

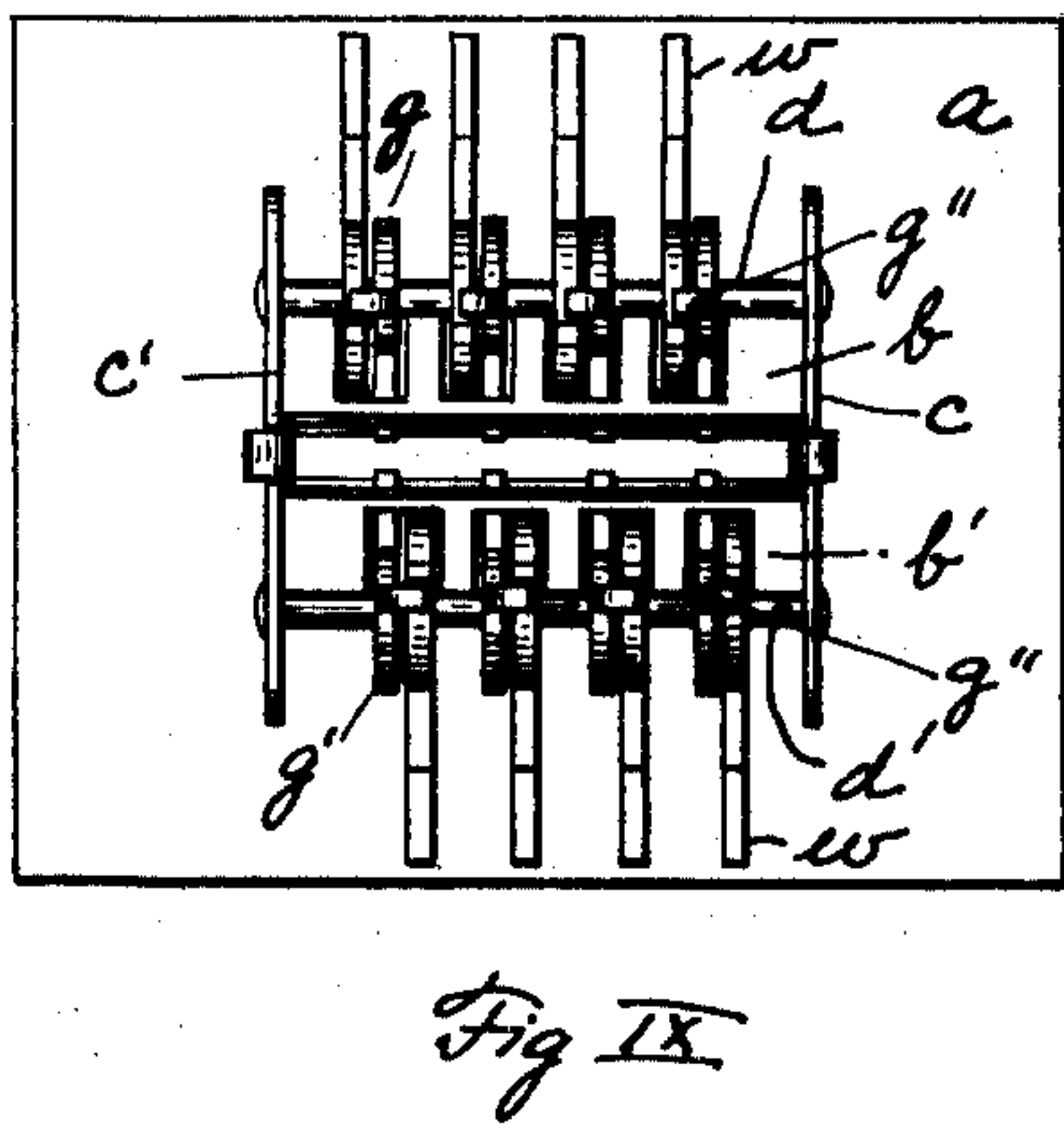
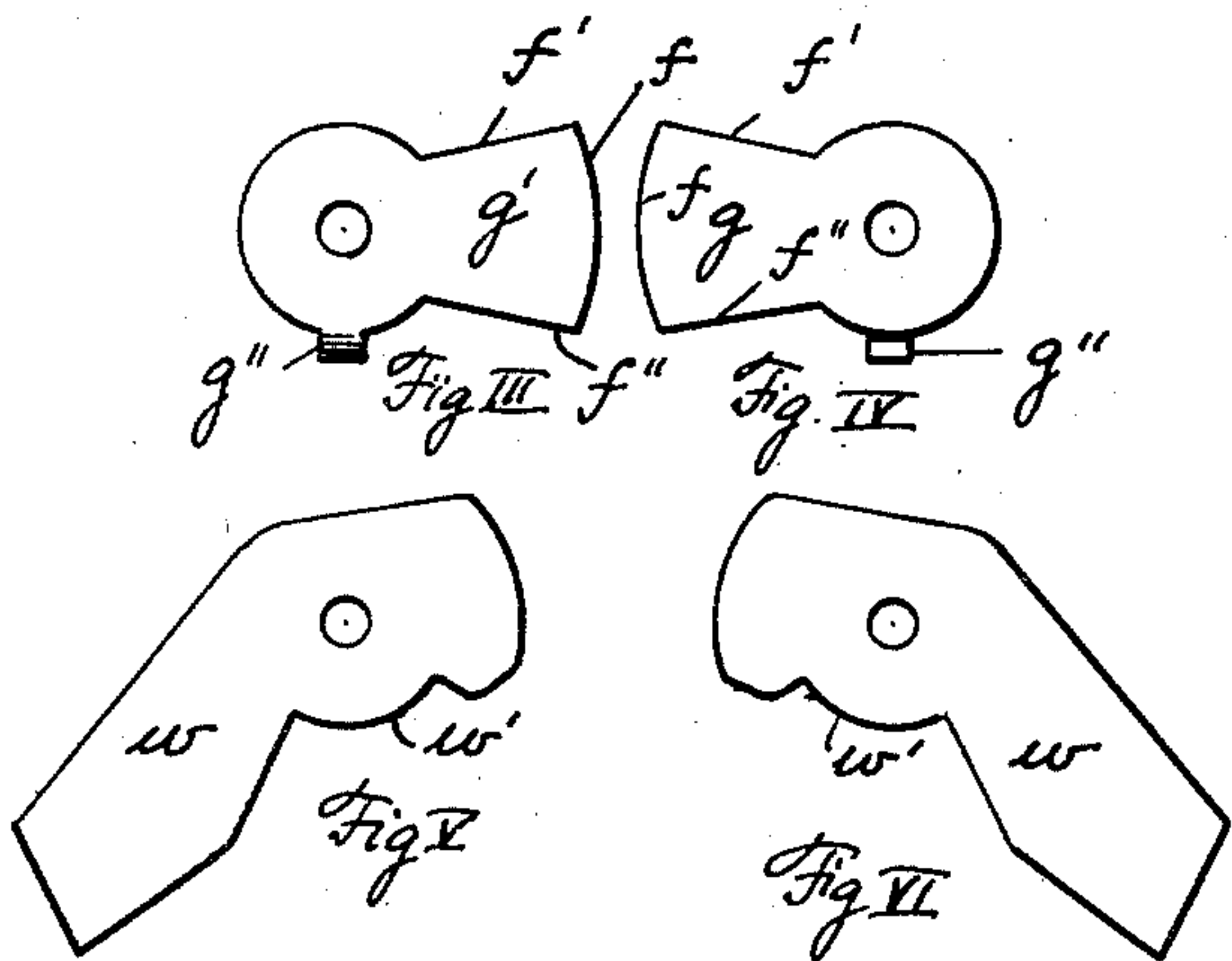
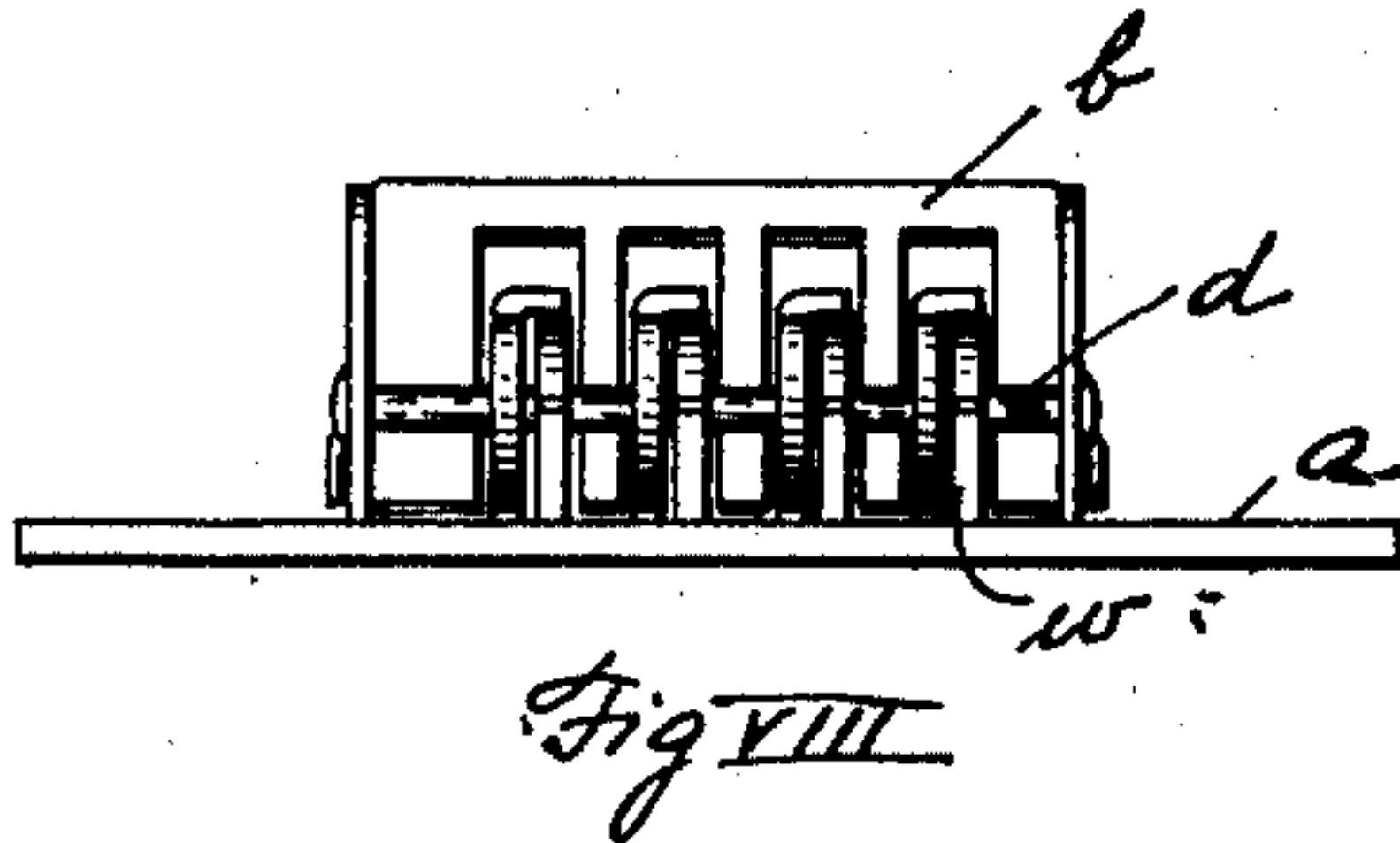
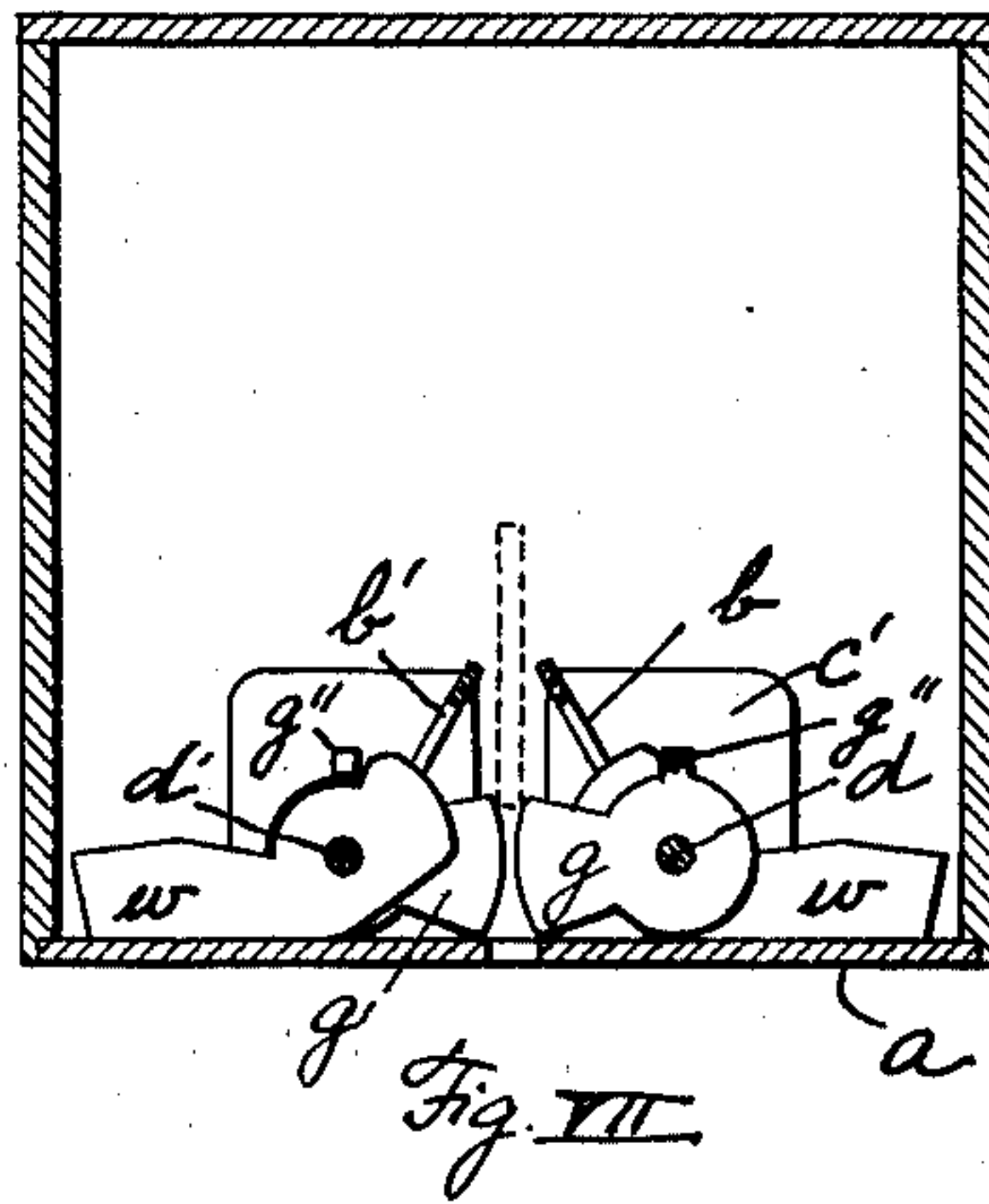
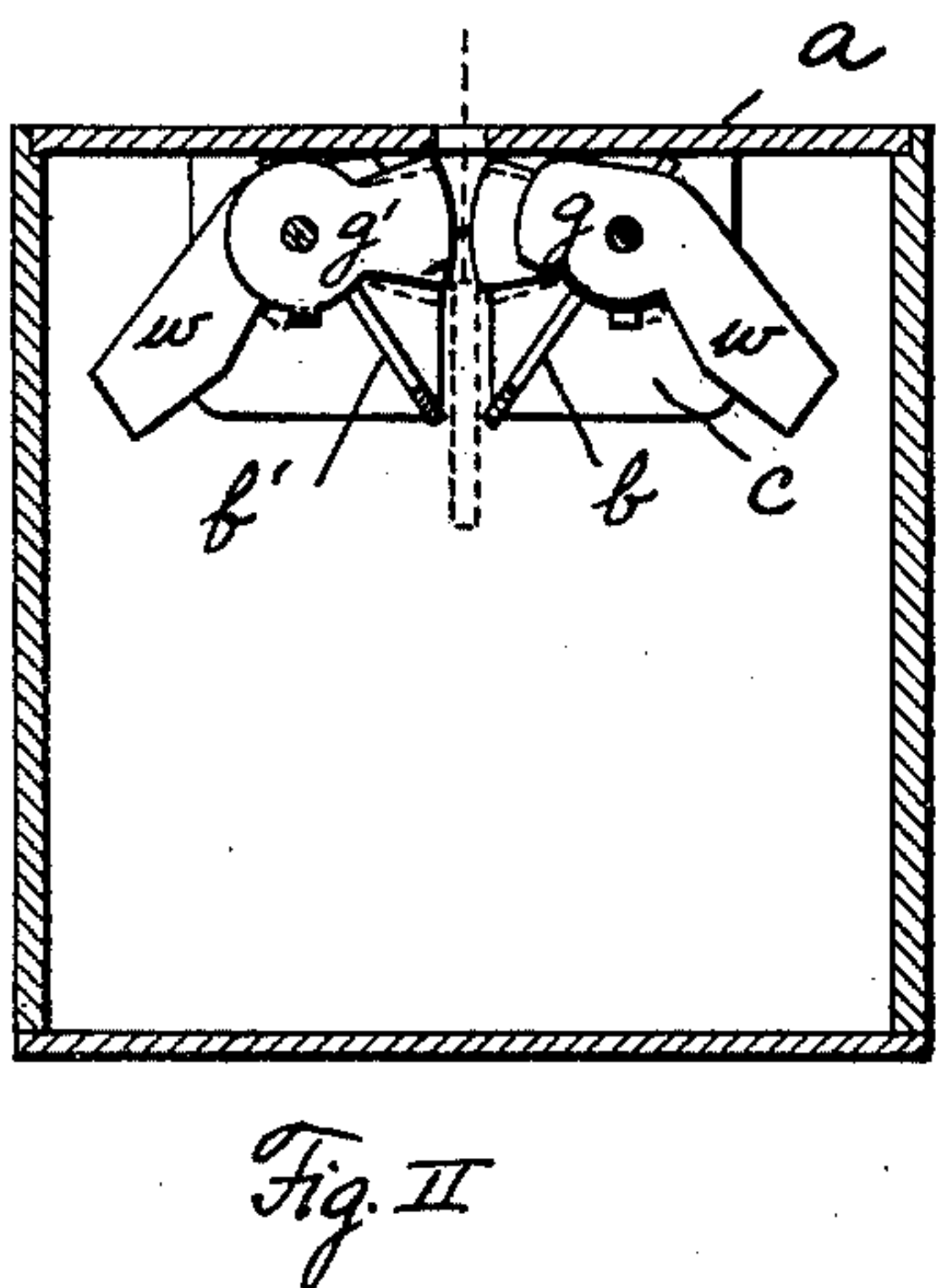
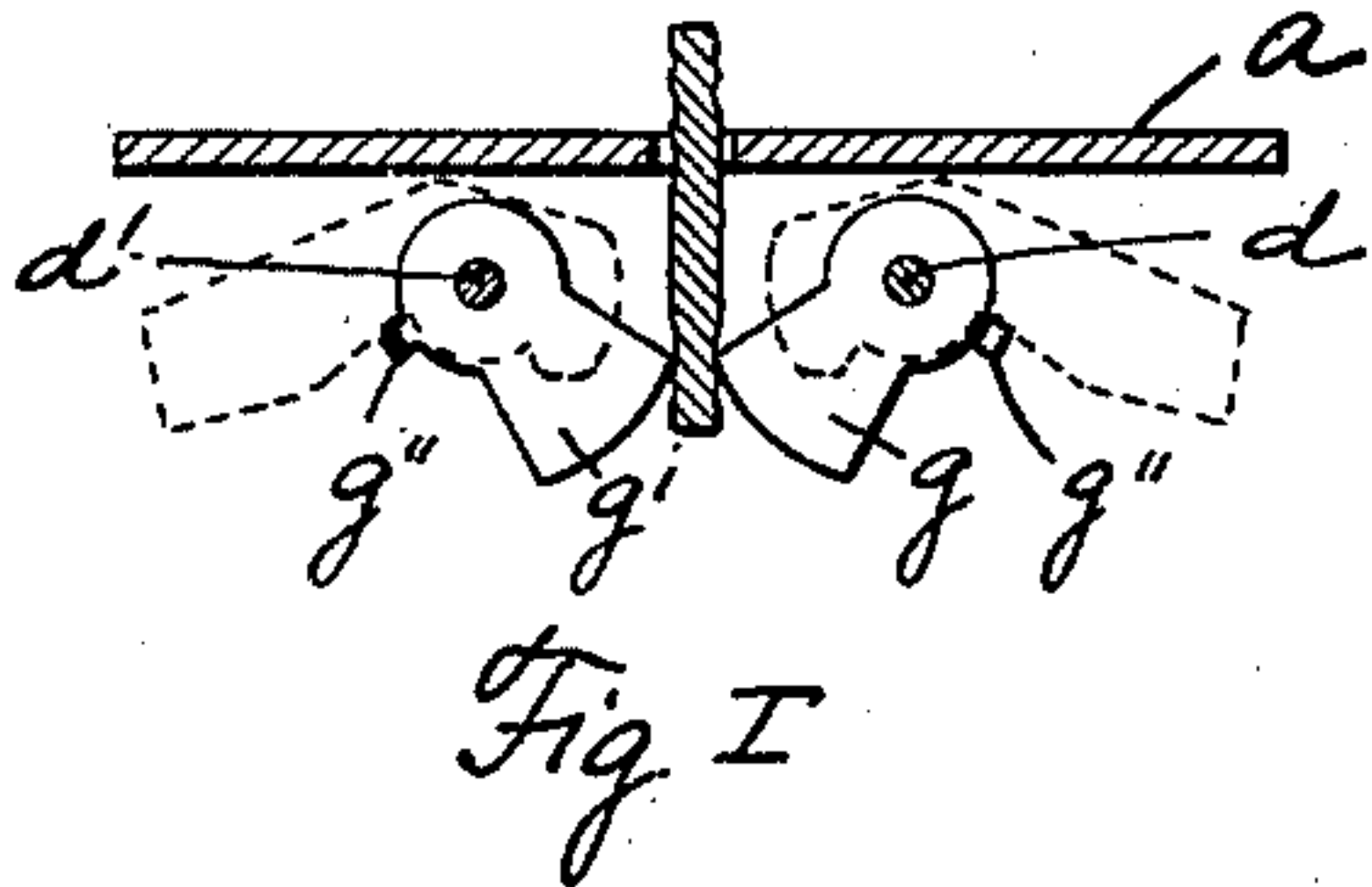
No. 737,640.

PATENTED SEPT. 1, 1903.

J. LOCH.  
COIN SLOT.

APPLICATION FILED FEB. 20, 1903.

NO MODEL.



Witnesses  
Herman Meyer  
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Joseph Loch  
By His Attorney William R. Baird



# UNITED STATES PATENT OFFICE.

JOSEPH LOCH, OF BROOKLYN, NEW YORK, ASSIGNOR TO C. O. BURNS COMPANY, A CORPORATION OF NEW YORK.

## COIN-SLOT.

SPECIFICATION forming part of Letters Patent No. 737,640, dated September 1, 1903.

Application filed February 20, 1903. Serial No. 144,268. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH LOCH, a citizen of the United States, and a resident of the borough of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Coin-Slots, of which the following is a specification.

My invention relates to coin-slots; and its novelty consists in a safety device designed to prevent the unauthorized withdrawal of coin through such a slot and in the construction and adaptation of the parts of the same, as will be more fully hereinafter pointed out.

Coin-actuated vending and other machines have gone into such common use and become so numerous in the attempts made to supply wants by means of their aid that the stock of coin which they accumulate affords a constant temptation to evil-disposed persons to abstract the same. The same is true of small savings banks and boxes. By means of hooks or rods covered with adhesive material thefts from receptacles of this kind have not been uncommon.

The purpose of my invention is to provide a device arranged within the coin-receiving receptacle in the vicinity of the slot and comprising a guard or series of guards which will permit of the easy receipt of a coin or piece of money, but which will effectually prevent its withdrawal.

In the drawings, Figure I is a central vertical section transverse to the line of the slot, showing the guards of my safety device depressed and in the act of receiving a coin, the counterweights being shown in dotted outline. Fig. II is a similar view showing the frame supporting the guards, also a coin in dotted outline. Fig. III is an enlarged detail of a left-hand guard. Fig. IV is an enlarged detail of a right-hand guard. Fig. V is an enlarged detail of a counterweight of a left-hand guard, and Fig. VI is an enlarged detail of a counterweight of a right-hand guard. Fig. VII is a central vertical section transverse to the line of the slot of a box provided with my safety device turned upside down, so that the guards are above the slot. Fig. VIII is a side view of the guards and their supporting-frame, and Fig. IX is a plan

view of the device when in the position shown in Fig. VII.

In the drawings, *a* is the slotted plate of a box or similar receptacle adapted to contain coins dropped through the slot. Secured to the under side of this plate is a framework consisting of two sloping apertured plates *b* and *b'*, secured in position by two side plates *c* and *c'*, which serve as bearing-plates for the bars *d* and *d'*, upon which the right-hand guards *g* and the left-hand guards *g'* are hung. The guards *g* and *g'* are arranged in pairs on opposite sides and underneath the slot, there being a sufficient number of such pairs to efficiently guard the slot throughout its entire length. Each guard is pivoted loosely upon its bar by means of an aperture formed for that purpose. Each guard consists of a sector *f*, bounded by radial lines *f'* and *f''*, forming sharp angles with the periphery of the sector. The sectors when assembled face each other and between them afford the passage underneath the slot through which the coins are to be dropped. Each guard is also provided with a projecting lug *g''*, engaging with a notch *w'* in the under surface of the counterweight *w*. These counterweights *w* are pivoted loosely upon the same bars *d* and *d'* on which the guards are pivoted. Each guard has its own counterweight, and the guards and counterweights are kept upright and guided to move in a plane at substantially right angles to the plane of the slot by reason of the fact that they move in pairs through the slots *b''* of the plates *b* and *b'*. The counterweights are notched at *w'* to receive the lugs *g''* of the guards. When the guards are in the position shown in Fig. II, they present between each pair the narrowest opening which can exist between them, the counterweights *w* dropping downward by gravity and bearing against the lugs *g'* of each guard, tending to throw the latter toward a plane passing through the center line of the slot. When, however, the guards are in the position shown in Fig. VII and the slot is underneath them instead of above them, as is shown in Fig. II, the counterweights *w* fall by gravity against the inner side of the slot-plate which is then



undermost. In this position the guards are also as close as they can be to each other and to the plane passing through the material line of the slot by reason of the fact that the counterweights *w* have ceased to act upon them and the guards fall by their own gravity toward the plate against which they then rest. It will be seen, therefore, that in this construction the counterweights tend to force the guards to close the slot when the slot is above them and that when the slot is below them the guards tend to close it by their own weight, forcing them into a position similar to that which they were compelled to assume by the action of the counterweights.

It will be seen that the pressure of the counterweights on each of the guards is exerted to yieldingly but normally force the guards into a position in which there is the least space between them and that, similarly, when the slot is underneath the guards the weight of the sectors of which they are composed and the fact that they are loosely mounted upon the bars *d* and *d'* cause them also to be yieldingly and normally forced toward this same position. The consequence is that in either position, whether the counterweights be in action or not, a coin may be introduced through the slot and between the pairs of guards, moving them easily to one side, and so causing it to drop into the interior of the box. If, however, it be sought to remove the coin from the box—for instance, by a string, as indicated by dotted outline in Fig. II—the edges of the coin will catch upon the angles formed by the curved faces of the sectors and their lower radial boundaries, and the movement of the coin toward the slot will simply cause the sectors to be pressed against the slot-plate and the opening between them will not then be wide enough to permit the coin to be withdrawn. Similarly, if it be sought to secure the withdrawal of a coin when the slot is underneath the guards, as shown in Fig. VII, the coin being there indicated in dotted outline, the guards being pressed by their own gravity against the inner surface of the slot-plate do not leave a sufficient width of passage between them to allow of the passage of the coin.

In Fig. I is illustrated a further function of the sharp angles formed between the faces of the sectors and their upper radial boundaries. Coins do not consist of plain disks, but are commonly molded on their surface, so as to present irregularities. A coin being introduced through the slot, as shown in Fig. I, is caught between the guards and cannot thereafter be withdrawn, because the bars *d* and *d'* being rigidly secured to the frame of the device prevent the lateral displacement of the sectors and will only allow them to rotate downward.

In using the word "coin" in the foregoing specification it will be understood that I have reference to any form of token made of any

material which it may be designed to place within the receptacle through the slot and that the term is not necessarily restricted to a small piece of metallic money.

What I claim as new is—

1. A safety device to prevent the withdrawal of a coin through a slot which comprises a series of guards mounted on opposite sides of the slot, each guard being pivoted to oscillate independently in a plane transverse to that of the slot, and means for causing each guard to yieldingly bear normally against the under surface of the plate in which the slot is cut.

2. A safety device to prevent the withdrawal of a coin through a slot which comprises a series of guards mounted on opposite sides of the slot, each guard being pivoted to oscillate independently in a plane transverse to that of the slot, and means for causing each guard to yieldingly bear normally against the under surface of the plate in which the slot is cut when the slot is above the guards, such means consisting of a counterweight.

3. A safety device to prevent the withdrawal of coin through a slot which comprises a series of guards mounted on opposite sides of the slot, each guard being pivoted to oscillate in a plane transverse to that of the slot and provided with a curved outer face terminating in a sharp angle at the point farthest from the slot and with means for preventing the oscillation of the guard in the direction of the slot farther than a predetermined distance.

4. A safety device to prevent the withdrawal of coin through a slot which comprises a series of guards mounted on opposite sides of the slot, each guard being pivoted to oscillate in a plane transverse to that of the slot and provided with a curved outer face terminating in a sharp angle at the point farthest from the slot and with means for preventing the oscillation of the guard in the direction of the slot farther than a predetermined distance, which means comprise a shoulder on each guard adapted to bear against the inner side of the slot-plate.

5. A safety device to prevent the withdrawal of coin through a slot which comprises a series of guards mounted on opposite sides of the slot, each guard being pivoted to oscillate independently in a plane transverse to the slot, and means for normally but yieldingly keeping them in contact with the inner surface of the slot-plate, said means consisting of a counterweight.

6. A safety device to prevent the withdrawal of coin through a slot which comprises a series of guards mounted on opposite sides of the slot, each guard being pivoted to oscillate independently in a plane transverse to the slot, and means for normally but yieldingly keeping them in contact with the inner surface of the slot-plate, said means consisting of a counterweight, said guards being



moved out of such contact by the lateral pressure of a coin or the like slipped between the two series of guards.

5 7. A safety device to prevent the withdrawal of coin through a slot which comprises a series of guards mounted on opposite sides of the slot, each guard being pivoted to oscillate independently in a plane transverse to the slot and means for normally but yield-  
10 ingly keeping them in contact with the inner surface of the slot-plate, said means consisting of a counterweight, and adapted to be moved out of such contact by the lateral pressure of a coin or the like slipped between the  
15 two series of guards, and shoulders on each guard which bear against the inner side of the slot and prevent the guards from moving in the opposite direction.

8. A safety device to prevent the withdrawal of coin through a slot which comprises 20 a series of guards mounted on opposite sides of the slot, each guard being pivoted upon a rod and provided with means for guiding it in a plane transverse to that of the slot and means, as a counterweight, adapted to allow 25 it to move freely in a direction away from the slot and other means comprising a shoulder which prevent it from moving toward the slot.

Witness my hand, this 9th day of February, 1903, at the city of New York, in the county 30 and State of New York.

JOSEPH LOCH.

Witnesses:

HERMAN MEYER,  
STEPHEN J. COX.