April 2, 1935. W. E. CALLISON 1,996,143

AMUSEMENT DEVICE

Filed June 20, 1932 4 Sheets-Sheet 1

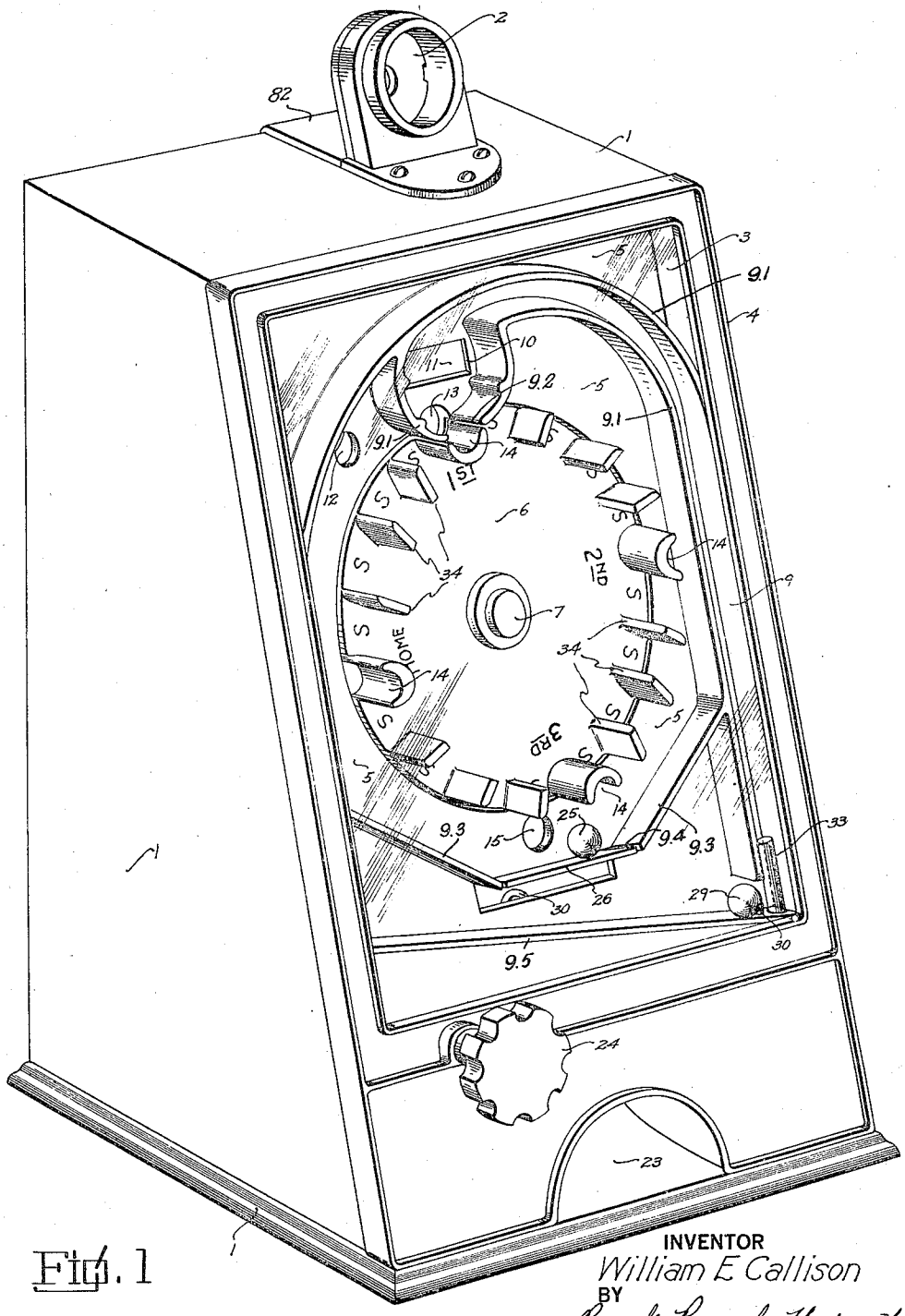

Fig. 1

INVENTOR
William E Callison
BY
Rummler, Rummler & Woodworth
ATTORNEY

April 2, 1935. W. E. CALLISON 1,996,143

AMUSEMENT DEVICE

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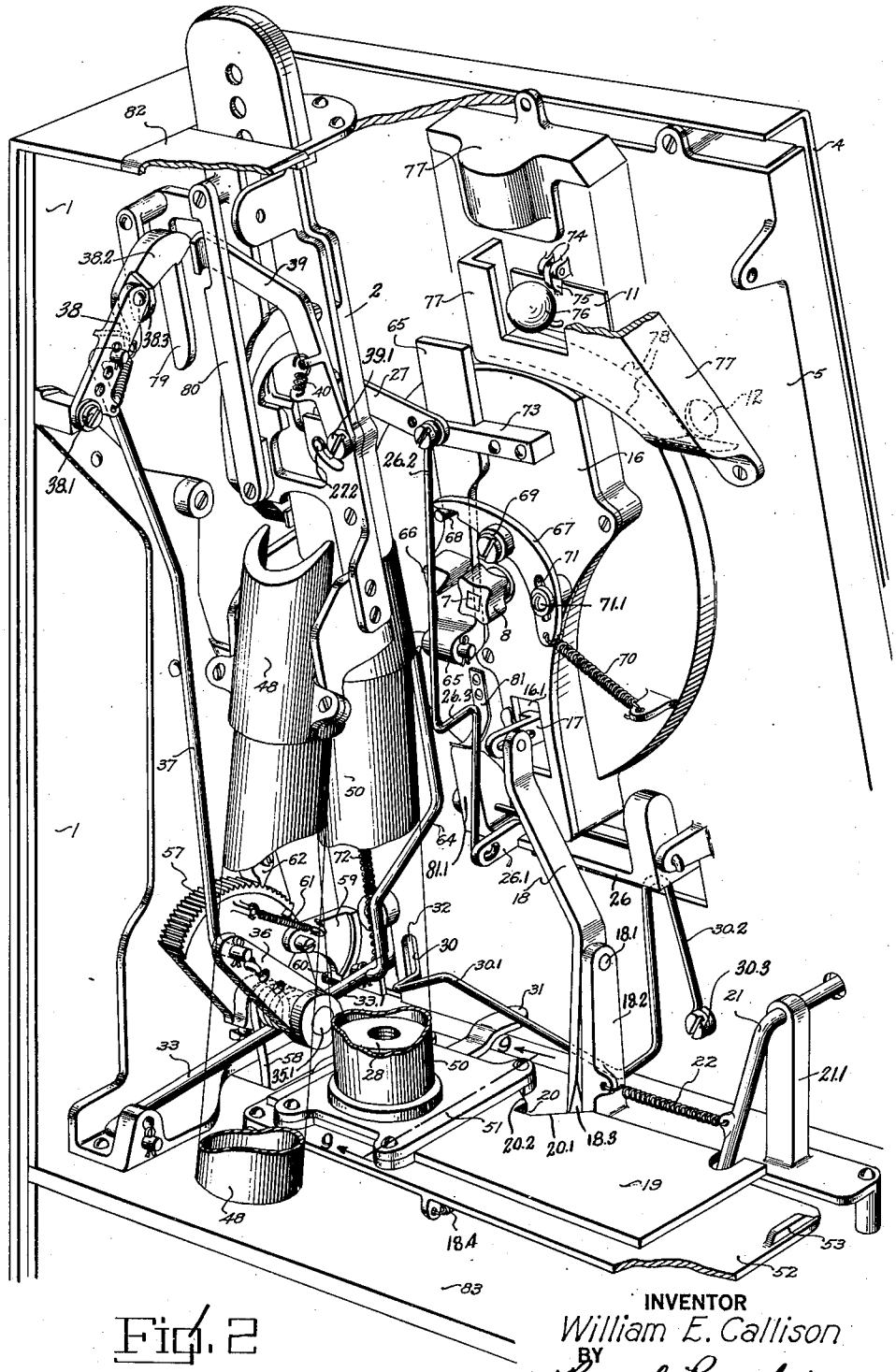

Fig. 2

INVENTOR
William E. Callison
BY
Rummler, Rummler & Woodworth
ATTORNEY

April 2, 1935. W. E. CALLISON 1,996,143

AMUSEMENT DEVICE

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Fig. 3

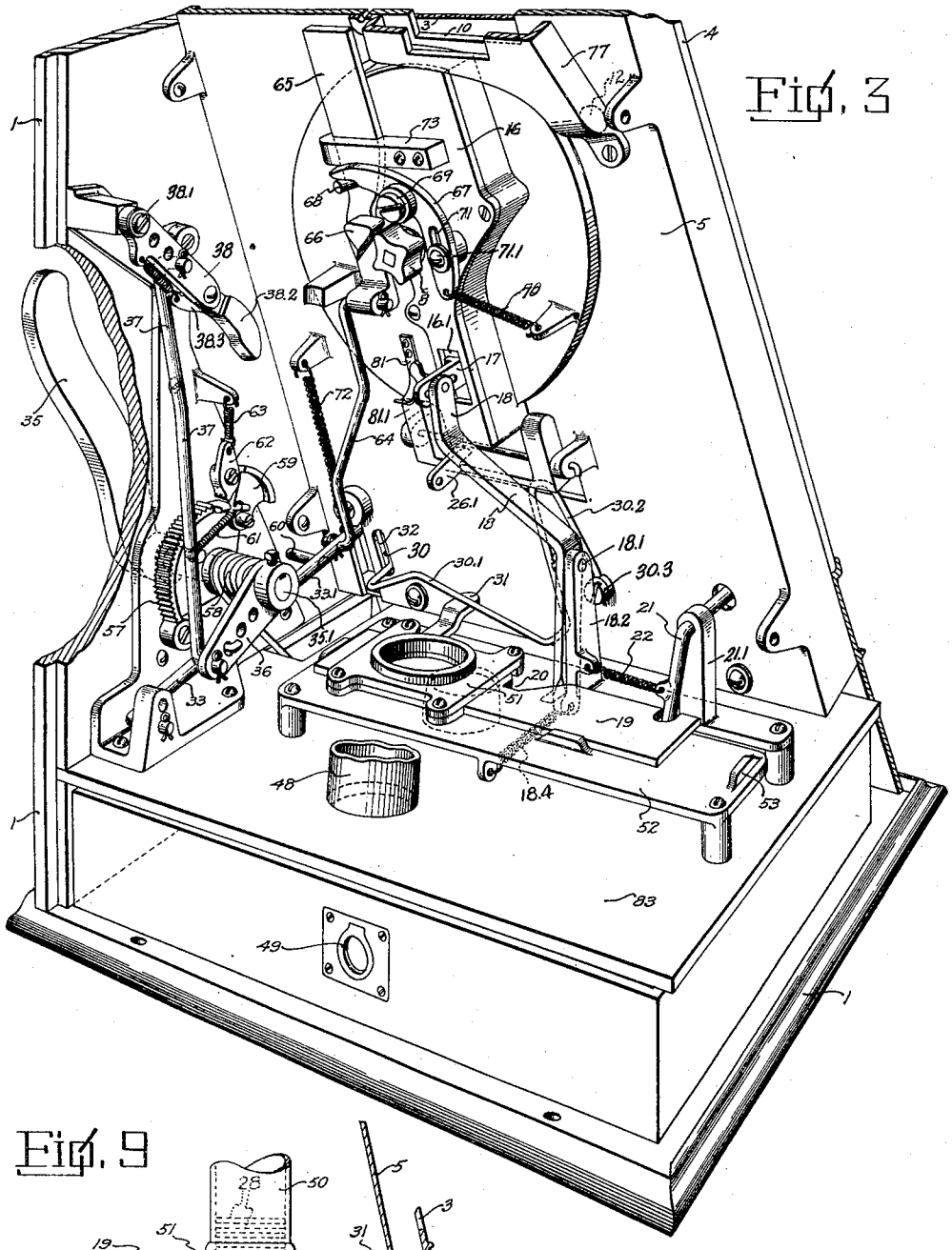
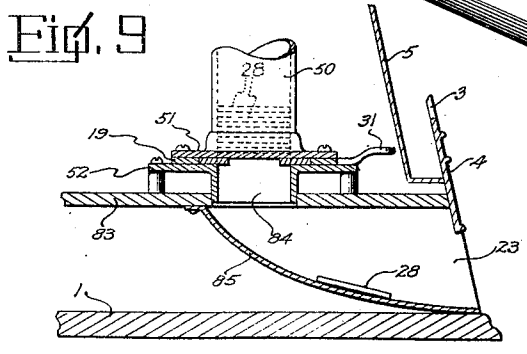


Fig. 9



INVENTOR
William E. Callison
BY
Rummler, Rummler & Woodworth
ATTORNEY

April 2, 1935. W. E. CALLISON 1,996,143

AMUSEMENT DEVICE

Filed June 20, 1932 4 Sheets-Sheet 4

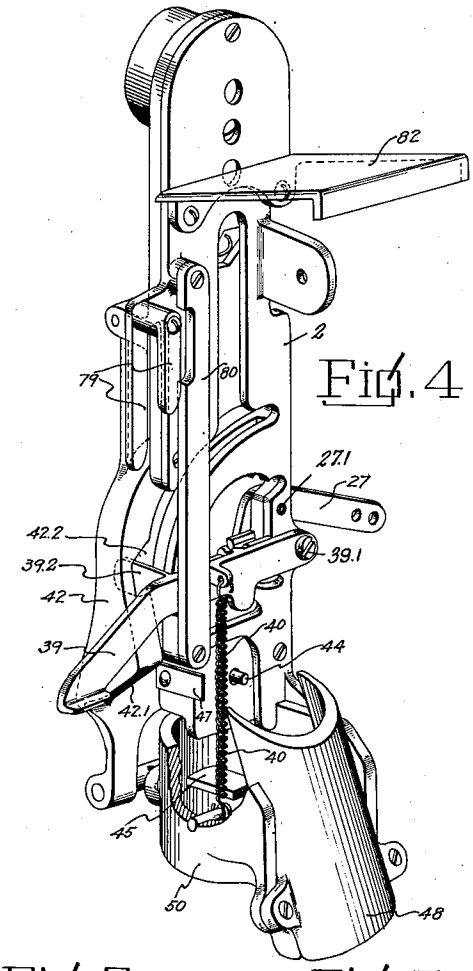


Fig. 4

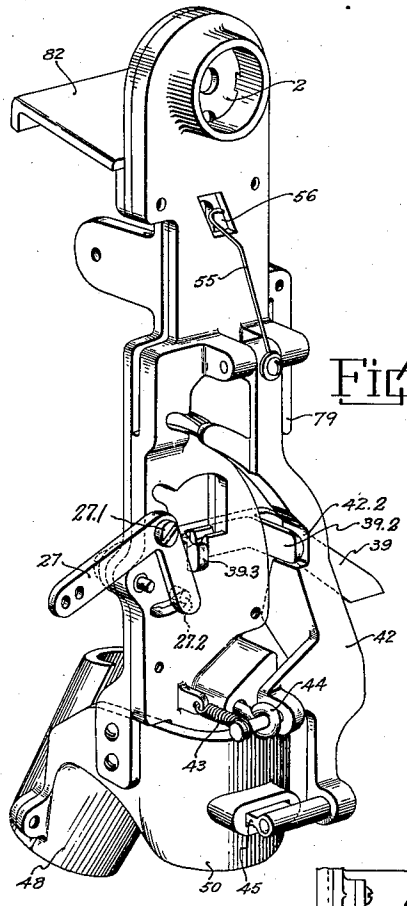


Fig. 5

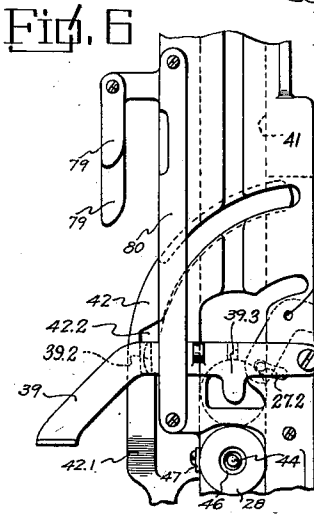


Fig. 6

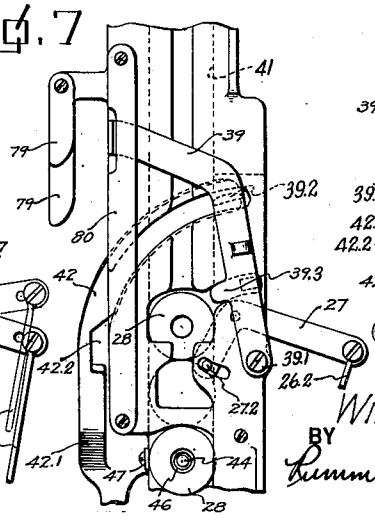


Fig. 7

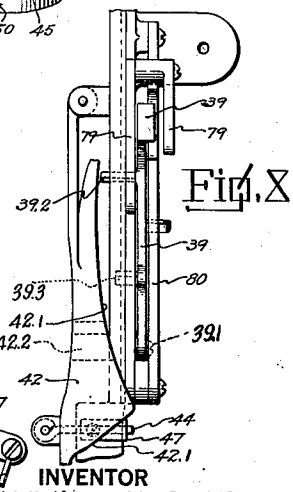


Fig. X

INVENTOR
William E Callison
BY
Burnside, Burnside & Woodworth
ATTORNEY

Patented Apr. 2, 1935 1,996,143

UNITED STATES PATENT OFFICE

1,996,143

AMUSEMENT DEVICE

William E. Callison, Tulsa, Okla.

Application June 20, 1932, Serial No. 618,283

10 Claims. (Cl. 194—1)

My invention relates to amusement devices of the coin controlled variety and particularly to a game apparatus for entertainment and amusement.

The main objects of my invention are to provide an improved and novel apparatus so fascinating in its operation that it will suggest or prompt those seeing it with a desire to play it; to provide such a game apparatus constructed so that the player may continue to enjoy its novel operation indefinitely, for the coin inserted, so long as he may, by his skill, obtain a score on the playing field; to provide such a device arranged to dispense a check or token, when a score is made, with which to continue operation of the game; to provide in such a device means for automatically separating coins from checks or tokens when inserted in a common coin and check receiving slot; and to provide an improved playing field arranged to agitate projectiles propelled thereonto, and to receive such projectiles in certain openings or pockets for permitting the operation of a check or token dispensing means and indicating a score.

Further objects of my invention are to provide an improved arrangement of barring means on the playing field for preventing return of projectiles to the propelling device, such that when the barring means is placed in a releasing position during operation of the game, it is automatically latched and momentarily held in that position so as to give all projectiles sufficient time to advance to the propelling device before closing back to its normal barring position; and to provide an improved arrangement to prevent unfair manipulations of the device while it is in operation, such as tilting or moving the device to control the action of a projectile propelled onto the playing field.

A specific embodiment of this invention is shown in the accompanying drawings in which:

Figure 1 is a front view in perspective, of an improved game device showing the playing field.

Fig. 2 is a rear view in perspective, of the device, partially broken away to show the assembly of the mechanism, the actuating portions being shown in an intermediate position toward operation.

Fig. 3 is a view similar to Fig. 2 but with portions of the mechanism removed to show the actuating mechanism in a normal inoperative position.

Fig. 4 is a rear view in perspective of the coin receiving apparatus.

Fig. 5 is a front view in perspective of the same.

Fig. 6 is a fragmentary rear elevation of the lower part of the coin receiving apparatus.

Fig. 7 is like view of the same showing the coin driving arm in a raised position for forcing the coin downward.

Fig. 8 is a fragmentary side elevation of the same from the left of Fig. 7, the coin driving arm being in its raised position.

Fig. 9 is a fragmentary sectional view of the coin dispensing means taken on line 9—9 of Fig. 2.

In the form shown in the drawings, my improved game apparatus comprises an upstanding box 1 having an open inclined face or front surface. A coin receiving apparatus 2 extends above the top of the box or case 1, and a glass covering 3 encloses the open face, the glass covering being held in position by a frame 4 which borders the open face and finishes off that side of the box 1.

Beneath the glass covered face is a panel which comprises a playing field 5 having a revolving central portion or disc 6 supported on a shaft 7, which extends through the playing field panel and into the interior of the box 1 wherein a star wheel or gear 8 (see Fig. 2) is secured to the shaft 7 for the purpose of preventing axial shifting thereof and to provide a means for rotating the same.

The panel or playing field 5 is provided with an arrangement of guides or walls projecting vertically from its surface and defining a guideway 9 for directing the path of the projectiles with which the game is played. The guides or walls 9.1, which are spaced apart a suitable distance, lead from the lower right hand corner of the playing field, up the right side thereof, and curve over toward the top center where they expand away from each other to form a substantially circular pocket, the walls terminating on either side of the bottom center of the pocket to provide an opening 9.2 onto the playing field.

Near the bottom of the panel 5 a pair of inwardly and downwardly projecting walls 9.3 are provided to guide projectiles toward the bottom center of the playing field, and these walls terminate on either side of a center opening 9.4. Beneath the opening 9.4 a horizontally inclined wall or guideway 9.5 is provided to guide projectiles back to the lower right side of the field from which point they are initially played, as will be hereafter described.

At substantially the center of the circular pocket at the top center of the playing field is an opening 10 having a gate or closure 11, the purpose of which will appear later, and at the left side of the pocket is an opening 12 in the

playing field 5. The opening 12 is in communication with the opening 10 by means of a guideway on the rear of the playing field panel, as will be hereafter shown.

At the bottom center of the pocket terminating the guideway 9 is an opening or hole 13, through the playing field panel, disposed in line with the opening 9.2 in the walls 9.1 so that the opening 9.2 is substantially on a diameter of the hole 13. The revolving portion of the playing field comprising the disc 6 is of such proportions that its periphery also substantially intercepts a diameter of the hole 13, and on the margin of the disc 6 a plurality of radial upstanding lugs or baffles are provided which extend to the periphery of the disc. Certain of these lugs are semicircular in form and open outward from the center of the disc so as to provide channels 14 which open through the margin of the disc and, when opposite the hole 13, provide a clear circular opening through the playing field.

As shown in Fig. 1, a shiftable barrier or barring means 26 is disposed in the opening 9.4 between the ends of the downwardly projecting walls 9.3. This barrier is normally held in a closed position such that when a projectile has passed over the playing field 5, the projectile will be stopped by the barrier 26 and prevented from dropping down to the wall or guide 9.5 where it would be directed back to the initial starting point at the right hand side of the playing field. The barrier 26 is provided on its inner side with a horizontally projecting lug 26.1 which is connected by means of a rod 26.2 with a lever 27 mounted on the coin receiving apparatus.

The lever 27 is in the form of a bell crank pivotally mounted on the coin receiving apparatus at 27.1 and carries on its inner arm a pin 27.2 which is disposed so as to extend across and into the path of a coin or token 28 passing through the coin receiving apparatus.

Referring to Fig. 1, it will be seen that a projectile 29 resting on the guide 9.5 is controlled by means of a plunger 30, the position of which determines whether or not the projectile 29 will fall into a position wherefrom it might be played. The plunger 30 is a vertical continuation of a rod 30.1 which extends across the back of the panel 5 as shown in Figs. 2 and 3. The rod 30.1 is provided with a vertical loop 30.2 which extends upwardly toward the bottom of the barrier 26 and then downwardly to a tap bolt 30.3 where it is secured to the panel 5.

The rod 30.1 is actuated by means of a lever 31 fixed to the horizontal dispensing slide 19. The rod 30.1, being slightly inclined from the horizontal as it passes over the lever 31, will be engaged by the lever 31 when the slide 19 is actuated by the lever 21, and be pushed upwardly so that its end portion 30, which extends through the opening 32, will move to intercept the projectile 29 and prevent its engagement with the propelling means 33.

In the lower portion of the playing field 5, below the disc 6 and between the inwardly projecting walls 9.3, is an opening or hole 15 which communicates with the hole 13 by means of a housed runway 16 (see Fig. 2) disposed on the back side of the panel 5. Projecting through an aperture 16.1 in the rear wall of the runway 16 is a dog 17 mounted on the upper end of a latching or holding arm 18 which in turn is pivotally mounted at 18.1 on a vertical support 18.2. The vertical arm 18 is arranged so that its lower end 18.3 will engage the inner margin of a horizontal dispensing slide 19, the end 18.3 being normally held in a notch 20 by the action of a spring 18.4. The dispensing slide 19 is operated by means of a lever 21 journaled on a vertical support 21.1 and normally held in a retarded position by means of a spring 22 which is secured to the lever 21 adjacent its lower end and to the vertical support 18.2.

When the dispensing slide 19 is operated by means of the lever 21, a slug or token is automatically dispensed through the opening 23 (see Fig. 1) in a manner that will hereafter be described. The lever 21 is operated by means of a handle 24 mounted on the front face of the cabinet 1.

The mechanism is operated by means of a main actuating lever 35 mounted on a shaft 35.1 which extends through the side wall of the casing 1. A crank 36 is secured to the shaft 35.1 at its inner end and is connected by means of a drive rod 37 to a lever 38 which is pivotally mounted at 38.1 on the casing 1. The lever 38 carries a drive dog 38.2 pivotally mounted on its inner end. The dog 38.2 is provided with a curved upper surface and a lug 38.3 arranged to prevent downward pivotal movement of the dog 38.2 which is positioned on the lever 38 so as to engage a coin driving lever 39 pivotally mounted at 39.1 on the coin receiving apparatus. Thus, when the main actuating lever 35 is pulled forward, the crank 36 is raised, pushing the driving rod 37 upwardly so as to force the lever 38 to a position where the dog 38.2 engages the driving lever 39, lifting the same upwardly as shown in Fig. 2 of the drawings, until the dog 38.2 slips over the end of, and releases, the coin driving lever 39 whereupon it is pulled back to its normal position by means of a spring 40.

As the lever 38 and the driving rod 37 are returned to their normal position as shown in Fig. 3, by a backward movement of the lever 35, the dog 38.2, because of its pivotal mounting on the lever 38, is permitted to swing upward and thus pass over the lever 39.

Referring to Figs. 4 to 8 inclusive, showing details of the coin receiving apparatus, it is readily seen that the function of the driving arm 39 is to force the coins or tokens, introduced in the coin receiving apparatus 2, against the pin 27.2 thereby operating bell crank 27 to cause opening of the barrier or barring means 26 and releasing of projectiles held thereby. It is also a function of the coin receiving mechanism to separate coins and perforated tokens as they pass through the device and in order to simplify the structure and operation of the mechanism the entire action is controlled through the movement of the driving arm 39.

The arm 39 is provided on its inner side with a pair of lugs 39.2 and 39.3 which extend inwardly from the arm as shown in Figs. 4 to 8 inclusive. The lug 39.2 is positioned so as to be adjacent one side of the body of the coin device when the arm 39 is in its normal position as shown in Fig. 6 and the lug 39.3 is positioned so as to extend across the coin or token track 41 and engage the coin or token. Initially the coin or token rests on top of the lug 39.3, but as the arm 39 is raised through the action of the lever 38 the coin passes beyond the lug 39.3 to engage the pin 27.3 (see Fig. 7) and as the arm descends, the coin is forced past the pin 27.2 to the position shown in Fig. 6, thus actuating the bell crank 27.

The coin separating operation is performed by a cam lever 42 which is pivotally suspended from the upper part of the coin mechanism and on its

inner side. The lever 42 is provided on its outer side with a cam surface 42.1 disposed so as to be first engaged by the dog 38.2 before the dog engages the lever 39. The lever 42 is also provided with a notch 42.2 through which the lug 39.2 extends when the mechanism is in its normal position, as shown in Figs. 4 to 6 inclusive, and the upper portion of the lever 42 is arranged to provide a continuation of the cam surface 42.1 against which the lug 39.2 will ride after it has been disengaged from the notch 42.2.

Thus when the dog 38.2 engages the surface 42.1, the lever 42 is forced inward away from the coin mechanism until the lug 39.2 is clear of the notch 42.2, at which point the dog 38.2 engages the lever 39 and begins to force it upward. As soon as the lever 39 has moved until the lug 39.2 is above the notch 42.2, the dog 38.2 rides over and above the upper portion of the cam surface 42.1 and permits the lever 42 to be urged toward its normal position by the action of the spring 43 (see Fig. 5). However, the lever 42 is prevented from fully returning to its normal position by engagement with the lug 39.2 which rides against the lever 42 during the remainder of the upward stroke of the arm 39 and while it is returning back to its normal position, at which point the lug 39.2 passes through the notch 42.2 and allows the lever 42 to completely return to its normal position.

The lever 42 is arranged to carry a plunger 44 which is positioned to extend through the coin mechanism and across the coin track 41 at a point one and one-half times the diameter of the coin or token for which the mechanism is designed below the bottom surface of the lug 39.3. Thus when lever 42 is forced backward and the arm 39 is raised, the pin 44 is retracted sufficiently to allow a coin or token to pass over its end and is held in the retracted position by engagement of the lug 39.2 with the cam surface of the lever 42 while the lever 39 is returning to its normal position. By means of lug 39.3 a coin is driven past the pin 27.2 and forces the coin just ahead of it over the end of the pin 44 until it is concentric therewith, at which point the lug 39.2 falls into the notch 42.2 permitting the lever 42 to return to its normal position, thereby pushing the pin 44 across the coin track 41.

The tokens used in the operation of my device are provided with a central aperture 46. Thus if it is a token that is positioned opposite the pin 44 when the same is returned to its normal position, the pin or plunger will pass through the aperture 46. However, should an imperforate coin be there positioned, the plunger 44 will force it forward out of the coin track 41 and into a coin chute 48 which leads to a money box 49 (shown in Fig. 3). When the playing piece happens to be a perforated token, it will be forced straight downward by the next succeeding coin or token and drop directly into a magazine tube 50 which leads to the dispensing mechanism.

In order to prevent playing pieces other than perforated tokens from dropping into the magazine tube, a second plunger or gate member 45 is carried by the lower end of the arm 42, which plunger operates at the same time and in the same manner as the plunger 44 and is therefore extended across the magazine tube 50 at the time that the plunger 44 forces the coin out of the coin track 41, thus blocking the magazine tube 50 so that the coin can only fall through the coin chute 48.

In order to prevent coins or tokens from inadvertently dropping straight downward from the coin chute 41 while the plungers 44 and 45 are in a retracted position, a spring clip 47 is mounted at the side of the coin track 44 so as to frictionally hold the coins or tokens in position until they are forced outwardly by the action of the plunger 44, or downwardly by the next succeeding coin or token.

At the base of the magazine 50 is a cover plate 51 which is disposed over the dispensing slide 19 and arranged to receive and support the lower end of the magazine tube 50, the plate 51 having an aperture therethrough concentric with the magazine tube whereby tokens pass from the magazine tube into an opening in the slide 19 in a manner that is old and well known in the art.

The slide 19 is supported on a base plate 52 and is horizontally reciprocable thereupon under the action of the arm 21, the movement of the slide 19 being limited by lug 53 projecting upwardly from the base plate 52.

The mechanism for actuating the plunger 33 which propels the projectiles along the guideway 9 is mounted on the shaft 35.1 which carries the actuating lever 35 and crank 36, and comprises a ratchet 57 secured on the shaft 35.1 adjacent the side wall of the casing 1. A spring 58 is also mounted on the shaft 35.1 for returning the lever 35 and the ratchet to their initial position after the device has been operated.

Pivotally mounted on the inner side of the ratchet 57 is a dog 59 arranged to engage a pin 60 projecting at right angles horizontally from an arm 33.1 which carries the plunger or propelling means 33. The dog 59 is arranged to contact the pin 60 and force the arm 33.1 downward until the dog slides past the pin 60, whereupon arm 33.1 snaps upward under the action of the spring 72 to cause a projectile to be propelled. Upon returning to its initial starting position under the action of the spring 58, the dog 59, because of its pivotal attachment to the ratchet 57, swings downward to slide past the pin 60 and is brought back to its normal position by means of the spring 61.

Another dog 62 is mounted above the ratchet 57 so as to engage the teeth thereon whereby the ratchet 57 is prevented from returning to its initial position before a complete forward stroke of the main actuating lever 35 has been made, the dog 62 being held in ratchet engaging position by the spring 63.

Attached to the arm 33.1 and extending upwardly therefrom is a connecting link 64 having its upper end secured to a slide 65 positioned on one side of the star wheel 8 and having a projecting lug 66 arranged to engage the teeth on the star wheel or gear 8. Mounted on the opposite side of the star wheel 8 and extending over the upper part thereof, is a dog-leg-shaped aligning arm or lever 67, one end of which is arranged to engage a pin 68 mounted on the slide 65. The dog-leg lever 67 carries a cam wheel 69 positioned above the star wheel 8 and arranged to engage the star wheel between its teeth, when, under the action of the spring 70, the lever 67 is pulled downward. Such downward movement of the lever 67 is permitted by the slot 71 in the arm through which the pivot mounting 71.1 extends.

The purpose of the arm or lever 67 and the cam wheel 69 is to align the star wheel 8 so that one of its teeth will be in a proper position to be engaged by the lug 66 of the slide 65 when the slide is snapped upward by the link 64 which is con-

trolled by the arm 33.1. The lever 67 and the cam wheel 69 are normally urged toward engagement with the star wheel 8 by the spring 70. However, their position is controlled by the pin 68 which is so disposed on the slide 65 that the cam wheel 69 does not contact the star wheel 8 until the slide 65 has moved downward to a point where the top face of the lug 66 is below the center of the wheel 8, the slide 65 being guided in its movement by the guide member 73.

When the cam wheel 69 engages the star wheel 8, it immediately turns the star wheel until it rides between two of the teeth thereof. The cam arm 67 is then pulled downward by the spring 70 and, because of the slot 71, slides on the pivot 71.1, thus rotating the star wheel until one of the teeth thereof is in position to be engaged by the lug 66 upon upward movement of the slide 65. The engagement of the lug 66 with the star wheel causes the same to spin, thus spinning the rotating portion 6 of the playing field.

Referring to Fig. 2, it will be seen that the gate 11, which closes the opening 10 in the circular pocket at the top of the playing field (see Fig. 1), is supported by hinge members 74 and 75 and is controlled by a weight 76 mounted on and spaced away from the gate 11. By means of this arrangement unfair manipulation of the game, such as tilting the apparatus, for the purpose of externally controlling the movement of the projectiles with which the game is played is obviated.

Should the player in any way tilt the game apparatus, to cause a projectile to fall into the opening 13, the weight 76 will cause the gate 11 to swing open, whereupon the projectile will enter the opening 10 and fall into a housing 77 which encloses a guideway 78 leading to the hole or opening 12 in the playing field panel. A projectile entering the opening 10 will be directed through the hole 12 and drop to the bottom of the playing field where it is held by the barrier 26 until another coin or token is utilized to release the same.

The arrangement for momentarily holding the barrier or barring means 26 in an open or releasing position is shown in Figs. 2 and 3, wherein a spring 81 is shown mounted on the back side of the panel 5 and positioned to slidably engage a lug 81.1 on the barrier 26. Thus, when the barrier 26 is opened or released through action of the lever 27 and the rod 26.2, the lug 81.1 will slide on the spring 81 and be frictionally held until it is forcibly drawn back to its normal position by the closing of the barrier. The barrier 26 is closed by coaction of the lower portion of the slide 65, as it reaches the bottom of its downward stroke, with a shoulder or bend 26.3 in the connecting rod 26.2 whereby the rod is forced downward. With this arrangement, the barrier 26 is positively latched open for a time sufficient for all projectiles held thereby to be released to the propelling mechanism, and the player is assured a full count of projectiles with which to play the game for each coin or token paid into the machine.

With reference to Figs. 2 and 4 to 8 inclusive, the members indicated by the number 79 are for the purpose of guiding the actuating arm 38 and the dog 38.2 in their up and down movement and preventing lateral displacement of the same. The member 80 is a guide for the coin driving arm 39, and the member 82 is a shield for closing off the opening in the top of the casing 1 through which the coin mechanism is inserted when being assembled in the game structure.

The numbers 55 and 56 shown in Fig. 5 indicate respectively a spring arm having a hook at its end and an opening into the coin track 41 through which the hook portion passes. The spring is attached to the upper portion of the arm 42 so that when the same is actuated inwardly by the dog 38.2 and the lug 39.2, the hook portion will enter the coin track 41 through the opening 56 and thus block the passage of other coins or tokens until the preceding one has been driven down by the arm 39. In this manner the coins or tokens are prevented from jamming in the upper part of the coin apparatus while the mechanism is being operated.

Referring to Fig. 9, the number 83 indicates the base upon which the mechanism is mounted. Number 84 indicates a passage in the plate 52 through which tokens are dispensed by means of the sliding dispensing means 19, and 85 indicates a portion by means of which tokens are guided from the passage 84 to the opening 23 in the front of the casing 1.

In the operation of my improved game apparatus, the mechanism is first put into operative condition by the insertion of a coin or token in the opening of the coin receiving device 2, the coin falling down the coin track 41 until it comes to rest on the upper edge of the lug 39.3 on the coin driving arm 39.

The main actuating lever 35 positioned on the outside of the casing 1 is then drawn forward, thereby rotating the shaft 35.1 and raising the crank 36 whereby the lever 38 is caused to swing upward by the connecting link 37. As the arm 38 raises, the dog 38.2 comes into contact with the arm 39 and swings the same upward on its pivot 39.1 until the lug 39.3 is moved to one side of the coin track 41 to allow the coin or token 28 to drop down and rest against pin 27.2 of the bell crank 27 as shown in Fig. 7.

When the arm 39 has reached this position, the dog 38.2 passes over the end of the arm and allows the arm to be snapped downward under the action of the spring 40, thereby causing the lug 39.3 to drive the coin or token 28 past the pin 27.2, thereby moving the bell crank arm 27 which, through the link 26.2, opens or releases the barrier 26, permitting all projectiles previously retained thereby to drop down to the guideway 9.5 which leads to the lower right hand side of the playing field panel, wherefrom the projectiles are propelled.

At the point where the crank arm 36 has been raised sufficiently to elevate the arm 38 so as to release the driving arm 39, the ratchet 57, which is also secured to the shaft 35.1, has been swung forward so that the dog 59 mounted on the ratchet 57 comes into engagement with the pin 60 of the propelling arm 33.1. Continued advancement of the lever 35 causes the dog 59 to press the propelling arm 33.1 downwardly until the dog 59 passes over and past the pin 60, at which point the propelling arm 33.1 is released so that under the action of the spring 72 it is snapped upwardly. The downward movement of the propelling arm 33.1 is of such extent that the propelling plunger 33 is lowered so that the projectile 29 shown in Fig. 1 is permitted to travel to a position immediately over the end of the plunger 33, from which point, as the propelling arm 33.1 is released, the projectile is propelled along the guideway 9 and into the circular pocket at the top of the playing field.

Referring to Figs. 2 and 3, it is seen that as the propelling arm 33.1 is forced downwardly under the action of the dog 59, the slide 65 will be pulled downward by the connecting link 64 until the lug 66 is below the center of the star wheel 8, the star wheel aligning cam 69 at the same time being lowered by the pin 68 so as to engage the star wheel and properly position the same for engagement of one of its teeth with the lug 66. As the driving arm 33.1 is released and snapped upwardly by the spring 72, the slide 65 is sharply forced upward, and the rapid engagement of the lug 66 with a tooth of the star wheel 8 rotates the same, thereby spinning the rotating playing field portion 6. Thus the playing field 6 is rotated at the same instant that a projectile is propelled along the guideway 9. At the same time, the main actuating lever 35 is returned to its normal position by means of the spring 58 mounted on the shaft 35.1.

As the projectile falls into the circular pocket at the top of the playing field, it immediately drops toward the opening 9.2 where it is engaged by a series of radial baffles or lugs 34 disposed at the margin of the rotating field 6. The lugs 34 coming into rapid successive engagement with the projectile cause it to bounce around between the walls 9.1 until the wheel 6 stops spinning and comes to an approximate rest, at which time the projectile will either fall between two of the baffles 34 or into one of the channels 14. Should the projectile fall between the baffles 34, it drops immediately to the bottom of the playing field and comes to rest on the barrier or barring means 26.

Should the projectile fall into one of the channels 14 it is then permitted to enter the opening 13 and drop into the runway 16 where it falls and comes into engagement with the dog 17.

The arm 18 carrying the dog 17 is normally held in an intermediate position because of engagement of its lower end 18.3 with the slanting side portion 20.1 of the notch 20, in which position the inner end of the dog 17 is so spaced from the inner wall of the runway 16 that a projectile lodged therein will come to rest between the inner end of the dog 17 and the wall of the runway, thereby holding the arm 18 against movement under the action of the spring 18.4. In this position the lower end 18.3 of the arm 18 will clear the notch 20 as the slide 19 is moved under the action of the dispensing arm 21 so that when the notch 20 is moved past the end 18.3, said end comes into engagement with an oppositely slanting side 20.2 which on further movement of the slide moves the arm 18 so that the dog 17 is drawn away from the projectile engaged thereon, allowing it to drop and fall through the opening 15 onto the barrier 26.

The dispensing slide 19, which, in a well known manner, moves tokens from the magazine 50 and delivers them through the opening 84 in the bottom of the base plate 52, is arranged so that the notch 20 will be engaged by the end 18.3 before the slide has moved sufficiently to deliver a token through the opening 84 unless the dog 17 is engaged by a projectile so as to prevent the spring 18.4 from pulling the lower end 18.3 into locking engagement with the notch 20. In this manner the dispensing mechanism is prevented from being operated unless the player has succeeded in lodging a projectile in the opening 13.

It is the purpose of the game herein shown and described to permit the playing of a plurality of projectiles, for example five, in exchange for one coin or token. However, as soon as a projectile is lodged in the opening 13 so as to permit the dispensing of a token to the opening 23, the apparatus is so arranged that any remaining unplayed projectiles will be automatically cut off from the propelling device upon operation of the dispensing mechanism, thereby permitting only one token to be dispensed for each series of five projectiles provided for play.

This automatic cut off is accomplished by means of the plunger 30 which is controlled by the rod 30.1 shown in Figs. 2 and 3. As the dispensing arm 21 is actuated to move the slide 14 for dispensing a token, the arm 31 which is carried by the slide 19, engages the sloping portion of the rod 30.1 and forces the same upwardly, the rod 30.1 being pivotally mounted at 30.3.

As the rod 30.1 is moved upwardly the plunger 30 is projected through the guide 9.5 so as to intercept and cut off any unplayed projectiles and prevent their moving into propelling position upon movement of the main actuating arm 35, and at the same time the loop 30.2 is moved upwardly so as to come into engagement with the bottom surface of the barrier 26. By this means, when another coin or token is inserted in the coin receiving mechanism, the opening or releasing of the barrier 26 through the connecting link 26.2 and the bell crank 27 will cause the barrier to engage the loop 30.2 so as to move the arm 30.1 downwardly to its normal position and permit the unplayed projectiles as well as the projectiles released by the barrier 26, to pass successively to the propelling device for continued playing of the game.

The game apparatus herein shown and described is particularly arranged so that it might be played as a baseball game, the baffles or lugs having the channels 14 being indicated as hits good for a predetermined number of bases, the spaces between the baffles 34 being indicated as strikes. In the playing of the game, each player or batter is preferably allowed five strikes before making an out. Should one of the five strikes, each of which constitutes the propelling of a single projectile along the guideway 9, result in a projectile being lodged in the opening 13, a token can be dispensed by manipulation of the knob 24, which token is again inserted in the coin receiving apparatus 2 and the mechanism is operated to provide a complete set of five projectiles with which play of the game is continued.

When a player has propelled five projectiles onto the playing field without lodging one of them in the opening 13, he is considered to have struck out, whereupon the next player goes to bat, inserting a coin in the coin receiving apparatus and releasing the five projectiles for play.

Although but one specific embodiment of this invention is herein shown and described, it is to be understood that details of the construction shown may be altered or omitted without departing from the spirit of this invention as defined by the following claims.

I claim:

1. In a coin receiving apparatus for coin-controlled devices having a coin guideway communicating with a receptacle and a coin driving arm arranged to engage and drive a coin through said guideway, a means for separating coins and perforated tokens comprising a cam arm pivotally mounted on said apparatus, a plunger carried by said cam arm and positioned to extend across said guideway, a gate member carried by said cam arm and positioned to extend across said guideway at the entrance to said receptacle, a lug on

said driving arm arranged to engage said cam arm, and a cam surface on said cam arm adapted to be engaged by said lug for moving said cam arm to withdraw said plunger and gate member and permit the passage of a coin thereby, said cam surface being arranged to hold said cam arm in a plunger-withdrawing position while said driving arm is driving a coin through said guideway, and said cam arm being arranged to return to its normal position when said driving arm has completed its coin driving movement whereby said plunger and gate member are returned to their normal positions across said guideway.

2. In an amusement device of the class described having a means for successively propelling a plurality of projectiles, a playing field onto which the projectiles are propelled comprising a rotating disc with an opening therethrough communicating with a guideway for projectiles, means in said guideway arranged to coact with a projectile when lodged therein for releasing a dispensing device, and means actuated by the dispensing device for preventing the propelling of any remaining unplayed projectiles.

3. In a device of the class described comprising a playing field and means for successively propelling a plurality of projectiles thereupon, said playing field having an aperture therethrough in which a projectile may be lodged, said aperture communicating with a guideway, a dispensing device, means in said guideway arranged to engage a projectile passing therethrough for releasing said dispensing device, said means being normally urged to a position latching said dispensing device, and means actuated by the operation of the dispensing device for blocking off unplayed projectiles from said propelling means.

4. In an amusement device having a means for propelling projectiles, a coin receiving apparatus, a playing field and a guideway communicating with said playing field through which projectiles are propelled, a movable barrier on said playing field arranged for barring the passage of projectiles from the playing field to the propelling device, an arm on said coin receiving apparatus arranged to drive a coin therethrough, means on said coin apparatus actuated by a coin passing therethrough for releasing said barrier and permitting the passage of projectiles barred thereby to said propelling means, and common actuating means arranged to successively actuate said coin driving arm and said projectile propelling means.

5. In an amusement device of the class described having a coin receiving apparatus and a propelling device for projectiles, a playing field upon which said projectiles are propelled having an opening in which a projectile may be lodged, means for barring the return of projectiles from the playing field to the propelling device, a means for dispensing tokens, means controlled by a projectile lodged in said opening for releasing the dispensing means, means actuated by the dispensing means for cutting off unplayed projectiles from the propelling device, means controlled by said coin receiving apparatus for releasing projectiles held by the barring means, and means actuated through the release of the barring means for releasing the unplayed projectiles cut off from the propelling device.

6. In an amusement device of the class described having a coin receiving apparatus and a propelling device for projectiles, a playing field upon which said projectiles are propelled comprising a revolving disc provided with a series of baffles and having an opening therethrough communicating with a guideway for projectiles, a movable barrier for barring the return of the played projectiles from the playing field to the propelling device, means for dispensing tokens, means controlled by a projectile lodged in said playing field opening and said guideway for releasing the token dispensing means, a cut-off actuated by said dispensing means and arranged to prevent unplayed projectiles from engaging the propelling device, means controlled by said coin receiving apparatus for moving said barrier and releasing the projectiles held thereby, and means actuated through movement of said barrier for releasing the said cut-off and permitting projectiles to engage the propelling device.

7. In a device of the class described comprising a playing field and a propelling device for successively propelling projectiles upon said playing field, a movable barrier on said playing field arranged to prevent the return of projectiles from said playing field to said propelling device, a coin receiving apparatus, a driving arm on said apparatus arranged to drive a coin therethrough, means on said coin apparatus to be engaged by a coin passing therethrough for moving said barrier to release projectiles held thereby, an actuating arm on said device secured to an actuating shaft, a crank on said actuating shaft connected to a lever arranged to actuate said coin driving arm, a cam on said actuating shaft arranged to actuate said propelling device, said crank and said cam being disposed on said actuating shaft in such a position that said crank will move to actuate said coin driving arm whereby said driving arm will drive a coin through said coin apparatus to actuate the means for releasing said barrier before said cam engages said propelling device to actuate the same, and means actuated by said propelling device for closing said barrier.

8. In an amusement device of the class described having a means for successively propelling a plurality of projectiles, a playing field onto which the projectiles are propelled having an opening therethrough communicating with a guideway for projectiles, means in said guideway arranged to coact with a projectile when lodged therein for releasing a dispensing device, and means actuated by the dispensing device for preventing the propelling of any remaining unplayed projectiles.

9. In a coin receiving apparatus for coin-controlled devices having a coin guideway communicating with a receptacle and a coin driving arm arranged to engage and drive a coin through said guideway, a means for separating coins and perforated tokens comprising a cam arm pivotally mounted on said apparatus, a plunger carried by said cam arm and positioned to extend across said guideway, a lug on said driving arm arranged to engage said cam arm, and a cam surface on said cam arm adapted to be engaged by said lug for moving said cam arm to withdraw said plunger and permit the passage of a coin thereby, said cam surface being arranged to hold said cam arm in a plunger withdrawing position while said driving arm is driving a coin through said guideway, and said cam arm being arranged to return to its normal position when said driving arm has completed its coin driving movement, whereby said plunger is returned to its normal position across said guideway.

10. In an amusement device of the class described having a coin receiving apparatus and a

propelling device for projectiles, a playing field upon which said projectiles are propelled arranged to return the projectiles to the propelling device and having an opening in which a projectile may be lodged, means for barring the return of projectiles from the playing field to the propelling device, a means for dispensing tokens, means controlled by a projectile lodged in said opening for releasing the dispensing means, means actuated by said dispensing means upon being released to prevent the propelling of any unplayed projectiles, and means controlled by said coin receiving apparatus for releasing projectiles held by the barring means and resetting the means actuated by said dispensing means.

WILLIAM E. CALLISON.