *b*; second, a circuit-closing arm is moved into the chute, so that if a proper coin has been deposited therein said arm will co-operate with said coin in closing an electric circuit which includes an electro-magnet. The closure of said circuit moves a latch or connecting device into such position that at the conclusion of the downward movement of the lever and upon its upward movement, which is effected by a spring, the escapement-pallets will be operated in such manner as to permit the desired partial rotation of the wheel, which is then locked.

I will now proceed to describe in detail the mechanism thus generally referred to.

The frame *j*, supporting the chute *g*, lever *h*, and escapement-pallets *f f'*, is here shown as located between the wheel *b* and a money drawer or receptacle *k*, the said drawer being arranged to slide in a casing *k'*, which has an orifice k^2, Fig. 3, arranged to permit the coin that passes through the chute *g* to enter the drawer *k*.

This lever *h* is normally held in the position shown in Fig. 3 by means of a spring *m*. Said lever is preferably made in the form of a frame composed of side arms 10 10 and a connecting cross-bar 12, the ends of the side arms 10 10 being pivoted at *i i* to the supporting-frame *j*, while the cross-bar 12 is provided with a handle 13, by which the operator depresses the lever. A locking mechanism is employed to normally prevent the depression of the lever *h*, said mechanism comprising a fixed standard 14, having a curved slot 15, at the upper end of which is a shoulder 16, Figs. 3 and 4, said slot receiving a pin 17 on the swinging end of an arm 18, which is adapted to oscillate on a rod or cross-bar 19, affixed to the side arms 10 10. When the lever *h* is in its normal position, the arm 18 is held in the position shown in Fig. 3 by means of a bell-crank lever composed of the arms 20 21, pivoted at 22 to a fixed support, said bell-crank lever being engaged and locked in the position shown in Fig. 4 by means of a lever 23, which is pivoted at 24 to a fixed support and has its upper end provided with a finger 25, which is normally projected by a spring 26 into the coin slot or chute *g*, the finger 25 being in such position that a coin of the size and dimension adapted to operate the apparatus cannot be inserted in the chute *g* without moving the lever 23 to the position shown in dotted lines in Fig. 5. The lever 23 is provided with a projection at 27, formed to engage the arm 21 of the bell-crank lever above mentioned and to hold said bell-crank lever in the position shown in Figs. 3 and 5. When the lever 23 is displaced by a coin *n*, the projection 27 releases the arm 21 and permits the bell-crank lever 20 21 to be moved by a spring 28 to the position shown in Fig. 4. This movement of said lever removes a pin 29 on the arm 20 from contact with the arm 18 and permits said arm to move its pin 17 by gravitation out of engagement with the shoulder 16, so that the pin 17 is free to move downwardly in the slot 15. The lever *h* is therefore free to be depressed by the operator, and when it is depressed the arm 18 is caused to receive the pin 29 in a notch 30, formed in said arm, as shown in Fig. 4, so that when the lever *h* is raised by the spring *m* after being released by the operator the arm 18 will draw the bell-crank lever 20 21 back to the position shown in Fig. 3, thus again engaging the arm 21 with the lever 23 and preparing the machine for the next operation, the release and partial rotation of the wheel *b* taking place, as presently described, during the upward movement of the lever *h*.

The walls of the chute *g* are plates 31 and 32, affixed to the frame *j* in any suitable way. The lever 23 projects into one end of said chute, as above stated, and the other end of the chute is formed by a finger 33, which is pivoted at 34 (see Fig. 5) and projects downwardly along one side of the path in the chute through which the coin falls. The descent of the coin in the chute is limited by means of a gate 35, which is mounted upon a rod 36, said rod being attached to the bell-crank lever 20 21 and constituting the pivot of said lever, so that the gate 35 is moved from the position shown in Fig. 3 to that shown in Fig. 4 by the release of the lever 20 21, which takes place when the coin is first inserted in the upper end of the chute. The lower edge of the gate 35 is thus thrown into position to arrest the coin *n*, as shown in Fig. 4, before the latter has time to fall below the gate.

As already stated, the escapement-pallets *f* and *f'* are actuated by electro-mechanical devices which are operated by the depression and elevation of the lever *h*, said devices being as follows:

90 represents an arm of insulating material affixed to a rock-shaft 37, which is journaled in fixed bearings. The arm 90 is provided on its swinging end with a finger or electrode 38, which is connected by a wire 39 with an electric circuit which includes an electro-magnet 40. The arm 90 is normally held in the raised position shown in Fig. 3 by a spring 91. 41 represents another electrode or terminal which is connected by a wire 42 with said circuit, the wires 39 and 42 being here shown as connected with the poles of the electro-magnet 40, while 43 and 44 represent the main circuit-wires, which are connected with a battery. (Not shown.) The lever *h* is provided with a finger 45, which is arranged to strike an arm 46, affixed to the rock-shaft 37 when the lever *h* is being depressed, the contact of said finger with the arm 46 causing the rock-shaft 37 to turn and depress the arm 90, carrying the latter from the position shown in Fig. 3 to that shown in Fig. 4. This motion of the arm 90 causes the electrode 38 to pass through an orifice 93 in the gate 35 and to make contact with one side of the coin *n*, the latter being held by

the gate 35. The opposite side of the coin is in contact with the electrode 41. It will be seen, therefore, that the coin being of a material which is a conductor of electricity, the simultaneous contact of the electrodes 38 and 41 with the coin will close the circuit through the electro-magnet, and thus energize the latter. This closure of the circuit is utilized in the manner which I will now describe.

47 represents an armature which is movable toward and from the poles of the magnet 40 and is affixed to a lever 48, which is pivoted at 49 to a fixed support. The lower end of said lever is arranged to bear against one side of a sliding latch 50, Fig. 7, which is movable lengthwise in the casing *j*. One end of said latch is pivoted at 51 to an oscillatory bar 52, affixed to a vertical shaft 53, mounted to turn in bearings in the frame *j*. One end of said bar is provided with a notch 54, which is engaged with a lever 55, which lever is pivoted at 56 to the casing *j* and is engaged at its upper end with the escapement-pallet *f'*. To the opposite end of the bar 52 is pivoted at 57 a link 58, which is provided with a slot 59, which receives a stud 60, affixed to an arm 61, formed on or attached to one of the side arms of the lever *h*. The opposite side arm of said lever is provided with an arm or lever 62, the lower end of which is arranged in close proximity to one edge of the latch 50. When the lever *h* is depressed, the lower ends of the arms 61 and 62 are swung forward, as indicated in Fig. 4, the stud 60 of the arm 61 being thus carried forward in the slot 59, while the lower end of the arm 62 is moved to the left of a shoulder 63, formed on the latch 50, the movement of the arms 61 and 62 being in the direction indicated by the arrows in Fig. 7 when the lever *h* is being depressed.

It will be observed by reference to Figs. 7 and 11 that the arm 62 is in contact with the outer edge of the latch 50 before the depression of the lever *h*, said latch being held by said arm in the position indicated in Fig. 7. The armature-lever 48, bearing against the inner edge of the latch 50, is held by said latch in the position shown in Figs. 7 and 10, the armature 47 being retracted from the poles of the electro-magnet 40. When the arm 62 is moved past the shoulder 63 to the position shown in Fig. 11, the latch 50 is permitted to swing outwardly. Just at this time or slightly before the arm 62 passes the shoulder 63 the electro-magnet is energized, and the armature 47, being now free to move toward the poles of the electro-magnet, is attracted, the lower end of the lever 48 being thus moved outwardly and caused to move the latch 50 and thus engage the shoulder 63 with the rear edge of the arm 62, as shown in Fig. 11. When the lever *h* is raised by the spring *m*, the engagement of the arm 62 with the latch-shoulder 63 causes the latch to move in the direction of the arrow in Fig. 11, so that the bar 52 is moved by the movement of said latch from the position shown in Fig. 11 to that shown in Fig. 11ª. The escapement-pallet *f* is affixed rigidly to the stud 53, to which the bar 52 is affixed, so that the described movement of the bar 52 moves the pallet *f* laterally from the position shown in Fig. 12 to that shown in Fig. 13. The movement of the bar 52 from the position shown in Fig. 11 to that shown in Fig. 11ª causes the lever 55 to turn on its pivot 56 in the direction required to give the escapement-pallet *f'*, with which the upper end of said lever is engaged, a movement in the opposite direction, the two pallets being thus separated, as indicated in Fig. 13. The described movement of the pallet *f* releases the tooth or pin b^3, resting against said pallet, so that the wheel *b* is rotated by its spring until said tooth strikes the pallet *f'*, which in moving from the position shown in Fig. 12 to that shown in Fig. 13 is in position to arrest said tooth. The above-described movement of the bar 52 from the position shown in Fig. 11 to that shown in Fig. 11ª, together with the movement of the lever-arm 61 caused by the upward movement of the lever *h*, brings the right-hand end of the slot 59 in the link 58 into contact with the stud 60 on the arm 61. This contact causes the arm 61 during the concluding part of its backward movement to restore the bar 52 to the position shown in Figs. 7 and 11, in doing which it moves the pallets *f* and *f'* back to the position shown in Fig. 12. The pallet *f'* is thus caused to release the tooth b^3 held by it, and at the same time the pallet *f* is brought into position to arrest the following tooth, so that the wheel is permitted a sufficient rotation to bring one of its receptacles *b'* into its discharging position over the outlet-orifice in the casing.

It will be seen from the foregoing that the insertion of a coin in the chute *g* unlocks the lever *h* and causes the gate 35 to assume its coin-arresting position. After the insertion of the coin the operator depresses the lever *h*, thus closing the electric circuit and moving the lever-arms 61 and 62 forward and preparing them to operate the escapement-pallets, which operation takes place during the backward movement of said arms, caused by the upward movement of the lever *h*, the pallets being moved apart or outwardly by the action of the arm 62 on the latch 50 until a tooth b^3 is released by the pallet *f* and caught by the pallet *f'*, and then moved inwardly until said tooth is released by the pallet *f'* and another tooth is arrested by the pallet *f*. The wheel *b* is therefore rotated a distance equal to the space between two of its teeth b^3, this distance being sufficient to bring a receptacle or pocket *b'* into register with the delivery orifice or outlet. It will be seen that the latch 50, controlled by the electro-magnet so that it can be engaged with the lever-arm 62 only after the closure of the circuit, renders it impossible to

operate the escapement unless a coin of conducting material is present between the electrodes 38 and 41.

To prevent the fradulent operation of the machine by the use of a blank of iron or steel, I provide a permanent magnet 70, which is adapted to move horizontally in a guide 72 beside the chute *g*. The poles 71 71 of said magnet are offset and project into slots in the wall 31 of the chute *g*, so that they are in position to attract a piece of iron or steel therein. The magnet 70 is reciprocated by the movements of the lever *h* through suitable intermediate devices which cause the magnet to move in the direction indicated by the arrow in Fig. 6 when the lever *h* is being depressed and in the opposite direction when the lever is rising. Said devices, as here shown, comprise a lever 74, pivoted at 75 to a fixed ear 76, Figs. 3 and 4, a link 82, connecting said lever with the lever *h*, a bell-crank lever 77, pivoted at 78 to the casing and having an eye 79 on one of its arms engaged with a pin 80 on the magnet 70, and a link 81, connecting the other arm of said bell-crank lever with the lever 74. The depression of the lever *h* causes the link 82 to depress the swinging end of the lever 74, which through the link 81 swings the bell-crank lever 77 in the direction required to move the magnet 70 in the forward direction indicated by the arrow. The upward movement of the lever *h* causes an opposite or backward movement of the magnet through the same devices. The forward movement of the magnet causes it to remove a piece of iron or steel in the chute from the point where the electrode 38 enters the chute before the entrance of said electrode, so that the circuit cannot be closed and the electro-magnet energized through the said piece. Hence there will be no operation of the escapement and of the delivery part of the machine.

I prefer to remove the poles of the magnet 70 from the chute just before the conclusion of its forward movement and during its backward movement, so that the piece moved away from the electrodes by the forward movement of the magnet will not be carried back by the backward movement of the magnet. To this end I pivot the guide 72 at 84, so that it can swing toward and from the chute *g*, and provide the wall 31 of the chute with a guide 85, which is provided with two slots 86 87, Fig. 14, formed to permit the passage through them of a stud 95 on one of the magnet-poles 71. When the magnet is moving forward, as indicated by the arrow in Fig. 14, the pin 95 on reaching an inwardly-projecting diagonal lip 88 at one side of the slot 86 is deflected outwardly by said lip and passes through the slot 86 to the outer side of the guide, as indicated by the arrow *x* in Fig. 15, the poles of the magnet being thus withdrawn from the chute. A spring 91 held yieldingly against the outer side of the guide 85 covers the slot 86 and prevents the pin 95 from passing through said slot during the backward movement of the magnet 70, said spring yielding to permit said pin to pass out through said slot and then closing and constituting a bridge along which the pin slides during the backward movement of the magnet. The guide 85 is provided with another slot 87, having at one side a diagonal lip 89, arranged to guide the pin 95 into the space between the guide 85 and the wall of the chute during the backward movement of the magnet, as indicated by the arrow *x'* in Fig. 15. The lever 33, which forms one edge or end of the coin-chute *g*, is connected by a link 97, Figs. 2 and 6, with the bell-crank lever 77, so that said lever is oscillated by the movements of the magnet 70 and is moved outwardly to permit the edgewise movement of an iron piece by the forward movement of the magnet. The guide 85, its slots 86 87, and the spring 84 constitute switching devices which keep the magnet in the chute during its forward movement and withdraw it from the chute during its backward movement, so that the magnet after displacing a piece of iron in the chute by its forward movement cannot move it back in the chute by its backward movement.

I claim—

1. A coin-operated vending-machine comprising in its construction a coin-chute, a lever adapted to be depressed by the operator and provided with means for returning it to its normal position, a wheel have merchandise-holding pockets and a series of teeth or pins, an electric circuit including an electro-magnet and a swinging contact or electrode adapted to be moved by the depression of said lever, the circuit being adapted to be closed by the contact of said electrode with a suitable coin in the chute, and an escapement or let-off mechanism normally in position to engage a tooth of the wheel and adapted to be engaged with said lever by the action of the electro-magnet when the latter is energized, the arrangement being such that a movement of said lever in one direction prepares it for engagement with said escapement mechanism, while a movement of said lever in the opposite direction operates the escapement, as set forth.

2. In a coin-operated vending-machine, the combination of a rotary wheel having merchandise-holding pockets and a series of teeth or pins, a lever adapted to be moved or depressed by the operator and provided with means for returning it to its normal position, a coin-chute, a circuit-closing device moved by the depression of said lever into position to bear on a coin in said chute, an electro-magnet and electrical connections completing a circuit through said magnet when the said circuit-closing device is in contact with a coin, and an escapement mechanism controlled by said electro-magnet, said mechanism being adapted to co-operate with the teeth or pins of the wheel in permitting a partial rotation

of the latter, and including a latch which is thrown by the action of said magnet into position to be actuated by the lever during its return movement, as set forth.

3. In a coin-operated vending-machine, the combination of a rotary wheel having merchandise-holding pockets and a series of teeth or pins, a lever adapted to be moved or depressed by the operator and provided with means for returning it to its normal position and provided with two escapement-operating arms 61 62, a coin-chute, a circuit-closing device moved by the depression of said lever into position to bear on a coin in said chute, an electro-magnet and electrical connections completing a circuit through said magnet when the said circuit-closing device is in contact with a coin, and an escapement mechanism comprising two pallets independently movable, a rocking bar, such as 52, connections between said bar and the pallets, through which each movement of the bar moves the pallets simultaneously in opposite directions, a latch connected with one end of said bar and formed to engage the arm 62 when said arm is moved by the return movement of the lever, said latch being controlled by the electro-magnet and engaged with said arm only when the magnet is energized, the latch and bar being moved in one direction by said arm during a part of the return movement of the lever, and a loose connection, such as the link 58, between the opposite end of the bar 52 and the arm 61, through which the bar is moved in the opposite direction during the latter part of the return movement of the lever, as set forth.

4. In a coin-operated vending-machine, the combination of a fixed coin-chute, a coin-arresting gate therein, means for alternately opening and closing said gate, delivery mechanism and electrically-controlled operating devices therefor, including an electric circuit, devices for closing said circuit through a coin or piece of conducting material in the position it assumes by gravitation in the chute when arrested by said gate, said devices including a swinging contact and means for moving it alternately into and out of the chute, a permanent magnet movable crosswise of the chute, and mechanism for reciprocating said magnet, said mechanism being timed to give the magnet a movement in the direction required to displace a fraudulent piece attracted thereby before the said swinging contact enters the slot, whereby the said piece is prevented from closing the circuit, as set forth.

5. A coin-operated vending-machine comprising in its construction a coin-chute, a lever adapted to be depressed by the operator and provided with means for returning it to its normal position, a wheel having merchandise-holding pockets and a series of teeth or pins, an electric circuit including an electro-magnet and a swinging contact or electrode adapted to be moved by the depression of said lever, the circuit being adapted to be closed by the contact of said electrode with a suitable coin in the chute, an escapement or let-off mechanism controlled by said electro-magnet and operated by the return movement of said lever, a permanent magnet movable across the coin-chute and adapted to displace a fraudulent piece therein from the path of the swinging electrode, and connections between said permanent magnet and lever, whereby the magnet is reciprocated when the lever is oscillated, as set forth.

6. The combination of the coin-chute, the coin-arresting gate therein, the bell-crank lever affixed to said gate, the locking-lever 23, adapted to engage one arm of said bell-crank lever and arranged to be displaced by a coin inserted in the chute, the hand-lever *h*, having a swinging arm 18, and a fixed locking device with which said arm 18 is held in engagement by the bell-crank lever when the latter is locked by the lever 23, the displacement of the lever 23 causing the release of the bell-crank lever and of the arm 18, thus permitting the depression of the lever *h*, as set forth.

7. The combination, with the merchandise-holding wheel having a series of pins, of the escapement and escapement-operating mechanism consisting of the pallets *f f'*, the stud or rock-shaft 53, to which the pallet *f* is affixed, the pallet *f'* being adapted to swing loosely on said shaft, the bar 52, affixed to said shaft, the pivoted lever 55, engaged at one end with the bar 52 and at the other with the pallet *f'*, the latch 50, engaged with one end of the bar 52, the link 58, engaged with the other end of said bar, the hand-lever *h*, having arms 61 and 62, arranged to co-operate with said link and latch, an electro-magnet, an armature for said magnet, a pivoted lever supporting said armature and adapted to throw the latch into engagement with the arm 62 when the magnet is energized, and a coin-completed electric circuit including said magnet and adapted to be closed by a movement of the lever *h*, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 8th day of January, A. D. 1892.

CHARLES A. SHATTUCK.

Witnesses:
C. F. BROWN,
A. D. HARRISON.