March 17, 1942. G. E. BOCK 2,276,457

BASEBALL GAME APPARATUS

Filed May 16, 1940 3 Sheets-Sheet 1

FIG. 1

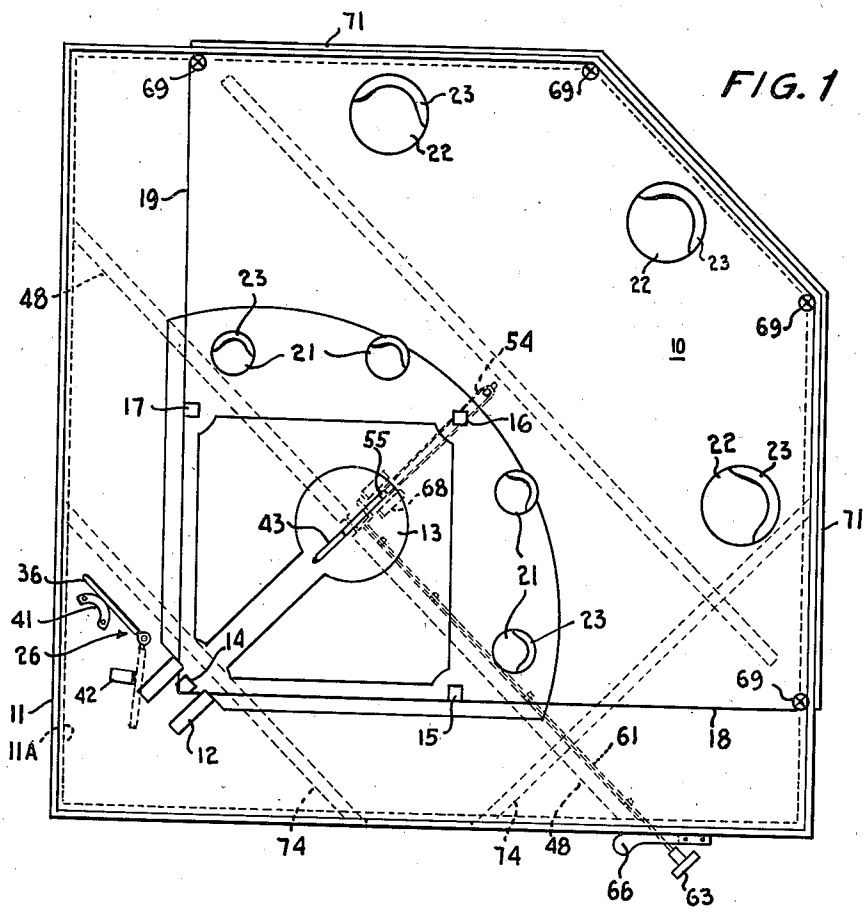
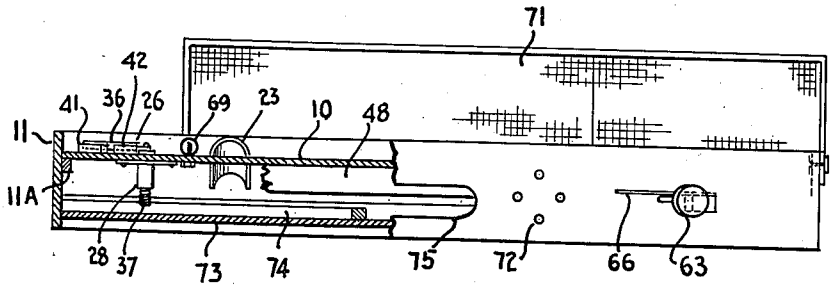


FIG. 2



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March 17, 1942. G. E. BOCK 2,276,457

BASEBALL GAME APPARATUS

Filed May 16, 1940 3 Sheets-Sheet 2

FIG. 3

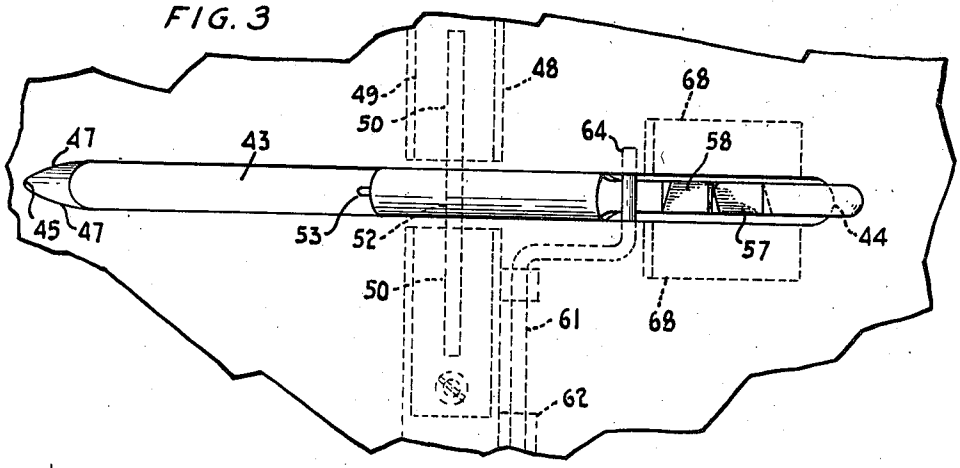


FIG. 4

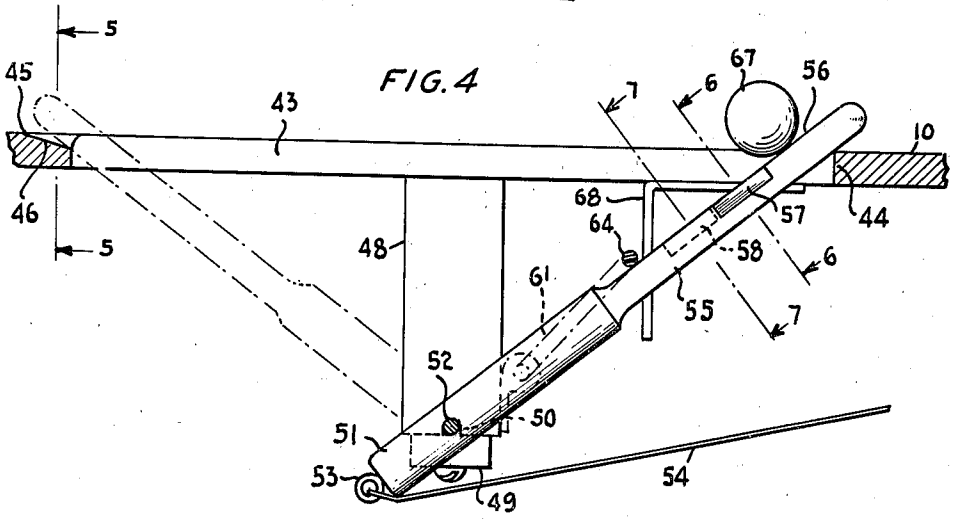


FIG. 6

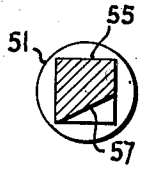


FIG. 7

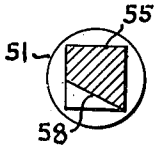


FIG. 5



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March 17, 1942. G. E. BOCK 2,276,457

BASEBALL GAME APPARATUS

Filed May 16, 1940 3 Sheets-Sheet 3

FIG. 8

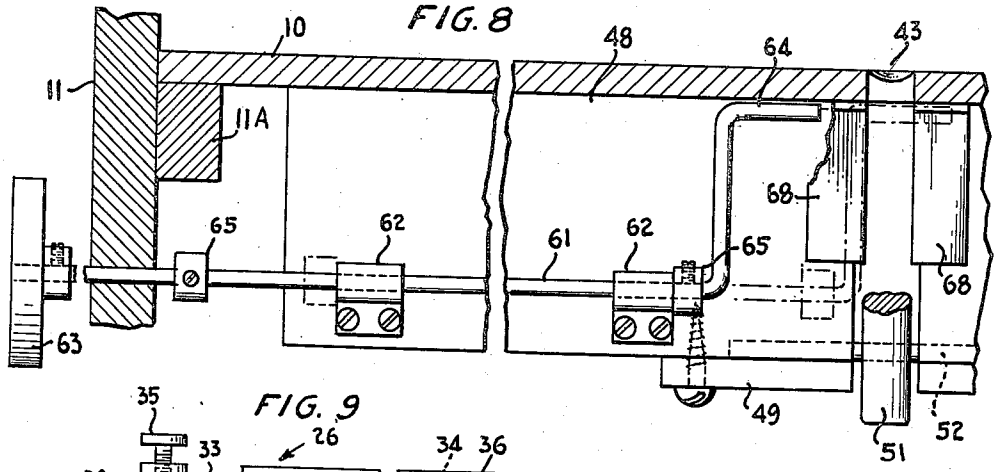


FIG. 9

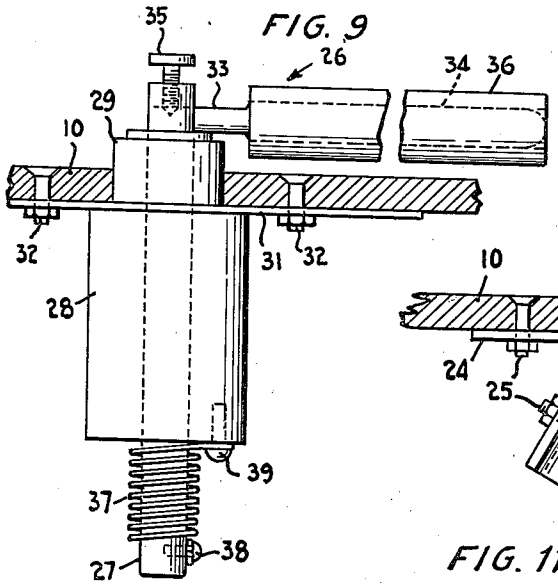


FIG. 10

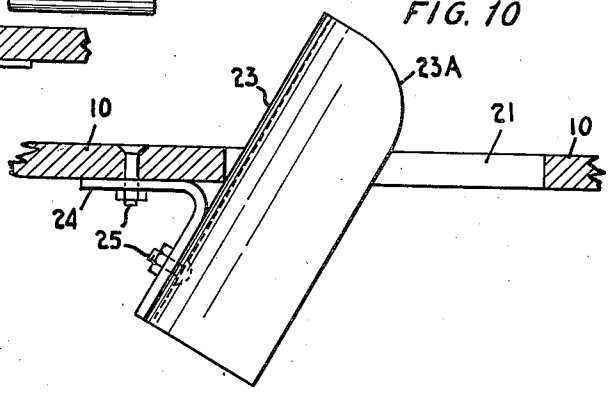


FIG. 11

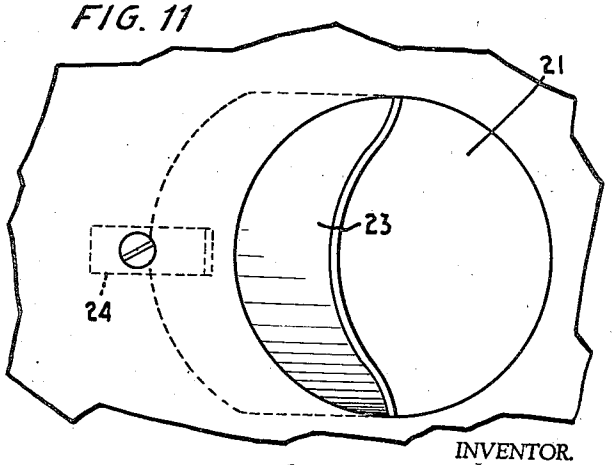
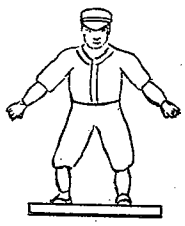


FIG. 12



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Patented Mar. 17, 1942 2,276,457

UNITED STATES PATENT OFFICE

2,276,457

BASEBALL GAME APPARATUS

George E. Bock, New York, N. Y.

Application May 16, 1940, Serial No. 335,446

11 Claims. (Cl. 273—89)

My invention relates to game apparatus and more particularly to a table apparatus for simulating the game of baseball.

Apparatus of this kind has heretofore been proposed but all such apparatus has been either complicated and expensive to manufacture, or difficult to operate requiring a high skill for manipulating the same, or has not been such that realistic playing conditions could be reproduced, or otherwise has been generally unsatisfactory.

It is one object of my invention to provide a greatly simplified apparatus which will be economical to manufacture and easy to operate successfully even in the hands of wholly unskilled persons.

It is a further object of my invention to provide apparatus of the above indicated character wherein realistic enjoyment of the game of baseball can be had because of the ability to simulate the actual playing conditions and situations, and to conduct this game applying the official rules of the game.

It is another object of my invention to provide apparatus of the above indicated character with simple pitching mechanism which nevertheless will curve the ball past the batter's position as well as enable a fast or a slow ball to be delivered, all at the choice of the operator.

It is a still further object of my invention to provide game apparatus of the above indicated character which is sturdy and fool-proof in operation and with various improved elements of mechanical construction.

Other and further objects of my invention will be apparent from the following specification taken in conjunction with the accompanying drawings, in which—

Fig. 1 is a plan view of my improved baseball game apparatus;

Fig. 2 is a side elevation of the apparatus of Fig. 1, with parts broken away and sectioned to facilitate illustration;

Fig. 3 is an enlarged detail in plan view of the pitching mechanism;

Fig. 4 is an enlarged detail in side elevation of the pitching mechanism;

Figs. 5, 6 and 7 are respectively cross sectional views on the lines 5—5, 6—6, and 7—7 of Fig. 4;

Fig. 8 is an enlarged detail of the operating or control for the pitching mechanism;

Fig. 9 is an enlarged detail in side elevation of the batting mechanism;

Fig. 10 is an enlarged detail in side elevation and sectional view of one of the fielders;

Fig. 11 is a plan view of the apparatus of Fig. 10; and

Fig. 12 is a front view of a figure representing a player.

Referring to the drawings, the playing field 10 is enclosed within a frame 11, being supported therein on the rail 11A. The field has inscribed thereon a baseball diamond layout consisting of a batter's box 12, pitcher's box 13, a home plate 14, and first, second and third bases 15, 16 and 17 respectively, with the base paths and the lane between the batter's box and home plate properly outlined according to standard playing fields. There is also inscribed on the playing field the foul lines 18 and 19.

Situated in the playing positions of each of the four infielders are holes 21 and situated in the normal playing positions of each of the three outfielders are larger holes 22. Inasmuch as each of these fielders are similarly constructed, only one will be described in connection with Figs. 9 and 10. Each of the fielding apertures 21 and 22 is provided with a semi-circular shield 23, preferably made of fibre board. Each shield is located in its aperture so as to face directly the home plate 14 and is situated in the aperture at an angle. The angle may vary, but I have found an angle of about 30° from the vertical to be preferable. Also as will be seen from Figs. 2 and 9 the shield extends a substantial distance above and below the playing surface 10. The shield 23 is held in place by a V-shaped piece of strip stock 24 which is appropriately secured to the shield and to the playing field, as by bolts 25. The upper corners are rounded as shown at 23A.

Positioned alongside the home plate 14 and adjacent the batter's box 12 is the batting mechanism 26 shown in detail in Fig. 9. This mechanism consists of a cylindrical rod 27 which is rotatably mounted in a bushing 28. The bushing has a reduced collar portion 29 which projects through the board of the playing field 10, and the bushing is secured to a plate 31 which in turn is bolted to the playing field board, as indicated at 32. The rod 27 has a transverse slot in the portion which projects above the collar 29 in which slot is received the reduced end 33 of a batting arm 34. The arm is secured in place in the slot by means of the set screw 35 which projects downwardly through the end of the rod 27 and engages in a proper niche in the portion 33. The batting arm 34 is desirably covered by a rubber or other protective sleeve 36. The portion of the rod 27 which projects below the

bushing 28 has a coiled spring 37 therearound, one end of the spring being secured to the rod as indicated at 38 and the other end of the spring being secured to the bushing, as indicated at 39.

Referring now to Fig. 1, normally the bat is in the full line position indicated where it rests against a resilient stop 41 secured on the surface of the playing field board 10. When the bat is to be used it is turned on its pivot by hand to the dotted line position against the stop 42, which movement places the spring 37 under tension. When the bat is released, the spring 37 will return the bat 34 from the dotted line position to the full line position. It will be seen that the sweep of the bat 34 includes the home plate 14 and a surrounding area similar to the normal area commanded by a batter in the game of baseball.

The pitching mechanism is shown in detail in Figs. 3 to 8 inclusive. The playing field board is provided with a slot 43 in the pitcher's box 13, along a line which would intersect home plate and second base. The outer end of the slot is straight, as shown at 44 (Fig. 4) and the inner end terminates in a point 45 (Fig. 3). From the point rearwardly this forward portion of the slot is tapered as indicated at 46 in Fig. 4, while the sides of the tapered portion are curved inwardly from the edge of the full width of the slot to the point, seen best at 47 in Fig. 3. Between the side edges 47 the pointed portion of the slot is dished (Fig. 5). With this end construction, a straight ball leaves the slot without any hopping action, and without any deflection.

A pair of supports 48 are appropriately mounted on the underside of the playing field board and terminate on either side of the slot 43. A pitching arm 51 is loosely mounted upon the pivot rod 52 so that its upper portion projects through the slot. The pivot rod in turn is mounted in slots 50 in the supports 48, and is held in place by the slides 49. The lower end of the pitching arm is provided with an eyelet 53 in which is secured one end of a rubber band or other spring 54, the other end of which is suitably mounted rearwardly of the pitching position. The resilient member 54 constitutes the motive force for the pitching arm, but any other suitable arrangement may be substituted therefor.

The upper portion 55 of the pitching arm is square in shape (Figs. 6 and 7) and of less width than the width of the slot 43, and has at its upper end a flat portion 56 on the side toward home plate. Below this portion the forward face of the arm is cut away to provide a slanting surface 57, the high side being on the right hand side (when facing home plate). This cut away portion is located just below the playing field when the arm is in the pitching position shown in Fig. 4, but in the arc of movement of the arm the cut away portion crosses the field. Spaced below the cut-away portion 57 is a second cut-away portion providing a slanting surface 58, which surface extends oppositely from the slanting portion 57, and also crosses the playing surface in the movement of the pitching arm. These slanting portions 57 and 58 are used to cause the ball to curve one side or the other of home plate to produce the effect of out-curves or in-curves, respectively, as will be more fully explained.

Operation of the pitching arm is controlled by the lever 61 which is loosely mounted in two or more eyelets 62 along one of the supports 48 and extends through one of the side boards 11 where an operating knob 63 is fastened. At the inner end the arm 61 is bent to have an offset straight catch 64 arranged to engage with the pitching arm for which purpose the arm 61 is slidable inwardly to the dotted line position shown in Fig. 8. The control lever 61 carries a pair of stop collars 65 to limit the inward and outward sliding movements of the arm. If desired, a brake lever 66 may be mounted on the side board 11 in position to be pressed against the projecting portion of the control shaft 61 during the pitching operations.

To operate the pitching mechanism, the player moves the pitching arm 55 rearwardly by hand, thus tensing the spring 54, and slides the control lever inwardly so that the catch 64 engages the pitching arm and holds it in the rearward position. A ball 67 is placed on the slot 43 (Fig. 4) adjacent the pitching arm, the ball resting partially in the slot. When the operator releases the control lever the spring 54 will move the pitching arm about the pivot 52 to the dotted line position in Fig. 4, thus projecting the ball toward the batter. The type of pitch delivered to the batter, i. e. a slow ball, a fast ball or a curve ball depends upon the manner in which the control lever is released. To throw a fast ball the control lever is slid sideways to release the pitching arm immediately from its full rearward position so that the full force of the spring 54 can be instantly imparted to the ball. To throw a slow ball, the control lever is rotated by means of the knob 63 in the direction of home plate and without releasing the catch from the pitching arm, the speed of rotation determining the speed of the slow ball.

Throwing a curved ball is accomplished by a combination of the rotating and sliding movements of the control lever 61, that is to say, the control lever is turned toward the batting position as in throwing a slow ball, and at the proper time, depending upon whether throwing an in-curve or out-curve, the control lever is slid outwardly to release the pitching arm. For an out-curve the throwing arm is released as the slanting portion 57 engages the ball in the slot 43, and for an in-curve the arm is released as the slanting portion 58 engages the ball.

A fast or a slow ball moves straight along the slot and leaves the pointed end 45. A curved ball, on the other hand, begins its spinning action at once, and rides along one or the other of the side edges of the slot and leaves the slot before the end portion 47 is reached. Accordingly, the ball continues the spin undisturbed and the ball will curve past the home plate. Only that portion of the arm 51 in engagement with the ball when the same is released affects the character of the pitch.

It is apparent that many varieties of pitched balls are possible depending upon the interest of the player of the game operating the pitching mechanism. It is also apparent that the power of the pitching arm can be regulated by adjusting the length of the rubber bands or the strength of the spring or by any other suitable adjustment which may be added within the skill of the ordinary mechanic, in manufacturing this apparatus.

Turning movements of the catch 64 and control lever 61 are limited by the pair of rear stops 68 on either side of slot 43, and forwardly by the supports 48.

In playing this game, one player operates the pitching mechanism and his opponent operates the batting mechanism. Pitched balls and strikes are called and control the movements of the bat-

ter, as in the regular game of baseball. When the ball is batted, the rules as to fair ball and foul ball control the play. If a batted ball goes into one of the fielding pockets, an "out" is scored for the batter. If the ball is in "fair" territory and not in a pocket it is counted as a single base hit, unless the ball hits one of the four bells 69, or hits or clears the screen 71 which defines the outer limits of the outfield. A ball hitting a bell is counted as a two-base hit; one hitting the screen a three base hit, and one clearing the screen as a home run or four base hit.

A base hit will advance a runner occupying a base either one, two or three bases according to the nature of the subsequent hit made. If more than one runner is on base, all will advance accordingly. To mark the position of base runners, figures such as indicated in Fig. 12, may be placed on the proper base position. Then if a batted ball hits a player occupying a base, the batter is out, as is the case in the standard rules. Runs will be scored in accordance with the number of players crossing home plate. An alternate method of keeping account of runners and runs is shown in Fig. 2, consisting of four holes 72 arranged in the shape of a diamond and in which pegs may be inserted as play progresses. Play proceeds with one or more players on a side, three outs being allowed per inning, and the side having the highest number of runs at the end of nine innings being declared the winner.

A balk may be scored where the ball does not leave the pitching slot. An error is charged where the ball strikes one of the fielding shields 23 but is not deflected into a fielding aperture, and the batter is allowed a one base hit on the error. A fielder's choice is scored when a runner occupies a base and the ball is hit to that base fielder. The runner is out and the batter reaches first base and other runners advance one base. A double play is scored where a runner occupies first and the batter hits the ball into the pocket of either the second baseman, the shortstop or the third baseman. If both first and second bases are occupied, the runner on first is out at second base, the runner on second advances to third base, and the batter is considered out. If first and third bases are occupied, the runner on third scores while the runner on first and the batter are both out. If all the bases are occupied and the ball is hit to any infielder, the man on third is scored as out at home plate, and the batter is scored as out. With a runner on second base only, and a ball hit to any infielder, the runner advances but the batter is out. With a runner on third base only, a ball hit to any infielder advances the runner but retires the batter. When one or more runners are on base, the ball hit to any outfielder retires the batter and the runners do not advance.

In pitching, if the bat is not released to swing at a pitched ball, the pitch is scored as a ball or strike, as the case may be even though the pitched ball strikes the bat in its retracted position.

Thus it is seen that the standard playing conditions and standard scoring are used, so that the game played on this board becomes as interesting and as competitive as the regular game of baseball.

Balls falling through the fielding apertures drop upon the base board 73, which is suitably supported by the side frame 11, and a pair of guide rails 74 on the base board deliver the balls adjacent the opening 75 in one of the side walls 11 where the balls can be recovered for re-use.

Modifications may be made in the arrangement and location of parts within the spirit and scope of my invention, and such modifications are intended to be covered by the appended claims.

I claim:

1. In a table baseball game apparatus, a playing field board, a pitching mechanism comprising a slot in said board to receive a ball of a size to rest partially in said slot, a pivotally mounted pitching arm movable in the slot, and spring means for moving the arm forwardly, the arm having a flat portion and a slanting portion, the portions being arranged to engage the ball to govern the type of pitched ball delivered.

2. In a table baseball game apparatus, a playing field board, a pitching mechanism comprising a slot in said board to receive a ball of a size to rest partially in said slot, a pivotally mounted pitching arm movable in the slot, and spring means for moving the arm forwardly, the arm having a flat portion and a pair of slanting portions inclined oppositely to each other, the portions being arranged to engage the ball to govern the type of pitched ball delivered.

3. In a table baseball game apparatus, a playing field board, a pitching mechanism comprising a slot in said board to receive a ball of a size to rest partially in said slot, a pivotally mounted pitching arm extending through and movable in the slot, spring means for moving the arm forwardly about its pivot, the arm having a flat portion which when the arm is released from its rearward position engages the ball to propel the same under the action of the spring and a slanting portion below the flat portion which engages the ball to propel the same under the action of the spring when the arm is released from a different position, and manually operated means for releasing the arm from its different positions.

4. In a table baseball game apparatus, a playing field board, a pitching mechanism comprising a slot in said board to receive a ball of a size to rest partially in said slot, a pivotally mounted pitching arm extending through and movable in the slot, a lever having a portion for engaging the arm, said lever being slidable into and out of engagement with the arm and also rotatable in the direction of movement of the arm for propelling said ball, and means for moving the arm forwardly when the lever is moved out of engagement with the arm.

5. In a table baseball game apparatus, a playing field board, a pitching mechanism comprising a slot in said board to receive a ball of a size to rest partially in said slot, a pivotally mounted pitching arm extending through and movable in the slot, spring means for moving the arm forwardly, the arm having a flat propelling surface and a slanting propelling surface arranged to engage the ball in the slot, and means adapted to engage the arm when it is in retracted position and to release the same when either the flat surface or the slanting surface is in engagement with the ball to propel the ball accordingly.

6. In a table baseball game apparatus, a playing field board, a pitching mechanism comprising a slot in said board to receive a ball of a size to rest partially in said slot, a pivotally mounted pitching arm extending through and movable in the slot, spring means for moving the arm forwardly, the arm having a plurality of different

propelling surfaces, said surfaces being arranged to engage the ball in the slot as the arm moves, and means adapted to engage the arm when it is in retracted position and to release the same when a selected one of said surfaces is in engagement with the ball.

7. In a table baseball game apparatus, a playing field board, a pitching mechanism comprising a slot in said board to receive a ball of a size to rest partially in said slot, a pitching arm projecting through and above said slot, a pair of supports mounted beneath said board and extending in opposite directions from said slot, a pivot for the arm and mounted in said supports, spring means for moving the arm forwardly about said pivot, a control lever having a catch adapted to engage the arm, means for slidably and rotatably mounting the lever, the lever extending outside said playing board, and a control knob on the outer end of said lever.

8. In a table baseball game apparatus, a playing field board, a pitching mechanism comprising a slot in said board to receive a ball of a size to rest partially in said slot, a pivotally mounted pitching arm extending through and movable in the slot, a lever having a portion for engaging the arm, said lever being slidable into and out of engagement with the arm and also rotatable in the direction of movement of the arm for propelling said ball, means for moving the arm forwardly when the lever is moved out of engagement with the arm, and a manually operable brake cooperating with said lever.

9. In a table baseball game apparatus, a playing field board, a pitching mechanism comprising a slot in said board to receive a ball of a size to rest partially in said slot, a pitching arm projecting through and above said slot, a pair of supports mounted beneath said board and extending in opposite directions from said slot, a pivot for the arm and mounted in said supports, spring means for moving the arm forwardly about said pivot, a control lever having a catch adapted to engage the arm, means for slidably and rotatably mounting the lever, the lever extending outside said playing board, a control knob on the outer end of said lever, and a brake lever adapted to engage the exposed portion of the control lever.

10. In a table baseball game apparatus, a casing, a board mounted therein and spaced above the bottom of the casing, said board having a playing field having a baseball diamond layout thereon including a home plate, apertures in said board in the normal playing positions of infielders and outfielders, a one-piece semi-circular guard mounted in and near the rear of each aperture and projecting above and below the board so as to direct a ball intercepted by the guard into the casing and beneath the board, each of the guards facing home plate, pitching mechanism for propelling a ball toward home plate, manual means for controlling the pitching mechanism, and manually operated batting mechanism mounted adjacent the home plate.

11. In a table baseball game apparatus, a board provided with a playing field having a baseball diamond layout thereon including a home plate and foul lines, apertures in said board in the normal playing positions of infielders and outfielders, a guard mounted in each aperture and projecting above the playing field, signal means mounted adjacent the outer boundary of the outfield at the foul lines and between the positions of the outfielders, and a screen mounted above the playing field and extending between the foul lines by which extra base hits are scored, pitching mechanism for propelling a ball toward home plate, manual means for controlling the pitching mechanism, and manually operated batting mechanism mounted adjacent the home plate.

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