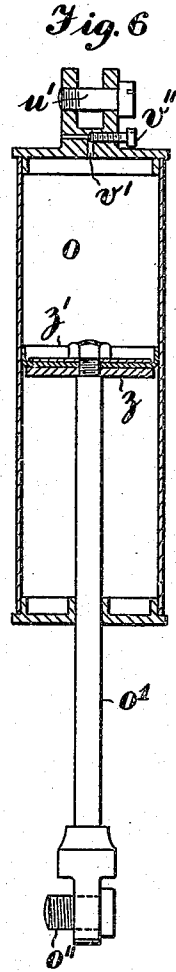
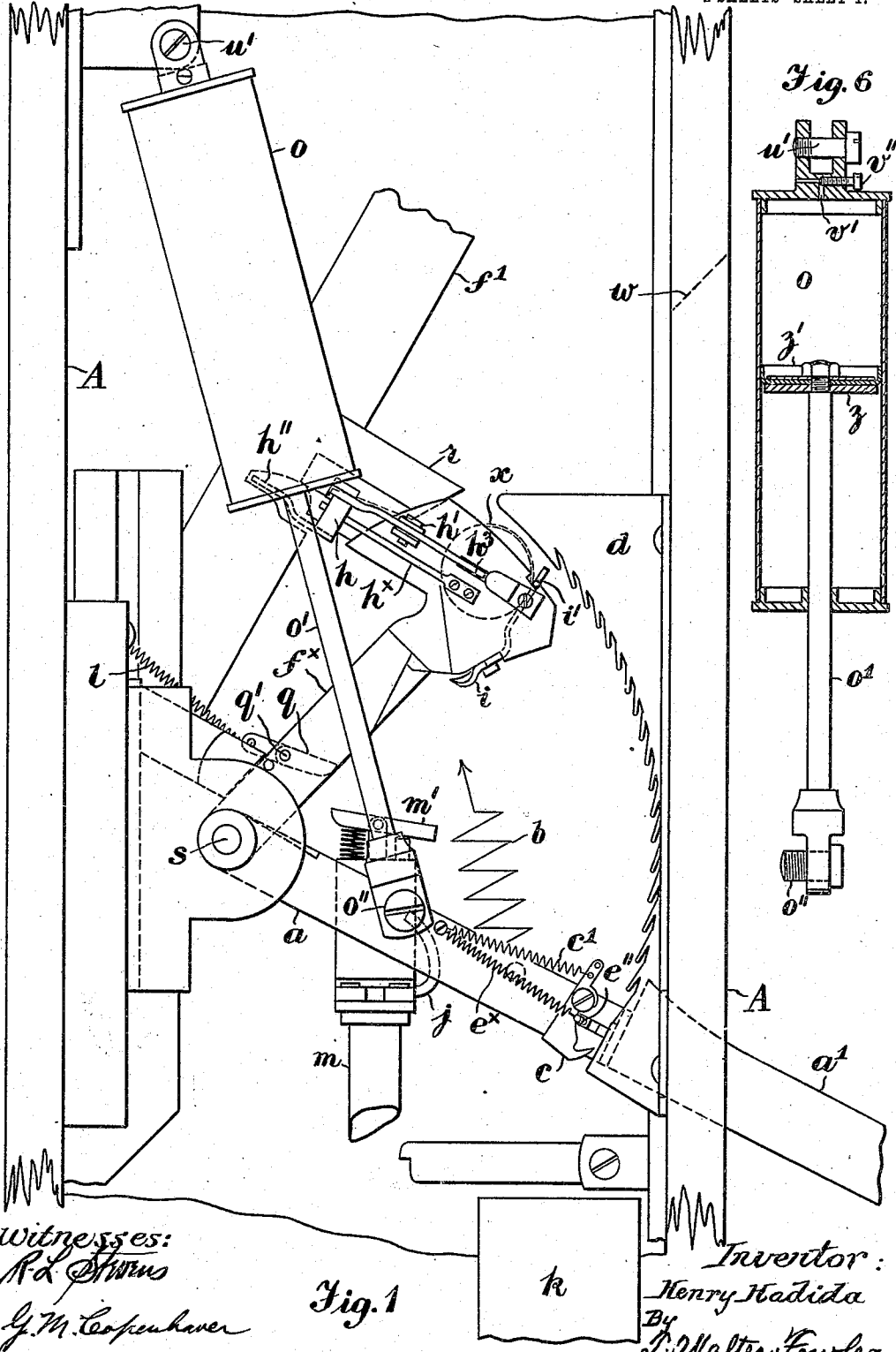


H. HADIDA.
 COIN FREED AUTOMATIC MACHINE.
 APPLICATION FILED FEB. 1, 1909.

933,368.

Patented Sept. 7, 1909.

2 SHEETS—SHEET 1.



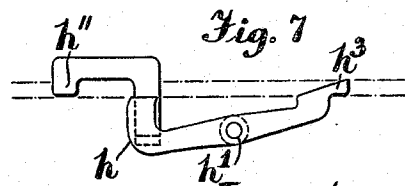
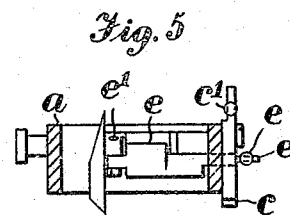
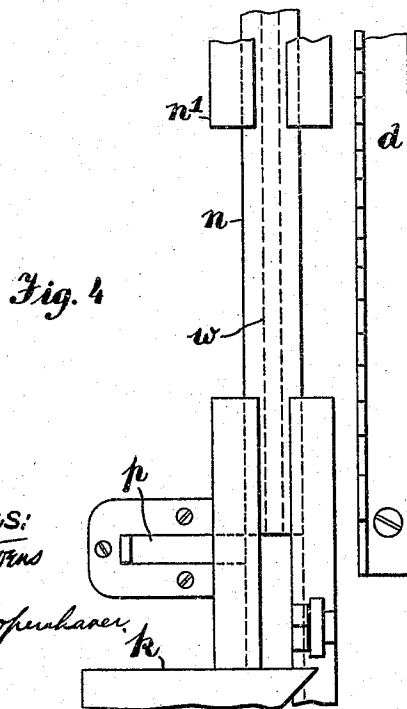
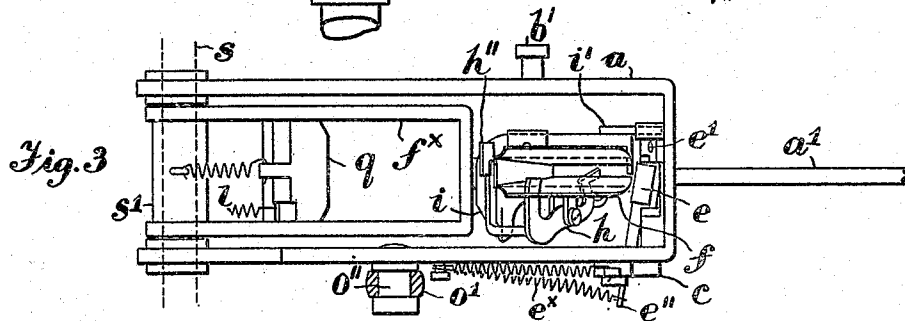
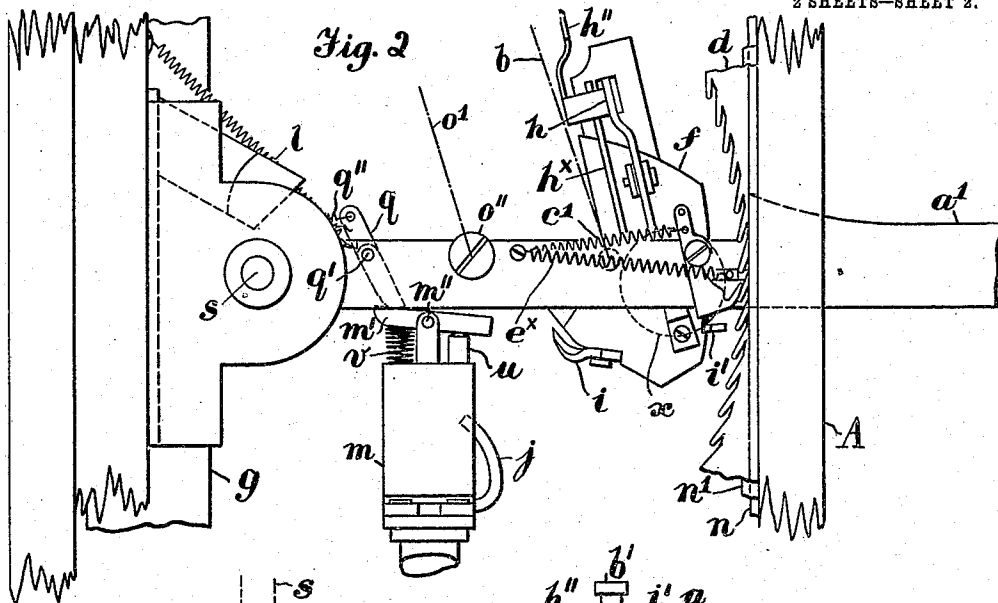
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 By *J. Walter Fowler*
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 2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

HENRY HADIDA, OF LONDON, ENGLAND.

COIN-FREED AUTOMATIC MACHINE.

933,368.

Specification of Letters Patent.

Patented Sept. 7, 1909.

Application filed February 1, 1909. Serial No. 475,400.

To all whom it may concern:

Be it known that I, HENRY HADIDA, of 24 Rood lane, in the city and county of London, England, merchant, have invented a certain new and useful Improvement in Coin-Freed Automatic Machines, of which the following is a full, clear, and exact description.

This invention has reference to coin-freed automatic machines and consists of an arrangement and construction of parts whereby in particular the operating lever engages in a special manner the coin supplied, is prevented from being reversed until the stroke is completed, and automatically causes the slot in the casing through which the said lever works, to be shielded or covered.

The example shown on the drawings is a form of machine suitable to operate a stamp-affixing machine of the type described in my prior patent specification No. 863169 and the specification of my patent application Serial No. 432838 filed May 14th 1908, upon the insertion of a coin into the machine. Other machines may of course be employed with this apparatus and the coin used to enable the machine to be operated is determined beforehand, the receiver for such coin being arranged accordingly.

The invention is hereafter described with reference to the accompanying drawings, in which:—

Figure 1 is a front elevation of the apparatus with one wall of the casing removed, the operating lever being at bottom of its stroke and the pivoted coin-receiver having escaped upwardly. Fig. 2 is an elevation of the operating lever and coin-receiver in the horizontal position on the down stroke. Fig. 3 is a plan of the lever and receiver without the coin, in the normal position of these parts. Fig. 4 is an elevation of the ratchet, the sliding strip, the latch and the guides for the strip. Fig. 5 is a cross section of the operating lever on line 5—5 of Fig. 3. Fig. 6 is a sectional elevation of the dash-pot device. Fig. 7 is a view detached of the deflecting lever which is mounted on the coin-receiver.

I pivot at one end within a casing A a lever *a* which extends at its free end outside the casing so as to afford a handle *a'* and this handle-end is normally held up by preferably a spring *b* secured within the casing and to some suitable portion of the lever. This lever *a* at its inner end is forked or of U shape as shown in Fig. 3 and upon the

branched or frame portion it is provided with a pivotal pawl *c*, spring-actuated and adapted to engage a curved rack *d* correspondingly ratchet-toothed and mounted within the casing A; this rack *d* is curved to the center of the pivot of the lever *a* and it is of a length determined by the position of the mechanism to be operated by the lever. Across this forked portion *a* is arranged in a transverse manner a blade *e* fixed or pivoted at one end as at *e'* and at its free end *e''* bearing under the action of spring *e^x* upon the pawl *c* to prevent the latter engaging the curved ratchet member *d* until the blade *e* is lifted, the spring *c'* of the pawl *c* thereupon causing the pawl to tend to engage the ratchet *d*.

The coin which connects the operating lever *a* to the mechanism for actuating the plunger of the stamp affixing machine (not shown) is represented at *x*. This coin when inserted in the machine runs by means of a chute or track *f'* and an auxiliary chute *r* into a pivoted receiver *f* which holds the coin in such a position that as the forked operating lever *a* is depressed, the transverse spring blade *e* engages the coin, causing the blade *e* to lift and release the pawl *c*, which being then under the action of its spring *c'* is pulled into engagement with the ratchet tooth rack *d*. The receiver *f* for the coin *x* is shown as of approximately T shape and mounted on a frame *f^x* pivoted at *s* and the receiver *f* is arranged to stand normally in continuation of the chute *r* and at an angle, preferably a right angle, to the chute or track *f'*, the latter being continued beyond the entrance to the receiver *f* and leading to a collector or receptacle *g* preferably arranged outside the casing, for the purpose hereinafter mentioned. The axis *s* for the frame *f^x* is preferably the same as the axis for the lever *a*, and the frame *f^x* may be provided with a sleeve or barrel *s'* mounted on said axis as shown on Fig. 3.

The coin-receiver *f* is provided with an arm *h* which is pivoted at *h'* upon the receiver intermediately of its own length. This arm is capable of projecting at one end *h''* into the chute or track *f'* at the lower level of the entrance to the receiver *f* so that a coin descending the chute above the receiver will meet the projecting arm *h''* and be thereby deflected and caused to enter the receiver, whereupon it will take up the position shown in Fig. 1. This pivoted lever *h*

is here arranged to move laterally of the receiver so that when a coin has entered the receiver *f* and has assumed the working position therein, the said coin will meet, so as to displace and actuate, the other end of the laterally-pivoted lever and thereupon remove the opposite end *h''* of the lever *h* sidewise from the chute *f'*. The next coin therefore which descends the chute while a coin is in the receiver *f*, is not met by the projecting arm *h''* but passes straight along the chute *f'*, past the entrance to the receiver *f* and is delivered to the exterior of the machine. In this way the second coin will be returned to the operator, if there is already a coin in position in the receiver *f*. A spring *h** is shown in Fig. 1 for the purpose of bearing on the lever *h* *h''* to keep it in its normal position. A dependent lever *i* from this receiver *f* is cranked and arranged to be struck by a stop-piece *j* at the end of the stroke of the operating lever *a* and thereupon to cause the coin to be released from the receiver *f* so that it may drop into a chute *k* leading to a drawer or other receptacle.

At the end of its downward stroke and after having met and actuated the mechanism of the coin-freed machine (the rear of the dependent lever or limb *i* from the receiver *f* meets and is tilted by the aforesaid stop-piece *j*, its forward end thus releasing the coin *x*), the pivoted receiver *f* escapes from the operating lever *a* and thereupon returns upwardly. This return movement of the coin receiver *f* may be effected by a spring as shown at *l*.

The depression of the operating lever *a* is arranged to cause a device to bear upon some operative part of the mechanism to be actuated so that the pressure of the lever *a* upon this operative part will actuate the said mechanism, or alternately or in addition the top of the coin-freed mechanism may be made yielding or self-leveling in any convenient manner. For this purpose I have pivoted at *m''* and supported by a spring *v*; this top is secured to or incorporated with the top is secured to or incorporated with the plunger of the stamp-affixing machine and it is here shown arranged to be struck by an operating piece or striker *q* pivoted at *q'* and mounted on the frame *f** of the receiver *f*, the striker *q* being subject to the action of a spring *q''*. A stud *u* is mounted on the top of the stem *m* to limit the action of the spring *v*. Being pivoted within the casing, the operating lever *a* *a'* works in a slot *w* in the side of the casing *A* and in order to close this slot at all times, the lever is shown passing freely through a vertically sliding strip *n* working within the casing *A* and adapted to shield the slot *w*. The guideway *n'* for this sliding strip is continued above and below the slot in the casing to provide for the

travel of the sliding strip as the operating lever *a* *a'* moves up or down. Instead of a single strip extending above and below the operating lever two sliding strips suitably pivoted to the lever *a* *a'* may be employed.

The operating lever *a* is shown provided with a suitable dash-pot *o* or cushioning device to prevent slamming and to prevent the mechanism being operated too rapidly. This dash-pot device is of known construction for other similar purposes and may be provided with an adjustable air valve such as the screw in the outlet *v'* from the cylinder *o* which cylinder is pivoted at *u'* to the casing *A*. The piston rod *o'* is shown pivoted to the lever *a* to *o''* and the piston *z* is shown in Fig. 6 provided with a bucket leather *z'*. If desired a device may also be provided within the casing to lock the operating lever against movement when so required. For example and as illustrated a sliding latch or bolt *p* may be adapted to be slid under the lower end of the sliding strip *n* to hold the latter and consequently the operating lever *a* against movement. This latch is of course movable only from within the casing.

The above described mechanism is intended to be wholly inclosed in the casing *A* with the exception of the outer end of the operating lever *a* and this casing is locked or fastened. The lower part of the casing will of course be cut away to allow of the placing of envelopes and the like in position upon the table of the stamp affixing apparatus.

Where other machines are employed in conjunction with this apparatus the casing will be arranged to be cut away and to box in the coin-freed mechanism or it will otherwise stop short of that portion of the operated machine to which access must be had.

The operation of this coin-freed mechanism is as follows:—The coin *x* having been inserted and being deflected and passed into the receiver *f* owing to the interposition of the arm *h''*, runs to the lower end of the receiver and is retained in position there by the forward end *i'* of the cranked arm *i*. The lever *a* being then pushed down will by means of its latch afforded by the blade *e* meet the edge of the coin and depress the pivoted receiver *f*. The pawl *c* thereupon rides over the teeth of the ratchet *d* and if the direction of travel of the lever *a* were for any reason reversed during the downward movement the pawl *c* would engage one of the said ratchet teeth and hold the lever against such upward movement. In its downward movement the pivoted receiver *f* eventually meets the plate *m'* of the machine top *m* by means of the pivoted operating piece *q*. When the pivoted receiver passes below the horizontal the piece *q* moves away from the plate *m'* of the machine top and the latter escaping suddenly after the operation or actuating of the stamp affixing

machine passes upward between or within the arms or frame of the pivoted receiver *f*. As it passes upward the contact piece or striker *j* on the machine plunger meets the lower arm of the cranked lever *i* and pushes aside the opposite arm or forward end of that lever which retained the coin in position at the end of receiver *f*. The coin thus released drops into the chute or receptacle *k* and the pivoted receiver is drawn upward by its spring. The latch *e* thereupon re-engages the pawl *c* and the lever *a* can be raised past the ratchet teeth since the pawl is now held away from the said teeth.

It should be explained that in Fig. 1 the receiver *f* and frame *f*^{*} are shown as having just returned to their normal position, the coin *x* being indicated only in dotted lines, and the operating lever *a* being still at the bottom of its downward stroke.

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

1. In a coin-freed automatic machine, a casing, an operating lever pivoted within said casing and projecting therefrom, a coin receiver also pivoted within said casing, means including a pivoted member carried by the receiver having one portion arranged to guide for delivering a coin to said receiver and means for retaining said coin in said receiver, a spring pressed member carried by said operating lever and adapted to engage said coin so that the receiver thereupon moves with said operating lever, means for actuating the mechanism of the machine carried by said lever, and means for automatically releasing the receiver from said lever when said mechanism has been operated.

2. In a coin-freed automatic machine, a casing, an operating lever pivoted within said casing and projecting therefrom, a coin receiver also pivoted within said casing, a pivoted member carried by the receiver having one portion arranged to guide a coin to said receiver, said lever having a portion adapted to hold said coin at the free end of said receiver, an engaging device carried by said operating lever and adapted to engage said coin so that the receiver may move with said lever, means for actuating the mechanism of the machine by said lever, and means for automatically releasing the coin so that the receiver is disconnected from the operating lever, when the said mechanism has been operated.

3. In a coin-freed automatic machine, a casing an operating lever pivoted within said casing and having an end projecting therefrom, a coin-receiver pivoted within the casing and co-axially with said lever, means including a pivoted member carried by the receiver having one portion arranged to guide a coin to said receiver and having

another portion for retaining said coin at the free end of said pivoted receiver, an engaging device carried by said operating lever and adapted to bear upon the coin held in said receiver so as to cause the receiver to move with said lever, means for actuating the mechanism of the machine by means of said lever, and a device for automatically releasing the receiver from the operating lever when the said mechanism has been actuated.

4. In a coin-freed automatic machine, a casing, a coin-receiver pivoted at one end within said casing, means for conducting a coin from the exterior of said casing to a chute adjacent to said receiver, a cranked lever pivoted intermediately of its length and mounted longitudinally on the side of said receiver, said lever having one end capable of projecting through a slot in said chute to obstruct the passage of a coin down said chute and to deflect it into said receiver, the other end of said cranked lever being adapted to project into the free end of the receiver so as to be displaced by the entered coin, the displacement of this end of the cranked lever causing the lateral withdrawal from the chute of the opposite arm of the lever so that the chute offers a free passage to a second coin descending the chute while the first coin remains in the pivoted receiver, and means for holding the coin in place until the mechanism of the machine has been actuated.

5. In a coin-freed automatic machine, a casing, a receiver pivoted within said casing, said receiver comprising a T shaped member, a coin chute, a branch chute at an angle to said coin chute, said branch chute leading to said receiver, a spring holding said receiver against said branch chute, a lever pivoted upon said receiver and having its ends capable of projecting simultaneously into the chute and into the coin seat in the receiver, a second lever mounted on the receiver and serving to hold the coin in position within the receiver, said second lever capable of being displaced to release the coin.

6. In a coin-freed automatic machine, a casing, an operating lever pivoted within said casing, a pivoted coin-receiver adapted to be engaged by said lever, a spring-actuated pawl mounted on said lever, a ratchet curved to the stroke of said pawl, and a latching blade mounted on said lever and holding said pawl away from said ratchet until a coin inserted into receiver holds the latch away from the pawl and allows the said pawl to position itself relatively to the ratchet.

7. In a coin-freed automatic machine, a casing, an operating lever pivoted in said casing, a ratchet member arranged within said casing, a pawl on said lever adapted to

coact with said ratchet but normally withheld from contact with said ratchet, a spring held coin-receiver pivoted within said casing, means for delivering a single coin to said receiver and means for holding said coin at the free end of said pivoted receiver, means for allowing said pawl to engage with said ratchet by the entrance of said coin into the said receiver, means for actuating the machine carried by said pivoted receiver and means for eventually releasing the coin from said receiver so that the connection between the operating lever and the receiver is broken.

8. In a coin-freed automatic machine, a casing, an operative lever pivoted within said casing and having a handle end extending from said casing, a coin-receiver pivoted within said casing, means for connecting said lever to said receiver by the coin in said receiver, a device for actuating the mechanism of said machine, said device carried by said receiver, said mechanism comprising a top piece consisting of a pivoted plate, a stem upon which the plate is mounted, and a spring for sustaining the plate, said plate being adapted to be engaged by the actuating device carried by said receiver.

9. A coin-freed automatic machine comprising a casing, an operating lever pivoted within said casing, and having one end extending therefrom, a coin-receiver pivoted co-axially with the operating lever and within said casing, means for delivering a coin to said receiver and for temporarily holding said coin in said receiver, a pivoted dashpot device between said lever and the casing, a striking piece carried by said receiver, said striking piece adapted to operate the mechanism of the machine, and means for engaging said operating lever with said coin-receiver and means for disconnecting said engaging means when the mechanism has been operated.

10. A coin-freed automatic machine comprising a casing, an operating lever pivoted within said casing and having a handle and projecting therefrom, a coin receiver pivoted within the casing and co-axially with said lever, means for delivering a coin to said receiver and means for preventing the entrance of a second coin into said receiver while a first coin is in place, springs upholding said handle and receiver, means for engaging said lever with said receiver by the coin seated in said receiver, a spring controlled pawl carried by said lever and a ratchet for said pawl within said casing, said pawl being capable of co-acting with said ratchet when a coin is retained in place in the receiver, a striking piece carried by said receiver to actuate the mechanism of the machine, means for connecting said receiver to said operating lever and means for auto-

matically disconnecting said receiver from said handle when said mechanism has been operated.

11. A coin-freed automatic machine comprising a casing, an operating lever pivoted within said casing, a coin receiver pivoted co-axially with said lever within said casing, said lever extending from said casing through a slot in said casing, a sliding strip mounted on said lever and traveling in a guideway to close said slot in said casing, means for delivering a single coin into said receiver and for temporarily retaining said coin in said receiver, means for connecting said lever to said receiver by means of said coin, a device carried by said receiver for actuating the mechanism of said machine, means for releasing the coin when said mechanism has been actuated, a spring held pawl pivoted on said lever, and a ratchet mounted within the casing, said pawl co-acting with said ratchet only when a coin is in said receiver and said receiver is engaged by said lever.

12. A coin-freed automatic machine comprising a casing, an operating lever pivoted within said casing, said lever comprising a handle projecting from said casing through a slot in said casing and a frame at its inner end, a coin-receiver comprising a frame pivoted co-axially with said operating lever-frame and within said lever-frame, a coin holder mounted upon the free end of said receiver frame, means including a pivoted member carried by the receiver having one portion arranged to guide a coin to said coin holder and having another portion for holding said coin in place, a device for engaging said lever with said coin holder and receiver by means of said coin, and means for actuating the mechanism of the machine by means of said receiver, said coin being automatically released from said holder when said mechanism has been actuated.

13. A coin-freed automatic machine comprising a casing, an operating lever pivoted within said casing, said lever being depressible and consisting of an outer handle end and an inner frame end, a coin receiver pivoted co-axially with said lever and having an inner frame arranged within the frame of said lever, a coin holding portion upon the free end of said pivoted coin-receiver, means for delivering a single coin to said coin holding portion and for retaining said coin in position, an engaging device carried by said lever for coupling said lever to said receiver while said coin is in place, a spring normally upholding said receiver, a striking piece carried by said receiver and serving when the receiver is depressed by said lever to actuate the mechanism of the machine, and means for releasing the coin from said holder when the said mechanism has been actuated.

14. A coin-freed automatic machine comprising a casing, an operating lever pivoted within said casing, said lever being depressible and consisting of an outer handle end and an inner frame end, a coin-receiver pivoted co-axially with said lever and having an inner frame arranged within the frame of said lever, a coin holding portion upon the free end of said pivoted coin-receiver, means for delivering a single coin to said coin holding portion and for retaining said coin in position, an engaging device carried by said lever for coupling said lever to said receiver while said coin is in place, a spring normally upholding said receiver, a striking piece carried by said receiver and serving when the receiver is depressed by said lever to actuate the mechanism of the machine, a pivot on the frame of said lever, a piston rod connected to said pivot, a piston at the opposite end of said piston rod, a cylinder pivoted to said casing and within which said piston travels to form a dashpot, and means for releasing the coin from said holder when the said mechanism has been actuated.

15. A coin-freed automatic machine, comprising a casing, an operating lever pivoted interiorly within said casing, a coin-receiver also pivoted within said casing, a chute for coins leading from the exterior of said casing to a receptacle delivering to the exterior of said casing, a branch chute at an angle to said first chute and leading to said pivoted coin-receiver, a lever pivoted on said receiver intermediate of its length and having one end capable of projecting into the first chute so as to be in the path of a coin descending said chute and to divert said coin into said receiver, the other end of said lever being displaced by the entered coin to withdraw the coin-diverting end from the chute, means whereby the operating lever may engage and depress said coin-receiver when a coin is in position in said receiver, means mounted on said receiver for actuating the mechanism of the machine, and means for releasing the coin from its receiver after the said mechanism has been actuated, so that the receiver may automatically return to its normal position.

depress said coin-receiver when a coin is in position in said receiver, means mounted on said receiver for actuating the mechanism of the machine, and means for automatically releasing the coin from its receiver after the said mechanism has been actuated.

16. A coin-freed automatic machine, comprising a casing, an operating lever pivoted interiorly within said casing, a coin receiver also pivoted within said casing, a chute for coins leading from the exterior of said casing to a receptacle delivering to the exterior of said casing, a branch chute at an angle to said first chute and leading to said pivoted coin receiver, a lever pivoted on said receiver intermediate of its length and having one end capable of projecting into the first chute so as to be in the path of a coin descending said chute and to divert said coin into said receiver, the other end of said lever being displaced by the entered coin to withdraw the coin-diverting end from the chute, means whereby the operating lever may engage and depress said coin-receiver when a coin is in position in said receiver, a sliding strip mounted on said operating lever, a slot in said casing for said lever and a guide for said sliding strip, a latch adapted to be slid under the said strip when the lever is in its upper position, means mounted on said receiver for actuating the mechanism of the machine, and means for releasing the coin from its receiver after the said mechanism has been actuated, so that the receiver may automatically return to its normal position.

In witness whereof I have hereunto set my hand in presence of two witnesses.

HENRY HADIDA.

Witnesses:

VICTOR FALLON FEENY,
GEORGE WALTER WHITTON.