UNITED STATES PATENT OFFICE.

ALBERT HENRY HEITMANN, OF COLUMBUS, OHIO.

BASE-BALL-GAME APPARATUS.


To all whom it may concern:

Be it known that I, ALBERT HENRY HEITMANN, a citizen of the United States, and a resident of Columbus, in the county of Franklin and State of Ohio, have invented a new and Improved Base-Ball-Game Apparatus, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in apparatus for playing games indoors, and more particularly to an apparatus for playing baseball by means of small dummy players which are placed upon a board representing a baseball diamond.

The object of the invention is to provide means whereby the game may be played with all of the rules of an ordinary outdoor baseball game, and whereby all of the realistic effects may be produced.

Further objects and advantages of my improved apparatus will be hereinafter pointed out and the specific structure defined in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, in which

Figure 1 is a perspective of the diamond and the players located thereon; Fig. 2 is a vertical section showing the operating mechanism of the pitcher; Fig. 3 is an inverted plan view of the supporting block for the pitcher, and taken on the line 3—3 of Fig. 2, in the direction of the arrows; Fig. 4 is a plan view of the line 3—3 of Fig. 2, looking in the opposite direction to the arrows; Fig. 5 is a vertical section illustrating the operating mechanism of the batter, and taken on the line 5—5 of Fig. 6; Fig. 6 is a rear view of the batter, certain portions being broken away to more clearly illustrate the operating mechanism; Figs. 7, 8 and 9 are vertical sections through the diamond at different points, and taken on the lines 7—7, 8—8 and 9—9 of Fig. 1.

My improved game comprises a rectangular board 10 adapted to be supported upon a table or upon supporting legs secured to the under side thereof, and the outer edge of the board is provided with an upturned flange or railing 11 adapted to prevent the balls from rolling off the edge of the board. Adjacent corner 45 of the board is located the batter facing toward the opposite diagonal corner, and in front of the batter is laid out the diamond having grooves along the base lines and pockets at the bases. The fielders' positions are designated by the larger pockets having spiral grooves, while the pitcher instead of being located within the diamond, is located beyond the center thereof, so as to be out of the way of the batted balls. A suitable railing surrounds the field, save at the points where it is necessary to insert the hand to operate the game.

More in particular the field is laid off from a point 12 directly in front of the batter with two lines 13, 14 at right angles to each other and forming the foul lines, while along these two lines for a portion of their length extend the grooves 15 and 16. At the points representing the first and third bases are openings 17 and 18 in the surface of the board, and these are connected by grooves 19 and 20 to the opening 21, representing the position of the second baseman. Each of the grooves is of increasing depth as it approaches the base toward which the runner would normally travel, so that as the ball, representing the base-runner, is liberated at any one base it will travel without outside aid to the next opening representing the next base.

Within each of the openings is located a curved plate 22 formed of an elliptical piece of metal bent so that when supported at the desired angle, it substantially closes the lower end of the opening. Each plate is substantially supported on the under side by a rod 23 whereby the plate may be raised and the ball, representing the base-runner, ejected from the opening and started on its course toward the next base. For operating these ejecting plates I provide a plurality of rods 23, 24, 25 and 26 connected to the lower ends of the rods 22 and extending to points adjacent the batter where they connect to push buttons 27, 28, 29 and 30. Each rod is pivoted to the under side of the board 10 at a point adjacent the push button by means of staples 31, and springs 32 are provided adjacent the pivoted staples for normally raising the push button and lowering the ejecting plates 21. Suitable staples 33 are provided for supporting and guiding the operating rods. The plates 21 are set at an angle, as indicated in Figs. 7 and 8, and each plate faces toward the next succeeding base. To operate this portion of my improved apparatus, the base-runner, represented by a marble or other small ball, is placed in the opening 13, representing the "home" plate, and as the ball is batted the button 30 is pushed down to raise the plate 21 carried thereby, and eject the ball 22 from the opening and start it down the groove 14 toward the opening 16, representing first base. To advance the ball from first base to second base, the button 29 is pressed which raises the plate 21 carried thereby and ejects the ball and starts it down the groove 18 toward the second base. Similarly, the ball, representing the base-runner, may be advanced from second to third and from third to "home" plate.

Arranged just outside of the diamond and adjacent the three bases are pockets representing the three 105 basemen and the short stop. Each of these pockets is 50
provided with a spiral groove leading from the circumference to the center, and any suitable means may be provided for forming the pocket and groove. Preferably, a large opening is cut in the board 10 and piece of sheet metal 35 stamped to the desired form are inserted flush with the upper surface of the board. The sheet metal 35 is formed with a spiral ridge, leaving a groove around which the ball must travel before it reaches the center of the pocket. At the rear of each pocket is placed a curved screen or shield 36, which serves to stop the ball and direct it into the pocket. Outside of the four pockets above referred to are arranged three other and larger ones in a similar manner and represented by the numeral 37.

These pockets represent the three out-fielders, and as the territory which they must cover is somewhat greater than that covered by the in-fielders, these pockets are made larger than the first mentioned ones, and as it normally takes longer for the batted ball to reach the out-field and to be returned to the diamond, these pockets 37 are provided with a larger number of turns to the spiral groove, so that it will take longer for the batted ball to reach the center of the pocket. Suitable screens or shield 38 are provided back of each of these pockets and similar in construction to the shield 36 behind the in-field pockets.

As previously stated, the board, representing the field, is surrounded by a screen or shield 39, representing a fence, and having openings therein only at the points where it is necessary to insert the hands to operate the pitcher, batter, and the means for advancing the base-runners. The pitcher occupies a position at the rear of the pocket of the center-fielder, and is provided with mechanism whereby the pitcher may throw the ball in the direction of the batter, and whereby the speed and direction of the pitched ball may be accurately controlled. The pitcher and operating mechanism thereof are clearly illustrated in Figs. 2, 3 and 4, to which reference will now be made. A suitable base block 40 supports the pitcher and is provided on the inner side with the mechanism for operating the device to throw the ball. The dummy player 41 may be formed of any suitable material and none of the parts need be movable save the arm 42 for throwing the ball, which arm must necessarily be either flexible or jointed to the body. Within the body of the player is a supporting standard 43 rigidly secured to the block 40 and having at its upper end a suitable bearing for the shaft 44, and a bar 45 rigidly screwed to said shaft and extending out through the pitching arm 42 of the player. The outer end of the bar 45 is cut to a shape adapted to hold the ball and to represent, as near as possible, the hand of the player.

The end 46 of the bar should necessarily be somewhat spoon shaped, with the little finger supporting the ball from beneath and the thumb supporting it at the rear side. The fingers are curved sufficiently to prevent the ball from leaving the hand other than at right angles to the arm. The shaft 44 extends down through one leg of the player into the supporting block and is provided with a bearing therein and an operating lever 47 extending out through an opening in the side of the supporting block 40. By turning the lever 47, the hand 48 will be moved through the arc of a circle, and as the shaft 44 is set at an angle the hand will be moved upward as it moves forward and the ball will be thrown at a slight upwardly inclined angle. The lower end of the shaft 44 is provided with a coil spring 48 having one end thereof secured to the shaft, and having the other end abutting against a nut 49 carried by a screw-threaded bolt 50. The spring normally holds the arm in the forward position and as the lever 47 is moved backward, the action is shown in Fig. 2 and is then released, the action of the spring rotates the shaft 44 and swings the arm forward. The rotation of the shaft, arm and lever is suddenly stopped by the contact of the lever 47 with a stop 51 and the ball leaves the hand at right angles thereto.

It is evident that the tension of the spring will determine the speed with which the arm is rotated when released, and, therefore, determine the distance to which the ball will be thrown. As the tension of the spring is normally such that the ball when thrown at a slight upward angle will pass adjacent the batter on a slight downward curve, it is evident that the height of the ball at the time it passes the batter may be readily controlled by controlling the speed at which it is thrown. The nut 49 is held from turning on the screw-bolt 50, and by rotating the latter the nut is advanced to increase or decrease the tension of the spring 48, thus readily determining the speed of the pitched ball and its height as it passes the batter. For controlling the lateral course of the ball to insure its passing directly over the “home” plate and in the proper relation to the batter, I secure the block 40, upon which the pitcher is supported, with means whereby the lateral angle of the thrown ball may be readily controlled. The board 10, representing the field, is preferably provided with two plates 52 and 53 inserted therein at the point where it is desired to locate the pitcher, and these plates are embedded so as to lie flush with the upper surface of the board. The board is cut away beneath each of the plates, and the plate 52 is provided with a rectangular opening 54 having a recess 55 at one side thereof, and the plate 53 is provided with two enlarged openings 56 adjacent its end and a narrower passage 57 connecting the two. Two bolts 58 and 59 having enlarged heads, extend down through the supporting block adjacent the two ends thereof, and the head of the bolt 58 is extending through the rectangular opening 54 of the plate 52 and inserted beneath the recess 55 in the position indicated in Figs. 2 and 4. The head of the bolt 59 is inserted through one of the rectangular openings 56 and moved to a position directly below the groove or slot 57. Thumb nuts 60 are provided at the upper ends of the two bolts, whereby the block may be secured in any desired position. The bolt 58 serves as a pivot bolt within the recess 55 and the groove 57 is in the arc of a circle having the recess 55 as a center, the rear end of the block may be moved to place the pitcher to different positions, and thus laterally control the course of the thrown ball.

The batter 62 is located directly behind the “home” plate and is supported upon a base-block 61, somewhat similar to the base-block 40 upon which the pitcher is supported. The dummy batter may be made of any
suitable material similar to the pitcher, although both arms should be movable in relation to the body. Within the body of the batter is a support which extends down through one leg of the support block and terminates in two downwardly-extending lugs which are pivoted to the support block and terminate in a knob adapted to be grasped by the operator. Intermediate the ends of the lever it is pivoted between two downwardly-extending lugs 73, whereby the lever may be turned in a lateral direction and also raised and lowered. The inner end of the operating lever is connected by a link 74 to the end of the lever support 66, while the end of the operating lever is free to move up and down in relation to the end of the shaft 63. By moving the knob 71 in a lateral direction, the bat 67 is moved simultaneously, while by raising or lowering the knob 71 the link 74 causes the simultaneous raising and lowering of the bat. As the link 74 is connected to both the bat-support and to the lever 70 on the same side of their pivotal supports but is connected much nearer to the pivot of the bat-support than to the pivot of the lever, it is obvious that a given vertical movement of the lever will result in a much greater vertical movement of the bat.

The supporting block 61 of the bat is secured to the board in any suitable manner but preferably by means of a projection 75 carried by the under side of the block and extending into an opening in the board 10, and by a bolt 76 and a plate 77 similar to the bolts 59 and the plate 53 of the supporting block 40. The bat 67 is preferably made detachable from the bat-support 66, whereby bats of different sizes and different shapes may be inserted to suit the fancy of the operator. To one not familiar with the game a larger bat would preferably be used, but as the person-gained experience and dexterity in the operation of the batter a much smaller bat would be desired. The action of the spring 68 upon the operating shaft 63 is somewhat different than the action of the spring upon the operating shaft of the pitcher. The backward movement of the lever and bat-tends to increase the tension of the spring, but in the operation of the device the operator does not let go of the lever but merely gives it a quick forward movement, the spring tending to facilitate this movement rather than to constitute the sole means for causing the forward movement of the bat.

To play my improved baseball game, two persons are necessary and as many more may participate as desired. The ball is first placed in the hand of the pitcher and the lever 47 moved to the position shown in Figs. 2 and 4. A second person controls the batter by means of the lever 71. Upon releasing the operating lever 47 of the pitcher the ball is thrown into the vicinity of the batter, and the person operating the latter endeavors to strike the ball with the bat. As the bat is free to move both in a lateral and a vertical direction and both movements may be accomplished by a single lever, 71, the bat may be readily moved to a position where the ball may be struck. The player manipulating the pitcher by increasing the tension of the spring 48, or by shifting the position of the rear of the block 40, may readily control the direction and the velocity of the pitched ball. A small marble, representing the base runner, is previously placed within the opening 12 at the "home" plate, and as soon as the ball is struck by the bat and goes within the foul lines 13, the button 30 is pressed and the marble released from the opening 12 and started down the groove 14 toward the first base opening 16. If the batted ball reaches one of the fielding pockets 35 or 37 and travels down the spiral groove to the center before the marble, representing the base runner, reaches first base, the ball will be considered as having been properly fielded and the batter as having been "put out". The outfield is preferably subdivided by two lines 77 and 78, the former outside of the three out-field positions and the latter outside of the three in-field positions, so that if the batted ball comes to rest outside of the line 77 or inside the fence, 90 the batter will be considered to have made a three-base hit; while if the ball comes to rest between the lines 77 and 78 but not in any one of the fielding pockets 37, the batter will be considered to have made a two-base hit; while if the ball stops inside the line 78 but not in any one of the fielding pockets, the batter will be considered to have made a one-base hit. If the ball is batted over the fence but within the foul line, a "home run" will be scored.

Various rules may be established for the playing of the game other than those above noted, and various changes may be made in the details of the apparatus without departing from the spirit of my invention.

Having thus described my invention, I claim as now and desire to secure by Letters Patent:

1. An apparatus of the class described, comprising a suitable support, means for pitching a ball, means for batting said ball, and a plurality of pockets intermediate said pitching and batting means, each of said pockets having a spiral groove descending toward the center of the pocket.

2. An apparatus of the class described, comprising a suitable support, means for pitching a ball, means for batting said ball, a plurality of pockets intermediate said pitching and batting means, each of said pockets having a spiral groove descending toward the center of the pocket, and a screen disposed adjacent each of said pockets and on the opposite side thereof from said batting means and adapted to direct the ball into the groove of said pocket.

3. An apparatus of the class described, comprising a suitable support, a plurality of pockets in said support, each of said pockets having a spiral groove descending toward the center of the pocket, and means for projecting a ball into proximity to said pockets.

4. An apparatus of the class described, comprising a suitable support, a plurality of pockets in said support, each of said pockets having a spiral groove descending
toward the center of the pocket, means for projecting a ball into proximity to said pockets, and a screen disposed adjacent each of said pockets and on the opposite side thereof from said ball-projecting means and adapted to direct the ball into the groove of the corresponding pocket.

An apparatus of the class described, comprising a suitable support having a plurality of openings therein, a plurality of pockets each formed of sheet metal and stamped to provide a spiral groove extending from the circumference to the center thereof, each of said pockets being disposed within one of said openings, and means for projecting a ball into proximity to said pockets.