May 17, 1955 W. PATZER 2,708,499

COIN SELECTORS OF THE GRAVITY FEED TYPE

Filed Oct. 6, 1951

2 Sheets-Sheet 1

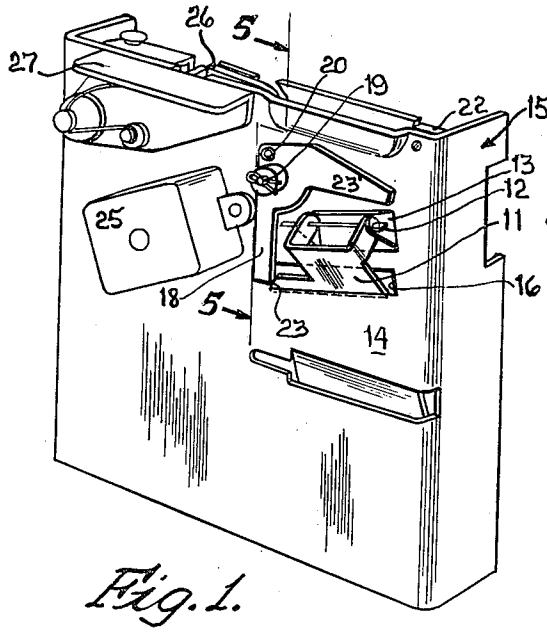


Fig. 1.

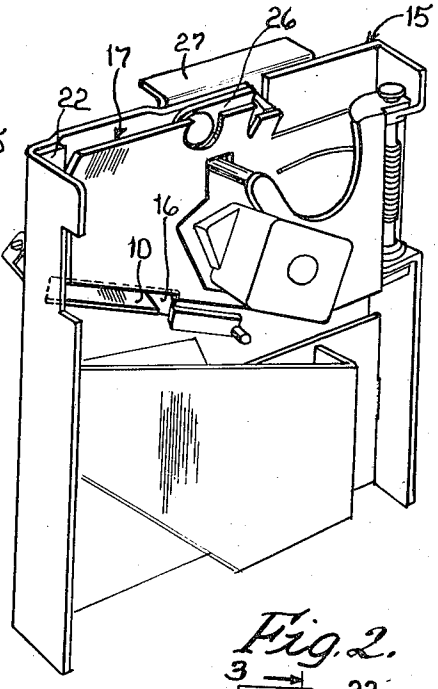


Fig. 2.

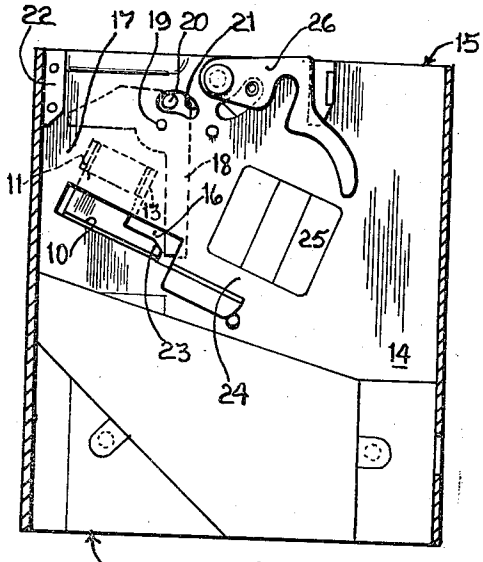


Fig. 3.

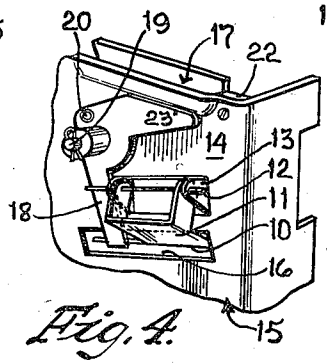


Fig. 4.

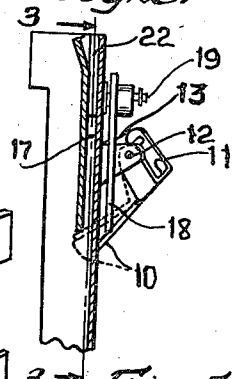


Fig. 5.

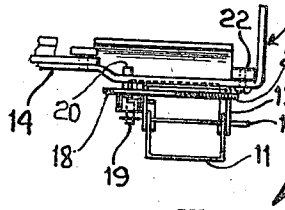


Fig. 6.

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COIN SELECTORS OF THE GRAVITY FEED TYPE

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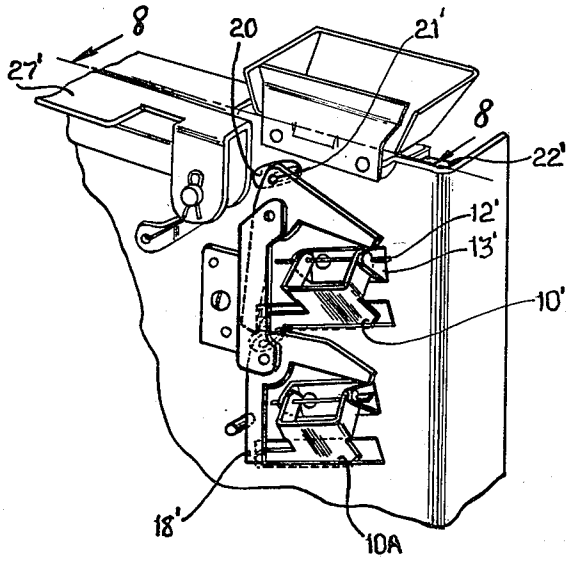


Fig. 7.

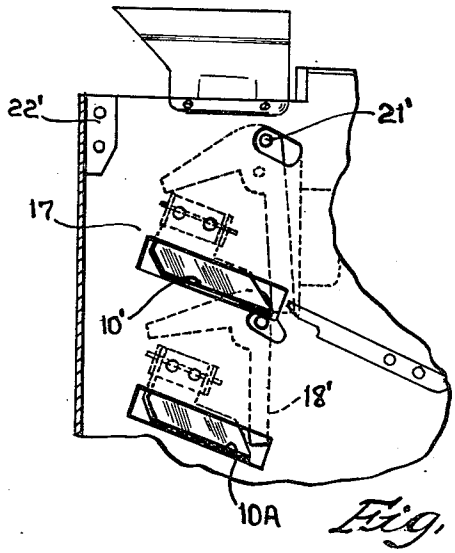


Fig. 8.

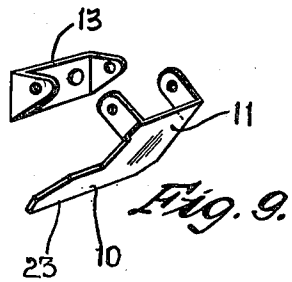


Fig. 9.

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2,708,499

COIN SELECTORS OF THE GRAVITY FEED TYPE

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Application October 6, 1951, Serial No. 250,074

4 Claims. (Cl. 194—103)

This invention relates to new and useful improvements in coin selectors of the gravity feed type and has for its principal object the provision of a simplified arrangement for effecting acceptance of genuine and proper coins and the rejection of slugs or tokens of a diameter of a proper or genuine coin but underweight.

The device shown and described in my companion application embodies a movable track projected into a coin receiving pathway by a coin-actuated member and maintained in such pathway by the weight of the coin on the track. My present invention contemplates the provision of a track adapted to be projected into a coin receiving pathway but which track is provided with a portion adapted to bear against an end portion of a coin-actuated lever by the weight of a descending coin on the track, whereby to maintain the track in projected position within the coin receiving pathway until the descending coin moves off the track, at which time the track and lever return to their normal inoperative position.

A further object of the invention is to provide a simplified arrangement which will comprise relatively few parts, affording economical manufacture.

Other objects will appear hereinafter.

The invention consists in the novel combination and arrangement of parts to be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings showing the preferred form of construction, and in which:

Fig. 1 is a perspective view of one side of a coin selector embodying my invention;

Fig. 2 is a perspective view of the opposite side of said coin selector;

Fig. 3 is a sectional detail view taken substantially on line 3—3 of Fig. 5;

Fig. 4 is a fragmentary perspective view of a track and its actuating member embodied in the invention;

Fig. 5 is a fragmentary sectional detail view taken substantially on line 5—5 of Fig. 1;

Fig. 6 is a fragmentary top plan view of the selector as shown in Fig. 4;

Fig. 7 is a fragmentary perspective view of a multiple coin selector embodying my invention;

Fig. 8 is a fragmentary elevational view of the coin receiving and acceptance pathway taken substantially on line 8—8 of Fig. 7;

Fig. 9 is a perspective view of a track and mounting bracket therefor shown in exploded relation with respect to each other and embodied in the invention.

As before stated this invention contemplates the provision of a coin track projectable into a coin receiving pathway by a coin-actuated lever with the coin track so related with respect to the lever that the weight of a coin on the track will bear the track against the lever, thereby to maintain the track in projected position until the coin moves off the track.

To accomplish this object, reference being had to the form of the invention shown in Figs. 1 to 6 inclusive and

9, I provide a track **10** having an extension **11** adapted to be pivotally connected as at **12** to a bracket **13** mounted on a wall **14** provided by a body **15**. This wall **14** provides an elongated opening **16**. Such opening is arranged transversely with respect to a coin receiving pathway **17** and is inclined with respect to such pathway. The track **10** is adapted to be projected through this opening into the coin receiving pathway by a coin-actuated lever **18**. This lever **18** is pivotally mounted as at **19** to the wall **14** and carries a pin **20** which projects through an arcuate opening **21** formed in the wall **14** above the elongated opening **16**. The pin **20** is located at one side of the coin receiving pathway **17** opposite a plate **22**. When a coin is lodged between the plate **22** and the pin **20**, the lever **18** will be caused to pivot in a direction to move the pin **20** away from the plate **22** to allow the coin to descend into the coin receiving pathway.

The lower end portion of the lever **18** engages a cam edge **23** provided by the extension **11**. When the lever **18** is thus pivoted by the weight of the coin thereon, the track **10** will be projected through the opening **16** into the path of the descending coin. As the coin descends upon the track **10**, the weight of the coin thereon will bear the track against the lever **18** whereby to maintain the track in the path of the descending coin until the coin has moved off the track. When this takes place, a counterweight **23'** provided by a lateral extension of the lever **18** will pivot the lever **18** to dispose the pin **20** in the path of the descending coin. From the track **10** the accepted coin passes into a coin acceptance pathway **24**. If a spurious coin such as an iron or steel slug be admitted into the acceptance pathway **24**, it will be arrested by a magnet **25** where it will remain until wiped therefrom by a wiper mechanism including a wiper blade **26** and an operating lever **27**. This wiper blade and operating lever are of a construction well-known in the art.

If the coin be of a diameter equal to that of an acceptable coin but underweight, or if a paper disc or light-weight slug be deposited into the receiving pathway **17**, the light-weight slug or disc will not have sufficient weight to pivot the lever **18**, with the result that spurious slug or disc will be arrested in the coin receiving pathway.

On the other hand, if the coin, slug or disc deposited in the coin receiving pathway be of a diameter less than that of an acceptable coin, such slug or disc will by-pass between the pin **20** and the plate **22** and be ejected through a rejection outlet **28** at the bottom of the body **15**.

In the form shown shown in Figs. 7 and 8, the track and its coin-actuated lever are substantially the same as the track and the actuating lever employed in the form shown in Figs. 1 to 6 inclusive and 9. In this form of construction as illustrated in Figs. 7 and 8, I have illustrated a multiple coin selector in which coins of smaller diameter will pass between the pin **21'** and the plate **22'** without effecting the projection of the upper track **10'** into the coin receiving pathway **17**. If such by-passed coin be an acceptable coin, it will then actuate the lever **18'** to project the track **10A** into the coin receiving pathway for direction into the acceptance pathway. If such deposited coin be of a diameter less than that of an acceptable coin, then neither track **10'** nor track **10A** will be projected into the coin receiving pathway, but such spurious coin will by-pass between the pins and the plates and be ejected through the ejection outlet of the device.

While the construction shown in Figs. 7 and 8 is substantially the same as that shown in Figs. 1 to 6 inclusive and Fig. 9, such construction affords a selector which will accommodate the acceptance of a plurality of coins of different denominations, such for example a twenty-five cent-piece, a five-cent piece and a ten-cent piece, there being three separate and independent tracks and

coin-actuated levers therefor for each denomination of coin.

From the foregoing description, it is clearly manifest that I have provided a coin selector which is relatively simple, compact in construction, and highly efficient for the purpose intended.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A coin selector including a body providing a coin receiving pathway and a coin acceptance pathway having communication with the receiving pathway, a wall of said body having a slot formed therein in communication with and at one side of the receiving pathway, a lever pivotally carried by said wall, a pin carried by said lever at one end thereof and projecting through said slot into said receiving pathway, a counterweight on said lever for pivoting said lever in a direction to dispose the pin in the path of a coin descending said receiving pathway, said lever being pivoted in an opposite direction by the weight of a descending coin disposed upon said pin, said wall having an elongated opening formed therein, said elongated opening being below the slot and communicating with said receiving pathway, a counterbalanced coin track pivotally carried by said wall and adapted to be projected through said opening into a transverse position within said receiving pathway, said track having a cam portion engageable with the opposite end portion of said lever to pivot the track into coin receiving position in said receiving pathway when said lever is pivoted against the action of the counterweight by the weight of a coin on said pin, said portion of said track bearing against said lever by the weight of said coin on said track to maintain said track in said receiving pathway until said coin is moved off said track into said acceptance pathway.

2. A coin selector including a body having a coin receiving pathway, a wall of said body having an elongated slot formed therein, said slot extending transversely and at an inclination with respect to the coin pathway and communicating with the pathway, a track pivotally carried by the wall and adapted to be projected through said slot into said pathway, a counterweight for normally maintaining said track from projected position from within said pathway, and means actuated by a coin descending said pathway and engageable with said track to project said track into said coin pathway, said last-named means comprising a substantially L-shaped lever pivotally connected to and parallel with said wall, said lever having a laterally extending actuated pin adapted to be disposed through an adjacent opening in said wall in the path of a coin in said coin receiving pathway whereby said lever is pivoted to engage a portion of said track to project the same into said coin receiving pathway said track adapted to bear against an element of said means by the weight of said coin whereby to maintain said means in engagement with said track and said track in said coin receiving pathway until said coin moves off said track, said body providing an acceptance pathway into which said coin is directed by said track when said track is projected into said coin receiving pathway.

3. A coin selector including a body having a coin receiving pathway, a wall of said body having an elongated slot formed therein, said slot extending transversely and at an inclination with respect to the coin pathway and communicating with the pathway, a track pivotally carried by the wall and adapted to be projected through said slot into said pathway, said track being pivoted by gravity from projected position within said pathway, a counterweight for normally maintaining said track from projected position from within said pathway, and means actuated by a coin descending said pathway and engageable with said track to project said track into said coin pathway, said last-named means comprising a substantially L-shaped lever pivotally connected to and parallel with said wall, said lever having a laterally extending actuated pin adapted to be disposed through an adjacent opening in said wall in the path of a coin in said coin receiving pathway whereby said lever is pivoted to engage a portion of said track to project the same into said coin receiving pathway said body providing an acceptance pathway into which said coin is directed by said track when said track is projected in said coin receiving pathway.

4. A coin selector including a body having a coin receiving pathway, a wall of said body having an elongated slot formed therein, said slot extending transversely and at an inclination with respect to the coin pathway and communicating with the pathway, a track pivotally carried by the wall and adapted to be projected through said slot into said pathway, said track being pivoted by gravity from projected position within said pathway, a counterweight for normally maintaining said track from projected position from within said pathway, and means actuated by a coin descending said pathway and engageable with said track to project said track into said coin pathway, said last-named means comprising a substantially L-shaped lever pivotally connected to and parallel with said wall, said lever having a laterally extending actuated pin adapted to be disposed through an adjacent opening in said wall in the path of a coin in said coin receiving pathway whereby said lever is pivoted to engage a portion of said track to project the same into said coin receiving pathway said track adapted to bear against an element of said means by the weight of said coin whereby to maintain said means in engagement with said track and said track in said coin receiving pathway until said coin moves off said track, said body providing an acceptance pathway into which said coin is directed by said track when said track is projected into said coin receiving pathway.

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