310-12 SR REFERENCE SEARCH ROOM
FIP8502 XR 1,648,956 1,648,956

Nov. 15, 1927

ELECTRIC GAME

Filed Dec. 11, 1926 2 Sheets-Sheet 1

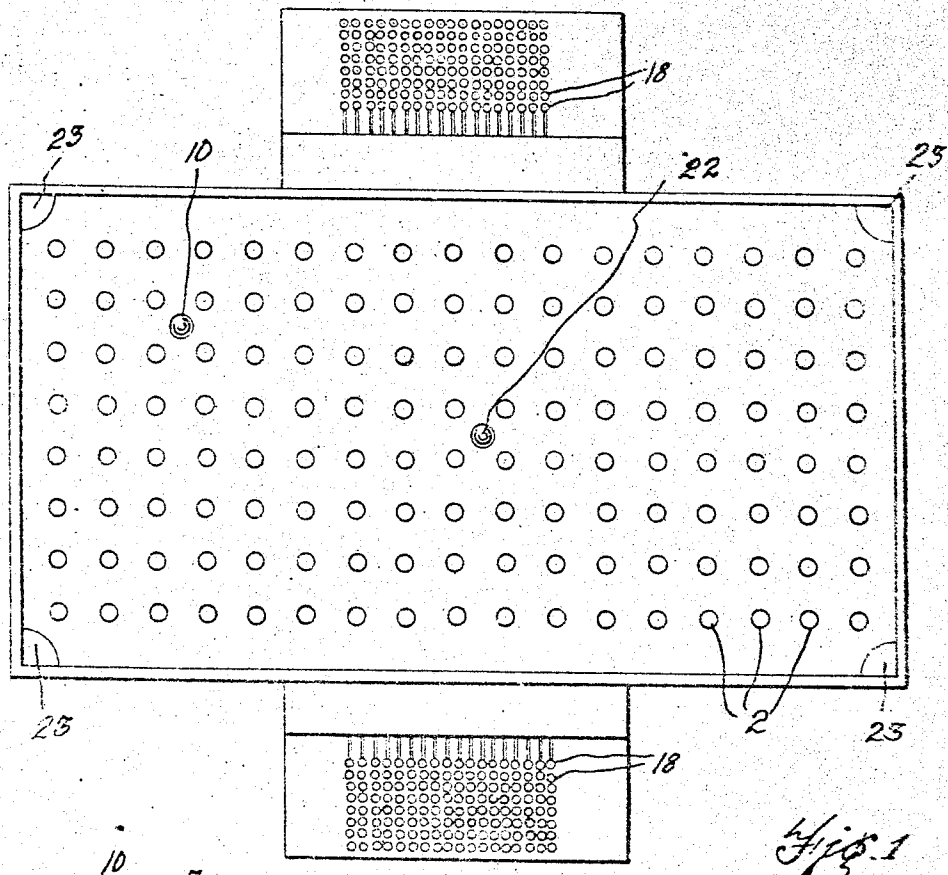


Fig. 1

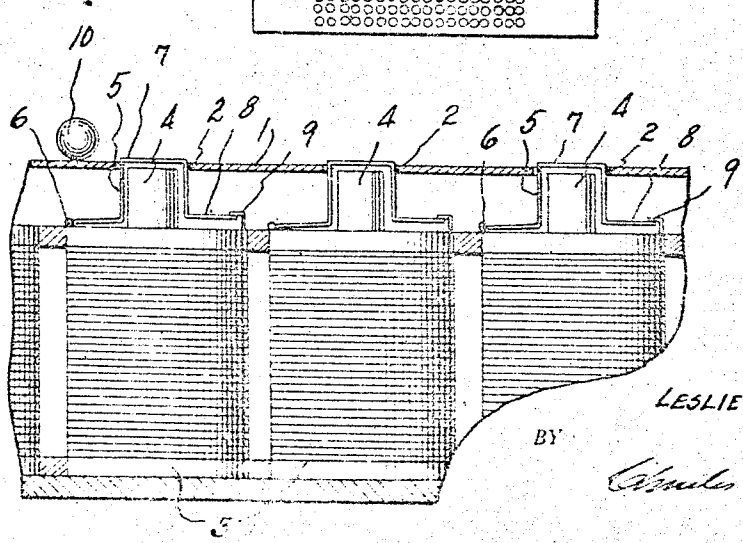


Fig. 2

INVENTOR.
LESLIE E. MEADE

BY

ATTORNEY.

Nov. 15, 1927. 1,648,956

L. E. MEADE

ELECTRIC GAME

Filed Dec. 11, 1926 2 Sheets-Sheet 2

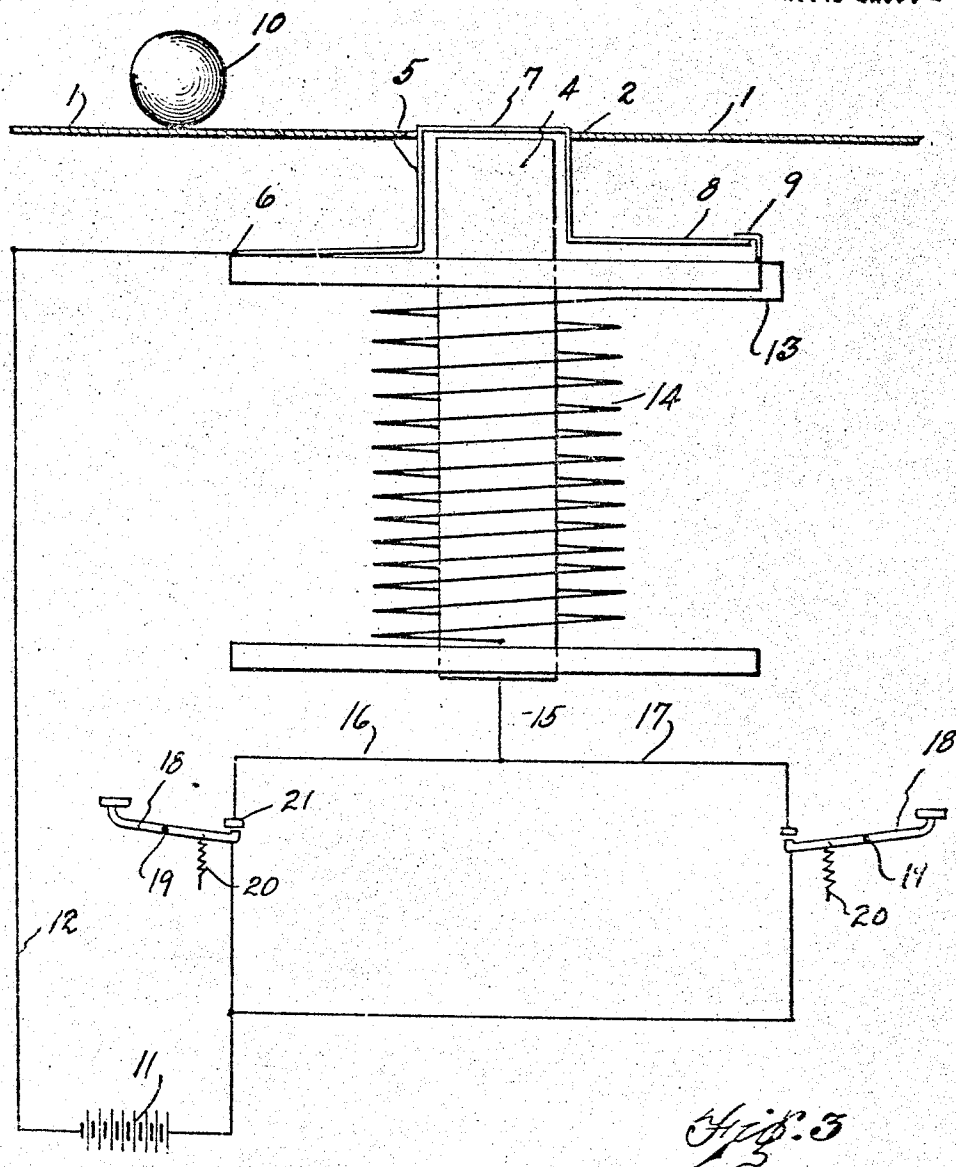


Fig. 3

INVENTOR.
LESLIE E. MEADE

BY

ATTORNEY.

Patented Nov. 15, 1927. 1,648,956

UNITED STATES PATENT OFFICE.

LESLIE E. MEADE, OF DETROIT, MICHIGAN.

ELECTRIC GAME.

Application filed December 11, 1926. Serial No. 154,060.

This invention relates to electric games and the object of the invention is to provide a game in which a ball or other object may be controlled on a game board by means of electro-magnets.

Another object of the invention is to provide a game in which a ball is controlled on a game board by means of a multiplicity of electro-magnets the magnets being energized by the players by means of a key board provided for each player.

Another object of the invention is to provide an arrangement whereby the ball breaks the circuit for the electro-magnet when positioned over the pole piece thereof so that the ball is then influenced by adjacent electro-magnets.

The object of the game is for the player to control the ball in a manner to win the game against the efforts of the other player to control the ball.

These objects and the several novel features of the invention are hereinafter more fully described and claimed and the preferred form of construction by which these objects are attained is shown in the accompanying drawings in which—

Fig. 1 is a plan view of a game board embodying my invention.

Fig. 2 is a section through a portion of the game board or table.

Fig. 3 is a schematic diagram of the circuit for one of the electro-magnets.

As shown in Figs. 1, 2 and 3 the game board 1 is provided with a multiplicity of apertures 2 therein. Beneath the game board are a series of electro-magnets 3 each having a pole piece 4 positioned beneath one of the apertures 2. The game board 1 is preferably of fibre or other dielectric material. Each electro-magnet is provided with a member 5 formed of brass, copper or other non-magnetic metal and this member is secured to the respective electro-magnet at 6. The member 5 is provided with a portion 7 filling the aperture 2 and the end 8 of the member 5 normally engages a contact member 9 on the electro-magnet. The member 5 itself is provided with sufficient spring tension to normally engage this contact but a light spring may be used for this purpose if desired.

The ball 10 with which the game is played is formed of magnetic metal and is preferably hollow so as not to be too heavy. This ball is attracted to different points about the game board by energization of the different electro-magnets. A circuit for energizing one of these electro-magnets is indicated diagrammatically in Fig. 3. A battery 11 is provided to which a wire 12 is connected. This wire 12 at the opposite end is connected to the member 5 at the point 6, the member 5 thus forming part of the circuit. A wire 13 connects the contact 9 with the coil 14 of the electro-magnet and a wire 15 connects the electro-magnet with the two wires 16 and 17. A switch key 18 is provided in the circuit 16 and is pivoted at 19 and a light spring 20 normally holds this switch member out of engagement with the contact 21. When this switch key is depressed by the operator the circuit is closed to energize the electro-magnet. A similar switch is provided in the circuit 17 for the player's opponent. When either of these switches is closed the electro-magnet is energized thus attracting the metal ball 10 which rolls onto the face 7 of the member 5 and the weight of the ball together with the attraction of the magnet for the ball depresses the member 5 to move the end 8 away from the contact 9 thus breaking the circuit for the electro-magnet so that adjacent energized electro-magnets will influence the ball. These switch keys are arranged on opposite sides of the game board as shown in Fig. 1 and are arranged to correspond with the holes 2 in the game board. By this arrangement either player by depressing one of the switch keys may energize the corresponding electro-magnet on the game board. By this arrangement the ball may be made to travel about the game board by the attraction of the different electro-magnets and the skill of the player in manipulating the ball against the skill of the other player in attempting to control the ball provides the element of contest. Several different games may be played with the arrangement shown in Fig. 1. In one type of game the game board may be considered as a football field and the object of the game is to get the ball to one end of the field or the other, one end of the field being assigned to each player. Another game may be played by using a non-metallic ball 22 and providing four pockets 23. The object of this game is to so manipulate the magnetic ball 10 as to drive the non-metallic ball 22 into one of the pockets. When one of the magnets is energized the ball 10

in moving thereover breaks the circuit to the particular magnet so that adjacent energized magnets attract the ball. By this arrangement a player by rapid manipulation of the keys may cause the ball to roll about the board and at the same time the opponent will attempt to control the ball by energizing the same or adjacent magnets. The game may be also arranged so that one keyboard controls every other magnet while the other keyboard controls the remaining magnets.

Another type of game that can be played on this board consists in utilizing several metal balls which may be placed on the table. In this arrangement the multiplicity of keys for closing the individual circuits may be done away with and a switch is provided which closes all the circuits simultaneously. This causes the balls to travel about the table in all directions and the balls as they pass over the different electro-magnets break the circuits to these magnets as hereinbefore described and are attracted by other magnets. In this game the pockets 23 are given different values and the several balls will travel about the table in all directions until all the balls roll into the pockets. This provides a game of chance in which the score is determined by the values of the pockets in which the balls roll.

From the foregoing description it becomes evident that a game having all the elements of hard fought contests may be played in this manner and the arrangement provides a device which accomplishes the objects described.

Having thus fully described my invention, its utility and mode of operation, what I claim and desire to secure by Letters Patent of the United States is—

1. In an electric game, a multiplicity of electro-magnets, a circuit for each electro-magnet, a pair of switch keys in each circuit each adapted to close the circuit, a table positioned over the electro-magnets and provided with an aperture over the pole piece of each electro-magnet, a magnetic ball movable about the table by energization of the electro-magnets and a contact member extending into each aperture in the table and adapted to break the circuit to the respective electro-magnet as the ball moves thereover.

2. An electric game comprising a multiplicity of electro-magnets, a series of circuits for the electro-magnets, a multiplicity of switch keys each adapted to close the circuit to one of the magnets, a table positioned over the electro-magnets and provided with an aperture over the pole piece of each electro-magnet, a magnetic ball adapted to be attracted about the table by energization of the electro-magnets and a contact member extending into each aperture in the table and adapted to break the circuit to the respective electro-magnet as the ball moves thereover.

3. In an electric game, a multiplicity of electro-magnets, a table positioned over the electro-magnets and provided with an aperture over the pole piece of each electro-magnet, a pair of switch boards each provided with a multiplicity of switches for controlling the circuits to the electro-magnets, a magnetic ball movable about the table by energization of the electro-magnets and a contact member extending into each aperture in the table and adapted to break the circuit to the respective electro-magnet as the ball moves thereover.

4. In an electric game, a multiplicity of electro-magnets, a table positioned over the electro-magnets and provided with an aperture over the pole piece of each electro-magnet, a switch board on each side of the table, a multiplicity of switches on each switch board for closing the circuits to all of the electro-magnets, a magnetic ball movable about the table by energization of the electro-magnets and a member positioned in each aperture in the table and adapted to break the circuit to the respective electro-magnet as the ball moves thereover.

5. In an electric game, a multiplicity of electro-magnets, a table positioned over the electro-magnets and provided with an aperture over the pole piece of each electro-magnet, a magnetic ball movable about the table by energization of the electro-magnets and a contact member extending into each aperture in the table and adapted to break the circuit to the respective electro-magnet as the ball moves thereover.

6. In an electric game, a game board having a series of apertures therein, a series of electro-magnets each having a pole piece positioned beneath one of the apertures, a circuit for each electro-magnet, a control switch in each circuit, a ball of magnetic metal movable about the table, and means adapted to break the circuit for the respective electro-magnet as the ball is moved thereover.

7. In an electric game, a multiplicity of electro-magnets, a table positioned over the electro-magnets and provided with an aperture over the pole piece of each electro-magnet, a switch board on each side of the table, a multiplicity of switches on each switch board for closing the circuits to the electro-magnets and a magnetic ball movable about the table by energization of the electro-magnets.

In testimony whereof I sign this specification.

LESLIE E. MEADE.