

No. 639,115.

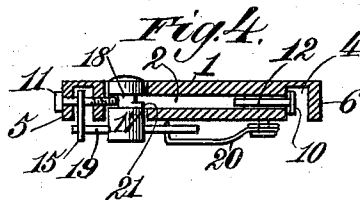
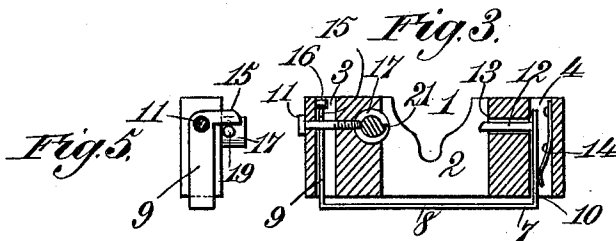
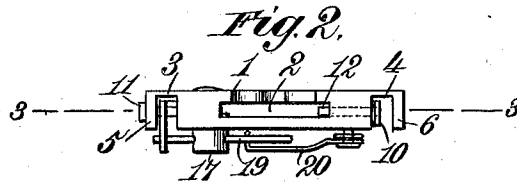
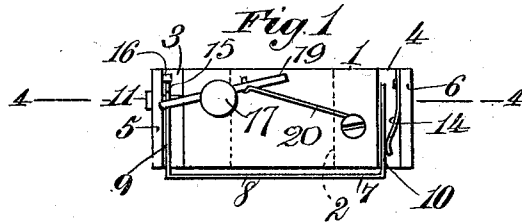
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COIN GUARD OR CONTROLLING DEVICE FOR COIN OPERATED MACHINES.

(Application filed Mar. 18, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

ROBERT FRED. TOCHTERMANN, OF NEW YORK, N. Y.

COIN-GUARD OR CONTROLLING DEVICE FOR COIN-OPERATED MACHINES.

SPECIFICATION forming part of Letters Patent No. 639,115, dated December 12, 1899.

Application filed March 18, 1899. Serial No. 709,666. (No model.)

To all whom it may concern:

Be it known that I, ROBERT FRED. TOCHTERMANN, a subject of the Emperor of Germany, (but having declared my intention of becoming a citizen of the United States,) residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Coin-Guards or Controlling Devices for Coin-Operated Machines, of which the following is a specification.

The object of my invention is to provide a coin-guard for coin-operated machines by means of which only coins which the machine is intended to receive can pass therethrough; and the invention consists of a coin chute or guideway, a pivotally-mounted gate controlling the passage therethrough, and means thrown into operation by a coin of proper size for swinging said gate.

The invention also consists in certain details of construction and combinations of parts, which will be hereinafter more fully described and claimed.

In the drawings, Figure 1 is a side elevation of my improved device. Fig. 2 is a plan view of the same. Fig. 3 is a vertical section on the line 3 3 of Fig. 2. Fig. 4 is a horizontal section on the line 4 4 of Fig. 1, and Fig. 5 is a detail view.

Like reference-numerals indicate like parts in the different views.

The casing 1 is provided with a vertical opening or passage 2, which constitutes a coin chute or guideway and has vertical grooves 3 4, adjacent to the opposite ends thereof, forming flanges 5 6. The width of the chute 2 is equal to or slightly greater than the diameter of the coin which the machine is to receive, and the lower end thereof is normally covered by a gate 7, the same being substantially U-shaped, having a bottom portion 8, which lies directly beneath the lower end of the chute 2, and is of substantially the same thickness as the coin to be received, and upwardly-extending arms 9 10, the arm 9 fitting within the groove 3 and supported upon the pivot-pin 11, which extends through the flange 5 and intersects said groove 3. The other arm 10 fits within the groove 4 and is provided with an inwardly-extending pin 12, which passes loosely through the opening 13

in the casing 1, the end of said pin being beveled or rounded and normally lying within the coin-chute 2, the same being retained in this position by means of a leaf-spring 14, which is secured to the inner wall of the flange 6 and engages the outer surface of the arm 10. It will be observed that the arms 9 and 10 of the gate 7 are narrower than the grooves 5 6 and 6, in which they respectively fit, and are therefore capable of lateral movement in said grooves. It will also be observed that the gate 7 is capable of a swinging movement upon the pins 11 and 12, respectively. The connection between the body of the gate 7 and its pivots being a loose one, the arms 9 and 10 will normally lie in a vertical position, at which time the bottom of the gate covers and obstructs the lower end of the coin-chute 2. The upper end of the arm 9 is provided with a laterally-extending offset or flange 15, which when the gate is in its normal position, as shown in Fig. 1 of the drawings, is adapted to engage a shoulder 16 in the groove 3, which shoulder constitutes a stop for preventing the swinging or vibration of the gate.

Extending through the casing 1, adjacent to one side of the coin-chute 2, is an arbor 17, provided with an annular groove 18 at a point intermediate of its ends, in which groove the pivot-pin 11 fits for preventing the accidental removal of said arbor. The said arbor projects from one side of the casing 1 and carries a releasing arm or lever 19, whose forward end projects to a point beneath and is adapted to engage the under side of the lateral offset or flange 15 on the arm 9. The rear end of said arm or lever is normally held in its raised position by means of a spring 20, which is secured to the outer surface of the casing 1. To turn the arbor 17 and the releasing arm or lever 19, carried thereby, against the action of the spring 20, I provide upon said arbor, at a point intermediate of its ends, a shoulder 21, which projects into the coin-chute 2 at a point opposite the pin 12 on the arm 10.

From the foregoing description it is thought that the operation of my device will be readily understood. Briefly stated, however, it is as follows:

With the parts in the position shown most clearly in Fig. 3 of the drawings, a coin of

proper size introduced into the coin-chute 2 and forced down to the lower end thereof will engage simultaneously the projecting end of the pin 12 and the shoulder 21 on the arbor 17. The action upon the pin 12 is to shift the gate 7 to the right, so as to bring the lateral offset or flange 15 out of the range of the shoulder 16, and the action of the coin upon the shoulder 21 is to rotate the arbor 17, elevate the forward end of the releasing arm or lever 19, bring the latter into engagement with the under side of the lateral offset or flange 15, and thereby swing the gate 7 so that the bottom portion 8 thereof is moved out of line with the coin-chute 2. The passage through said chute is now unobstructed and the coin is free to pass therethrough into the machine. As soon as the coin has left the chute, however, the parts are returned to their normal positions through the action of the spring 14, which moves the gate laterally, and the spring 20, which rotates the arbor 17.

If a coin of larger size than that which the machine is intended to receive is attempted to be introduced into the coin-chute 2, the movement thereof through the chute will be resisted by the end walls thereof, and if a coin of smaller dimensions than that which the machine is intended to receive is introduced into the chute its passage therethrough will be prevented by the engagement thereof with the bottom portion 8 of the gate 7, it being impossible for a coin of small dimensions to act upon the inner end of the pin 12 and the shoulder 21.

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

1. In a coin-guard, the combination with a coin-chute, of a pendent, swinging and longitudinally-movable gate, normally lying across the coin-chute, and devices operated by pressure on the properly-inserted coin for bodily shifting the gate longitudinally and swinging the same, substantially as described.

2. In a coin-guard, a pivotally-mounted gate normally locked in position to obstruct the passage through said chute, and means actuated by the introduction of a coin of proper size into the chute for unlocking said gate, and swinging the same.

3. In a coin-guard, a coin-chute, a pivotally-mounted and bodily-movable gate normally locked in position to obstruct the passage through said chute, and means actuated by the introduction of a coin of proper size into the chute for moving said gate bodily for unlocking it, and for swinging it upon its pivot for removing it as an obstruction to the passage through the chute.

4. In a coin-guard, a casing having a coin chute or passage-way therethrough, and

grooves on opposite sides of said chute, a gate having its bottom portion normally lying beneath the discharge end of said chute and provided with upwardly-extending arms or flanges at its ends, said arms being respectively located within said grooves and capable of lateral movement therein, a pin secured to the casing, extending through one of said grooves, and upon which one arm of said gate is mounted, a pin secured to the other arm of said gate, extending through an opening in said casing into said chute, and adapted to be engaged by a coin of proper size introduced into said chute, a spring for holding said gate at one end of its movement within said grooves, a stop for locking said gate when in this position, and engaging means in the chute for the coin whereby said gate may be swung upon its pivots, as and for the purpose set forth.

5. In a coin-guard, a casing having a coin-chute therein, and grooves on opposite sides of said chute, a U-shaped gate whose bottom lies normally beneath the discharge end of said chute, and whose side arms or flanges are respectively located in said grooves and are capable of lateral movement therein, a lateral offset on one of said arms, a stop adapted to be engaged by said offset when the gate is at one end of its bodily movement, a spring for normally holding said gate in position to be locked by said stop, pivots on which said gate is mounted, one of which is secured to one arm thereof and extends through an opening in the casing into said chute, the projecting end of which is adapted to be engaged by a coin of proper size introduced into said chute, a rotating arbor extending through said casing and provided with a shoulder which projects into said chute and is adapted to be engaged by a coin of proper size, and a releasing arm or lever carried by said arbor and adapted to engage said offset for swinging said gate after it has been moved out of locking engagement with said stop.

6. In a coin-guard, a casing having a coin chute or passage-way formed therein, a pivotally-mounted gate normally located beneath the discharge end of said chute, said gate being bodily movable and held in locking position at one end of its bodily movement, and means actuated by the introduction of a coin of proper size into the chute for moving said gate bodily and thereby unlocking it and for swinging it out of line with said chute.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

RBT. FRED. TOCHTERMANN.

Witnesses:

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