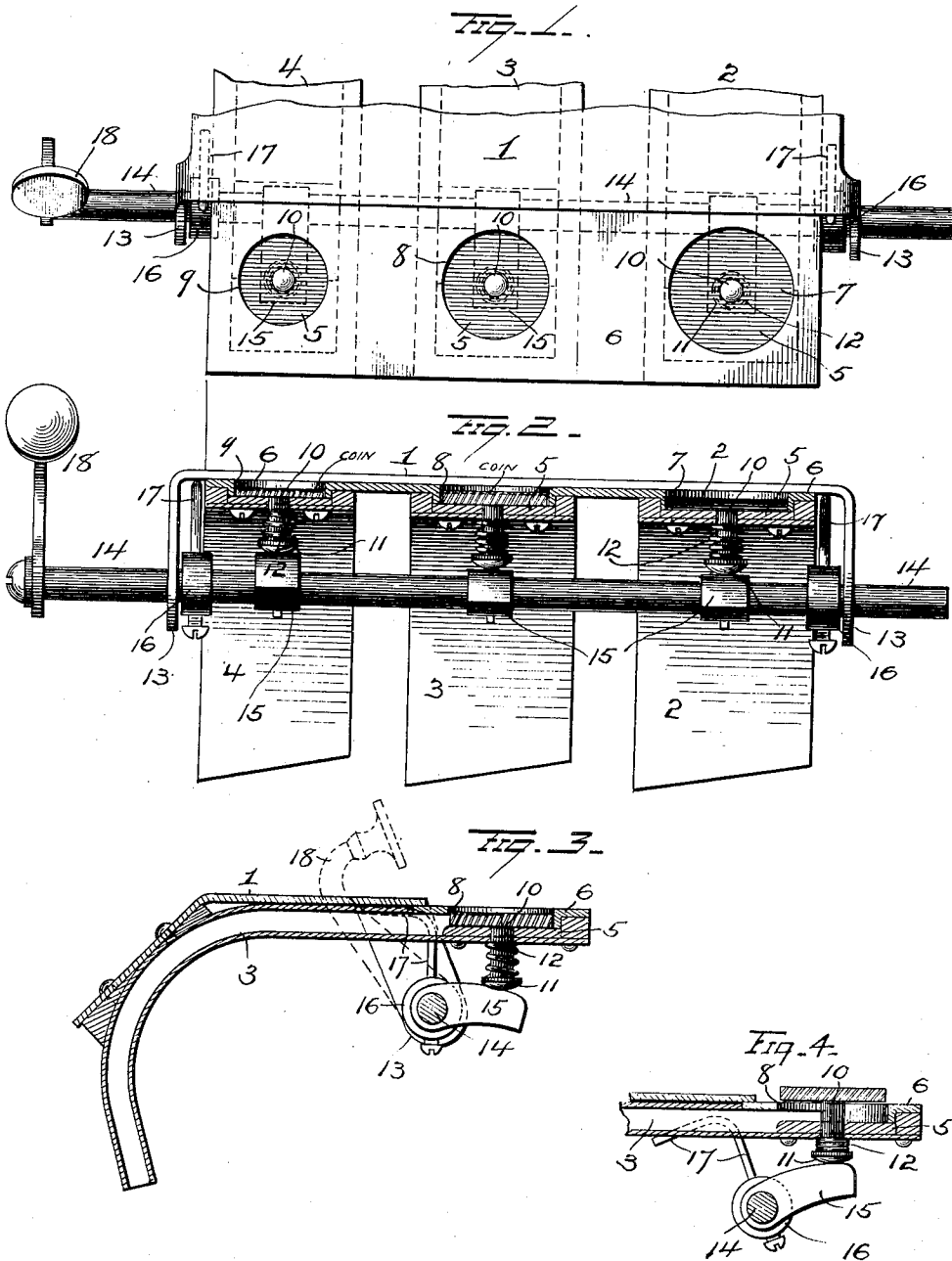


H. T. WERDEN.
COIN DETECTOR.

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940,568.

Patented Nov. 16, 1909.



WITNESSES

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COIN-DETECTOR.

940,568.

Specification of Letters Patent. . . Patented Nov. 16, 1909.

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To all whom it may concern:

Be it known that I, HENRIETTA T. WERDEN, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Coin-Detectors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in coin detectors which are adaptable particularly for use on telephone toll boxes,—the object of the invention being to provide simple and efficient means whereby coins or tokens of improper diameter and thickness will be prevented from entering the coin chute.

A further object is to provide means for ejecting a coin or token from the coin inlet should said coin or token be too thick to enter the coin chute.

With these objects in view the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is a front face view of the device showing a portion of the frame of a toll box; Fig. 2 is a rear face view partly in section of the same; Fig. 3 is a transverse sectional view, and Fig. 4 is a detail sectional view showing the manner of ejecting an improper coin or token.

1 represents a portion of the frame of a toll box or other coin receiving device to which a series of coin chutes 2, 3, 4 are secured.

The front face of each coin chute is removed near the upper end of the latter and has secured therein a steel plate 5. A steel plate 6 extends across the open upper end of the coin chutes and is secured to the latter,—said plate 6 being provided with a series of holes or coin inlets which are located directly in front of the steel plates within the coin chutes. The holes 7, 8, and 9 in the plate 6 are of different sizes according to the diameters of the coins which they are to receive. Thus the hole or coin inlet 7 is of exactly the proper size to permit the passage of a twenty-five cent coin and the space between the rear face of the plate 6 and the front face of the plate 5 in the chute

2 is such as to permit the coin to drop through the chute. The hole or coin inlet 8 is intended to receive a nickel and the hole or opening 9 is to receive a dime,—the plates 5 in the chutes 3 and 4 being so spaced from the plate 6 as to permit proper coins inserted in these openings to pass downwardly through the chutes in the same manner as above explained.

It is apparent that a coin which is too great in diameter cannot be inserted and that if the coin or token is too thick (that is thicker than legal coin) it cannot enter the chute but it would be difficult for the user to remove the coin or token from the coin inlet without the use of some device to assist him. In order therefore, that the spurious coin may be readily removed from the coin inlet, I provide the devices now to be described.

Each plate 5 is provided centrally with an opening for the passage of a plunger 10, the head or free end of which normally rests flush with the front face of said plate. Each plunger 10 passes rearwardly through a hole in the rear wall of the chute and is provided at its rear end with a head 11, between which and the rear wall of the chute a spring 12 is disposed for normally maintaining the front end or head of the plunger flush with the front face of the plate 5. It is of course understood that each of the chutes employed will be provided with a plunger such as above described. The frame 1 is provided with rearwardly projecting arms 13 in which a shaft 14 is mounted. To this shaft, several cam arms 15 are secured in position to operate the several plungers when the shaft is turned. Longitudinal displacement of the shaft 14 is prevented by means of collars 16 secured thereto adjacent to the arms 13 and rotation of this shaft in one direction is limited by means of stop-arms 17 secured to the collars 16 and adapted to engage the frame 1 so that the cam arms 15 will be maintained normally in close proximity to the rear ends of the plungers. The shaft 14 is provided at one end with a finger piece 18 by means of which to turn said shaft.

It is apparent that if a coin or token which is too thick to enter a coin chute is inserted through one of the coin openings, pressure upon the finger piece 18 will cause the shaft 14 to be turned and the cam arms 15 to

move the plungers 10 outwardly and thus eject the spurious coin or token. As soon as pressure is removed from the finger piece, the plungers 10 will be caused to assume
 5 their normal positions by the action of the springs 12.

Various slight changes might be made in the details of construction of my invention without departing from the spirit thereof
 .0 or limiting its scope and hence I do not wish to restrict myself to the precise details herein set forth.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is,—
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1. The combination with a coin chute provided with a coin inlet, of a spring actuated plunger having one end normally flush with the front face of the rear part of the chute
 20 behind the coin inlet, and means for operating said plunger to eject a spurious coin or token outwardly through said coin inlet.

2. The combination with a coin chute provided with a coin inlet, of a plunger passing
 25 through the rear wall of the chute in line with the coin inlet, a shaft provided with means for engaging said plunger, and means for manually operating said shaft to cause the plunger to eject a spurious coin or token
 30 outwardly through the coin inlet.

3. The combination with a coin chute provided with a coin inlet, of a spring actuated plunger adapted to enter the chute in rear of the coin inlet, a shaft, a cam arm on said shaft to engage the rear end of the plunger
 35 and force it outwardly to eject a spurious coin or token outwardly through the coin inlet, and a finger piece for turning said shaft.

4. The combination with a coin chute having its front wall near its upper end removed, of a steel plate secured to the rear wall of the chute opposite the open front thereof, and a plate secured to the front of the chute and having a coin opening in line
 45 with said steel plate, said coin opening being of a predetermined diameter to permit the passage of a proper coin and the space between said steel plate and the rear face of the front plate being such as to permit
 50 the entrance of a proper coin into the chute below said steel plate and coin opening.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

HENRIETTA T. WERDEN.

Witnesses:

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 MATTHEW J. MADDOCK.