C. E. BURCH & C. A. WOOLSEY.

GAME APPARATUS.

APPLICATION FILED JULY 17, 1911.

1,053,568.

Patented Feb. 18, 1913.

5 SHEETS—SHEET 1.

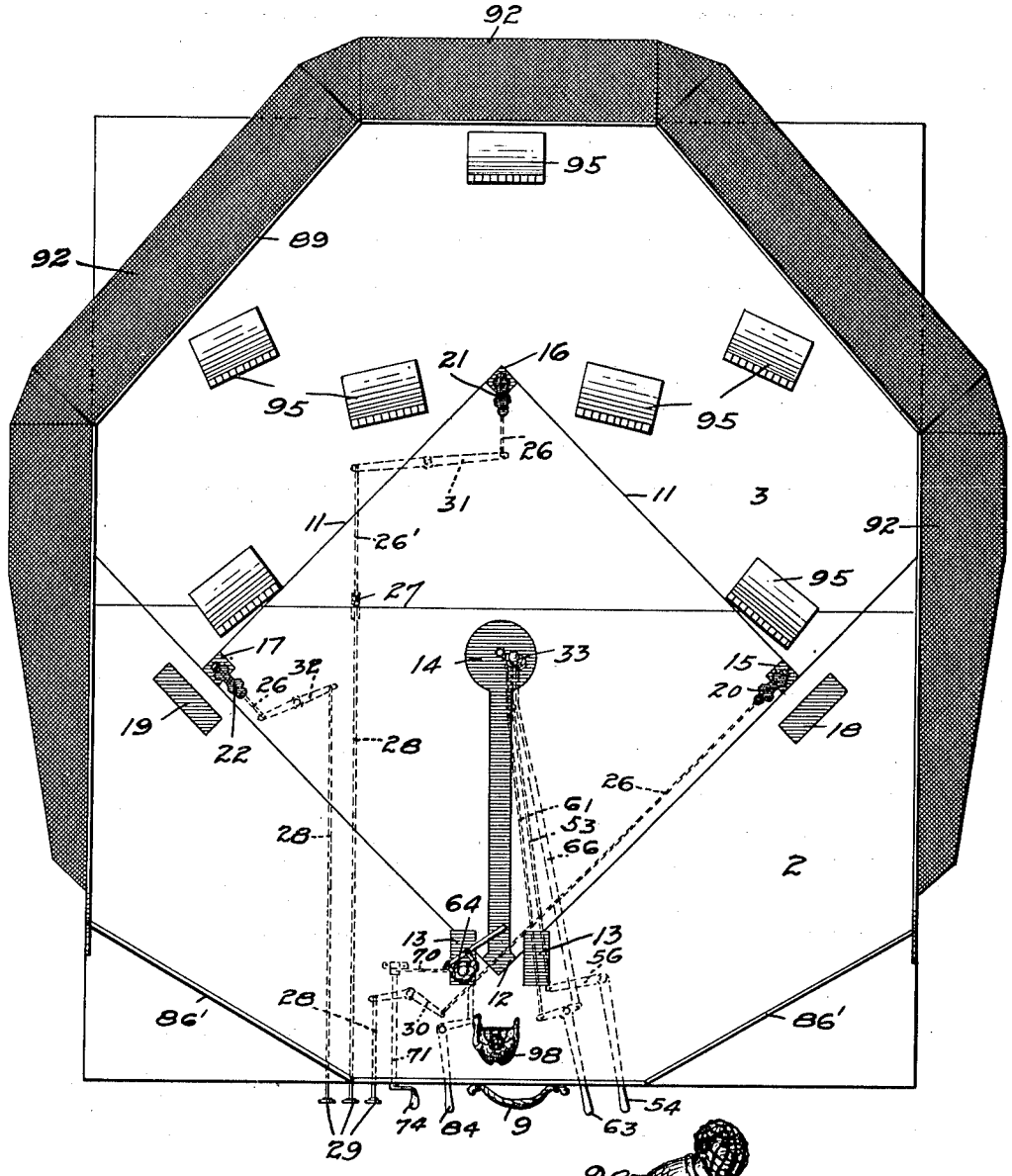

FIG. 1.

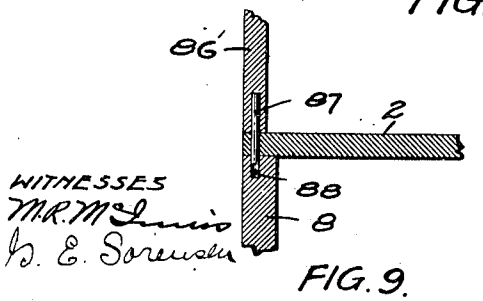

FIG. 9.

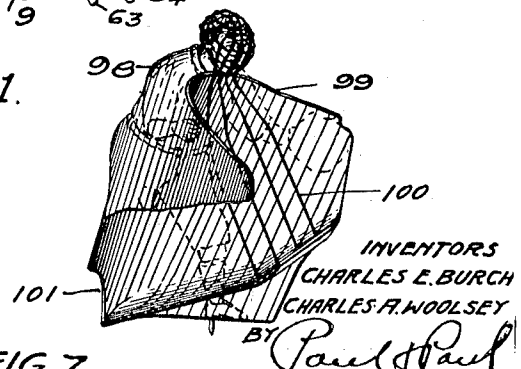

FIG. 7.

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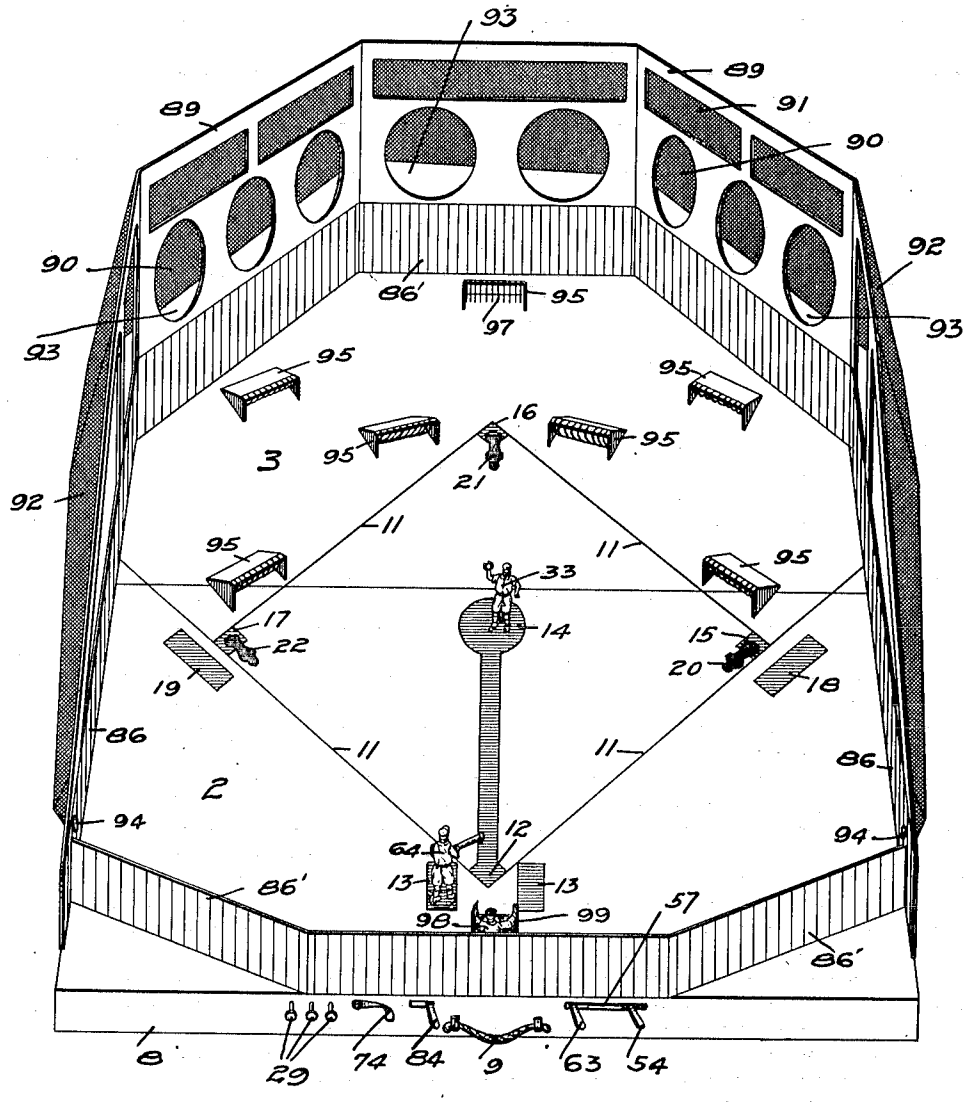

FIG. 2.

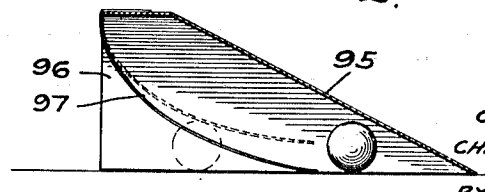

FIG. 8.

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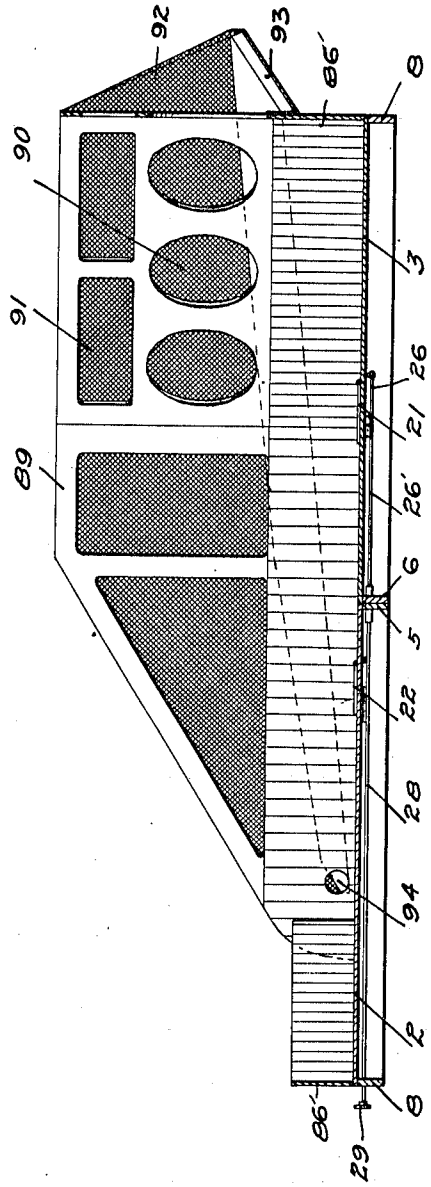

FIG. 3.

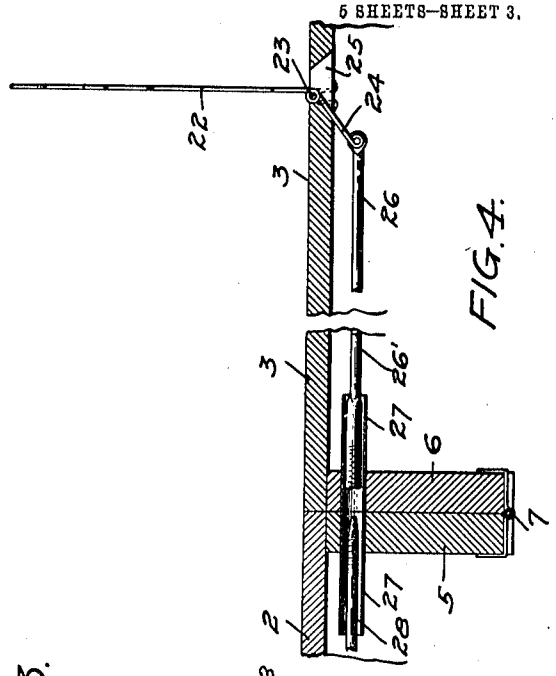

FIG. 4.

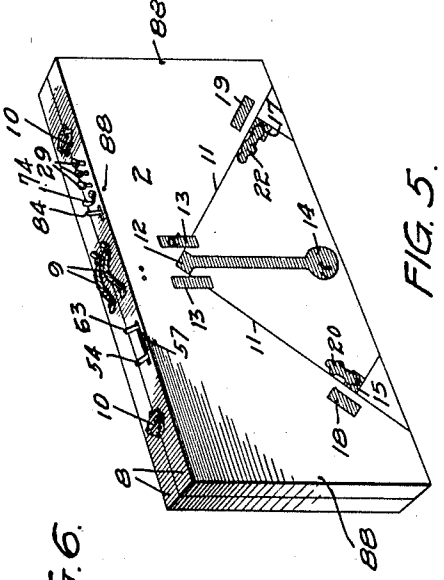

FIG. 5.

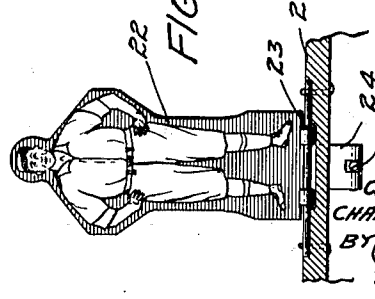

FIG. 6.

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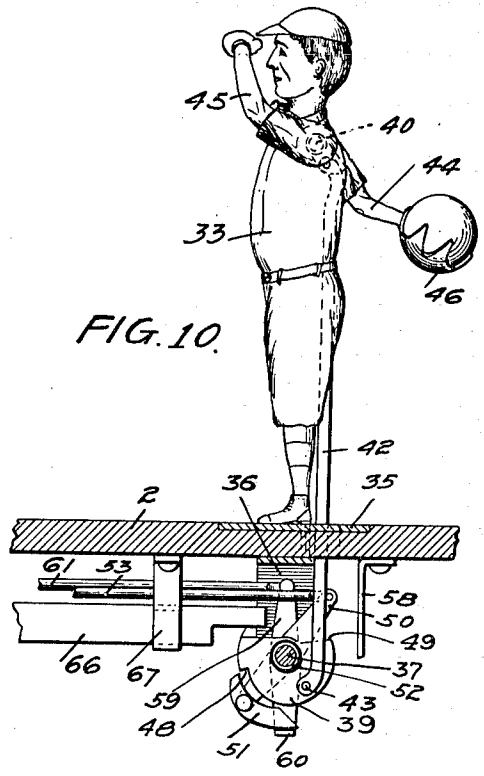

FIG. 10.

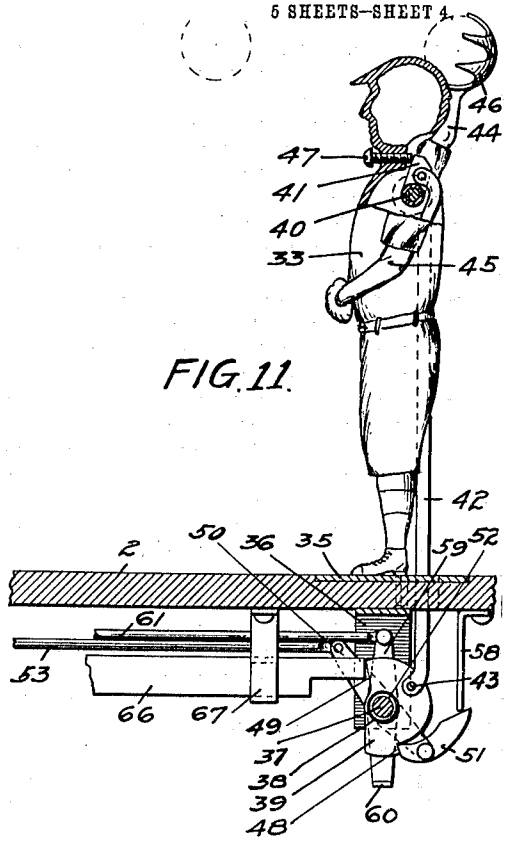

FIG. 11.

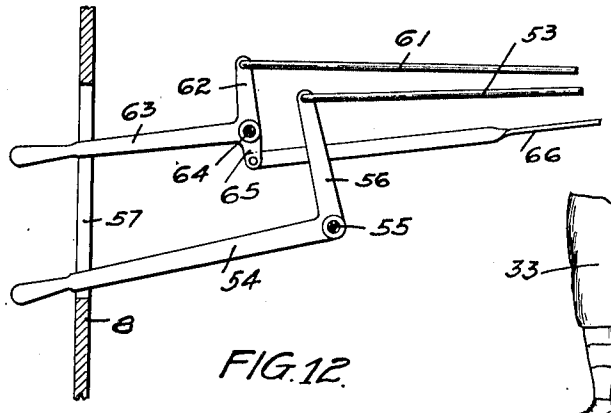

FIG. 12.

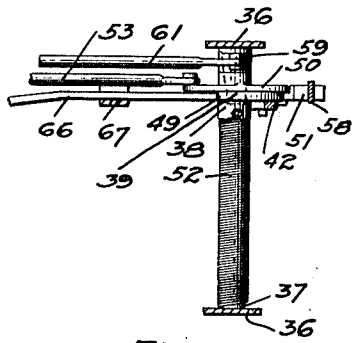

FIG. 13.

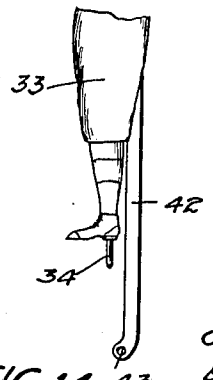

FIG. 14.

WITNESSES

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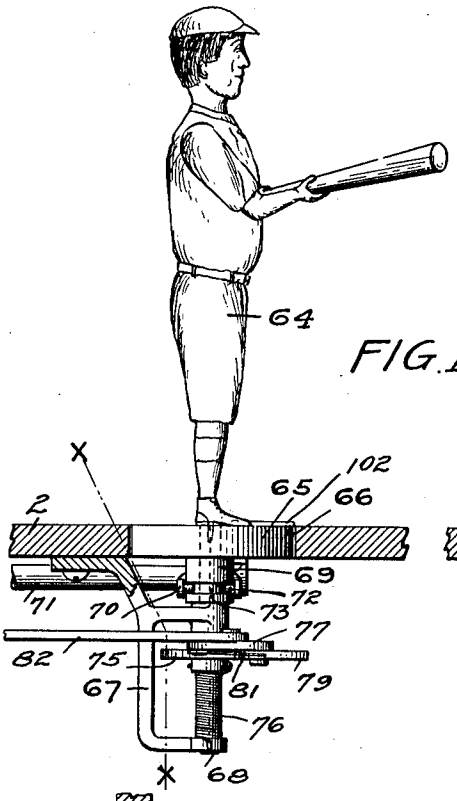

FIG. 15.

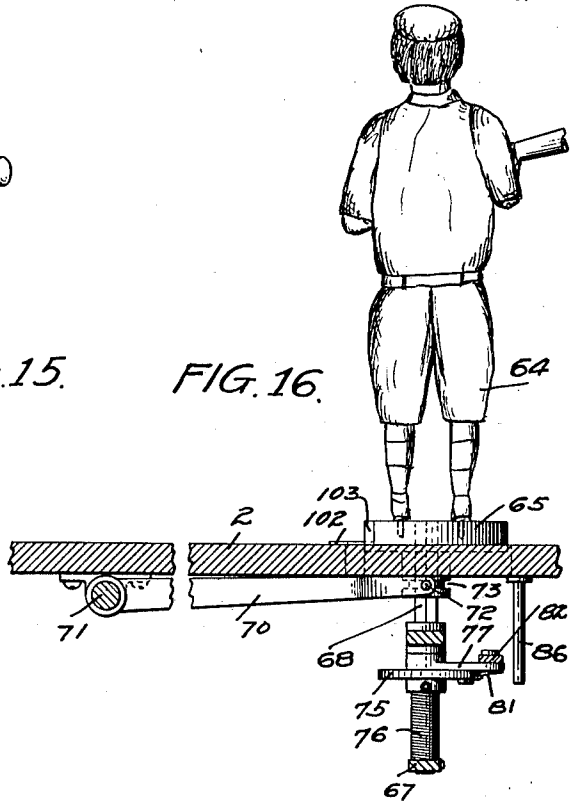

FIG. 16.

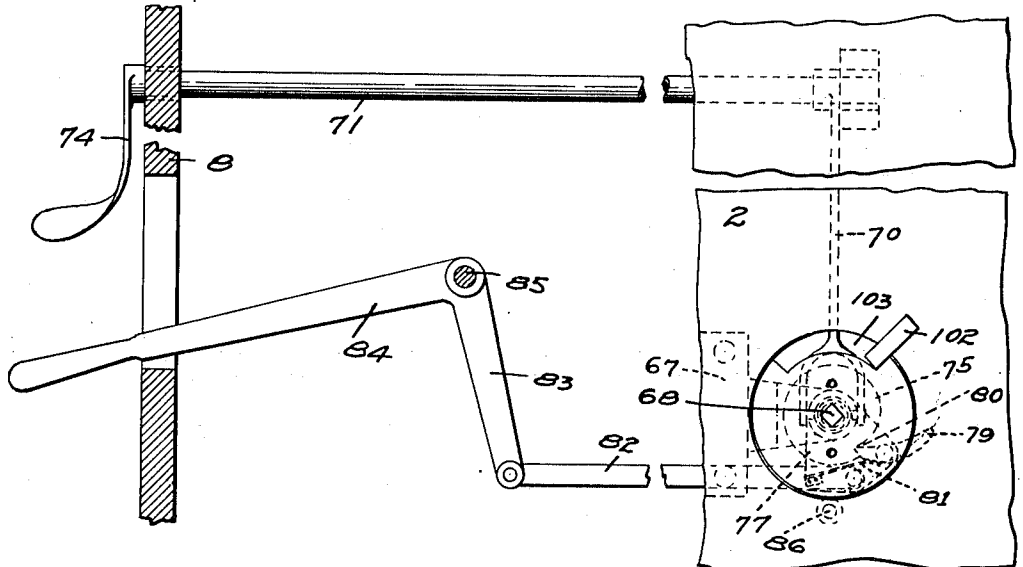

FIG. 17

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GAME APPARATUS.

1,053,568. Specification of Letters Patent. Patented Feb. 18, 1913.

Application filed July 17, 1911. Serial No. 638,950.

To all whom it may concern:

Be it known that we, CHARLES E. BURCH and CHARLES A. WOOLSEY, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful Improvements in Game Apparatus, of which the following is a specification.

Our invention relates to games and particularly to a game apparatus involving the principal features of the modern game of base ball.

The object of the invention is to provide an apparatus which will admit of a considerable degree of skill in the manipulation of the parts and in which the playing of the game to a point approaching perfection will follow only after considerable practice and care in the movement of the miniature players.

A further object is to provide a game in which skill and practice are such important factors that the interest of the players manipulating the objects on the diamond will be easily maintained.

Other objects of the invention will appear from the following detailed description.

The invention consists generally in various constructions and combinations, all as hereinafter described and particularly ponted out in the claims.

In the accompanying drawings forming part of this specification, Figure 1 is a plan view of a game board embodying our invention, Fig. 2 is a perspective view of the same, Fig. 3 is a sectional view through the board, Fig. 4 is a detail sectional view showing the mechanism for operating the figure representing the base runner, and the means permitting the folding of the sections of the board, Fig. 5 is a perspective view, illustrating the game board folded into a form substantially the shape of a suit case, Fig. 6 is a detail sectional view showing a front view of the figure representing the base runner, Fig. 7 is a detail view representing the catcher, Fig. 8 is a detail sectional view of the device representing one of the out fielders, Fig. 9 is a detail sectional view showing the manner of mounting the inclosing walls or fence upon the floor of the board, Fig. 10 is a detail sectional view of the miniature figure representing the pitcher, showing the pitching arm thrown back ready to pitch the ball, Fig. 11 is a similar view in another position, showing the arm thrown forward to pitch the ball and the mechanism for operating the arm, Fig. 12 is a detail plan view of the lever mechanism for operating the pitching device, Fig. 13 is a detail view showing the mechanism that is actuated by the movement of the levers in Fig. 12, Fig. 14 is a detail view showing the manner of mounting the pitcher figure on the board, Fig. 15 is a detail sectional view illustrating the batter figure, the figure being shown in side elevation, Fig. 16 is a similar view on the section line *x*—*x* of Fig. 15, Fig. 17 is a detail sectional view of the mechanism for controlling the movement of the batter.

In the drawing, 2 and 3 represent the sections of the board, having strips 5 and 6 thereon secured together by a hinge 7. This hinge allows the board to be folded until the walls 8 at the outer edges of the board contact with one another and form a box, as shown in Fig. 5, substantially the shape of a suit case, handles 9 being provided for carrying the box so formed, a fastening device 10 holding the sections securely together.

The diamond is marked off on the board by suitable lines 11, the home plate being indicated at 12, the batter's box at 13, and the pitcher's box at 14. The first, second, and third bases are represented by numerals 15, 16 and 17, and the coaching boxes at the first and third bases are represented by numerals 18 and 19. The first, second and third base runners are represented by numerals 20, 21 and 22 and consist of plates hinged at 23 on the corresponding bases and having depending portions 24 projecting through openings 25 in the board, and pivotally connected with rods 26. A sleeve 27 is provided at the hinged edges of the boards and adapted to receive rods 26′ and 28, there being a rod 28 for each base projecting outside the board and provided with finger grips 29. Levers 30, 31 and 32 are pivotally mounted on the board and connected with the levers 26 at first and third bases and also with the operating rods 28. At the second base the rod 26′ is connected with the lever 31 and is threaded at one end to receive the correspondingly threaded rod 28. This connection allows the folding of the board and when the game is set up the threaded ends are secured together and the figure representing the base runner operated

in the same manner as the figures at the other bases.

In setting up the game, the rod 28 leading toward second base is pushed into the sleeve 27 and connected with the threaded end of the rod 26′ so that pressure on the rod will raise the figure representing the base runner to an upright position. This will only be done when the batter makes a hit and reaches second base. If the batter makes a one base hit the figure on first base will be raised and if a two base hit the figure on second base will be lifted; or when the base runner, having made a base hit, steals second or third base, the proper figure will be raised to indicate the position of the runner.

We prefer to interpose levers 30, 31, and 32 in the connections between the operating rods 28 and the rods 26 connected to figures representing the base runners so that all the finger grips 29 may be arranged close together within convenient reach of one of the persons playing the game, and at this point we might state that the person manipulating the batter will, of course, have charge of the figures representing the base runners.

We prefer to designate the pitcher by reference numeral 33. (See Fig. 11). The feet of this figure are provided with pins 34 which fit into sockets provided in the plate 35 and in the floor of the board, so that the figure can be readily detached from the board when the game is folded.

On the underside of the board a hanger 36 is provided, supporting a shaft 37 which lies in a plane parallel, substantially, with the board and carries a hub 38 having a cam 39 mounted thereon. The pitcher figure has a shaft 40 extending transversely therethrough on which a lug 41 is secured. A rod 42 is pivotally connected with this lug at its upper end and at its lower end has a loose pivotal connection at 43 with the cam 39. Arms 44 and 45 are mounted on the shaft 40, the arm 44 having a hand 46 that is adapted to receive the ball to be pitched. This hand and arm swing upwardly in the act of pitching, so that the ball is thrown overhand in a manner corresponding to overhand pitching in the game of base ball. A set screw 47 is mounted in the pitcher figure in the path of the lug 41 to act as a stop therefor and limit the upward swinging movement of the pitching arm. Evidently, if the arm has a limited movement the ball will be thrown slower, while, if the arm swings forward to a vertical position or nearly so, the ball will move faster when it reaches the batter. In this way the speed of the ball pitched can be regulated. The cam 39 is preferably provided with a shoulder 48 and with a flat face 49. A lever 50 is pivoted on the shaft 37 and carries a dog 51 that is adapted to engage the shoulder 48 and rotate the cam against the tension of a spring 52 that is mounted on the shaft 37. The lever 50 is attached to an operating rod 53 and the hand lever 54 is pivoted at 55 and has an arm 56 connected to the rod 53. This lever 54 projects through a slot 57 in the wall of the board where it can be conveniently reached by the player.

A finger 58 is preferably provided on the board in position to engage the dog 51 and insure its contact with the shoulder 48. We also prefer to provide a lever 59 pivoted on the shaft 37 and having a trip lug 60 in the path of the dog 51. A rod 61 is attached to this lever 59 and connected to an arm 62 on a lever 63 that is pivoted at 64 near the lever 54. This lever 63 also has an arm 65 to which the bar 66 is attached, said bar sliding in a guide 67 and having its forward end in the path of the cam 39 to engage the face 49 and check the movement of the cam. It will be evident that as the lever 63 is oscillated the lever 59 will be moved to swing the trip lug 60 toward or from the dog 51 to hasten or retard the tripping of the cam 39. Evidently, if the tripping operation is hastened, the pitching arm will be checked before reaching a vertical position, as when the trip lever is swung toward the dog 51 the bar 66 will be moved inward to check the revolution of the cam 39. The player manipulating the lever 63 can thus vary the throwing position of the pitcher's arm and deliver a slow or fast ball, as desired. This regulation of the manner of delivery enables the player to change the speed of the ball at the plate, thereby increasing the difficulty of hitting it with a bat and adding materially to the interest in the game. Considerable skill will be required of the person controlling the batter to determine what sort of a ball will be pitched. By adjusting the levers so that the cam 39 will operate its full stroke the person controlling the pitcher can throw a straight, swift ball, or by varying the release of the cam the speed of the ball at the plate can be varied, and by only putting the spring under very slight tension a slow ball can be pitched. At any time the speed of the ball may be varied by changing the point of release of the cam.

In Figs. 15 and 16 we have illustrated a batter figure 64, removably supported on a base 65 that fits into an opening 66 in the floor of the board. A bracket 67 is secured on the underside of the board beneath the batter figure. A shaft 68, preferably polygonal in cross section, is mounted on the bracket 67 and a hub 69 is secured to the base 65 and is vertically slidable on said shaft to raise or lower said base. An arm 70 is mounted on a rock shaft 71 and has a forked end provided with pins 72 which

are adapted to enter an annular groove 73 in the hub 69. A crank 74 is mounted on the shaft 71 and by rocking this shaft the base 65 can be raised or lowered to elevate or depress the batter figure and thereby change the elevation of the bat. A cam 75 is mounted on the shaft 68 and a spring 76 has one end attached to the hub of said cam and the other to the bracket 67. An arm 77 is mounted loosely on the shaft 68 and carries a dog 79 adapted to engage a shoulder 80 on the cam 75, said dog being normally held in position to engage said shoulder by the tension of a spring 81. A link 82 connects the arm 77 with one arm 83 of a lever 84 which is pivoted at 85. The operation of this lever will move the cam until the spring 76 has been put under tension and when the dog 79 engages the stop 86 it will be tripped to release the cam and allow the batter figure to swing on its pivot and bring the bat into the path of the pitched ball. At the same time the player may elevate or depress the batter and raise or lower the bat, according to the kind of ball one player thinks the other player will cause the pitcher figure to pitch.

The fence which we prefer to employ we will designate by reference numeral 86', said fence having pins 87 therein adapted to enter sockets 88 in the floor of the board. This fence incloses the diamond, outfield, and the space where many foul balls are batted, on the right and left hand of the catcher. Above the fence proper we prefer to provide an additional fence 89 forming a superstructure and containing a series of holes 90, preferably circular in form, and additional openings 91. A screen 92 is secured to the top of the superstructure 89 and extends down to a runway 93, which is mounted on the outer walls of the fence and is inwardly and downwardly inclined to direct the balls passing through the holes back to the openings 94, where the balls will be delivered to the catcher.

In playing the game, the batting of a ball through the openings into the runway constitutes a fly ball caught.

To represent the out fielders, we prefer to provide traps 95 having openings 96 at their forward ends and guard plates 97 which prevent the ball, after rolling into a trap, from bounding out again, the plates 97 bending sufficiently, as indicated in Fig. 8, to allow the balls to roll freely into the trap.

We also provide a catcher figure 98 provided with a curved plate 99 having guards 100 sufficiently far apart to allow the ball to enter the receptacle formed by the plate and roll out through an opening 101 in the rear, where it can be gathered up by the player and returned to the pitcher.

A pin 102 is preferably provided in the floor of the board, depending into a recess 103 in the periphery of the disk 65, acting as a stop to limit the movement of the disk and the rotation of the batter figure in both directions.

In playing the game, one person will have charge of the levers controlling the pitcher figure, the other person the levers controlling the batter figure and the mechanism for operating the figure representing the base runner. The catcher will be put in position behind the batter and the devices representing the out fielders as well as the in fielders will be placed in their positions near the respective bases and in left, center and right fields. The person controlling the pitcher figure will then manipulate his levers to pitch the ball to the batter, the speed of the ball being governed by the time of delivery and the point where the operating mechanism for actuating the pitcher's arm is released. The person in charge of the batter will rotate the figure to swing the bat and at the same time may raise or lower the batter to change the elevation of the bat and bring it to a point where he thinks the pitcher will put the ball over the plate. Of course, if the pitcher delivers a drop ball and the person in charge of the batter misjudges the delivery and elevates the batter, a strike will result. In case the ball strikes the bat and flies upward and is caught by the receptacle in front of the catcher, or passes through the holes in the fence to right or left of the catcher, then the batter is out, as usual when a foul is caught. This will also be true of any fly ball that is caught in one of the devices representing the in and out fielders. In case the ball is batted to a point in or outside the diamond where it is evident the fielder cannot put out the runner at first base, the figure representing the base runner at first base is lifted, indicating that the batter has safely reached first base. In case of a wild pitch or a passed ball, it is then assumed that the base runner would have ample time to reach second base and the figure on first base is drawn down while the one on second base is raised. This will also be true in case a hit is made for one base. In case of a two base hit with the runner on second base, the figure at third base might be raised to an upright position or not, as preferred, to indicate that the runner had passed third base and had scored.

We claim as our invention:—

1. In a game apparatus representing the game of base ball, a pitcher figure provided with a swinging arm adapted to pitch a ball supported by the arm, said arm swinging in a substantially vertical plane to pitch the ball overhand, and means under control of a player for regulating the time of delivery of the ball and its speed.

2. In a game apparatus representing the game of base ball, a pitcher figure provided

with an arm adapted to swing in a substantially vertical plane to pitch a ball overhand, means within control of a player for swinging said arm to project the ball, and means for varying the point of delivery of the ball to regulate its speed.

3. In a game apparatus representing the game of base ball, a pitcher figure provided with swinging arm adapted to pitch overhand a ball supported by said arm, means within control of a player for swinging said arm in a substantially vertical plane to project the ball, and means mounted in said pitcher figure and capable of adjustment therein for regulating the forward swinging movement of said arm.

4. In a game apparatus representing the game of base ball, a pitcher figure provided with an overhand swinging arm adapted to pitch a ball supported by said arm, means within control of a player for swinging said arm to project the ball, a shaft whereon said swinging arm is mounted, a lug carried by said shaft, and a set screw mounted in said figure in the path of said lug.

5. In a game apparatus representing the game of base ball, a pitcher figure provided with a swinging arm adapted to pitch a ball supported by said arm, a rock shaft whereon said arm is mounted, a rod pivotally connected at one end to said rock shaft, a spring pressed cam whereto the other end of said rod is pivotally connected, said cam having a peripheral shoulder, a lever, and means within control of the player for operating it, a dog carried by said lever and engaging the shoulder of said cam to oscillate the same and rock said shaft and arm, and means also within control of the player for tripping said dog to release said cam.

6. In a game apparatus representing the game of base ball, a pitcher figure provided with a swinging arm adapted to pitch a ball, a spring pressed cam operatively connected with said arm, said cam having a notched periphery, a lever having a dog to engage said cam, a trip lever and means for operating said levers to actuate said cam and release said dog successively.

7. In a game apparatus, representing the game of base ball, a pitcher figure provided with a swinging arm adapted to pitch a ball supported by said arm, operating levers, means connected with said swinging arm and actuated by the movement of one of said levers for drawing said arm backward preparatory to pitching the ball, and means actuated by the movement of the other lever for releasing said arm retracting means at different points in the range of movement of said arm.

8. In a game apparatus representing the game of base ball, a pitcher figure provided with a swinging arm adapted to pitch a ball supported by said arm, a rocking, spring-pressed cam operatively connected with said arm, an oscillating lever, a dog carried thereby and adapted to engage said cam and oscillate it against the tension of its spring, a second oscillating lever having means for tripping said dog, and means within control of a player for operating said levers.

9. In a game apparatus representing the game of base ball, a pitcher figure provided with a swinging arm adapted to pitch a ball supported by said arm, an oscillating, spring pressed cam, an oscillating lever having a dog to engage said cam and oscillate the same against the tension of its spring, a second oscillating lever having means in the path of said dog to trip the same at a predetermined point, means within control of the operator for moving said oscillating levers, and means operating simultaneously with said operating levers for arresting the oscillation of said cam.

10. In a game apparatus representing the game of baseball, a pitcher figure having a pitching arm swinging in a vertical plane, a ratchet device including a disk, means pivotally connecting said disk with said arm, and means actuated by the player of the game for oscillating said disk to swing said arm.

11. In a game apparatus representing the game of baseball, a pitcher figure having an arm swinging in a vertical plane to pitch the ball overhand, mechanism for swinging said arm, means for regulating the length of stroke of said arm to pitch the ball at different elevations, a rotating batter figure having arms adapted to carry a bat, and mechanism for rotating said batter figure to swing the bat into the path of the ball.

12. In a game apparatus representing the game of base ball, a batter figure having arms adapted to support a bat, a base whereon said figure is mounted, said base having a rotary and a vertical movement, and means for operating said base to rotate the batter figure and elevate the same.

13. In a game apparatus representing the game of base ball, a batter figure having arms adapted to support a bat, a base whereon said figure is mounted, said base having a rotary and a vertical movement, a shaft whereon said base is mounted, a rock shaft having a loose connection with said base for raising or lowering the same, an operating lever, and a ratchet connection between said operating lever and said shaft.

14. In a game apparatus representing the game of base ball, a catcher figure having an open topped receptacle, guard wires extending across the top of said receptacle, allowing the balls to pass between them, the rear wall of said receptacle having a discharge opening.

15. In a game apparatus representing the game of baseball, a pitcher figure having a

arm adapted to support a ball and swinging in a vertical plane, a rotating disk, a spring put under tension by the rotation of said disk, means within control of the player for moving said disk against the tension of said spring, means connecting said disk with said arm, and means for tripping said moving means to release said disk and actuate said arm.

16. In a game apparatus representing the game of base ball, a pitcher figure having an arm adapted to swing in a vertical plane and provided with a hand adapted to support a ball, means for swinging said arm to pitch the ball overhand and means for regulating the height of delivery of the ball.

17. In a game apparatus representing the game of base ball, a board having a diamond marked off thereon, a fence supported on said board, said fence having upward extensions provided with openings therein, a netting supported outside said fence and spaced therefrom, and a runway inclosing said fence and inclined to direct the balls batted through said openings back to the point representing the catcher's box.

18. In a game apparatus representing the game of base ball, a pitcher figure having a pivoted arm and a hand adapted to support a ball and swinging forwardly to pitch the ball overhand, a spring actuated ratchet disk operatively connected with said arm, means within control of the player of the game for rocking said disk against the tension of said spring, and means for releasing said disk at a predetermined point in its rocking movement.

19. In a game apparatus representing the game of baseball, a board having a diamond marked off thereon, a fence inclosing the diamond, a runway provided outside the fence to direct the balls back to the diamond, and means for guiding the balls into said runway.

20. In a game apparatus representing the game of baseball, a pitcher figure having an arm adapted to swing in a vertical plane to pitch the ball overhand, a ratchet mechanism within control of one player for swinging said arm, a batter figure having arms adapted to support a bat, a rotating base whereon said figure is mounted, and an independent ratchet mechanism in control of another player for rotating said base and figure.

21. In a game apparatus representing the game of base ball, a board having a diamond marked off thereon, a fence provided with openings therein, a runway provided outside said fence and arranged to direct the balls batted through said openings back into the diamond, and means for directing the balls into said runway.

In witness whereof, we have hereunto set our hands this 1st day of July, 1911.

CHARLES E. BURCH.
CHARLES A. WOOLSEY.

Witnesses:
GENEVIEVE E. SORENSEN,
A. M. WALSTROM.