

April 28, 1931.

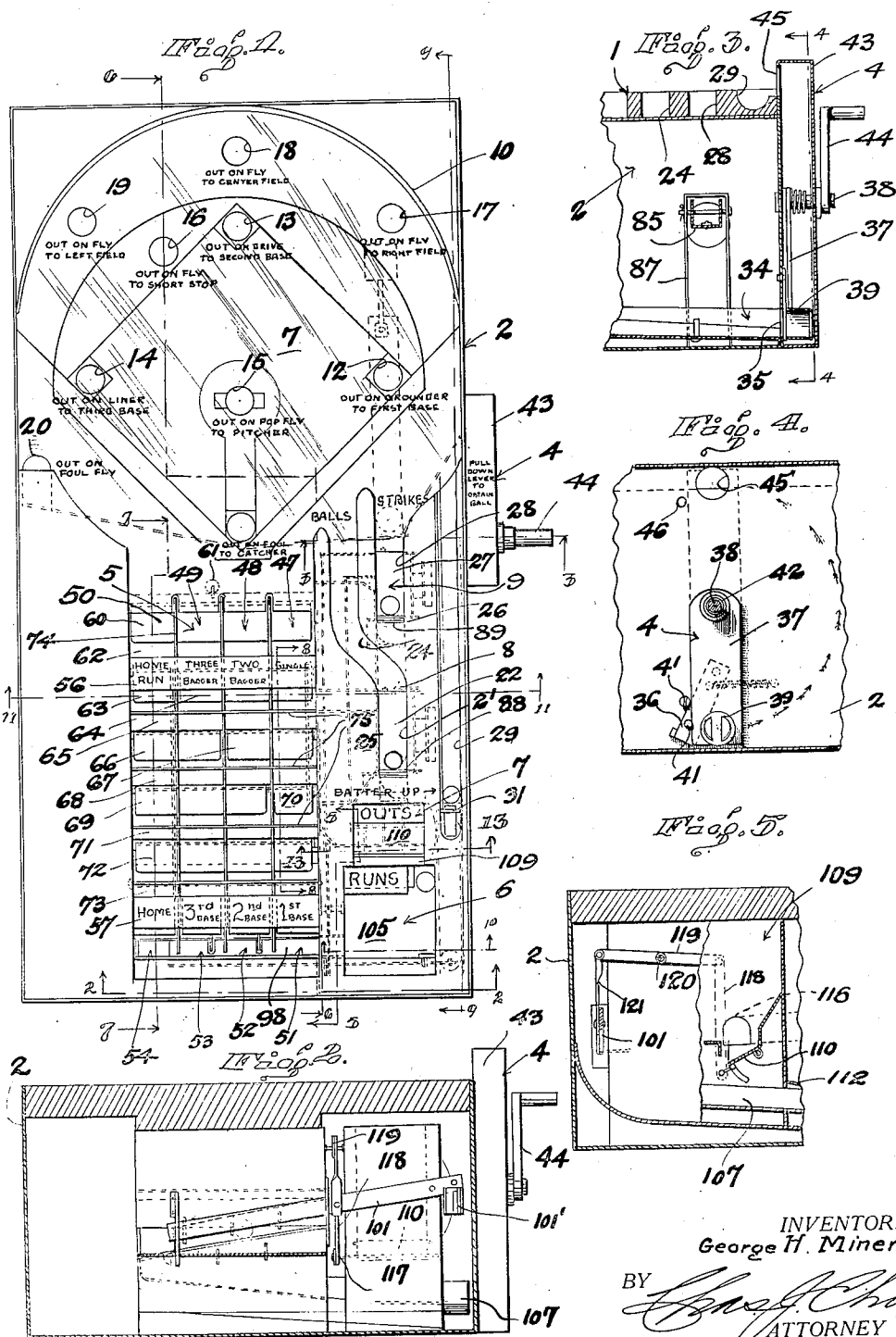
G. H. MINER

1,802,521

GAME APPARATUS

Filed Aug. 14, 1928

4 Sheets-Sheet 1



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GAME APPARATUS

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4 Sheets-Sheet 2

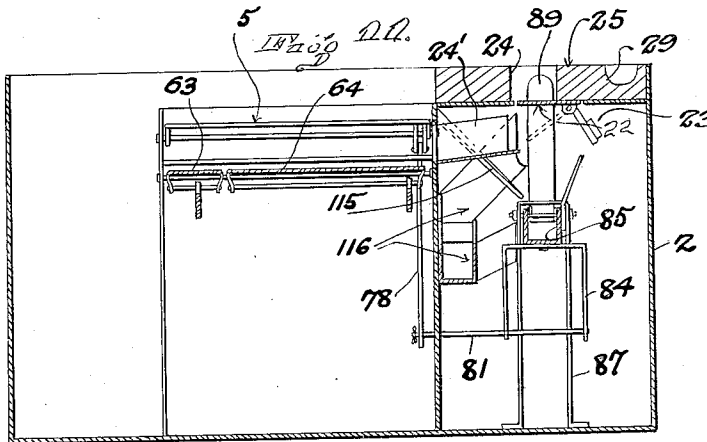


Fig. 12.

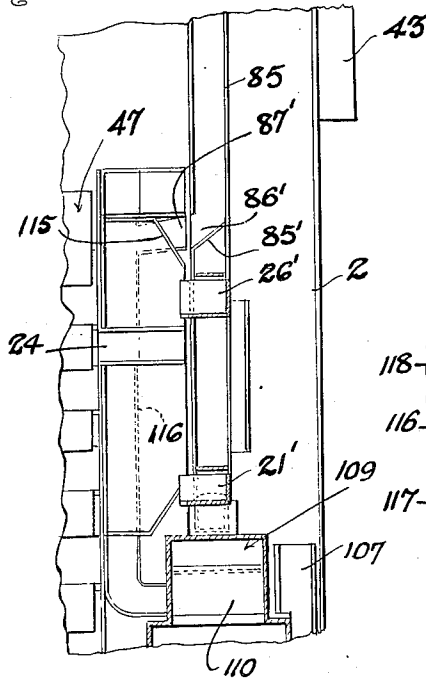
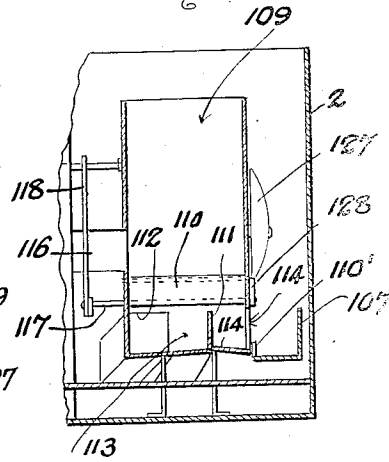


Fig. 13.



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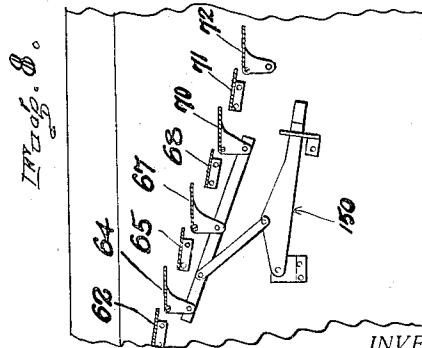
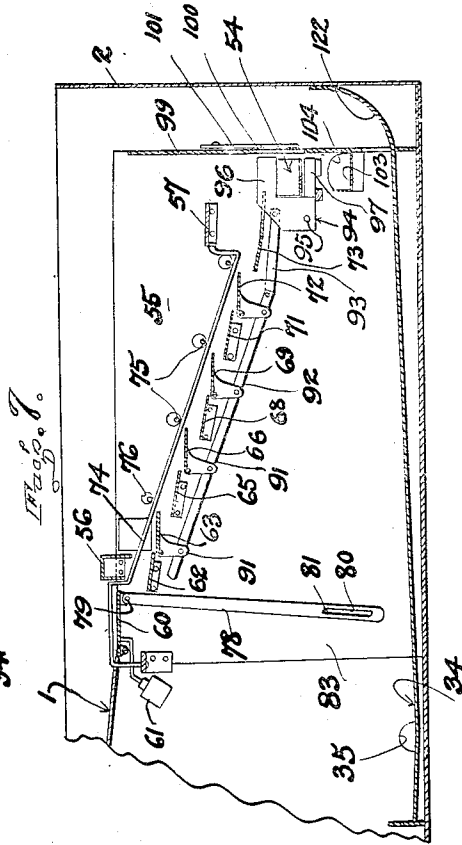
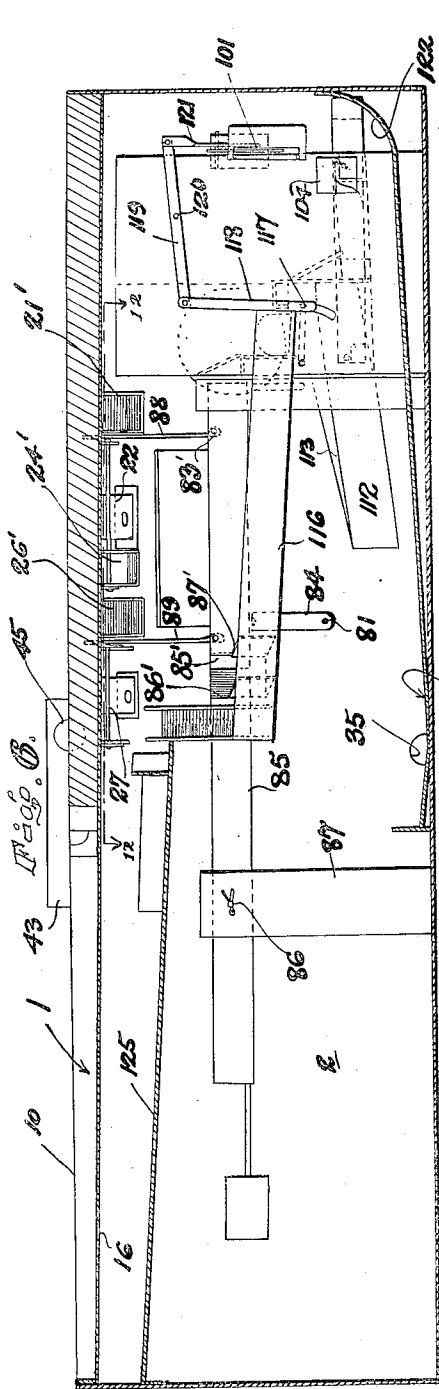
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GAME APPARATUS

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4 Sheets-Sheet 3



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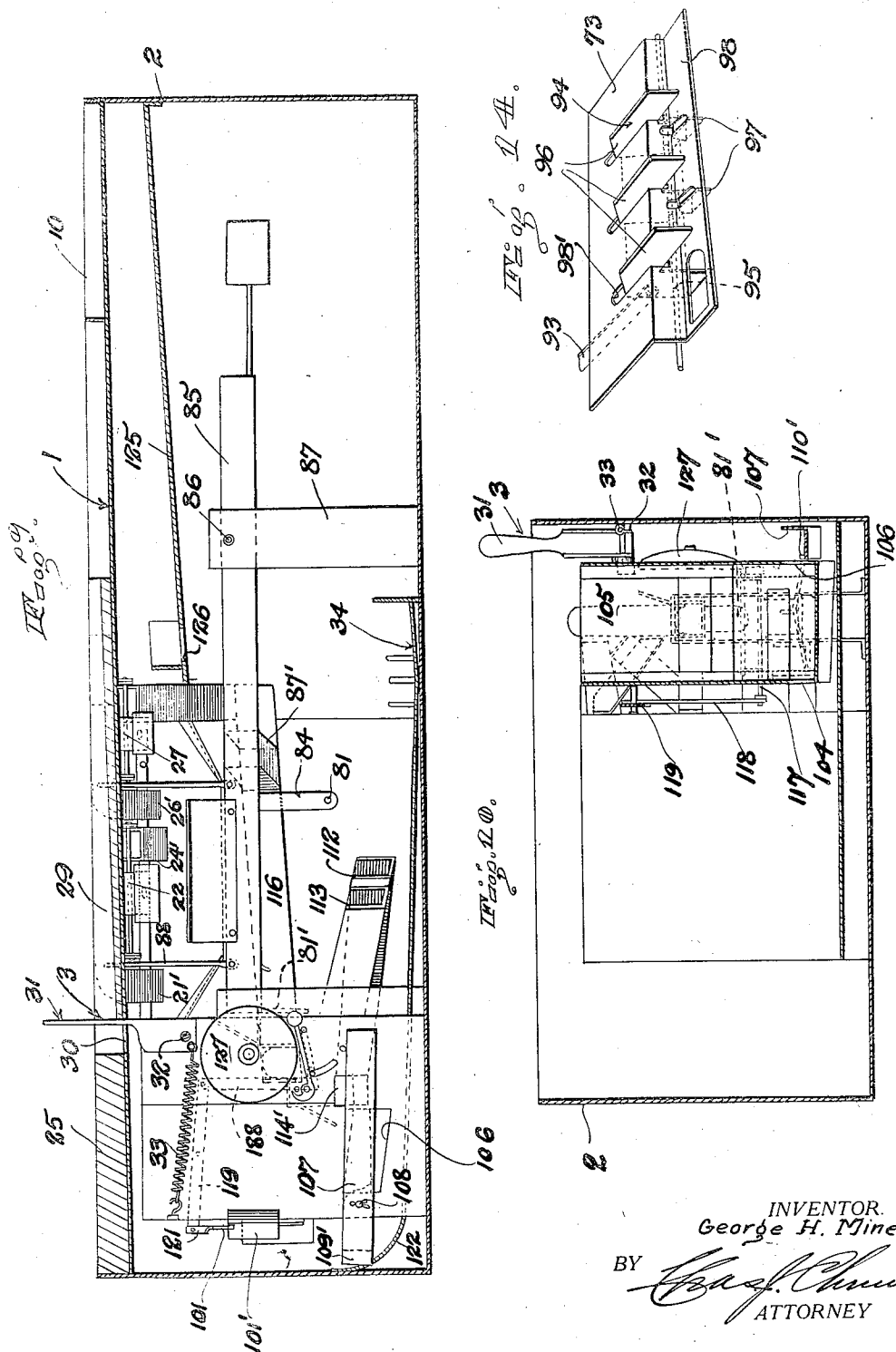
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GAME APPARATUS

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4 Sheets-Sheet 4



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GAME APPARATUS

Application filed August 14, 1928. Serial No. 299,463.

This invention resides in the provision of a ball game apparatus which is novel, unique, and permits of the realistic playing of a ball game, such as base ball, in a highly amusing and interesting manner, the arrangement of the apparatus requiring skill as well as an element of chance, to successfully play the game.

One of the objects of the invention is to provide game apparatus of the character described in which the "playing" and "scoring" of the game takes place automatically incident to the projection of balls over the playing surface and the gravitation of the balls into operative relation to various "play" and "score" indicating mechanisms.

Another object of the invention is to provide game apparatus of the character described in which the ball game pieces, by the position that they reach after gravitation and following projection thereof onto the playing surface, indicate the "playing" and "scoring" of the game, there being means which when encountered by a ball in play, automatically causes a previously played ball to move from one indicating or scoring position into another so that the progressive "playing" and "scoring" will be automatically carried on.

A further object of the invention is to provide game apparatus of the character described which is particularly arranged to play the game of base-ball, and which includes a novel "hit" indicating and "men-on-base" indicating and advancing means that includes "1st", "2nd", and "3rd" base pockets and a "home" plate pocket, into which pockets the balls gravitate from the playing surface. This means is arranged so that the balls in play will automatically advance from one pocket to another and towards the "home" pocket during the playing of the game dependent on the kind and number of "hits" made with the balls as the latter are successively played and gravitate into operative relation to said means.

A further object is to provide in apparatus of the character described a means for automatically clearing all of the indicating points and pockets of balls which may be con-

tained in said pockets or points, incident to the creation of a "three out" condition, thereby preparing the apparatus for the next player.

A still further object is to provide in mechanism of the character described a simple and efficient means for feeding balls into position to be projected onto the playing surface, this means being subject to operation by a short movement of an operating member.

The apparatus of this invention is particularly efficacious for use as a table game, or as a coin-in-the-slot game such as now publicly used in cigar stores, pool rooms, and other public places, in that the operator is only required to move a single operating element to place a ball in position to be projected and to then operate the projecting means in order to play the game, the entire operation of the "indicating" and "scoring" progressively the plays as they are made and of clearing the apparatus of the game pieces after an "inning" of one player or operator, being automatic and subject to visualization by the players or operators.

With the above mentioned and other objects in view, the invention consists in the novel construction and combination of parts hereinafter described, illustrated in the accompanying drawings, and set forth in the claims hereto appended, it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Referring to the drawings:

Fig. 1 is a top plan view of game apparatus constructed in accordance with this invention.

Fig. 2 is a sectional view taken on the plane of line 2—2 of Fig. 1, particularly showing the means for clearing the pockets.

Fig. 3 is a fragmentary sectional view taken on the plane of line 3—3 of Fig. 1, particularly showing the means for feeding balls into position to be projected onto the playing surface.

Fig. 4 is a sectional view taken on the plane of line 4—4 of Fig. 3.

Fig. 5 is a sectional view taken on the plane of line 5—5 of Fig. 1, particularly showing the "three out" trap and its associated mechanism.

Fig. 6 is a longitudinal sectional view taken on the plane of line 6—6 of Fig. 1.

Fig. 7 is a fragmentary longitudinal sectional view taken on the plane of line 7—7 of Fig. 1, particularly showing the arrangement of hinged steps as they appear in the "home run" runway.

Fig. 8 is a fragmentary sectional view taken on the plane of line 8—8 of Fig. 1, particularly showing those of the steps which are not actuating steps, and the counter-balance means for said steps.

Fig. 9 represents a longitudinal sectional view taken on the plane of line 9—9 of Fig. 1.

Fig. 10 represents a cross sectional view taken on the plane of line 10—10 of Fig. 1, particularly showing the arrangement of the "three out" and "run" compartments, with their associated mechanisms.

Fig. 11 is a cross sectional view taken on the plane of line 11—11 of Fig. 1, particularly showing the "ball" indicating pocket and its associated elements, certain other parts of the mechanism being omitted.

Fig. 12 represents a fragmentary horizontal sectional view taken on the plane of line 12—12 of Fig. 1, particularly showing the counter-balanced trough and the arrangement of the chutes for the balls, also the "out" indicating compartment.

Fig. 13 represents a fragmentary sectional view taken on the plane of line 13—13 of Fig. 1, particularly showing the "out" compartment and its associated mechanisms.

Fig. 14 represents a perspective view of a detail of the invention showing the detent mechanism and part of the "men-on-base" indicating pockets associated therewith.

One embodiment of the automatic ball game apparatus of this invention generally comprises a playing surface 1 simulating a base ball diamond, a casing 2 supporting said surface and containing various mechanisms of the apparatus, a ball projecting device 3 for directing miniature balls over the playing surface, a ball feeding device 4 which, on operation thereof, delivers a ball to the projecting device, an automatic combined "hit" indicator and "men-on-base" advancing and indicating device 5, an automatic "run" or score indicating device 6, an automatic "out" indicator and trap device 7, and automatic "ball" and "strike" indicators and trap devices 8 and 9. These with other devices and mechanisms as will be more fully described hereinafter, are interrelated and arranged so that the "playing" and "scoring" of the game takes place automatically incident to the projection of the balls over the playing surface and the gravitation of the balls into operative relation to the

above described devices and mechanisms. The balls on encountering these devices and mechanisms cause said devices to operate and thereby cause the automatic "playing" and score indicating of the game. The projection of one ball onto the playing surface, comprises a "play" and on each succeeding play the "men-on-base" advances, balls, strikes, outs and runs are all automatically properly indicated until a "three-out" condition is reached, whereupon the balls are caused to automatically gravitate out of "indicating" positions and the apparatus is restored to normal and ready for the next "inning".

Playing surface

The playing surface 1, provided as the cover of the casing 2, is set below the plane of the upper edges of the vertical walls of the casing in order that the balls will be prevented from rolling off the margins of the playing surface. A curved strip 10 is mounted in upstanding position at the outer end of the playing surface so that the balls will be guided around the margin of the "out field" portion of said surface, which surface has the representation of a base-ball "diamond" provided thereon. At the "home plate", "1st base", "2nd base", "3rd base", "pitcher", "short stop", "right field", "center field" and "left field" designations on the playing surface, are openings 11, 12, 13, 14, 15, 16, 17, 18 and 19 respectively, through which openings the balls may drop dependent on the manner of projecting the balls onto the playing surface. These openings 11 to 19 are "out" openings, an "out" being scored against the player should the ball drop through one of them. Near the 3rd base point and close to the adjacent side wall of the casing, the playing surface is inclined for a short distance into another "out" opening 20. The "surface" is inclined so that the balls will roll towards the "home plate" end of the playing surface after being projected onto the out field end of said surface.

"Ball" indicator and trap device

This mechanism generally designated 8, comprises an opening 21 in the playing surface, which opening is normally closed by a trap door 22. This door is hinged to lie flush with the playing surface and has a weight 23 attached thereto so as to hold the door closed until four playing balls are simultaneously supported on the door, at which time the weight of the four balls opens the trap and the balls drop through the opening 21. The balls are guided onto the trap door by a slot 24 formed in a part of a partial cover piece 25, which part of said piece lies on the playing surface with the open end of the slot closer to the "diamond", and the other end over the trap door. A chute 24' conducts one ball from the trap into 1st base position

when a base-on-balls condition is reached. A chute 21' extends down from the opening 21.

Strike indicator and trap device

This means generally designated 9 is like the "ball" device 8 in that it comprises a similar opening 26 in the playing surface, a similar counter balanced trap door 27, and a guide slot 28. When three balls (strikes) are supported on the trap 27, the trap lowers and the balls drop through the opening 26. A guide chute 26' extends downward from the opening 26.

Ball projecting device

This means generally designated 3 includes a groove 29 in the cover piece 25 which groove opens onto one corner of the playing surface. At the closed end of this groove is a slot 30, upwardly through which a "bat" lever 31 extends, said lever being pivoted at 32 within the casing 2 and normally held in extended position by a retractile spring 33. The lever is retracted against the action of the spring and let go so as to strike or project a ball lying in the groove 29, thereby directing the ball out of the groove onto the playing surface. The bottom of this groove is inclined so that the balls when placed in the groove will roll into position to be projected by the bat 31 onto the playing surface.

Ball feeding device 4

This device includes a ball reservoir 34 having an inclined floor and formed on the bottom of the casing 2, into which reservoir the balls roll from the playing surface and other parts of the apparatus as will be later more fully described. From the reservoir the balls roll through an opening 35 in the side of the casing. The opening 35 is normally closed by a spring operated trap door 36. An arm 37 is fixed to a shaft 38 journaled in the side of the casing 2 and on the lower end of this arm is a bucket 39 which is adapted to register with the ball discharge opening 35. A projection 40 on the trap door 36 is engaged by the arm when the latter is swung downward and the trap opens in time to permit a ball to run out through the opening 35 into the bucket 30 on said arm. A stop 41 limits the movement of the arm to a position bringing the bucket into registration with said opening 35. A spring 42 on the shaft 38 operates to normally hold the arm in position to pick up a ball in the bucket 39. A suitable housing 43 covers the shaft, arm, and trap. A crank arm 44 is fixed to the outer end of the shaft on the outside of the housing and when turned from its normal position raises the arm with the ball in the bucket 39, until the bucket registers with an outlet opening 45 in the housing, which opening is located near the open end of the groove

29. The bucket is so inclined that the ball will run out through the opening 45 into the groove 29 where it will gravitate into position lying against the bat 31. As the bucket moves away from the opening 35 the spring operated trap closes said opening.

The spring 42 moves the shaft, arm and crank arm back to normal position and another ball rolls into the bucket. The open side of the bucket is closed by the side of the housing when the bucket is out of registration with the openings 35 and 45, thereby preventing the ball from rolling out of the bucket. A stop 46 on the casing 2 limits the movement of the arm 37 to a position of registration of the bucket 39 with the opening 45.

The automatic hit indicator and men-on-base advancing and indicating device

This means generally indicated by the numeral 5 comprises a series of parallel inclined "hit" indicating runways as follows: a "single" runway 47, a "two bagger" runway 48, a "three bagger" runway 49, and a "home run" runway 50. The upper and entrance ends of these runways are flush and contiguous with the playing surface so that the balls which, after missing the "out" openings and "ball" and "strike" traps on said surface may roll into any one of the several runways and thereby score a "hit" or a "run" as the case may be. These runways terminate at their lower ends in pockets as follows: a 1st base pocket 51 at the end of the "single" runway 47, a 2nd base pocket 52 at the end of the "two bagger" runway 48, a "3rd base" pocket 53 at the end of the "three bagger" runway 48, and a "home plate" pocket 54 at the end of the "home run" pocket 50. By this arrangement the ball having made a "hit" and running into one of the pockets indicates to the player the man-on-base position and the kind of "hit" made. This apparatus is clearly visible to the operator of the apparatus and is enclosed in a casing 55 which latter is open on its upper side. The cover piece 25 extends around the upper margins of said casing 25 and is cut away so as to leave the casing 25 open. A plate 56 extends across the upper ends and above the runways and bears the legends "Single", "Two bagger", "Three bagger" and "Home run", properly aligned with and designating the respective runways. A similar plate 57 is placed above but slightly ahead of the pockets and bears the legends "1st base", "2nd base", "3rd base" and "home".

The runways comprise a series of plates arranged as steps, extending transversely across the casing 55. The uppermost step 60 is hinged to swing downward and is counter-balanced by a weight 61 whereby it will remain level and flush with the playing surface until a ball rolls thereon at which time the weight of the

ball will tilt the step downward and allow the ball to roll down one of the runways. The next step 62 is fixed in level position between the walls of the casing 55. The next 5 step is divided into two sections 63 and 64, each of which is hinged and counter-balanced as is the top step 60. The short section 63 is in the "home run" runway, whereas the longer section 64 is extended as a single piece 10 across and is a part of the other runways.

The next step 65 is fixed and extends entirely across the runways like the 2nd step. The next step is divided into sections 66 and 67 of equal length and is hinged and counter- 15 balanced as are the other hinged steps, each section extending across a pair of the four runways.

The next step is divided into sections 69 and 70 hinged and counter-balanced as are 20 the other hinged steps. The section 69 extends across the "home run", "three bagger" and "two bagger" runways, and the other section 70 extends across the "single" runway.

The next step 71 is fixed. The next step 72 25 is extended across the entire group of runways and is hinged and counter-balanced as is the 1st step. The bottom step 73 is fixed and the balls will roll over it into the "on-base" indicating pockets beneath it. The run- 30 ways are defined by spaced parallel guide rods 74 and by the side walls of the casing 55. Extending transversely across the runways over the hinged steps are light rods 75 the ends of which rest in openings 76 in the side 35 walls of the casing 55. These rods retard the downward travel of the balls so as to insure the downward swinging of the hinged steps in the runways. The rods are forced upward slightly by the balls and after slight check- 40 ing of the downward movement of the balls, release the balls to permit them to roll further downward. The hinged steps must be swung downward to provide for operation of other parts of this mechanism as will be here- 45 inafter fully described.

Means is provided for automatically opening the traps of the "balls" and "strike" indicating and trap devices when a "base hit" is 50 made and one of the balls rolls over the uppermost step 60. This means includes a plunger 78 pivoted at 79 to the step 60 and is provided with a slot 80 near its lower end, through which slot a pin 81 loosely extends. This pin extends through and is vertically 55 movable in a slot 82 provided in the adjacent wall 83 of the casing 55, said pin being carried on an arm 84 which depends from a trough member 85. The trough 85 is pivoted as at 86 on a standard 87 and serves as a run- 60 way guide for the balls as will be later more fully described. Pivoted as at 83' and extending upwardly from the trough 85 are detent members 88 and 89 which are respectively associated with "ball" device 8 and 65 the strike device 9. The detents 88 and 89

are located at the ends of trap doors 22 and 27 and serve as stops to prevent the balls from rolling endwise off the doors. When a ball rolls over and depresses the top step 60, the plunger 78 moves the pin 81 down- 70 ward and rocks the trough so that the members 88 and 89 are lowered. This permits balls which may be on the trap doors 22 and 27 to roll off and drop through the openings 21 and 26 directly into the trough 85. The 75 step 60 and plunger 78 return to normal position as soon as the ball rolls off the step 60, the slots 80 and 82 permitting the return of the plunger and step, whereas the trough remains in tilted position until the ball or balls 80 therein, roll out of the trough after which the trough is returned to normal by the weight 90 and the detents 88 and 89 are returned to operative position. In this way the step 60 serves as the operating trigger 85 for the means which clears the "ball" and "strike" indicating traps when a base hit is made. A stop 81' limits the movement of chute 85.

The steps 63, 66, 69 and 72 each have a 90 crank arm 91 depending therefrom and each crank arm is pivotally connected with a reciprocal bar 92 which bar is connected by a link 93, with a detent member 94. This detent 94 is pivoted on a rod 95 extended across 95 the casing 55, said detent including an upper series of spaced detent plates 96 and a lower series of smaller spaced detent plates 97. An inclined plate 98 is extended across the casing 55 between the upper and lower 100 sets of detent plates. The wall 99 of the casing 55, which wall is parallel with the plate 98, is formed with a slot or opening 100, which opening is normally closed by a pivoted closure bar 101. This bar 101, the inclined plate 105 98 and the spaced detent plates 96 define the 1st base, 2nd base, 3rd base and home, pockets, which latter are designated 51, 52, 53 and 54 respectively. The plate 98 is disposed below the plane of the last step 73 whereby balls 110 will roll off said step onto the plate, which latter is inclined towards the "home" pocket 54, this pocket being open to permit the balls to drop through it. Said plate 98 is also 115 inclined towards the closure bar 101 so that normally the balls will rest and roll against said bar, and when said bar is raised the balls will roll off the plate out through the opening 100 and clear of the "on-base" indicating pockets. Normally the upper set of 120 detent plates 96 prevent the balls from rolling from one "pocket" into another and the lower set are normally disposed below the plane of the runway plate 98. However, when any one of the steps 63, 66, 69 and 72 is depressed, 125 the bar 92 is moved so that the detent member 94 rocks on its pivot and lifts the upper set of detent plates 96 out of obstructing position thereby permitting the balls which may be in any one of the "men on base" pockets 130

51, 52 and 53 to roll towards the "score", the "home" pocket 54, as will be later described. When the upper set of detents 96 is raised the lower set 97 extends up above the plate 98 through slots 98' in said plate and as the plates 97 are located between pairs of the plates 96, the balls will be held by the plates 97 until the detent 94 returns to normal and the plates 96 and 97 are returned to operative and inoperative positions respectively. The detents 97 operate to prevent the balls from advancing more than one base on each complete operation of the detent member 24 as a whole.

Run or score device 6

Disposed below the plate 98 is a "run" chute 103 into which the balls drop from the open "home" pocket 54. This chute is inclined towards an opening 104 formed in one side wall of the casing 55. The opening 104 communicates with the "run" compartment 105 of the run indicator 6, said compartment being open at the upper side of the main casing to permit full visualization thereof by the players. This "run" pocket or compartment 105 has a bottom which inclines towards an outlet opening 106 which opening communicates with a runway 107 leading to the ball reservoir 34 near the ball feeding device 4. The runway 107 is pivoted as at 108 and weighted as at 109' so that it normally lies with a cut away portion 110' thereof extending across the outlet opening 106 and prevents the balls from rolling out of the run compartment. The runway is lowered to permit the balls to run into it from the "run" compartment by the weight of a ball which ball is delivered into the runway from the "out" device 7.

Out indicator and trap device 7

This device includes a compartment or pocket 109 open on its upper side in the same manner as the run compartment so that the interior thereof may be visualized by the player. In the bottom of this compartment is a counter-balanced trap door 110 which when three of the playing balls are supported thereon will also, due to the weight of the balls, allow the balls to drop past the trap into the lower part of the compartment. Two of the balls will drop past a partition 111 into chute 112, which latter is inclined towards the reservoir near the feed device. The other of the three balls will strike a plate 114 which is inclined laterally towards the side of the casing, whereby the ball will roll through opening 114' into the pivoted runway 107. When the weight of this ball is placed on the runway, said runway is tilted so that it moves below the plane of the outlet opening of the run compartment and permits any balls in the run compartment to roll into the chute. In this way when a three out condition is

reached, the run compartment is automatically cleared of balls which are directed into the reservoir in running out of the chute 107. The trap door of the "strike" indicating compartment when lowered, permits the three balls necessarily contained therein when said trap is lowered, to roll off the door, two of them onto a plate 115 which directed them into the pivoted trough member 85, and the other of which balls passes into a chute 116 which runs to the "out" compartment opening into the latter so that the ball will drop onto the trap door 110. In this way, when a "three strike" condition is reached in playing the game, an "out" is automatically scored and indicated by the presence of one ball in the "out" compartment.

The trap door of the "out" compartment is connected by means of a member 117 with an upright link 118, which latter is pivoted to one end of a rocker arm 119, the rocker arm being pivoted at 120 between its ends. The other end of the rocker arm is connected by a link 121 with the closure bar 101, which bar is provided with a counter-weight 101' which facilitates the raising of the bar. By this arrangement, when the trap door lowers on a "three out" condition, the rocker 119 is rocked so as to lift the door 101 out of closing position and any balls contained in the "man-on-base" indicating pockets 51, 52 and 53 will roll out of said pockets onto an inclined bottom member 122, which bottom member causes the balls to gravitate to the reservoir located adjacent the feeding device 4.

Beneath the playing surface 1 is an inclined pan 125 into which balls drop from the playing surface through the openings numbered 11 to 20 inclusive. This pan is inclined towards a ball discharge opening 126, which opening is immediately over the counter-balanced trough member 85, whereby the balls will drop into the trough. The balls drop into said trough at a point such that the weight of a ball will tilt the trough member downward, and pull downward on the detents 88 and 89 located at the ends of the "ball" trap 22 and the "strike" trap 27. In this way each time that a ball in play passes through one of the openings on the playing surface and eventually drops into the trough 85, or in other words, each time that an "out" is made, the "ball" and "strike" trap devices are operated so that the balls which may be in said traps and which serve to indicate "balls" and "strikes", will gravitate clear of said traps.

The chute or trough 85 is provided with a stop or partition 85' which causes the balls that drop into the chute from the discharge opening 126, or in other words, the balls which have made "outs" by dropping through the openings on the playing surface, to be deflected out through a lateral opening 86' in the side of the chute and into a short chute

87' which leads into the chute 116, that in turn leads to the "out" compartment.

When four balls are supported on the "ball" trap door 22, three of said four balls will be conducted by a chute or runway 130 directly into the pivoted chute 85 and will then roll down said chute to the ball feed device, as previously described. Likewise, two of the three balls that roll off of the "strike" trap door 27, pass over the chute 130 which directs them into the pivoted trough 85. In this way all of the balls which drop through the openings on the playing surface, with the exception of one of four balls on the trap 22, and one of three balls on the trap 27, will be delivered into the chute 85.

I may employ a bell 127 mounted on the side of the "out" compartment, the clapper 128 for which bell is connected to a guide pin 129 on the "out" trap 110. By this arrangement when the trap which is counter-balanced, returns to normal position after dropping the three "out" balls, the clapper will strike the bell and give a signal to the player that his "side" has been retired, or in other words, a "three out" condition has been reached. A chute 113 receives balls from the lower end of trough 85 and directs the balls toward the feeding device.

Operation

Assuming that the indicating pockets and traps are clear of balls, to start the game the player turns the crank 44 of the feed device and raises the bucket 39 so that the ball in said bucket will roll out and pass through the opening 45 into the inclined groove 29, whereupon the ball will roll down the said groove and come to rest adjacent to or against the ball projecting bat 31. The player then pulls back this bat lever 31 against the action of the spring 33 and lets go of the bat, causing it to project the ball out of the groove and onto the playing surface 1. The playing surface may be inclined in various ways in order to make necessary a skillful projecting of the ball onto the playing surface to obtain a "hit" or to make other advantageous "plays". However, the field or playing surface is generally inclined towards the "home" plate point so that the balls will have a tendency to roll past said point and into the automatic "hit" indicator, and "men-on-base" advancing and indicating devices.

Assuming that the ball in play drops through one of the openings designated 11 to 20 inclusive, the player, that is the ball in play, is "out", for the ball then drops into the pan 125 and will roll to and drop through the opening 126 of the pan, and then drop into the trough 85. From the trough, the ball is deflected by the partition 85' out through the opening 86', into the chute 87' and then into the chute or runway 116, which discharges directly into the "out" compart-

ment or pocket 109, the ball coming to rest on the trap door 110. In this way the operator of the game apparatus may, on looking into the "out" compartment, determine the fact that there is one "out" against him. The next play is made by again operating the feed lever 44 to bring a ball into place and project it onto the playing surface. Assume that on this play, the ball avoids the openings on the playing surface and runs into the "strike" pocket and rests on the trap door 126. Assume that the next ball played runs into the "ball" compartment and rests upon the trap door 22 of said compartment. Thus, by continuing this projection of the balls onto the playing surface, it is possible to produce a condition in which three of the balls put into play rest upon the trap door 22 of the "ball" indicating device and two of the balls rest on the trap door 27 of the "strike" indicating device. With this condition and with but one "out" scored in the "out" compartment, when the next ball is played, should the ball avoid the openings in the playing surface and avoid the "ball" and "strike" pockets, it will run down one of the special runways forming a part of the automatic "hit" indicator and "men-on-base" advancing devices. Assuming that this ball rolls down the "single" runway 47, a one base hit is scored and a player (the ball) then runs into the "1st base" pocket 51. When this ball first encounters the top step 60 in said runway 47, said step is depressed by the weight of the ball and the plunger 78 connected with said step is pushed downward and by this action moves the pin 81 downward, which pin is carried by the pivoted trough member 85. This action swings the trough downward and withdraws the detents 88 and 89 which are located at the ends of the trap doors 22 and 27 for the "ball" and "strike" indicating devices. By this action the balls roll endwise off said trap doors and enter the trough 85 at a point between the open end of the trough and the partition 85', whereby the balls will roll out of the trough and down through chute 113 to the ball reservoir in the bottom of the casing. If the ball previously described as having made a "hit" should roll into the "strike" trap instead, the weight of the three balls on the trap door 27 will lower the trap and the balls will roll, two of them, into the trough 85, and the other of the three balls will roll into the chute 116. This ball then rolls down the chute 116 to the "out" compartment and comes to rest on the trap door of said "out" compartment. This play would then result in a second "out" rather than a "hit". If this ball should roll into the "ball" pocket instead of the "hit" runway 47, or the "strike" pocket, both as previously described, then the trap 22 will lower and the balls will roll over the trap, three of them into the trough 85 so as to be directed

to the supply or collection of balls near the feeding device, whereas the fourth ball will run through the chute 24' and drop into the "single" runway 47 where it will gravitate into the "1st base" pocket 51, thus giving a "base on ball" play. This ball enters the "single" runway 47 at a point below the top step 60, so that the operation of the detents 88 and 89 does not take place as when a ball rolls over and depresses said top step.

If a ball is contained in the "1st base" pocket 51, and another ball rolls into the top of the runway 47 towards said pocket, the ball in the pocket will automatically advance into the next pocket 52. This is brought about by the last played ball rolling over and depressing the lower hinged step 72 in said runway 47, which step, through the crank arm 91, moves the bar 92 and through the link 93 rocks the detent member 94 on its pivot. When the detent rocks in this manner, the upper series of detent plates 96, one of which plates serves to hold the ball in the pocket 51, are raised and the ball then rolls on the inclined bottom of said pockets from the "1st base" pocket 51 into the "2nd base" pocket 52. Before the detent plates 96 lower into obstructing position again, the lower series of detent plates 97 which are raised into obstructing position when the detents 96 are moved out of obstructing position, then act to hold the ball against further movement. Therefore by the time the detent plates 96 move back into obstructing position, the detent plates 97 are out of obstructing position and the ball will roll against the obstructing plate 96 defining the lower end of the pocket 52. Should a ball roll down the runway 48 as in making a "two base hit", it causes a double operation of the detent apparatus, due to the fact that in this runway are two actuating steps, namely, the steps 69 and 72. The operations of the detent, caused by the ball rolling over the steps 69, is the same as that which takes place when the ball rolls over the step 72. As these steps are spaced apart in the runway, there is a pause between the two operations of the detent. On these two operations of the detent, a ball in the "1st base" pocket 51 would advance to the "3rd base" pocket 53, or a ball in the "2nd base" pocket 52 would advance to the "home" pocket 54. Any ball eventually reaching the "home" pocket 54 drops through the bottom of the pocket and into a trough which conducts the ball by gravitation into the "run" or "score" compartment 105.

To make clear the operation of the automatic "men-on-base" advancing means, it must again be pointed out that each time a ball in play rolls down from the top of the "single" runway 47, a ball held in any one of the pockets 51, 52 or 53 will be advanced one pocket. For example, if there is a ball in the

"3rd base" pocket 53, it will roll into the "home" pocket and score a "run".

Should a ball roll down the "3rd base" runway 49, three successive operations of the detent plates 96 and 97 are brought about, due to the fact that in this runway there are three hinged steps which operate the detent devices, said steps being designated 66, 69 and 72. Therefore, if a ball is contained in the "1st base" pocket 51, when a ball in play scores a "three base hit", the ball in the "1st base" pocket is successively advanced into the "home" plate pocket, and a "run" is scored, and by the time the ball making the "three base hit" reaches the bottom of the runway 49, the detent plate 96 defining the lower side of said pocket is back in position to hold the ball in the "3rd base" pocket. When a ball in play runs down the "home run" runway 50 in which there are four hinged steps, designated 63, 66, 69 and 72, all of which steps are connected with the bar 92 that operates the detent device 94, the detent device operates four times. Thus, if a ball is in the "1st base" pocket when the ball in play runs over the last hinged step 72, the detent 96 is lifted and allows the ball on base to roll into the "home run" pocket just prior to the ball which makes the "home run" and both balls will then roll into the "run" compartment. In this way the making of a home run "clears the bases".

When a "three out" condition is reached during the playing of the game, the weight of the three balls in the "out" compartment resting on the trap door 110, causes said door to lower and the balls then roll, two of them, downward into the chute 112 and to the feed device in the bottom of the main casing, whereas the third ball rolls laterally on the plate 114 into the pivoted runway 107. The weight of this ball on the runway lowers the runway so that it moves below the plane of the outlet opening 106 of the run compartment 105, allowing the balls in the run compartment to roll through said opening into the chute 107 and from thence to the feed pocket or reservoir. In this way the "run" compartment is cleared automatically when the "three out" condition is reached. The base pockets 51, 52 and 53 are also automatically cleared of any balls that may be contained therein by the raising of the closure bar 101. This bar is raised by the member 117 which is connected with the trap 110 and with an upright link 118, which latter is pivoted to a rocker arm 119. The rocker arm is being pivotally connected by a link 121 with the bar 101, causes said bar to raise when the "out" trap 110 is lowered. The counter-weight 101' returns these parts to normal position. The bell device, previously described, causes the bell to automatically sound when the trap 110 returns to normal position, thereby giving an audible signal to indicate that the "side" has been retired.

It will be noted that the steps 64, 67 and 70, while being hinged and arranged to swing downward when a ball rolls over them, do not cause an actuation of any other mechanism when depressed. These steps are counter-balanced by the means 150 so that they will return to normal position. The balls are required to force their way past the rods 75 as the hinged steps lower, said rods rising slightly after a temporary checking of the flight of the balls, and on such rising, allowing said balls to roll on past them.

While I have not disclosed a coin control mechanism in connection with this apparatus, it will be readily apparent to those skilled in the art to which this invention relates, that such an apparatus suitably made, may be readily associated with the mechanism of this invention in order that the depositing of a coin will be necessary before the game apparatus may be played.

When a "three strike" condition is reached, any balls held in the "ball" indicating pocket will be allowed to roll out of said pocket. This is caused by the balls rolling onto the pivoted trough 85, which trough each time a ball is directed into it, will lower and withdraw the detents 88 and 89. The same condition is had when four balls are supported on the trap door 22, certain of said balls entering the trough 85 and lowering said trough so that the detent 89 is withdrawn and the balls which may be contained in the "strike" pocket will roll out of said pocket.

I claim:

1. Ball game apparatus comprising a playing surface; means for projecting a ball onto said surface; play indicating pockets towards which said surface is inclined and into which pockets balls may gravitate from said surface; means actuated by a ball in play for causing a previously played ball to advance from one pocket to another, another pocket into which balls may gravitate from said playing surface; and means associated with the first named pockets and the last named pocket, which means is actuated by the weight of a predetermined number of balls disposed in the last named pocket, for causing the discharge of balls from all of said pockets.

2. Ball game apparatus comprising a playing surface; means for projecting a ball onto said surface; a plurality of play indicating pockets into which balls gravitate from said surface; and means actuated upon the deposit of a predetermined number of balls in one of said pockets for causing the gravitation from said pockets of any and all balls that may be contained therein.

3. Ball game apparatus comprising a playing surface having a plurality of openings therein through which balls may drop; means for projecting a ball onto said surface; a plurality of play indicating pockets into which balls may gravitate from said surface; an-

other pocket; means for directing balls which drop through said openings into the last named pocket; and means actuated when a predetermined number of balls are contained in the last named pocket for causing a gravitation from all of said pockets of any balls that may be contained therein.

4. Ball game apparatus comprising a playing surface having a plurality of openings therein through which balls may drop; means for projecting balls onto said surface; play indicating pockets into which balls may gravitate from the playing surface; means in certain of said play indicating pockets, which means is actuated upon the deposit in said pockets of a predetermined number of balls, for causing said predetermined number of balls to gravitate from said pockets; and means actuated by a ball having dropped through one of said openings for causing discharge of any balls which may be contained in the last named pockets.

5. Ball game apparatus comprising a playing surface having a plurality of openings through which balls may drop; means for projecting balls onto said surface; a plurality of play indicating pockets into which balls may gravitate from said surface; means in certain of said pockets actuated upon the deposit of a predetermined number of balls for causing discharge of said predetermined number of balls from said pockets; means operated by a ball which has passed through one of said openings for causing discharge of balls under a predetermined number, from said pockets; and means actuated by a ball in its passage towards one of the other of the pockets for causing actuation of said ball discharging means.

6. Ball game apparatus comprising a playing surface having a plurality of openings through which balls may drop; means for projecting balls onto said surface; a plurality of play indicating pockets into which balls may gravitate from said surface; means in certain of said pockets actuated by the presence of a predetermined number of balls for causing discharge of said predetermined number of balls from said pockets; means operated by a ball which has passed through one of said openings for causing discharge of balls under a predetermined number from said pockets; means actuated by a ball in its passage towards one of the other of the pockets for causing actuation of said ball discharging means; another play indicating pocket; means for conducting balls which drop through said openings onto the last named play indicating pocket; and means in the last named indicating pocket actuated upon the deposit of a predetermined number of balls for causing a discharge of balls that may be contained in any and all of the total number of pockets.

7. Ball game apparatus comprising a play-

ing surface having a plurality of openings through which balls may drop; means for projecting balls onto said surface; a plurality of play indicating pockets into which balls may gravitate from said surface; means in certain of said pockets actuated by the presence of a predetermined number of balls for causing discharge of said predetermined number of balls from said pockets; means operated by a ball which has passed through one of said openings for causing discharge of balls under a predetermined number from said pockets; means actuated by a ball in its passage towards one of the other of the pockets for causing actuation of said ball discharging means; another play indicating pocket; means for conducting balls which drop through said openings onto the last named play indicating pocket; and means in the last named indicating pocket actuated upon the deposit of a predetermined number of balls for causing a discharge of balls that may be contained in any and all of the total number of pockets including the last named pocket.

8. Ball game apparatus comprising a playing surface inclined to permit playing balls to gravitate thereon, means for directing balls onto said surface, a plurality of play indicating pockets into which the balls gravitate from said surface, which pockets are arranged so that the balls may be seen by the player; and means actuated by a ball in play and which when a predetermined number of balls are contained in one of said pockets will cause all of the balls to gravitate from the pockets in which they may be contained.

9. Ball game apparatus comprising a playing surface having pockets; means for projecting balls onto the playing surface including a guide channel; a collection chamber into which balls gravitate from said pockets and playing surface, which collection chamber is provided with an outlet opening through which balls may gravitate; a pivoted trap member; spring means normally holding said trap member in position to close said opening; a shaft; an arm carried by said shaft; a receptacle carried by said arm and having one side adapted to be brought into registration with said opening, said arm being arranged to engage and move aside said trap to permit of registration of the receptacle with the opening; means for rotating the shaft to bring the arm into ball receiving and ball discharging positions, said arm and receptacle being arranged to move above the guide channel, and the receptacle being inclined whereby the ball will roll into the channel when the arm is moved into a predetermined position.

10. Ball game apparatus comprising a playing surface having openings therein through which playing balls may drop beneath said

surface; means for projecting playing balls onto said surface; an indicating compartment adapted to receive balls which have dropped through said openings; a counterbalanced pivoted trough member mounted beneath said surface; means for directing balls which drop through said openings into said trough member; a play indicating pocket into which balls may roll from said playing surface; a detent member normally preventing gravitation of balls from said last named pocket, which detent member is normally held in operative position by said pivoted trough, said trough being arranged to tilt under the weight of a ball thereon and to thereby move the detent out of operative position; and means for causing balls to gravitate from said trough into said compartment.

11. Ball game apparatus comprising a playing surface having openings therein through which playing balls may drop beneath said surface; means for projecting playing balls onto said surface; an indicating compartment adapted to receive balls which have dropped through said openings; a counterbalanced pivoted trough member mounted beneath said surface; means for directing balls which drop through said openings into said trough member; a play indicating pocket into which balls may roll from said playing surface; a detent member normally preventing gravitation of balls from said last named pocket, which detent member is normally held in operative position by said pivoted trough, said trough being arranged to tilt under the weight of a ball thereon and to thereby move the detent out of operative position; means for causing balls to gravitate from said trough into said compartment; other play indicating pockets; a plurality of runways for guiding balls off the playing surface into said last named pockets; and means operating when a ball travels along any one of the runways for tilting said trough and thereby withdrawing the detent member from operative position.

12. Ball game apparatus comprising a playing surface having openings therein through which balls may drop beneath said surface; means for projecting balls onto said surface; a plurality of play indicating pockets into which balls may gravitate from said surface; score indicating compartments; means for guiding the balls from said pockets into said compartments, said score indicating pockets being open whereby full visualization thereof may be had by the players of the game apparatus; and means which when a predetermined number of balls is contained in one of the compartments, said predetermined number and any other balls contained in said compartments and pockets will automatically gravitate from said pockets and compartments.

13. Ball game apparatus comprising a

playing surface over which playing balls may gravitate, which surface is provided with a plurality of openings through which balls may drop beneath said surface, a member 5 beneath the surface into which balls drop, a pivoted counter-balanced trough member into which balls drop from said last named member, which trough member is arranged to rock on its pivot under the weight of a single 10 ball therein, play indicating pockets into which balls may roll from said surface, detent members normally preventing balls from rolling out of said pockets and which are carried and held in position by the trough 15 member, said trough member and detents being arranged whereby when the trough member rocks on its pivot under the weight of a ball therein, the detents will be withdrawn from ball obstructing position with reference to said pockets, a play indicating 20 pocket, and means for causing balls delivered to said trough to roll into said play indicating pocket, which pocket is open to permit of visibility of the balls contained therein. 25

14. Ball game apparatus comprising a playing surface over which playing balls may gravitate, which surface is provided with a 30 plurality of openings through which balls may drop beneath said surface, a member beneath the surface into which balls drop, a pivoted counter-balanced trough member into which balls drop from said last named member, which trough member is arranged to rock 35 on its pivot under the weight of a single ball therein, play indicating pockets into which balls may roll from said surface, detent members normally preventing balls from rolling out of said pockets and which are carried and 40 held in position by the trough member, said trough member and detents being arranged whereby when the trough member rocks on its pivot under the weight of a ball therein, the detents will be withdrawn from ball obstructing position with reference to said pockets, a 45 play indicating pocket, means for causing balls delivered to said trough to roll into said play indicating pocket, which pocket is open to permit of visibility of the balls contained therein, other play indicating pockets into 50 which balls may roll from said surface, and means which when a predetermined number of balls are contained in said second named play indicating pocket will cause the balls 55 which may be contained in all of said pockets to gravitate from the pockets.

15. Ball game apparatus comprising a playing surface inclined to permit playing balls to gravitate therein, means for directing 60 playing balls onto said surface, a plurality of play indicating pockets arranged to permit balls to gravitate therein from said surface, said surface having openings arranged at various points therein, through 65 which openings balls may drop beneath the

surface, a plurality of inclined runways extending from said surface to certain of said pockets, and means in each runway actuated by a ball gravitating down the runway for 70 causing an advance of a previously played ball from one pocket to another, the said means in certain of said runways causing the ball to advance to a greater extent than the means in other of said runways, and means 75 which when a predetermined number of balls are contained in one of said pockets, causes all of the balls contained in said pockets to gravitate therefrom.

16. Ball game apparatus comprising a playing surface simulating a base ball diamond and having a plurality of openings arranged at various points therein, through 80 which openings balls may drop, means for directing balls onto said playing surface, which latter is inclined to permit balls to roll therein, a "strike" indicating pocket into 85 which balls may roll from said surface, an "out" indicating compartment, means for conducting a ball which drops through any one of said openings into said "out" indicating 90 compartment, means which when a predetermined number of balls are contained in the "strike" pocket will cause one of said predetermined number of balls to gravitate into the "out" indicating compartment, a plurality 95 of "on-base" indicating pockets, a plurality of runways over which balls may roll from said surface into said "on-base" indicating pockets, a "run" indicating compartment, 100 means for conducting balls having reached one of said "on-base" indicating pockets into said "run" compartment, a "ball" indicating pocket into which balls may roll from said playing surface, means which when a predetermined number of balls are contained in 105 said "ball" indicating pocket for causing one of said predetermined number of balls to roll into one of said "on-base" indicating pockets, and means which is actuated automatically by a ball having dropped through one of said 110 openings, for causing all of the balls less than the predetermined number contained in the "ball" and "strike" indicating pockets to roll from said pockets.

17. Ball game apparatus comprising a 115 playing surface simulating a base ball diamond and having a plurality of openings arranged at various points therein, through which openings balls may drop, means for directing balls onto said playing surface, 120 which latter is inclined to permit balls to roll therein, a "strike" indicating pocket into which balls may roll from said surface, an "out" indicating compartment, means for conducting a ball which drops through any 125 one of said openings into said "out" indicating compartment, means which when a predetermined number of balls are contained in the "strike" pocket will cause one of said predetermined number of balls to gravitate 130

into the "out" indicating compartment, a plurality of "on-base" indicating pockets, a plurality of runways over which balls may roll from said surface into said "on-base" indicating pockets, a "run" indicating compartment, means for conducting balls having reached one of said "on-base" indicating pockets into said "run" compartment, a "ball" indicating pocket into which balls may roll from said playing surface, means which when a predetermined number of balls are contained in said "ball" indicating pocket for causing one of said predetermined number of balls to roll into one of said "on-base" indicating pockets, means which is actuated automatically by a ball having dropped through one of said openings for causing all of the balls less than the predetermined number contained in the "ball" and "strike" indicating pockets to roll from said pockets, and means which when a predetermined number of balls are contained in the "out" indicating compartment will cause balls in the other pockets and compartments to gravitate therefrom.

18. Ball game apparatus comprising a playing surface simulating a base ball diamond and having a plurality of openings arranged at various points therein, through which openings balls may drop, means for directing balls onto said playing surface, which latter is inclined to permit balls to roll therein, a "strike" indicating pocket into which balls may roll from said surface, an "out" indicating compartment, means for conducting a ball which drops through any one of said openings into said "out" indicating compartment, means which when a predetermined number of balls are contained in the "strike" pocket will cause one of said predetermined number of balls to gravitate into the "out" indicating compartment, a plurality of "on-base" indicating pockets, a plurality of runways over which balls may roll from said surface into said "on-base" indicating pockets, a "run" indicating compartment, means for conducting balls having reached one of said "on-base" indicating pockets into said "run" compartment, a "ball" indicating pocket into which balls may roll from said playing surface, means which when a predetermined number of balls are contained in said "ball" indicating pocket for causing one of said predetermined number of balls to roll into one of said "on-base" indicating pockets, means which is actuated automatically by a ball having dropped through one of said openings for causing all of the balls less than the predetermined number contained in the "ball" and "strike" indicating pockets to roll from said pockets, means which when a predetermined number of balls are contained in the "out" indicating compartment will cause balls in the other pockets and compartments to gravitate therefrom, and means actuated by a ball while rolling down any one of said

runways for causing balls to roll out of said "ball" and "strike" indicating pockets.

19. A ball game apparatus comprising a playing surface, means for projecting balls onto said playing surface, a plurality of play-indicating pockets into which balls gravitate from said surface, and means in each pocket adapted by the action of a number of balls in one of said pockets for causing a discharge of balls from all of said pockets.

20. Ball game apparatus comprising a playing surface having a plurality of openings therein through which balls may drop, means for projecting balls onto said surface, a play-indicating pocket into which balls may gravitate from the playing surface, means in said play-indicating pocket arranged to be actuated upon the deposit in said pocket of a predetermined number of balls so as to cause said predetermined number of balls to gravitate from said pocket, ball feeding mechanism in communication with the aforementioned openings and with the pocket, and means embodied in the ball feeding mechanism for delivering a ball upon the playing surface, the playing surface being inclined in a direction toward said ball projecting means, whereby a ball when delivered from the feeding mechanism will roll to a position against the projecting means.

21. Ball game apparatus comprising a playing surface inclined to permit playing balls to gravitate thereon, means for directing playing balls onto said surface, a plurality of play-indicating pockets arranged to permit balls to gravitate therein from said surface, said surface having openings arranged at various points therein and through which balls may drop beneath the surface, a plurality of inclined runways extending from said surfaces to certain of said pockets, and means in one of said runways adapted to be actuated by a ball in movement therein for causing an advance of a previously played ball from one pocket to another.

22. Ball game apparatus comprising a playing surface simulating a baseball diamond and having a plurality of openings arranged at various points therein and through which balls may drop, means for directing balls onto said playing surface, a strike-indicating pocket into which balls may roll from said surface, an out-indicating compartment, means for conducting a ball which drops through any one of said openings into said out-indicating compartment, and means operating when a predetermined number of balls is deposited in the strike pocket to cause one of said predetermined number of balls to gravitate into the out-indicating compartment.

23. A baseball game apparatus including a playing field and playing pieces adapted to be projected thereover, batting means for placing a playing piece in motion upon

the field, means for successively feeding playing pieces to the batting means, movable means disposed in the path of movement of projected playing pieces for temporarily checking further movement thereof, and playing-piece-actuated means to cause an operation of the movable means to allow for further movement of the temporarily checked playing piece.

24. In a baseball game apparatus, a playing field, playing pieces adapted to be projected over the field, projecting mechanism for the playing pieces, means for progressively delivering the playing pieces to the projecting mechanism, a plurality of runways communicating with the playing field, the playing field being inclined in the direction of the runways so that playing pieces after being projected onto the field may gravitate in a direction towards said runways for delivery to one of them, mechanism related to said runways for trapping a playing piece therein, said mechanism including a movable gate, means for actuating the gate to permit the playing piece to progressively advance along a definite course, and counterbalanced tiltable means disposed in the path of movement of projected playing pieces and serving to accommodate a plurality of playing pieces and to be depressed by the combined weights thereof so as to expel the said plurality of playing pieces from said counterbalanced tiltable means.

25. Ball game apparatus comprising "hit" denoting and player-piece advancing mechanism including portions depicting the respective bases of a ball diamond, means for moving balls into the mechanism, means for stopping the balls at the aforementioned base-depicting portions, means for causing the balls to progressively move from one base-depicting portion to another, means for accumulating a number of balls as indicative of the number of "balls on a batter", means for accumulating a number of balls as indicative of the number of "strikes on a batter," means for accumulating balls as indicative of the number of "outs", and means for automatically clearing the balls from said mechanism and from each of said fourth and fifth named means when three balls have accumulated in the said sixth means.

26. Ball game apparatus comprising hit-denoting and player-piece-advancing mechanism having portions depicting the bases of a ball diamond, means for impelling balls into the mechanism, means for stopping the balls at the respective base-depicting portions, means for advancing the balls from one base-depicting portion to another, respective means for denoting "strikes", "balls" and "outs", and means for automatically clearing the respective base-depicting portions of all balls contained thereon when the "out" means denotes three "outs".

27. Baseball game apparatus including ball batting means, means for progressively delivering balls thereto, mechanism disposed in the path of movement of some of the batted balls for receiving same and including portions depicting the bases of a ball diamond, means for stopping the balls at the base-depicting portions, ball actuated means for effecting movement in rotation of the received balls across the respective base-depicting portions, and means for automatically clearing the balls from said mechanism.

28. Ball game apparatus including ball batting means, balls co-acting therewith, mechanism through which the batted balls are movable, means for alternately starting and stopping movements of the balls in said mechanism as indicative of players running the bases, means for indicating outs and means to expel all balls from the mechanism upon an indication of "three outs."

29. In a baseball game apparatus, a structure having a playing surface, balls adapted to be moved thereover, mechanism carried on said structure and having portions representing the respective bases of a ball diamond and each portion having means for receiving and retaining one of said balls, ball batting means, means for delivering the balls successively to the batting means, and means actuated by a ball entering one of said portions for progressively shifting the balls from one base representing portion of said mechanism to another.

30. In a baseball game apparatus, a structure having a playing surface, mechanism carried by the structure and having portions representing the respective bases of a ball diamond and each portion having means for receiving and retaining a ball, a plurality of balls, means for batting said balls onto said surface so as to cause some of said balls to enter said mechanism, means to conduct balls to the batting means, means actuated by one of the batted balls entering one of said portions for progressively shifting a previously received batted ball from one base representing portion of said mechanism to another, means for accumulating some of the batted balls, and means for clearing the balls from the accumulating means and for returning said balls to the conducting means.

31. Baseball game apparatus including a structure having a playing surface, means for batting balls onto the surface, means for successively delivering balls to the batting means, ball controlled base-depicting and hit-designating mechanism incorporated in the structure for directing certain of the batted balls to base depicting positions and including means for causing such balls to subsequently take different positions in said mechanism through an action of said mechanism induced by a subsequently batted ball, other mechanism for receiving some of the batted

balls to be distinguished as "strikes", means for automatically clearing the balls from the last mentioned mechanism when three such "strike" balls have entered said last mentioned mechanism, a third mechanism for receiving certain of the batted balls and for designating same as "balls" and means for causing one of a group of four of said last mentioned batted balls to enter said first mechanism and to occupy a base depicting position therein.

32. Baseball game apparatus including batting means, a plurality of balls, means for delivering said balls to the batting means, respective mechanisms correlated to the batting means for forming relatively separate groups of batted balls respectively distinguished as "balls" and "strikes", and means for receiving some of the batted balls and for displaying same as indicative of "men on bases", said last named means including ball receiving portions representing the respective bases of a ball diamond, and means actuated by a batted ball for automatically shifting a previously received ball from one of said portions to another.

33. Baseball game apparatus including means for batting balls, means for feeding balls to the batting means, means to receive and exhibit a batted ball and for utilizing the ball to denote a "hit" and for depicting a "man on base", means for assembling a plurality of the batted balls distinguished as "balls", means for assembling a number of batted balls distinguished as "strikes", means for assembling a plurality of balls distinguished as "outs", means for automatically clearing the balls from each of the third, fourth and fifth mentioned means, where three balls are assembled in the sixth said means, and means for then returning all of the balls to the feeding means.

34. Ball game apparatus including ball batting means, means for feeding balls to the batting means, mechanism through which the batted balls are movable by gravity, means for respectively starting and stopping the balls while in said mechanism, and means for automatically discharging the balls from the mechanism and for conducting same to the feeding means upon the occurrence of a predetermined disposition of the balls in said mechanism.

GEORGE H. MINER.

DISCLAIMER

1,802,521.—*George H. Miner*, San Francisco, Calif. GAME APPARATUS. Patent dated April 28, 1931. Disclaimer filed December 1, 1932, by the assignee, *Amusement Machine Corporation, Ltd.*

Hereby enters this disclaimer to those claims in said specification which are in the following words, to wit:

"21. Ball game apparatus comprising a playing surface inclined to permit playing balls to gravitate thereon, means for directing playing balls onto said surface, a plurality of play-indicating pockets arranged to permit balls to gravitate therein from said surface, said surface having openings arranged at various points therein and through which balls may drop beneath the surface, a plurality of inclined runways extending from said surface to certain of said pockets, and means in one of said runways adapted to be actuated by a ball in movement therein for causing an advance of a previously played ball from one pocket to another.

"22. Ball game apparatus comprising a playing surface simulating a baseball diamond and having a plurality of openings arranged at various points therein and through which balls may drop, means for directing balls onto said playing surface, a strike-indicating pocket into which balls may roll from said surface, an out-indicating compartment, means for conducting a ball which drops through any one of said openings into said out-indicating compartment, and means operating when a predetermined number of balls is deposited in the strike pocket to cause one of said predetermined number of balls to gravitate into the out-indicating compartment."

[*Official Gazette December 27, 1932.*]