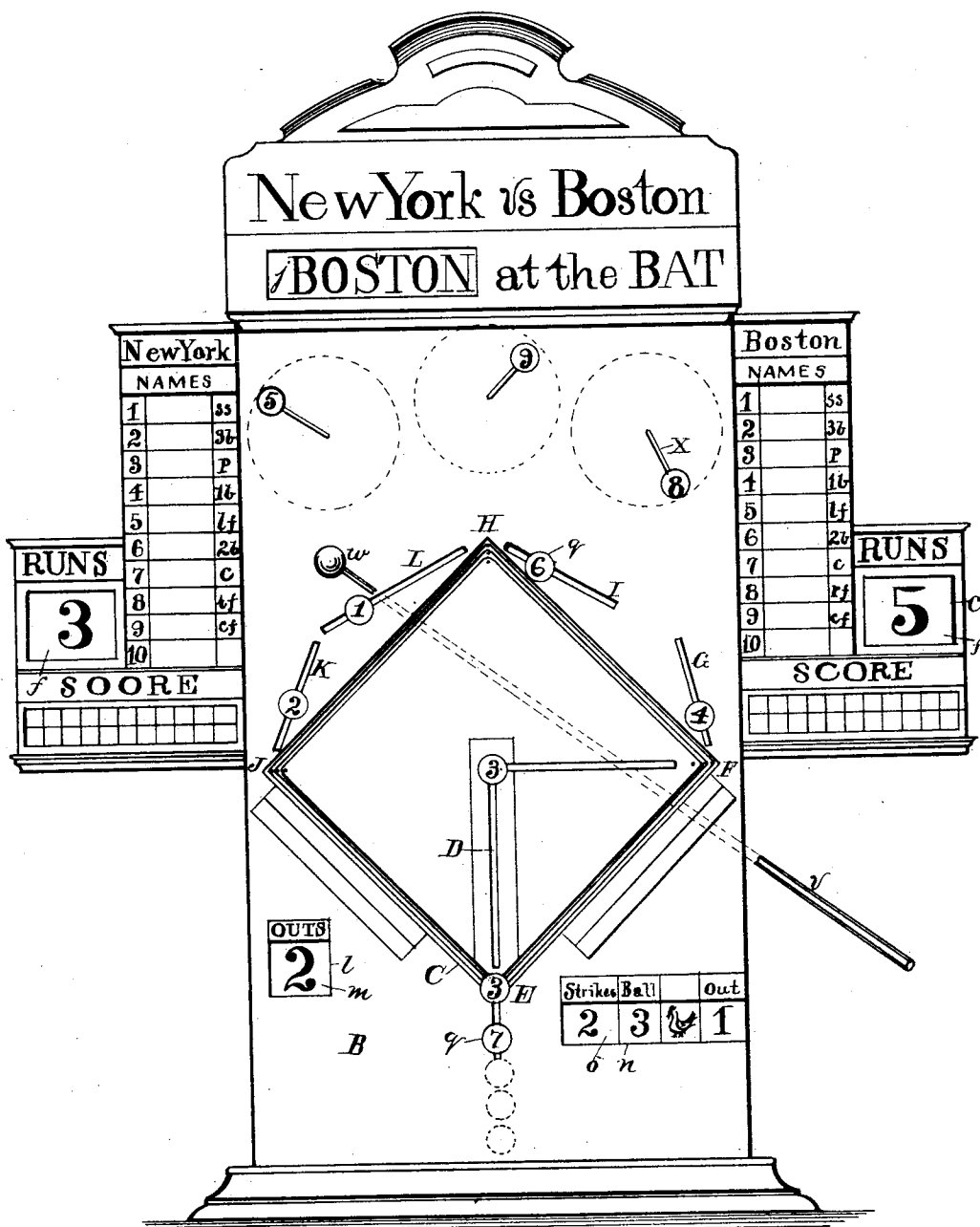


2 Sheets—Sheet 1.

No. 483,062.

Patented Sept. 20, 1892.



WITNESSES:

S. S. Atkins
A. J. Gerke

Fig. 1.

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E. D. Howell

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ATTORNEY.

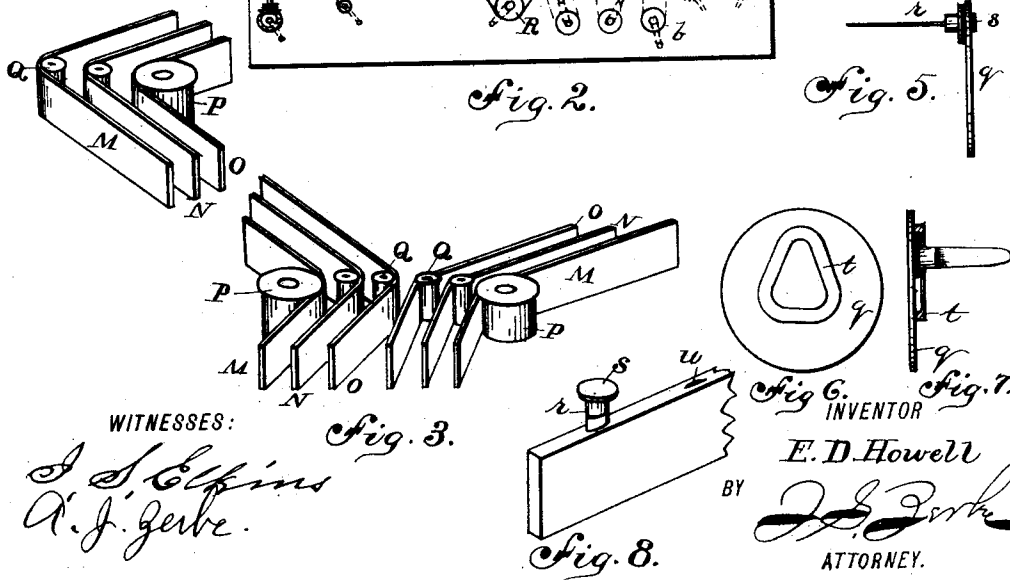
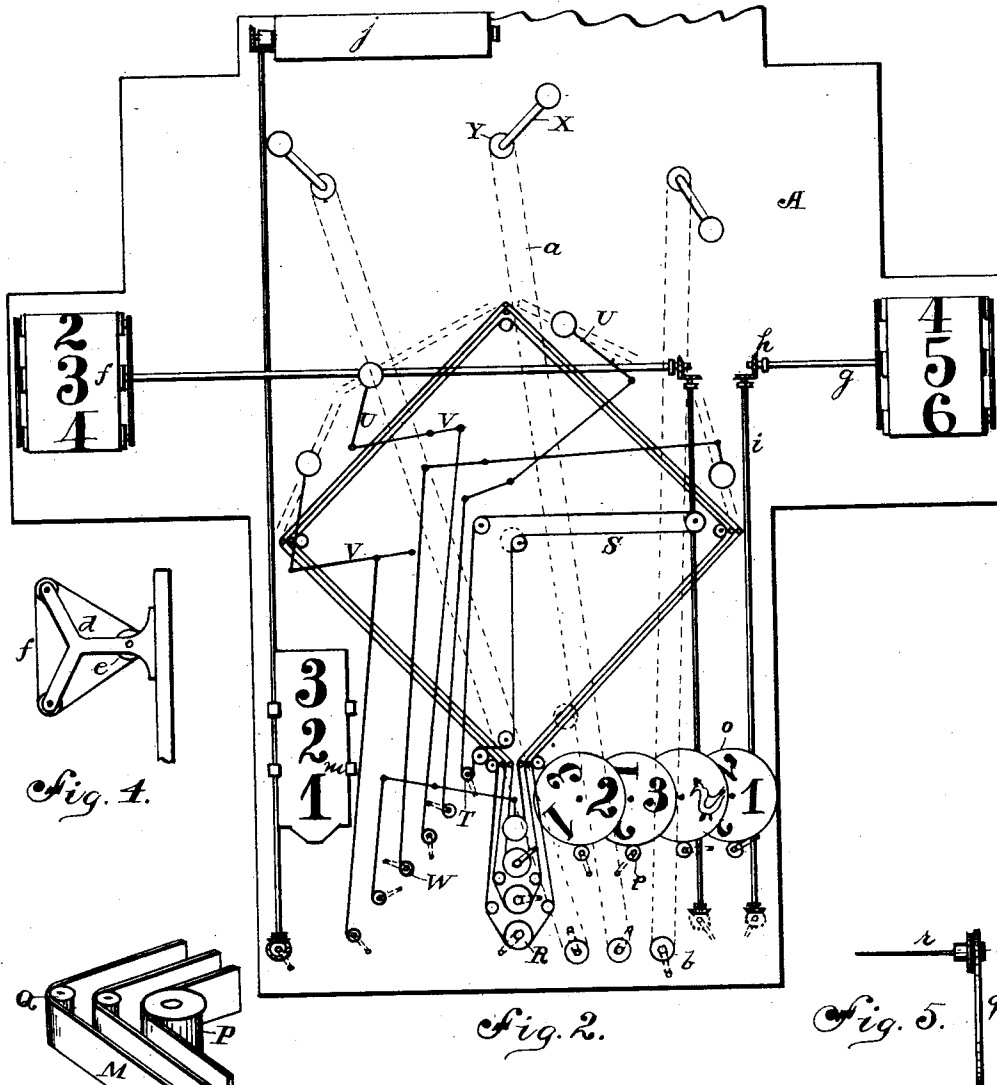
(No Model.)

2 Sheets—Sheet 2.

E. D. HOWELL.
GAME APPARATUS.

No. 483,062.

Patented Sept. 20, 1892.



WITNESSES:

S. S. Atkins
A. J. Gerbe.

INVENTOR

E. D. Howell

BY

ATTORNEY.

UNITED STATES PATENT OFFICE.

EDWARD D. HOWELL, OF BROOKLYN, NEW YORK.

GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 483,062, dated September 20, 1892.

Application filed May 25, 1891. Serial No. 394,090. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. HOWELL, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Apparatus for Playing the National Ball Game, of which the following is a specification.

The object of my invention is to provide a miniature playing apparatus to represent the moves in the successive periods of the game as it progresses, and it is particularly adapted to give a faithful representation of what is known as the "national ball game," popularly designated as "base-ball." The design is to reproduce the situations and moves of the game at different points with exactness and in proper order, so that while the game is being played in one city lovers of the sport in another city and places can view the game in all its phases as accurately as though present on the field.

The invention consists of a frame in the face of which is slotted the diamond, with the field for the outfielders, short-stop, and base-men, together with suitable positions for the catcher and pitcher. The batters are designed to travel around within the slotted way on movable tapes, bands, or chains, the catcher has a slotted way in the face of the frame, which extends from his position to the home-plate, and also to the first base, within which is a traveling tape, band, or chain, the base-men and short-stop move to and fro through slotted ways, and the outfielders turn from their central positions on pivotal arms, so that approximately the entire field will be covered by the respective players. Each of these sets of players is brought into the range of one or more operators located behind the board. Thus the base-runners are adapted to be attached to the tapes within the slotted way which marks the outline of the diamond, and these tapes are all brought down to one point, where they are wound around drums having cranks attached, so that one operator can turn the proper crank or cranks to produce the movements of the batters. The pitcher in like manner is manipulated by the tape, drum, and crank, while the short-stop, catcher, and base-men

are each moved to and fro by means of levers and connecting-rods which extend to one point and are there attached to cranks or other movable mechanism, and the outfielders are brought to a suitable point in reach of another operator by means of cords or belts around the grooved pulleys of their spindles. In addition to these features, which relate to the progressive playing of the game, I have attached a score-card on each side of the board to indicate the players and their positions, the score by innings, and the number of runs made. This latter is represented by means of a traveling band on which is successively placed a series of figures and adapted to be turned by means of an operator. Above the field is the sign showing the clubs playing and also a reversible sign having on opposite sides the names of the clubs, so that the sign can be turned to expose the side at the bat. Below the field, on one side, is an opening through the face of the frame to expose a wheel or a slide with three figures thereon to represent the "outs," while on the other side are four openings to indicate "strikes," "ball," "foul," and "out," each opening having behind it a suitable revolving disk to bring up the proper figure.

Each movable part is designed to be manipulated by the operators behind the board or located at any other convenient point, and one operator handles the stylus, which consists of a rod with a ball on the end of it, so that when a play is reported the stylus is used to describe the movement of the ball, and the movements of the players are then reproduced by the operators behind the frame, all of which will now be set forth in detail.

In the drawings, Figure 1 is a front view of the frame which contains the field and mechanism for playing the national game of ball. Fig. 2 is a view of the same with the face-plate removed to show the operative mechanism. Fig. 3 is an enlarged perspective view of the traveling tapes or bands, showing how the same are arranged at the home-plate and at the bases; Fig. 4, a side view of the traveling band for indicating the runs; Fig. 5, an edge view of the disk for representing the players; Fig. 6, a view of the inner side of

a modified form of the disk; Fig. 7, an edge view, and Fig. 8 a perspective view showing the manner of attaching the figure to the traveling tape.

5 The frame is made in any suitable form and size best adapted for the purpose; but the form herein shown is believed to be the best adapted for the purpose. This consists of a rear frame A cross-shaped, having a suitable base. To this rear frame is attached all the mechanism and means for working the same. Over this rear frame and separated therefrom a sufficient distance to accomodate the mechanism is a face-plate B. This face-plate has cut out centrally a square slotted way C to represent the diamond. It also has a slotted way D extending from the pitcher's position in the center of the diamond to the home-plate E and to the first base F. Slots are also formed through the face-plate, extending upwardly from the first base, as at G, from the third base H to the right, as at I, from the third base J upward, as at K, and obliquely to the left from the second base H, as at L, for the short-stop. It will be unnecessary to describe more than one of each of these movements in order to illustrate the whole. Thus, for instance, the endless bands or tapes M N O, which move within the slotted way C, travel around the vertically-disposed rollers P Q. It will be observed that at the home-base the large roller is on the outside, while at the other angles the large roller is on the inside. The object of this is to provide a greater arc around which the bands travel, so that the movement of the disk will not be too abrupt as it turns the corner. I prefer to use three bands to provide for players on the three bases at one time, if necessary, as thereby the operator can more readily manipulate the players. Near the lower end of the frame I place three drums R in line with the home-plate, and these three bands are placed around these drums, each drum being equipped on its rear end with a crank.

S represents a band passing around suitable rollers located at the pitcher's position and near the home-plate and first base, and also around other rollers at convenient points and around the operating-drum T. To this band is attached the disk representing the pitcher.

In each of the slotted ways G, H, K, L, and L' is a traveling block, (not shown,) to which is attached a disk representing the player in each position, while the under side of each block has attached thereto one end of a link U, and the opposite end of this link is hinged to a lever V. To this lever is attached a rod which extends down to a drum or crank-shaft W within reach of the same operator who manipulates the pitcher's tape or band S.

The outfielders have each of their disks attached to the crank-arm of a grooved pulley

Y, so that when the pulley turns the disk will describe a circle, and thus be caused to traverse that portion of the field belonging to that player. They are manipulated by means of a cord or belt *a*, which extends down to a similar pulley *b*, to which a crank is attached. On each side of the field is a space devoted to the names, numbers, and positions of the players and a score-card by innings. In one part of this space is an opening *c*, behind which and attached to the frame is a pair of brackets *d*, between which I place the rollers *e*, and around these rollers is an endless band *f*, having therein a series of figures from one upward to denote the runs made in each inning. This band is manipulated by means of a horizontal rod *g*, which forms the shaft of one of the rollers, and the inner end of this rod has a miter-gear *h*, which meshes with a similar miter-gear on the vertical shaft *i*. The lower end of this shaft has a miter-gear which meshes with a gear on a crank-shaft, so as to bring the run-indicator in reach of the operator. At the upper end of the frame is a horizontal reversible bar *j*, on the opposite side of which are placed the names of the playing clubs. One end of the shaft has a miter-gear which meshes with a similar gear on the vertical shaft K, while at the lower end is a set of gearing and a crank.

Below the field, and preferably on the left side, is an opening *z* in the face-plate, above which is inscribed the word "outs," and behind the opening is a vertically-movable slide *m* with the figures "1 2 3" thereon. This is designed to denote the outs of the side at the bat. On the right side below the field are four openings *n*, having the inscriptions "strikes," "ball," "foul," and "out" above them. Behind these openings I place overlapping revolving disks *o* with suitable figures thereon, and each disk has a small friction-wheel *p* in contact therewith and a crank on the shaft of the friction-wheel.

It should be observed that, while I have located the various operating-cranks at the lower end of the frame and grouped them, such disposition is not essential to the invention. They may be arranged in any other manner than herein shown or operated otherwise than by cranks. Thus the "outs" slide shows one form, or instead of this a wheel or disk may be employed and in like manner slides or movable tapes or bands may be arranged to change the figures.

The disks *q*, which represent the players, are adjustable—that is, they may be removed and replaced at will—and any suitable means to accomplish this may be employed, particularly for the disks used to represent the catcher and the base-men, since the blocks on which they travel do not turn; but for the other positions their stems turn, so that it is necessary to provide a means for holding the disks in one position or the numbers on the

disks would turn. To provide for this, I provide the pin or spindle *r* with a head *s*, which is placed through the disk *q* near one edge, so that when the pin turns the disk will hang in one position and show the number aright. A preferred form of accomplishing this is shown in Figs. 6 and 7, in which I place a triangular-shaped piece *t* on the rear side of the disk, the inner edge of this piece having an overhanging edge or ledge. The lower part of this triangular piece is large enough to receive the head *s* of the pin, and when the disk drops down it will rest in the apex of the triangular piece, and thus allow the disk to hang in one position.

The tapes or bands *M N O* are each provided at intervals with slitted openings *u*, into which the flattened blade of the pin *r* is placed whenever it is desired to adjust a player on the tape. The pin on the pitcher's tape *s* and on the outfielders crank-arms may remain in their positions permanently; but those on the tapes *M N O* should be removed with the disk.

In playing the game the operation is as follows: Fig. 1 represents the different players of the New York's in position, with No. 3 of the Boston's at the bat. When the pitcher throws the ball, one of the game-operators indicates the motion by means of the stylus *v*, with the ball *w* on the end of it. Suppose, for instance, it should be a passed ball, the stylus would move down to the back-stop and back to the pitcher, the catcher in the meanwhile moving back to the back-stop in the slot *J'*, thus representing the actual play of returning the ball to the pitcher. When the pitcher again delivers the ball and "ball" is called by the umpire, the disk indicating one ball is turned up. Suppose on the third delivery of the ball the batsman strikes it to left center field, the ball on the stylus would be moved in that direction and the center-fielder would be rotated around toward left center. At the same time the first base-man starts toward his base and the batter would run along toward first. If the center-fielder caught the ball, it would immediately be indicated as an "out" on the disk *o* and the batter No. 3 removed to be substituted by another batter at the home-plate. If the center fielder "muffed" the ball and the stylus reached first base before the batter, it would be indicated in the same manner by an "out" disk recording it and the fact that the batter was retired; but should the batter reach first base before the ball the stylus-ball would show that state of affairs with just as much exactness as the original play was made.

The foregoing will illustrate how every phase and feature of the actual game can be reproduced with the utmost exactness of detail, so that a game while in the process of being played at one point reproduced on this miniature field with every detail and in the order of events as they transpire, thus giving

the patrons of the game an opportunity of witnessing a distant game exactly as it takes place as fast as it is reported by wire.

What I claim as new is—

1. A mechanical playing-board composed of a frame or backing on which is mounted the mechanism to move the player-figures, in combination with a face-plate covering said backing and its containing mechanism, said face-plate having slots therein to form ways for the runners and separate slots for the base-men and openings to expose the various plays and features of the game, substantially as herein set forth.

2. A mechanical playing-board composed of a frame or backing on which is mounted the mechanism to move the playing-figures, in combination with a face-plate covering said backing and its containing mechanism, said face-plate having therein slots to form ways for the runners and base-men and openings to expose the various plays and features and means for representing the movement of the ball, substantially as herein set forth.

3. In a mechanical playing-board for indicating and reproducing a game of ball, a frame or backing on which is mounted the mechanism to move the player-figures, in combination with a face-plate covering said backing and its containing mechanism, said face-plate having slots therein to form ways for the runners and other slots for the base-runner, substantially as set forth.

4. A mechanical playing-board having a frame or backing, in combination with a face-plate having slots for the runners and base-men and between said backing and face-plate the mechanism for moving the figures, which consists of, first, the endless tapes or bands within the diamond slot for carrying the runners and the tape within the slot for carrying the figure of the pitcher; second, the figures for representing the base-men, short-stop, and catcher mounted on traveling blocks within their respective slots or ways, having the crank-levers and connecting-rods; third, the grooved pulleys having the crank-arms attached and exposed above the face-plate for attracting thereto the figures representing the outfielders, together with the cords or belts for turning the same, substantially as herein set forth.

5. A mechanical playing-board having a frame or backing, in combination with a face-plate having slots for the runners, base-men, catcher, pitcher, and short-stop and suitable holes for the swiveled outfielders and openings to indicate the runs made by each side, the "outs" and "foul" plays made, and the "strikes" and "balls" of the side at the bat, with the mechanism between the face-plate and the backing, as shown, to progressively manipulate the figures' positions and results, as set forth.

6. A series of endless tapes, bands, or belts within the slot which forms the diamond, held

in proper relation to each other by means of
rollers at the angles, and a line of rollers or
drums at one side to receive the tapes and re-
move the same, said tapes having at intervals
5 slotted openings or sockets to receive the
blades of the disk-pins, in combination with
said disks and pins thereon, substantially as
herein set forth.

Signed at New York, in the county of New
York and State of New York, this 6th day of 10
January, A. D. 1891.

EDWARD D. HOWELL.

Witnesses:

J. S. ZERBE,
A. J. ZERBE.