

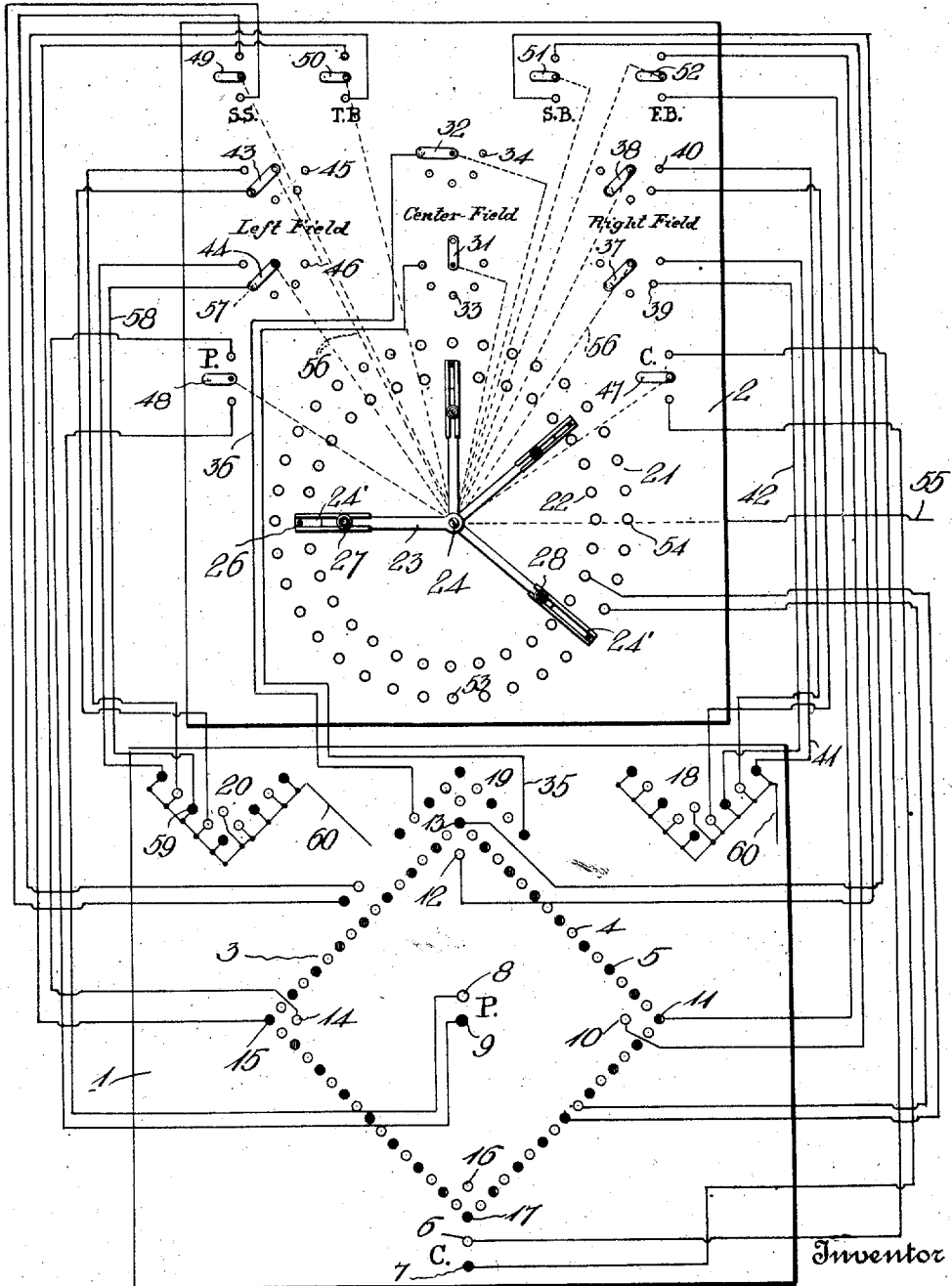
J. F. SMILEY.
ELECTRIC BALL GAME.
APPLICATION FILED DEC. 30, 1909.

988,829.

Patented Apr. 4, 1911

2 SHEETS—SHEET 1.

Fig. 1



Witnesses

F. O. Hilton

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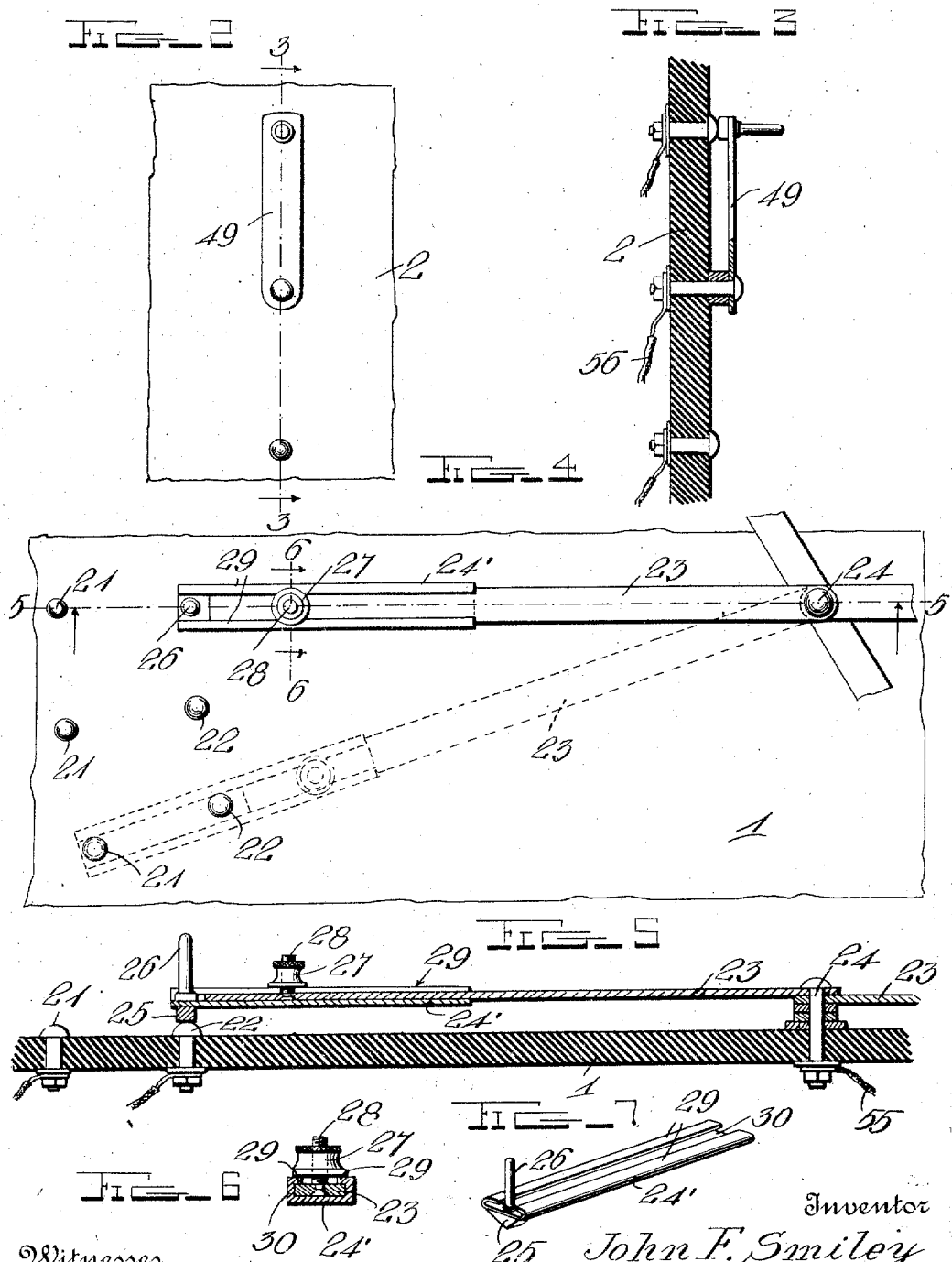
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Witnesses
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UNITED STATES PATENT OFFICE.

JOHN F. SMILEY, OF LOUISVILLE, KENTUCKY.

ELECTRIC BALL GAME.

958,829.

Specification of Letters Patent.

Patented Apr. 4, 1911.

Application filed December 30, 1909. Serial No. 535,587.

To all whom it may concern:

Be it known that I, JOHN F. SMILEY, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Electric Ball Games; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an electric ball game especially designed for use as a score board.

15 The primary object of this invention is to provide, in connection with the score board, a novel form of operating switch and suitable connections between the switch and lights, whereby not only may the different 20 plays made during the progress of the game be reproduced or indicated in a general way upon the board, but the position and courses of the players in running bases, catching fly balls to the out-field, etc. indicated, there- 25 by keeping the audience in touch with every minute feature of the game from the beginning to the completion of the game.

In carrying out the invention, the several switches of the switch board are preferably 30 provided with adjustable shoes to enable them to engage either of two concentric series of contact buttons on the switch board or to travel in a zig-zag or other course not in the arc of a circle. The purpose of this 35 construction will be more fully disclosed, however, in the body of the specification.

In the accompanying drawings, Figure 1 is a diagrammatic view, showing the score board, the operating switch and the various 40 connections between the switch and score board, with certain of the circuit wires omitted to avoid confusion; Fig. 2 is a plan view of a fragment of the board, showing one of the switches for controlling the bases; 45 Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 2; Fig. 4 is a plan view of a portion of the switch board, showing more particularly one of the main switches, the dotted lines indicating a second 50 position of the switch; Fig. 5 is a vertical sectional view taken on the line 5—5 of Fig. 4; Fig. 6 is a detail transverse sectional view taken on the line 6—6 of Fig. 4; Fig. 7 is a detail perspective view of a portion of the 55 switch lever.

Referring to the drawing for a more par-

ticular description of the invention, the numeral 1 indicates the score board proper, and 2 the switch board which may be disposed at any desired point, for instance, one 60 may be placed within a building and the other outside at a point remote from each other as may be desired.

In carrying out the invention, a series of lights 3 are arranged in the form of a diamond 65 upon the face of the score board 1, said lights being white and red and being arranged in alternating relation throughout the entire series, the numeral 4 indicating the white lights and 5 the red lights. Dur- 70 ing the progress of the game, the white lights are used to indicate the position of the players which are running the bases of one team, while the red lights are used for the opposing team. The score board is 75 further provided, directly in rear of said diamond, is a pair of white and red lights of white and red lights 6 and 7, respectively, indicating the catcher. In the center of the diamond, is a pair of white and red lights 80 8 and 9, which are used to indicate the pitchers of the opposing teams. The score board is further provided with white and red lights 10 and 11, indicating the first 85 basemen for the opposing teams, the white and red lights 12 and 13 indicating the second basemen, the lights 14 and 15 indicating the third basemen, and the white and red lights 16 and 17 indicating the home 90 plate. The score board is further provided with three series of white and red lights 18, 19 and 20, the lights of each series being arranged in alternating relation and each set 95 of lights of each series indicating the position and course taken by one of the outfielders of a team during the progress of the game. The series indicated by the numeral 18 may be used for the right 100 fielders, the series marked 19 for the center fielders, and the series indicated by the numeral 20 the left fielders.

The switch board 2 is provided with two concentric series of contact buttons 21 and 22, respectively, the inside series of buttons 22 being connected with the red lights of 105 the diamond shaped series on the score board, and the outside series of buttons 21 with the white lights of said series. A series of switch arms 23 are pivoted at their inner ends upon the bolt 24, which passes 110 through the switch board 2, it being understood that said bolt is located at the

common center for the circles described by the two series of buttons 21 and 22. Each of the switch arms is in the form of a flat metal strip provided at its outer end with an extensible section 24, provided with the contact shoe 25 and the finger piece 26 which is grasped by the operator to swing the switch arms from one position to another. The adjustable sections of the switch arms may be retained in either of their two positions by the thumb nuts 27 which screw upon the threaded studs 28 projecting outwardly from the switch arms and between the inwardly bent flanges 29 of the body portions 30 of the extensible sections. When the extensible sections are in their innermost position, they are adapted to engage the contact buttons 22 and when in their extended positions, are adapted to engage the outer series of contact buttons 21. The switch board is further provided with a pair of secondary pivoted switch arms 31 and 32 which are adapted to swing in the arc of a circle and to engage the contact buttons 33 and 34, and thereby make and break the circuit through the white and red lights of the series indicated by the numeral 19. The contact buttons 33 correspond in number to the red lamps of the series 19 and each of said buttons is individually connected with one side of its corresponding lamp by the circuit wires 35. For the sake of clearness and to avoid confusion, but one of the circuit wires 35 has been shown in Fig. 1. The outer series of contact buttons 34 are connected by as many circuit wires 36 with the red lamps of the series 19 and control the circuit through said lamps, as will be obvious. A second set of secondary switch arms 37 and 38 are adapted to engage the contact buttons 39 and 40 and control the circuit through the series of lamps indicated by the numeral 18, the contact buttons being connected with the white and red lamps of said series by the circuit wires 41 and 42, respectively. A third set of switch arms 43 and 44 are mounted on the switch board to control the circuit through the white and red lamps of the series designated by the numeral 20, the wiring between the buttons 45 and 46 engaged by said levers, being the same as heretofore described. Other switch arms 47, 48, 49, 50, 51 and 52 are mounted upon the board to control the circuits through the lamps on the score board designating respectively the catcher, pitcher, the short-stop, and the third, second and first bases. In practice, assuming one of the batters of the team, designated by the white lamps, is at the bat, the contact shoe of one of the main switch arms is moved into engagement with the contact button 53 of the outer series of buttons 21. If the batter makes a sin-

gle, the switch arm is swung in the arc of a circle until its contact shoe engages the contact button 54, and during the operation of moving said switch arm from its first position to the contact button 54, the white lamps of the series between the home plate and first base will be successively illuminated and extinguished, thus indicating the progress of the batter from the home plate to first base. Should the batter drive the ball to the center field, the switch arm 32 will be swung in the arc of a circle to successively illuminate and extinguish the white lamps of the series indicated by the numeral 19, it being understood that this switch arm will be swung in the proper direction to denote the course taken by the center fielder in catching or attempting to catch the ball. The same principle is carried out if the ball is driven to either the right or left field. The switch arms 47 to 52, inclusive, are used to indicate the catchers, pitchers, etc., of the opposing teams and consequently there is but two buttons employed in connection with each of said levers. If desired, the secondary switch arms 31, 37, 38, 42, 43 and 44 may be provided with extensible sections such as employed in connection with the main switch arms 23, and the several series of contact buttons with which they engage may be arranged in zig-zag or other relation to more clearly denote the course of the center fielders in catching the ball. It will be further understood that any number of contacts and lamps may be used in each series, the present number being merely for the sake of illustration. The main feed wire 55 is connected with the pivot bolt 24 in any well known manner, while the several secondary levers may be connected with the pivot bolt by the branch wires 56 indicated by the dotted lines in Fig. 1. Assuming the shoe of the switch lever 44 to be in engagement with the contact button 57, the circuit will pass from the pivot bolt 24 through the branch wire 26, switch lever 44 and contact 57 to the wire 58, and by means of the wire 58 to the red lamp 59, the current passing through the lamp to the main return or negative wire 60.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined in the appended claim.

Having thus described my invention, what I claim is:

In an electric score board, a score board

proper provided with a diamond-shaped series of lamps of different colors arranged with the lamps of one color alternating with those of the other color, a switch board
5 provided with two concentric series of contact buttons, connections between one series of contact buttons and one set of lamps, other connections between the other series of contact buttons and the other set of
10 lamps, a plurality of switch arms pivoted at the center of said concentric series of buttons and each provided with a longitudinally extensible member having a contact shoe adapted to engage either series
15 of contact buttons, said arm being pivoted, whereby the lamps of either series may be successively illumined and extinguished by swinging the switch arm in the arc of a circle, other series of lamps of two colors

to indicate the position and course taken 20 by the center, left and right fielders of the opposing teams in catching balls driven to the out-field, other series of contact buttons and switch arms to control the circuit
25 through said last mentioned series of lamps, lamps of two colors to indicate the opposing catchers, pitchers, in-field, and out-field players of the opposing teams, and suitable connections including switch arms and contact buttons to control the circuit through
30 said last mentioned lamps.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN F. SMILEY.

Witnesses:

E. EDMONDSTON, Jr.,
L. O. HILTON.