March 19, 1935. R. F. CALLEJAS 1,994,685

MECHANICAL BASEBALL GAME

Filed June 27, 1933 3 Sheets-Sheet 1

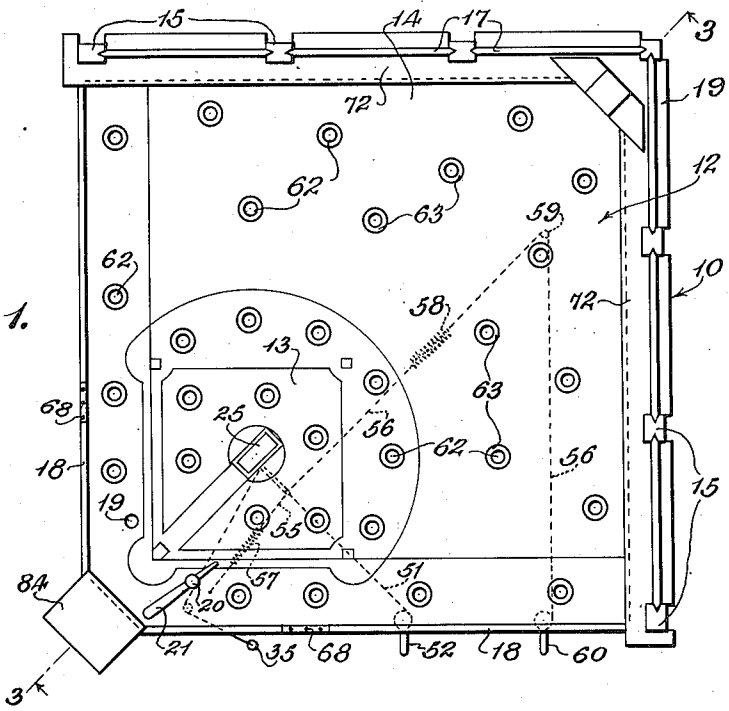

Fig. 1.

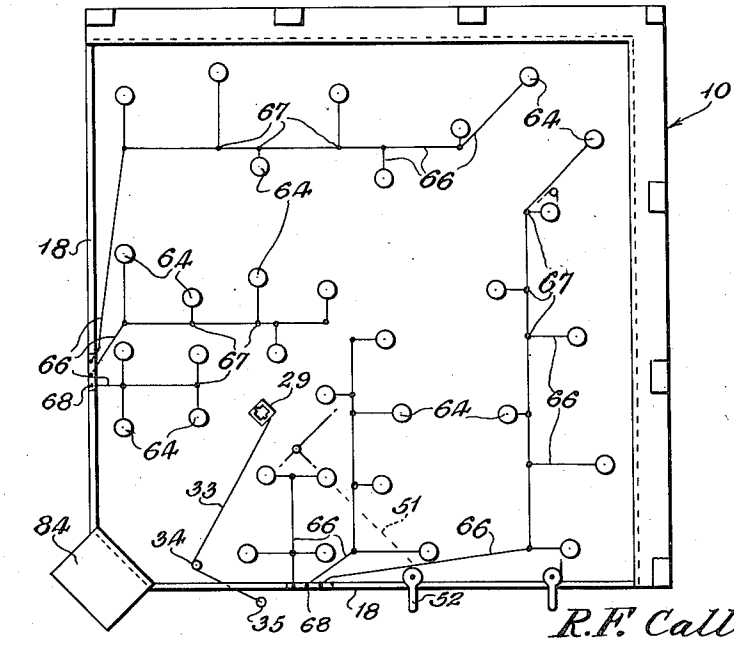

Fig. 2.

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MECHANICAL BASEBALL GAME

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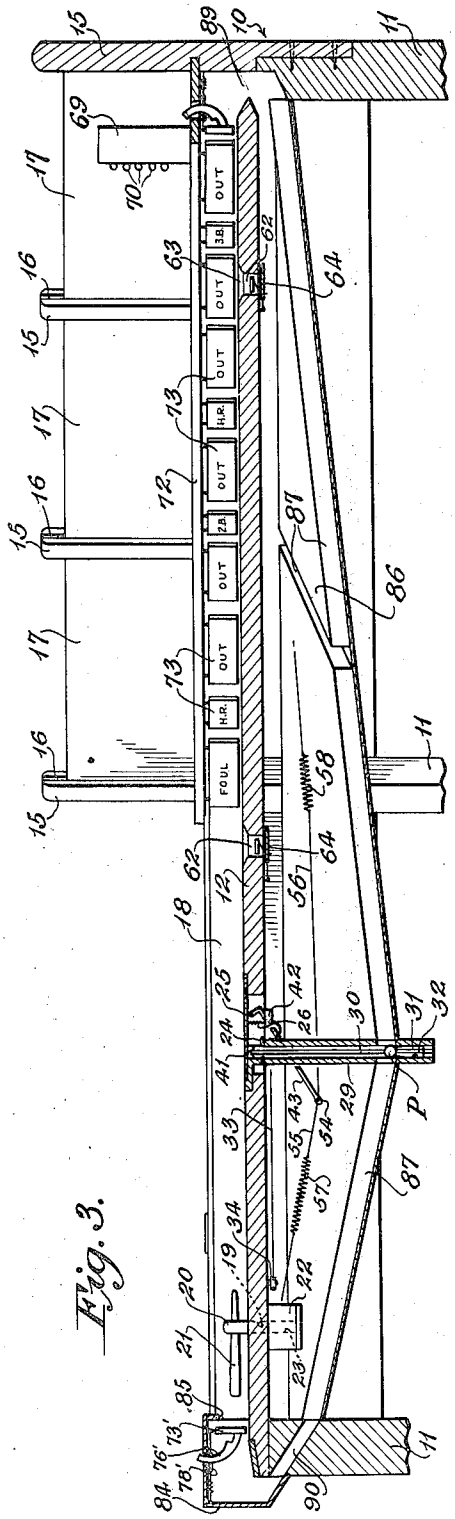

Fig. 3.

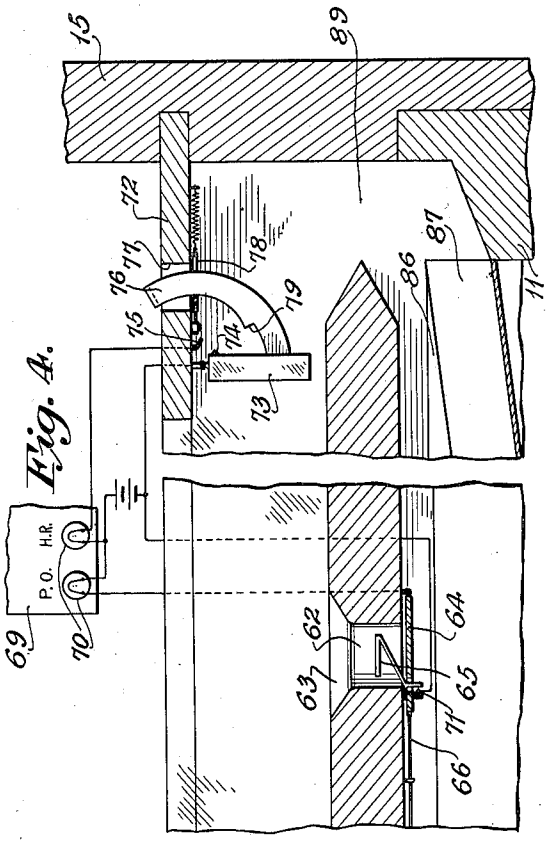

Fig. 4.

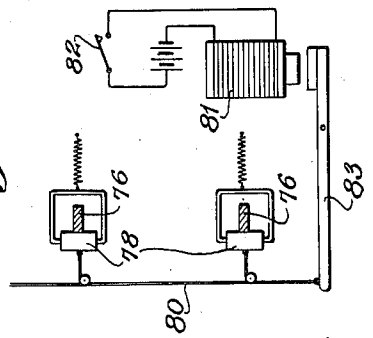

Fig. 5.

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MECHANICAL BASEBALL GAME

Filed June 27, 1933 3 Sheets-Sheet 3

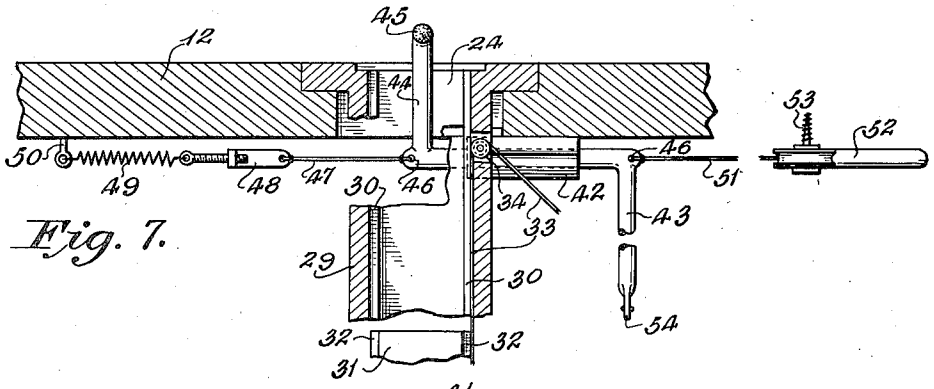

Fig. 7.

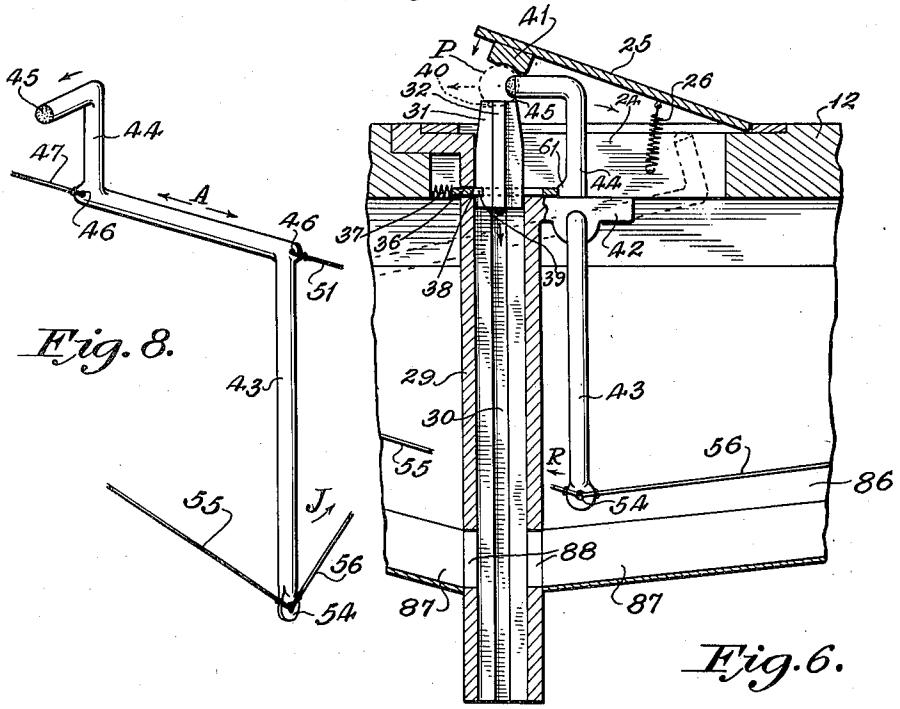

Fig. 8.

Fig. 6.

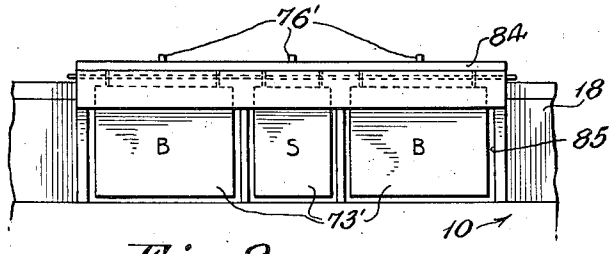

Fig. 9.

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UNITED STATES PATENT OFFICE

1,994,685

MECHANICAL BASEBALL GAME

Roger Fernandez Callejas, Habana, Cuba

Application June 27, 1933, Serial No. 677,917
In Cuba November 9, 1932

8 Claims. (Cl. 273—89)

The present invention relates to a mechanical baseball game and has for its primary object to provide an apparatus adapted to simulate the playing of baseball and capable of performing the plays common to the game.

Another object of the invention resides in the provision of an apparatus of the character mentioned having a simplified construction, without however, eliminating any of the features which makes the game similar to real baseball playing, and which is so constructed that the playing of the game will require judgment and skill upon part of the players and in this manner create an exciting interest in the game.

The invention also aims to provide certain improved features rendering the device capable of more closely realizing the fine points and technical phases of a real baseball game, such, for instance, as the pitching arrangement which is adapted to impart different types of pitch balls, i. e., plate, in-shoot, out-shoot, or curved balls; the hitting arrangement which makes it possible to bat right or left handed; the ball receiving arrangement which registers either the "strike" or "ball", dependent upon whether the pitched ball passes over or outside the home plate.

Other important features and advantages of the invention will be in part obvious and in part pointed out hereinafter.

In order that the invention and its mode of operation may be readily understood by those persons skilled in the art, I have in the accompanying drawings and in the detailed description based thereupon, set out a possible embodiment of the same.

In these drawings:

Figure 1 is a top plan of the device,

Figure 2 is a top view with the playing board removed,

Figure 3 is a section taken on line 3—3 of Figure 1,

Figure 4 is an enlarged sectional detail taken from a portion of Figure 3,

Figure 5 is a diagrammatic illustration of the resetting features embodied in the invention,

Figure 6 is an enlarged cross sectional detail of the "pitcher's box",

Figure 7 is a section taken at right angles of Figure 6,

Figure 8 is a perspective illustrating the construction of the lever used for pitching the ball, and

Figure 9 is a face elevation of the ball receiving arrangement shown on an enlarged scale.

Having more particular reference to the drawings wherein like characters of reference will designate corresponding parts throughout, my improved device may be stated to comprise a playing table indicated in its entirety for convenience and clarity herein by the reference character 10, and which is preferably provided with legs 11 supporting a playing board 12 of substantially square configuration.

Disposed in one corner of the playing board 12 and reproduced thereon, is a baseball diamond 13 with first, second and third base, home plate and pitcher's box. The diamond may be painted or otherwise outlined upon the surface of the playing board and so arranged that the home plate will be nearest to the aforesaid corner of the board. It will be understood that the remaining portion of the playing board, as indicated at 14 will represent the outfield.

Secured to the two sides of the playing board 12 defining the outfield portion 14 thereof, is a fence-like arrangement consisting of relatively spaced posts 15 provided slots 16 wherein are slidably and removably received boards or the like 17 upon which may be shown advertising matter much in the manner usually done on fences enclosing baseball grounds. Upon the remaining two sides of the playing board 12 are provided upstanding flanges 18 forming a stopping border on that section of the playing board 12.

Positioned on each side of the home plate and formed to extend through the playing board 12 is a pair of holes 19 adapted to removably receive a spindle 20 carrying a bat 21. That the bat may be held more steadily in position, a block 22 is affixed to the underside of the playing board, which block is provided with a bore 23 registering with the hole 19 in the board. By reason of the construction of the batting arrangement, it will be appreciated that the bat 21 may be positioned at will, on either side of the home plate so that the bat may be spun in a manner simulating a right or left handed batter.

As more clearly shown in Figures 3, 6 and 7, at the pitcher's box, the playing board 12 is cut through to provide an elongated recess 24 covered by a hinged plate 25 normally urged in closed position by means of a coil spring 26 having one extremity attached to said plate and its other extremity to an adjacent portion of the board 12 preferably as indicated at 27 and 28 respectively.

Suitably secured to the playing board 12 at the forward end of the recess 24 and depending therefrom, is a hollow shaft 29 provided with internal longitudinal grooves 30. A ball lifter or elevat-

ing member 31 is mounted within the shaft 29 to slide up and down therein, said lifter or member being provided with a pair of outwardly projecting ribs 32 fitting in the grooves 30 and cooperating therewith to guide the lifter 31 in its movement. It will be understood that normally the lifter 31, due to its own weight, will fall by gravity to the lower end of the shaft 29. However, to limit the fall of said lifter 31, a cord 33 is attached to one side of the same and is of such a length that the ball lifter 31 will be arrested at a predetermined position at the lower portion of the shaft 29. The cord 33 is passed outwardly of the shaft 29 at the upper portion thereof, as more clearly shown at 34 in Figure 7 of the drawings, guided over a pulley 34' mounted upon the underside of the playing board 12. The free end of the cord 33 projects through one side of the playing table end and is provided with a knob or the like 35, so that the cord may be pulled thus causing the lifter 31 to rise in the shaft 29 and extend through the recess 24.

In order to maintain the ball lifter or elevating member 31 in its elevated position, a ring 36 is provided at the top portion of the shaft 29 and urged by means of a spring 37 to extend within said shaft through a slot 38 cut therein. The extending edge of the ring 36 is adapted for engagement with a recess 39 formed in the lower end of the lifter, whereby to lock the latter at the top of the shaft. It will appear from the drawings more particularly Figure 6 thereof, the head portion of the lifter 31 is formed with a cup depression 40 so that the ball P may seat itself therein. The ball P is further retained upon the lifter 31 by means of a recess block 41 secured in place upon the under side of the hinged plate 25. At this point, it is to be noted that when the lifter 31 carrying the ball P is raised, said ball will come in contact with the recess block 41 and through the continued movement of said lifter, the hinged plate will be forced open, the spring 26 acting to clamp the ball in between the opposed surfaces of the lifter 31 and block 41.

Disposed rearwardly and to one side of the shaft 29 adjacent the recess 24 in the playing board 12, is a sleeve 42 wherein is slidably and pivotally suspended an inverted L-shaped lever 43, the horizontal arm of which is provided with a hammer-like portion 44 terminating with a cushion tip 45. As illustrated in the drawings, the arm of the lever 43 is longer than its supporting sleeve 42 and consequently, it will be understood that said lever may be slidably adjusted in the direction indicated by the arrows A in Figure 8. For this purpose, the opposed ends of the aforementioned arm are formed with eyelets 46, to one of which is attached a length of cord 47 connected by means of a turnbuckle 48 to a tension spring 49 fastened to the underside of the playing board 12 by a suitable element such as a screw eye 50. The tension of the spring 49 may be regulated through the turnbuckle 48 to exert the required pull upon the lever 43. To the remaining eyelet 46 of the lever arm 43 is attached another length of cord 51 the free end of which is fixed to a controlling handle 52 pivoted by means of a screw or the like 53 to the playing board 12.

Due to this arrangement, it will be appreciated that the lever 43 may be moved by manipulation of the handle 53, to bring the cushion tip 45 of the hammer-like portion 44, opposite any point of the adjacent surface of the ball P when the latter is held in elevated position by the lifter 31. Because of this feature, when the hammer-like portion 44 strikes the ball in the manner to be later described, different types of ball may be pitched such as a straight, in-shoot, out-shoot or curved ball, depending upon the adjustment of the lever 43.

The lower extremity of the vertical arm of the inverted L-shaped lever 43, preferably as shown, is provided with an eyelet 54 to which is attached a pair of cords 55 and 56 respectively. The cord 55 is stretched forwardly of the lever 43 and connected to a spring 57 acting to normally urge said lever in the direction of the arrow R and hold the same in a slanted position in the manner shown in full lines in Figure 3 and in dotted lines in Figure 6 of the drawings, so that the hammer-like portion 44 is nested within the recess 24 of the playing board 12 permitting the closure of the cover plate 25. The cord 56 in which is interposed an equalizing spring 58, is passed over a pulley or the like 59 and brought and secured to a controlling trigger 60 pivoted to the playing board in the manner described in connection with the lever position controlling handle 52. It will be understood that upon pulling the trigger 60, the cord 56 will be jerked in the direction of arrow J swinging the lever 43 and causing the hammer-like head 44 to hit the ball P, thus forcing the latter to roll over the playing board towards the home plate, to be struck at by the bat 21.

It is to be noted that the hammer-like portion 44 of the lever 43 is formed with a boss 61 adapted, upon swinging said lever, to come in contact with the lifter locking ring 36 and knock it out of engagement with the lifter 31, so that the latter is free to fall almost simultaneously with the hitting of the ball P.

Since the lever 43 is to be released immediately upon hitting the ball, it will be understood that said lever will be quickly returned to its normal position within the recess 24 by action of the spring 57, whereupon the cover plate 25 will snap back to closing position leaving the field unobstructed should the pitched ball be struck at and hit outfield over the surface of the playing board 12.

Scattered throughout the surface of the playing board 12 both in the diamond outline 13 and outfield portion 14 thereof, are a plurality of apertures 62 formed with a flared opening portion as shown at 63. These apertures, it will be understood, are provided to receive the batted ball should the same happen to roll thereover, and each represents a certain play, which play will be indicated in the manner to be hereinafter described. Hinged to the underside of the playing board 12 and arranged to normally close the bottom of the apertures 62 are trap doors 64 each carrying an angularly bent finger 65 projecting into the corresponding aperture 62. In this connection, it will be understood that when the ball P falls into one of the apertures 62, the weight of said ball will cause the door 64 to drop thus allowing the ball to pass through. Cords, wires, or the like 66 are attached to each door at a point diametrically opposite to the hinged portion thereof and guided through screw eyes, pulleys or the like 67. These cords or the like 66 lead to the sides of the playing table 10 as indicated at 68, where they may be manually pulled to reset the doors 64 after they have been depressed by the batted ball falling in the play indicating apertures 62.

For the purpose of indicating the play, an electrical scoreboard 69 is mounted upon a suitable portion of the playing table 10, which scoreboard 69 embodies a plurality of lamps 70 each indi-

cating a particular play and in the circuit of which, as illustrated in Figure 4, are interposed the trap doors 54. In this manner, it will appear manifest that the ball P falling in the aperture 62 will come to rest upon the finger 65, which is preferably made of spring metal, and displace the same to touch the contact 71 mounted upon an adjacent portion of the trap door, thus closing the circuit and illuminating the lamps 70. Of course, after the ball has left the finger 65 in passing through as above pointed out, the latter will automatically break the contact thus opening the circuit to the lamp 70.

Arranged over the sides of the playing board 12, defining the outfield portion thereof and slightly projecting thereover, are eaves 72 from which are swingably suspended plaques 73 each having a definite indication thereon such as "Foul", "Home run", "Out", "Two base hit", etc., so that if a batted ball rolls over the apertures 62 without falling therein, it will hit one of said plaques and swing the same rearwardly letting the ball pass but indicating the play made. The play is also indicated upon the electrical scoreboard 69 and for this purpose, a contact point 74 is placed on the plaque 73 and adapted, when the latter is swung in opposition, to bear upon a spring contact 75. These contacts 74 and 75 are in circuit with the appropriate lamps of the scoreboard 69 so that the play appears thereon.

Each plaque is further provided with a rearwardly and upwardly extending arcuate arm 76 passing through an opening 77 in said eaves 72. A spring actuated catch 78 is mounted upon the underside of the eaves 72 and disposed to engage a notch 79 on said finger to maintain the swinging plaque in up position.

The plaques 73 may be manually reset by means of cords 80 in the manner described with reference to the surface aperture trap doors, but it is preferred to reset the plaques 73 electrically as illustrated in Figure 5, wherein a coil 81 capable of being energized by the closing of a switch 82 to attract a pivoted lever 83 to which is connected the cord 80 controlling the rings 78. It will be understood that when the cord 80 is pulled, the rings 78 will be displaced to disengage the arm 76 of the plaques 73 whereupon the latter may return to their original suspended position.

Disposed in back of the home plate, is a ball receiving arrangement comprising a box-like body 84 having an open front 85 facing the home plate. A set of three swingingly suspended plaques 73' normally close the open front 85 of said body 84. It will appear from the drawings, that these plaques 73' with their arcuate arms 76' and locking rings 78' are similar in construction and operation to the plaques 73 bordering the outfield of the playing board.

Of the set of three plaques 73', the intermediate one is positioned in alinement with the home plate and intended to indicate a "strike", whereas the side plaques are disposed out of alinement with the home plate and intended to indicate "a ball". Consequently, it will be appreciated that if a batter fails to swing at the pitched ball and the latter passes over the plate, the ball will be received in the receiving arrangement through the intermediate plaque thus indicating a call strike, but if the pitched ball passes outside the home plate, it will be received through the side plaques thus indicating a "ball".

In order to return the ball to the pitcher's box after each play, an inclined false bottom 86 is constructed beneath the playing board 12. The false bottom 86 is made to converge towards the shaft 29 and is provided with channels 87 leading to said shaft. At the point where the channels 87 meet the shaft 29, there are cut in the latter, openings 88 whereby the ball P may enter said shaft and seat itself upon the elevating member 31 to be subsequently raised to pitching position in the manner hereinbefore set forth. As shown, passageways 89 and 90 are formed in the playing board 12 to permit the ball, after passing the plaques 73 or 73', to roll down the inclined false bottom 86 into the channels 87 and to the shaft 29.

The operation of my improved device will be clearly understood from the foregoing description. It may be added, however, that in use, the playing of the game generally requires at least two players, one representing the batting team and the other representing the fielding team.

The "Fielder" will control the pitching arrangement and may adjust the latter to impart to the ball the type of pitched ball that he desires.

The "Batter" will spin the pivoted bat 21 when the ball is pitched aiming to bat the ball so that the most advantageous play may be made. The play will be indicated and the ball returned to the pitcher's box as hereinbefore described.

If the batter so desires, he may let the pitched ball go by, and in that event, if the ball is received through the strike indicating portion of the receiving arrangement, a strike will be called against the batter, but if the ball enters the receiving arrangement through the "ball" portion thereof, then a "ball" will be counted for the batter.

Manifestly, the construction shown and described is capable of many modifications, and those modifications which come within the scope of the claims I consider within the spirit of the invention.

I claim:

1. In a baseball game apparatus, a playing board, a ball elevating member arranged under said board, means for raising said member to support the ball above the surface of the playing board, means for locking said member in its raised position, a lever pivoted to said board and having a hammer-like portion adapted to knock the ball off its elevating support to simulate a pitched ball, and means for releasing said locking means simultaneously with the knocking of the ball by said lever.

2. In a baseball game apparatus, a playing board, a hollow shaft depending from said board, a ball elevating member slidable up and down in said shaft, means for raising said member within the shaft to support the ball above the surface of the playing board, and means pivoted to the board and operable to knock the ball off its elevating support to simulate a pitched ball.

3. In a baseball game apparatus, a playing board, a hollow shaft depending from said board, a ball elevating member slidable up and down in said shaft, means for raising said member to support the ball above the surface of the playing board, spring actuated means engageable with said member for locking the same at the upper portion of the shaft, a lever pivoted to the board and having a hammer-like portion adapted to knock the ball off its elevating support to simulate a pitched ball, and means on said lever for releasing said locking means simultaneously with the knocking of the ball by said lever.

4. In a baseball game apparatus, a playing board, a hollow shaft depending from said board, a ball elevating member slidable up and down

within said shaft, means for raising said member to support the ball above the surface of the playing board, spring actuated means engageable with said member for locking the same in its raised position, a lever pivoted to said board and having a hammer-like portion adapted to knock the ball of its elevating support to simulate a pitched ball, means formed on said lever and adapted to contact with said locking means simultaneously with the knocking of the ball by said lever for releasing the member whereby the latter may return to the lower portion of the shaft, and means for leading the ball to the lower portion of the shaft for engagement with said elevating member.

5. In a baseball game apparatus, a playing board, a ball elevating member arranged under said board, means for raising said member to support the ball above the surface of the playing board, a lever pivoted to said board and having a hammer-like portion adapted to knock the ball off its elevating support to simulate a pitched ball, and means for adjusting said lever with relation to the ball.

6. In a baseball game apparatus, a playing board, a ball elevating member arranged under said board, means for raising said member to support the ball above the surface of the playing board, a lever pivoted to the board and having a hammer-like portion adapted to knock the ball off its elevating support to simulate a pitched ball, means for adjusting said lever in relation to the ball, manually controlled means for regulating said adjusting means, and other manually controlled means for operating said lever to knock the ball.

7. In a baseball game apparatus, a playing board, means for pitching the ball over said board, means for hitting the pitched ball over the board, plaques swingably suspended over a portion of said board and arranged to swing upwardly when hit by a batted ball, means associated with said plaques to lock the same in up position, and means for releasing said locking means whereby said plaques may return to extended position.

8. In a baseball game apparatus, a playing board, means for pitching the ball over said board, means for hitting the pitched ball over the board, plaques swingably suspended over a portion of said board and arranged to swing upwardly when hit by a batted ball, means associated with said plaques to lock the same in up position, means for releasing said locking means whereby said plaques may return to extended position, an electrical scoreboard, and contact means operable to close the circuit to said scoreboard when said plaques are in up position.

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