

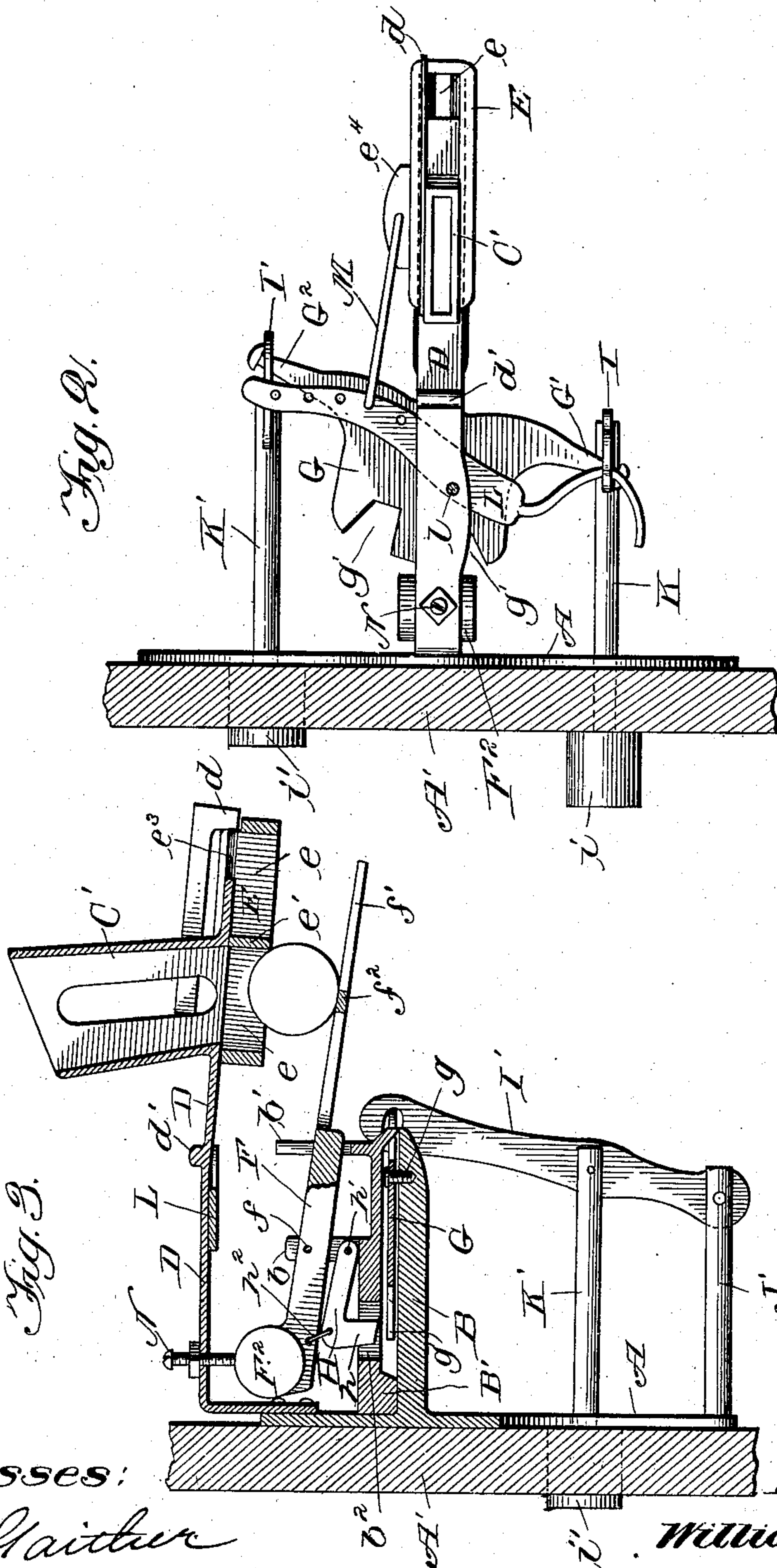
No. 737,304.

PATENTED AUG. 25, 1903.

W. H. WALTER.
COIN CONTROLLED DEVICE.
APPLICATION FILED NOV. 8, 1902.

NO MODEL.

3 SHEETS--SHEET 2.



Witnesses:

H. S. Gaither

Carl S. Crawford

Inventor:

William H. Walter

by Poole & Brown

Attorneys.

No. 737,304.

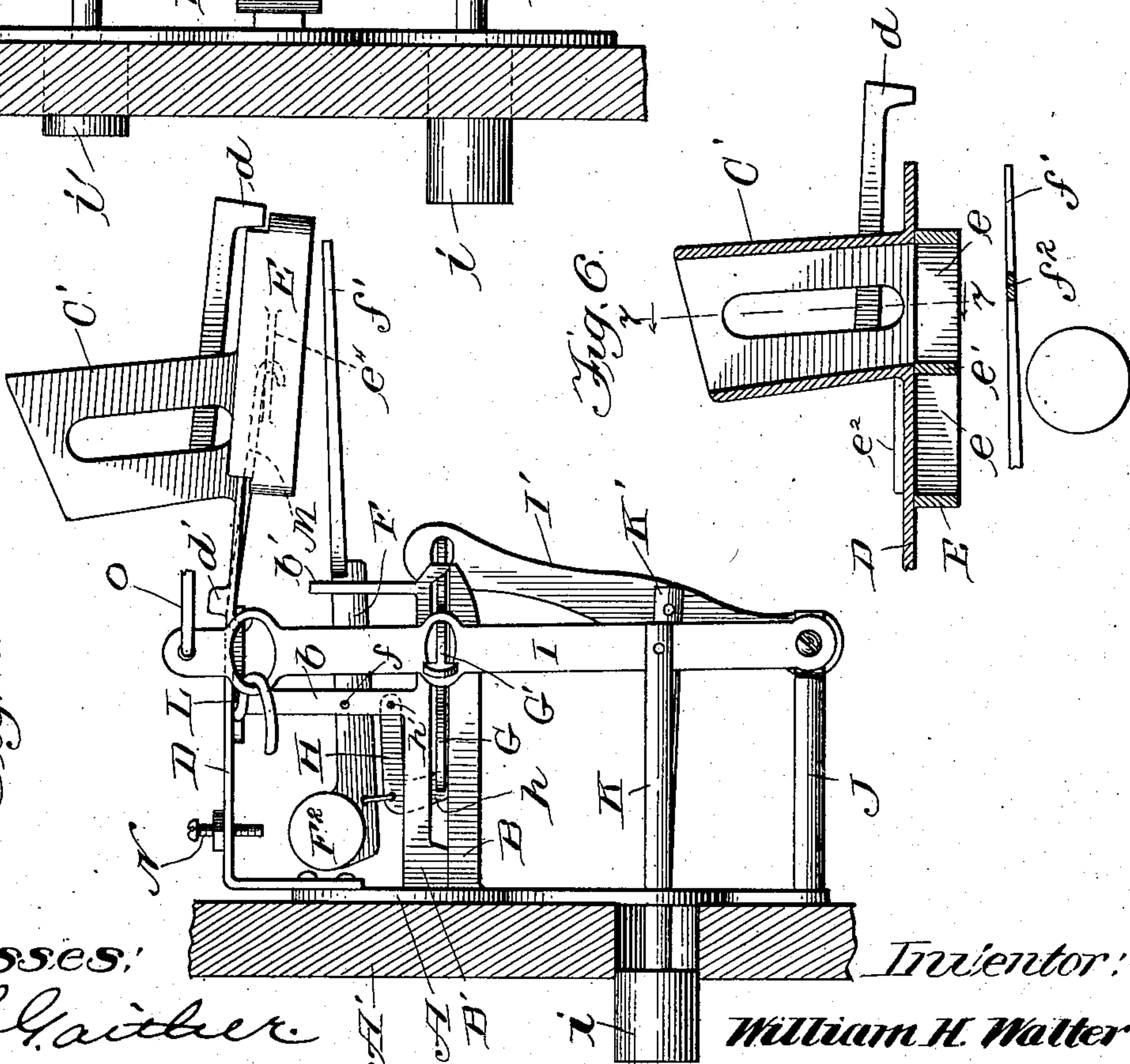
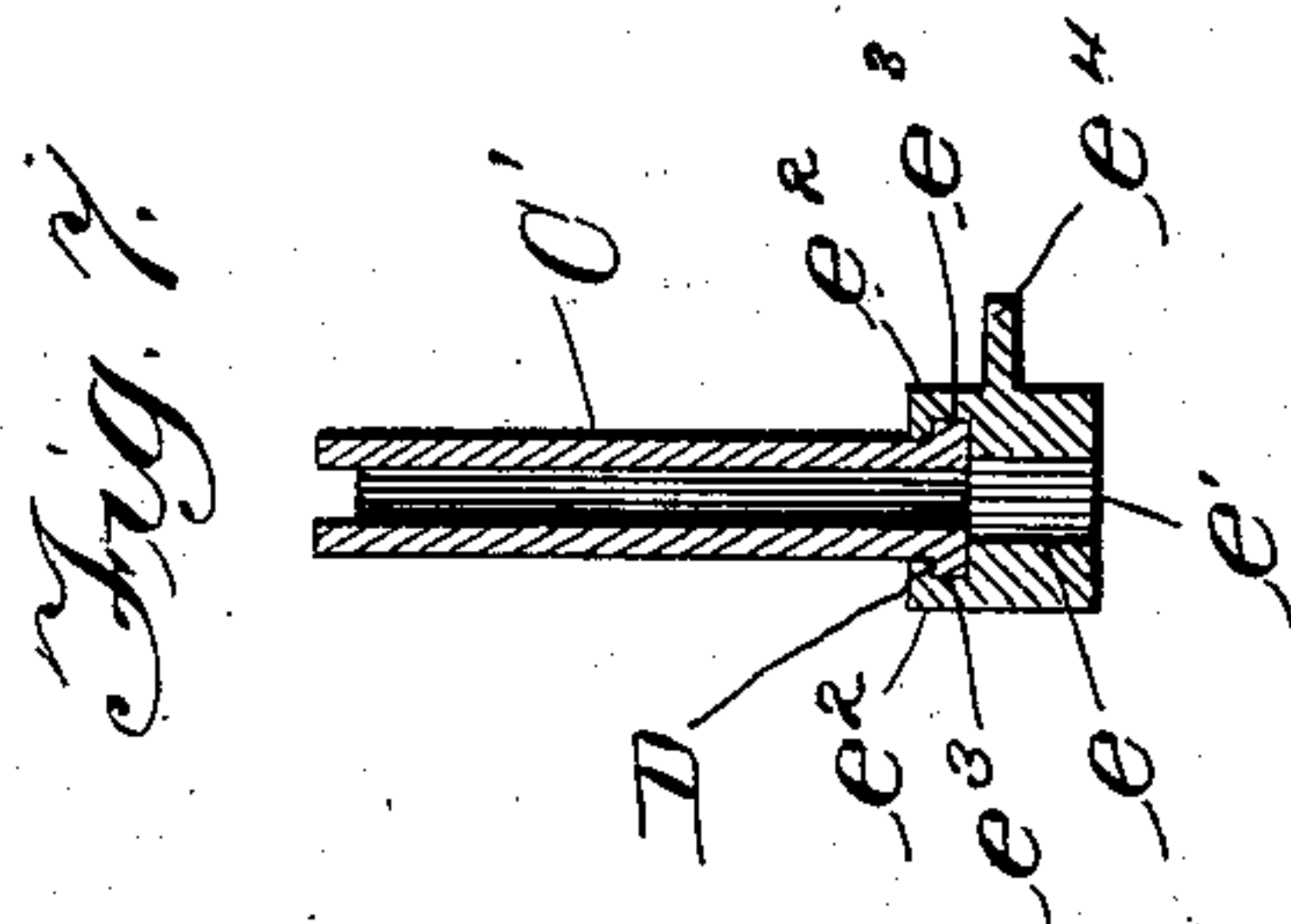
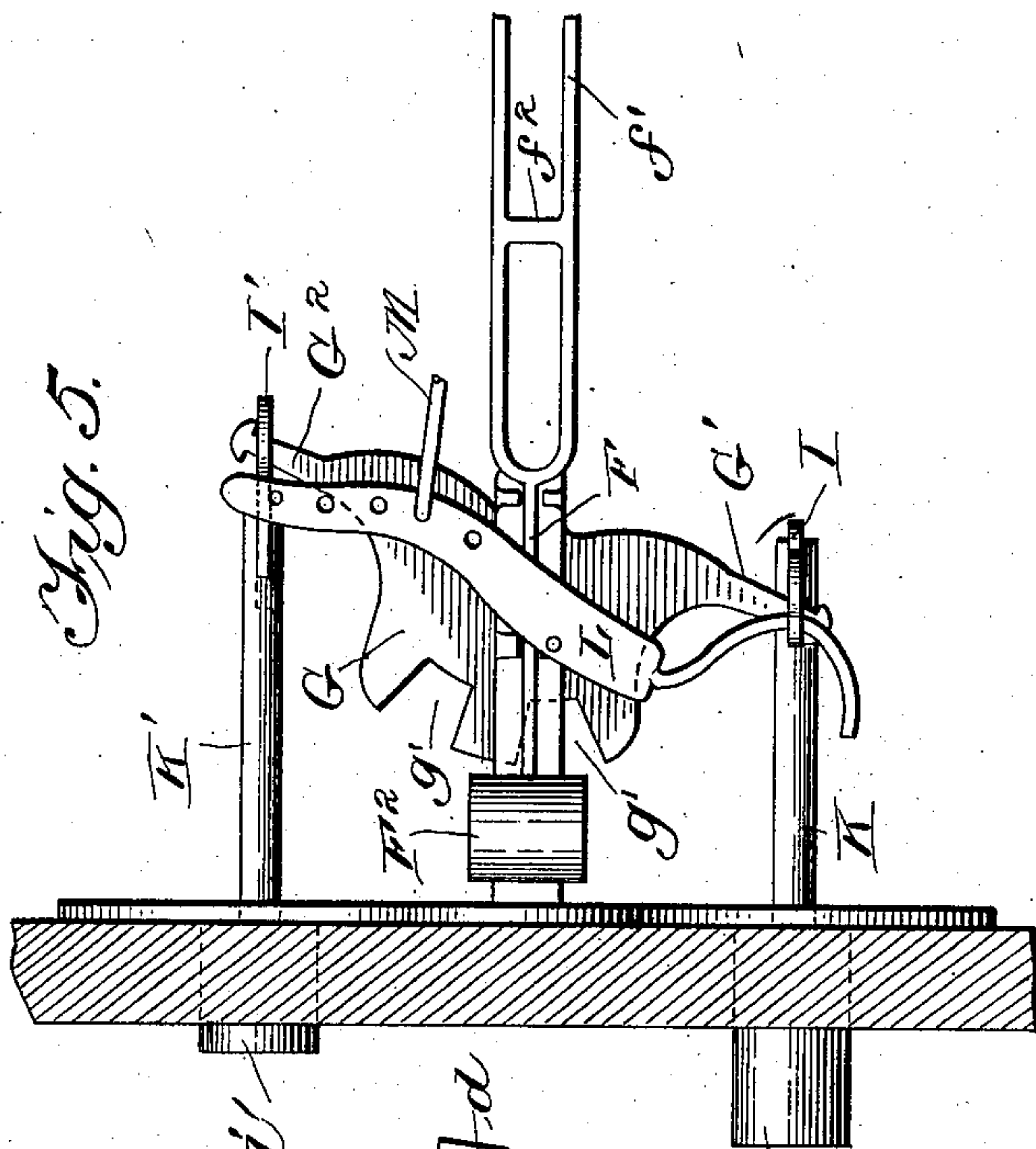
PATENTED AUG. 25, 1903.

W. H. WALTER.
COIN CONTROLLED DEVICE.

APPLICATION FILED NOV. 8, 1902.

NO MODEL.

3 SHEETS—SHEET 3.



Witnesses:

H. S. Gaither.

Carl A. Crawford

Inventor:

William H. Walter

by Poole + Brown

Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM H. WALTER, OF CHICAGO, ILLINOIS, ASSIGNOR TO FRANK G. KAMMERER, OF CHICAGO, ILLINOIS.

COIN-CONTROLLED DEVICE.

SPECIFICATION forming part of Letters Patent No. 737,304, dated August 25, 1903.

Application filed November 8, 1902. Serial No. 130,497. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WALTER, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Coin-Controlled Devices; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in coin-actuated mechanism for vending-machines and like devices.

The invention consists in the matters hereinafter described, and pointed out in the appended claims.

In the accompanying drawings, illustrating my invention, Figure 1 is a perspective view of an apparatus embodying the invention. Fig. 2 is a plan view of the same. Fig. 3 is a vertical section taken on line 3 3 of Fig. 2. Fig. 4 is a view in side elevation of the same. Fig. 5 is a plan view of parts shown in Fig. 4. Fig. 6 is a detail sectional view of the lower end of the coin-chute and adjacent parts. Fig. 7 is a detail section taken on line 7 7 of Fig. 6.

As shown in the drawings, A indicates a vertically-arranged plate, which is shown as attached to a vertical wall A', which may constitute the front wall or a part of the front wall of a casing or housing containing a vending or other coin-controlled apparatus.

B indicates a horizontally-arranged bracket which is attached to and projects from the plate A and on which some of the principal operative parts of the device are mounted.

C indicates a coin-chute which is attached at its forward and upper end to the wall A' above the supporting-plate, said chute communicating at its upper end with a slot formed in the wall A' for the admission of a coin to the said upper end of the chute. The said chute is directed downwardly and inwardly, and its lower and rear end is shown as consisting of a separate part or section C', which is attached at its lower end to an arm or bracket D, which is attached to and projects rearwardly from the plate A. Said arm D is provided with a slot or aperture forming

a continuation of the coin opening or channel in the slot D' of the coin-chute, and said arm D projects horizontally at either side of said coin-chute, and its side edges are adapted to form horizontal guides for a sliding coin-ejector E. The said coin-ejector has the form of an elongated block located beneath the rear end of the arm D and having formed in it two vertically-arranged slots or openings *e e*, separated by a cross-bar *e'*, Figs. 3, 6, and 7. Said slots *e e* are located in the same vertical plane with the passage of the coin-chute, and either of them may be brought into register with the lower end of said passage by endwise-sliding movement of the coin-ejector on said arm D. A stop-arm *d* limits the outward movement of the coin-ejector, while a stop-lug *d'* on the top of the arm D limits the inward movement thereof. Said elongated block, forming the body of the coin-ejector, is provided at its side margins with flanges *e² e²*, which rise at either side of the arm D and are provided with horizontal grooves *e³ e³*, which engage the side margins of the said arm and support the coin-ejector in place while permitting it to slide freely on the arm.

F indicates a pivoted detent-actuating lever arranged to swing in a vertical plane below the arm D. Said detent-lever is pivoted by a pivot-pin *f* between two standards *b b*, which are attached to and rise from a horizontal plate B', located above and parallel with the bracket B. At its forward end the detent-actuating lever F is provided with a weight *F²*, while the rear end of said detent-lever is provided with two parallel arms *f' f'*, which extend rearwardly beneath the coin-chute and the sliding coin-ejector E. Said arms *f' f'* are joined with each other by means of a cross-bar *f²*, which is located centrally beneath the lower end of the rear part C' of the coin-chute. The cross-bar *f²* constitutes the coin-supporting part or member of the lever F and is located centrally beneath the lower opening of the coin-chute, so that it will arrest and temporarily support a coin passing from said chute through one of the slots or openings *e e* in the movable coin-ejector. At its inner end the plate B' is provided with two parallel upright arms *b' b'*, which constitute lateral guides for the lever

F and serve to hold the rear end of the same from lateral movement while permitting free vertical movement thereof.

G designates a horizontally-swinging locking-plate mounted on a vertical pivot, which is located between the bracket B and the plate B' above it, Fig. 3. Said plate G is mounted to swing on a pivot-stud *g*, herein shown as passing downward through the locking-plate and as being secured in the bracket B. Said locking-plate G is provided in its forward margin with two locking-notches *g'* *g'*. Mounted on the plate B' is locking-detent H, which is adapted to swing in a vertical plane and is provided with a depending locking-arm *h*, adapted to engage either one of the locking-notches *g'* in the plate G. Said detent H is shown as pivoted to the standards *b b* by means of a horizontal pivot-pin *h'* and as extending forwardly from said pivot-pin and having the locking-arm *h* arranged at its forward or free end. The plate B' is provided with a guide-slot *b*², Fig. 3, through which the locking-arm *h* passes and by which the same is guided or held from lateral movement. The locking-detent H is connected with the forward or weighted end of the actuating-lever F by means of a link *h*², so that said detent-lever is operated or given vertical movement by the said actuating-lever F.

The locking-plate G is adapted to be swung or oscillated about its pivot *g*, so as to bring either one of the notches *g'* *g'* beneath the guide-slot *b*² and in position to be engaged by the detent-arm *h* on the detent-lever H when said detent-lever is depressed.

The locking-plate G is provided at its opposite sides with laterally-directed horizontal rigid arms *G'* *G*², which are engaged at their outer ends with two upright levers I I', which are pivoted at their lower ends to suitable stationary supports in such manner that the upper ends thereof may swing backwardly and forwardly in vertical planes, said supports, as herein shown, having the form of horizontal arms J J', attached to and extending rearwardly from the plate A. Connected by pivotal connections with the levers I I' at points between the lower pivoted ends thereof and the locking-plate G are two horizontal endwise-movable rods K K', which bear at their forward ends and slide endwise in the plate A. Said rods K K' have at their forward ends push-buttons or finger-pieces *i i'*, which extend through and slide in holes or apertures in the wall A', Fig. 4. The said push-buttons *i i'* through their connection with the oscillatory locking-plate G will be moved inwardly or outwardly in the wall A' as the said plate G is oscillated, the parts being so arranged that when said plate is at either limit of its oscillatory movement and one or the other of the notches *g'* *g'* is in position for engagement with the locking-detent H one of the push-buttons will be at the outward and the other at its inward position. It follows from this construction that if the fin-

ger be pressed on the push-button which is at the outward limit of its movement the plate will be moved or shifted through the action of the rod K or K' and the lever I or I', and thus carry the other or opposite push-button to its outward position. It follows that as one or the other of the push-buttons *i* or *i'* is thrust inwardly the plate G will be turned and the other push-button thrust outwardly.

One of the upright levers I extends above the level of the locking-plate G and near its upper end is engaged with a horizontally-swinging lever L, which is pivoted, by means of a vertical pivot-stud *i*, to the arm D, so as to swing in a horizontal plane. The said lever L and upright lever I thus arranged constitute a means for giving movement to the coin-ejector E. Said lever L for this purpose is shown as connected with the coin-ejector by means of a connecting-rod M, herein shown as having its forward end bent downwardly and engaged with one of a series of holes *l' l'* in the lever L and at its rear end bent downwardly and engaged with a horizontal flange *e*⁴ on one side of the coin-ejector E. These actuating devices for the coin-ejector are so arranged that when the upper end of the lever I reaches the forward limit of its movement the coin-ejector will be thrust rearwardly and the forward coin-slot *e* therein will be in position to register with the lower end of the coin-chute, and when said lever I is thrown to the rearward limit of its movement the coin-ejector will be moved forward, so as to bring its rearmost slot *e* beneath said coin-chute. It follows from the construction described that when the push-button *i* is thrust inwardly and the push-button *i'* is thereby moved outwardly the coin-ejector will be at the forward limit of its movement and that when the push-button *i'* is thrust inwardly and the push-button *i* thereby thrust outwardly the coin-ejector will be carried to the rearward limit of its movement.

As before stated, the detent-actuating lever F is provided with a weight F² at its forward end, and this weight is so arranged that when there is no coin in the device the action of the weight will overcome that of the rear end of the said lever and hold the same at the upward limit of its movement, while the weight of a coin resting on the cross-bar *f*² of said lever will depress the rear end of the lever and lift its forward or weighted end. Moreover, the cross-bar *f*² of the said lever F is located at such distance below the lower end of the coin-chute and the parts so arranged that when a coin is dropped from said chute and rests on the cross-bar *f*² and the rear end of the lever F is thereby depressed the upper edge of the coin will still remain engaged with the slot *e* of the coin-ejector, which is at the time beneath the coin-chute and over said cross-bar, so that the coin will be held in an upright position, with its lower edge resting on the said cross-bar, so long as no movement is given to the coin-ejector.

When the coin is thus resting on the rear end of the lever F, as clearly seen in Fig. 3, the forward or weighted end of said lever will remain in its elevated position and the locking-detent H will be supported with the lower end of its locking-arm *h* elevated above the locking-plate G. When, however, there is no coin in the apparatus or after the coin has been dislodged from the cross-bar *f*², the weighted forward end of the lever F will descend and the said locking-arm *h* of the locking-detent H will pass through and become engaged with one of the notches *g*' of the locking-plate G, and thereby serve to hold said locking-plate from movement. Inasmuch as the push-buttons *i* *i*' are connected with the said locking-plate by the levers I I' it follows that when there is no coin in the device and the locking-detent is thus depressed into engagement with one of the notches of the locking-plate G neither of the push-buttons can be moved and all parts of the apparatus, except the detent-actuating lever F, will be locked from movement.

When the parts are in their locked position, as above described, if a coin be inserted through the coin-chute it will fall through the same and through the slot *e* of the coin-ejector, which is at that time beneath the coin-chute, and will rest upon the cross-bar *f*² of the detent-actuating lever F, thus depressing the rear end of the detent-lever and releasing the locking-detent H from the locking-plate G. Said locking-plate will then be free to be moved, and the push-button *i* or *i*' which at the time is at the outward limit of its movement may be thrust inwardly, thereby swinging the plate G until the other locking-notch *g*' is in position for engagement with the locking-detent. As the locking-plate G is thus swung or oscillated the upright lever H, connected therewith, will be moved backward or forward and through the medium of the lever L will give movement to the coin-ejector E.

If the coin-ejector be at the rearward limit of its movement and the forward slot *e* therein be over the cross-bar *f*² as the coin-ejector is moved forward, the cross-bar *e*' between the slots *e* *e* will act upon the coin to push it forwardly until it is carried away from the cross-bar *f*² and is free to drop through the opening or space between the arms *f* *f* of said lever F. When the coin is thus released, the rear end of the lever F being thus relieved of its weight the forward end of said lever F will descend and permit the descent of the locking-detent H into engagement with one of the notches *g*' of the locking-plate G. If at the time one of the push-buttons is actuated the coin-ejector be at the forward limit of its movement, as shown in Fig. 6, said coin-ejector will be moved rearwardly when actuated by the push-button and the cross-bar *e*' thereof will similarly act upon the coin resting on the cross-bar *f*², so as to carry said coin inwardly or rearwardly away from the said cross-bar *f*² and permit it to fall between the

arms *f*. It follows from the above that the operation of the coin-ejecting device is the same whether the coin-ejector be moved forwardly or rearwardly, said coin-ejector in every instance being left with one or the other of its slots beneath the coin-chute at the termination of the movement of the plate G produced by pushing inwardly one or the other of the push-buttons.

It will be manifest that the rods, the upright levers I I', and the locking-plate G will be held from movement by the action of the locking-detent except when a coin is inserted into the machine to release the said detent from the locking-plate, so that the part of the vending mechanism which is designed to be actuated through the movement of the push-buttons may be connected with and actuated from any of these parts. In the particular construction illustrated a horizontal connecting-rod O, Figs. 1 and 4, is shown as connected with the lever H. Said connecting-rod may communicate motion to the moving part of any suitable vending device.

To provide for the accurate location of the rear end of the lever F with respect to the slot in the coin-ejector, as may be required for coins of different sizes, a provision is made for adjustably limiting the movement of said lever F under the weight of the coin resting on its rear end, the same, as herein shown, consisting of a set-screw N, which is inserted through the horizontal arm D above the forward end of the lever F and adapted for contact at its lower end with a part of said lever—in the instance shown the upper part of the weight F'.

Manifestly the connecting-rod M, arranged as described, or any other part connected and moving with the locking-plate G may be employed to give movement to the operative element of a vending or similar device or may operate a locking device which is adapted to hold from movement the operative parts of a vending or similar device which is itself operated by a single handle or lever or other manually-operable part, it being manifest that in the latter instance the actuation of one or the other of the push-buttons would merely serve to release said locking device to permit the movement of such manually-operable part.

A coin-controlled mechanism embracing the features of construction above described may be embodied in various forms so far as the mechanical features thereof are concerned, and I do not therefore desire to be limited to the details or specific features of construction illustrated, except so far as the same may form the subject of separate and specific claims.

I claim as my invention—

1. A coin-controlled mechanism comprising two manually-operable actuating members, a coin-chute, a tilting detent-actuating lever adapted to be moved by the weight of a coin and having a coin-supporting part located beneath the coin-chute and adapted to arrest

and support a coin inserted in said chute, means operated by the detent-lever for holding the actuating members from movement and means actuated by the movement of either one of said manually-operable members adapted to act on a coin resting on the actuating-lever to shift the position of the coin and thereby dislodge the same from its position on the tilting detent-lever.

2. A coin-controlled mechanism comprising two manually-operable actuating members, a coin-chute, a tilting detent-lever adapted to be moved by the weight of a coin and having a coin-supporting part located beneath the coin-chute, means operated by the detent-lever for holding the actuating members from movement, a coin-ejector having two slots or openings for the passage of a coin, either of which may be brought beneath the coin-chute and means actuated by the movement of either one of said manually-operable members for shifting the position of the coin-ejector so as to dislodge the coin from its position upon the detent-lever.

3. A coin-controlled mechanism comprising two manually-operable members, a locking-plate connected and moving therewith, a detent adapted to engage said locking-plate, a coin-chute, a tilting detent-actuating lever adapted to be moved by the weight of a coin and having a coin-supporting part located beneath the coin-chute and adapted to arrest and support a coin inserted in said chute and means actuated by movement of either one of said manually-operable members adapted to act on a coin resting on the actuating-lever to shift the position of the coin and thereby dislodge the same from its position on the detent-actuating lever.

4. A coin-controlled mechanism comprising two manually-operable members, a locking-plate having operative connections with both of said members, a detent adapted to engage the locking-plate, a tilting detent-lever adapted to be actuated by the weight of the coin, and which is connected with and gives movement to said detent, a coin-chute, said detent-lever being provided with a coin-supporting part located beneath said chute, and a coin-ejector provided with two openings or slots for the passage of the coin, either of which

may be brought into position beneath the coin-chute, and means actuated by the movement of either one of said manually-operable members, for shifting the position of said coin-ejector, so as to bring either one of the slots or openings therein beneath the chute and at the same time dislodge the coin resting upon the said coin-supporting part of the said detent-actuating lever.

5. A coin-controlled mechanism comprising two push-buttons, an oscillatory locking-plate provided with arms, two levers connected with the push-buttons and with said actuating-arms of the locking-plate, a tilting detent-actuating lever adapted to be moved by the weight of the coin, a detent adapted to hold the locking-plate from movement and which is connected with and moved by the detent-actuating lever, a coin-chute, a movable coin-ejector, having two coin-receiving slots or openings for the passage of coin, either of which may be brought beneath the chute, and means for actuating the said coin-ejector comprising a horizontally-swinging lever connected with the coin-chute and with one of the levers which connect the push-buttons with the locking-plate.

6. A coin-controlled mechanism comprising two manually-operable actuating members, a coin-chute, a tilting detent-actuating lever adapted to be moved by the weight of a coin and provided with a coin-supporting part located beneath the lower end of the coin-chute, means operated by the detent-actuating lever for holding said actuating members from movement, means actuated by the movement of either of said manually-operable members for dislodging the coin from its position in the coin-supporting part of the actuating-lever and an adjustable stop for limiting the movement of the said actuating-lever under the weight of a coin resting thereon.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two witnesses, this 28th day of October, A. D. 1902.

WILLIAM H. WALTER.

Witnesses:

C. CLARENCE POOLE,
WILLIAM L. HALL.