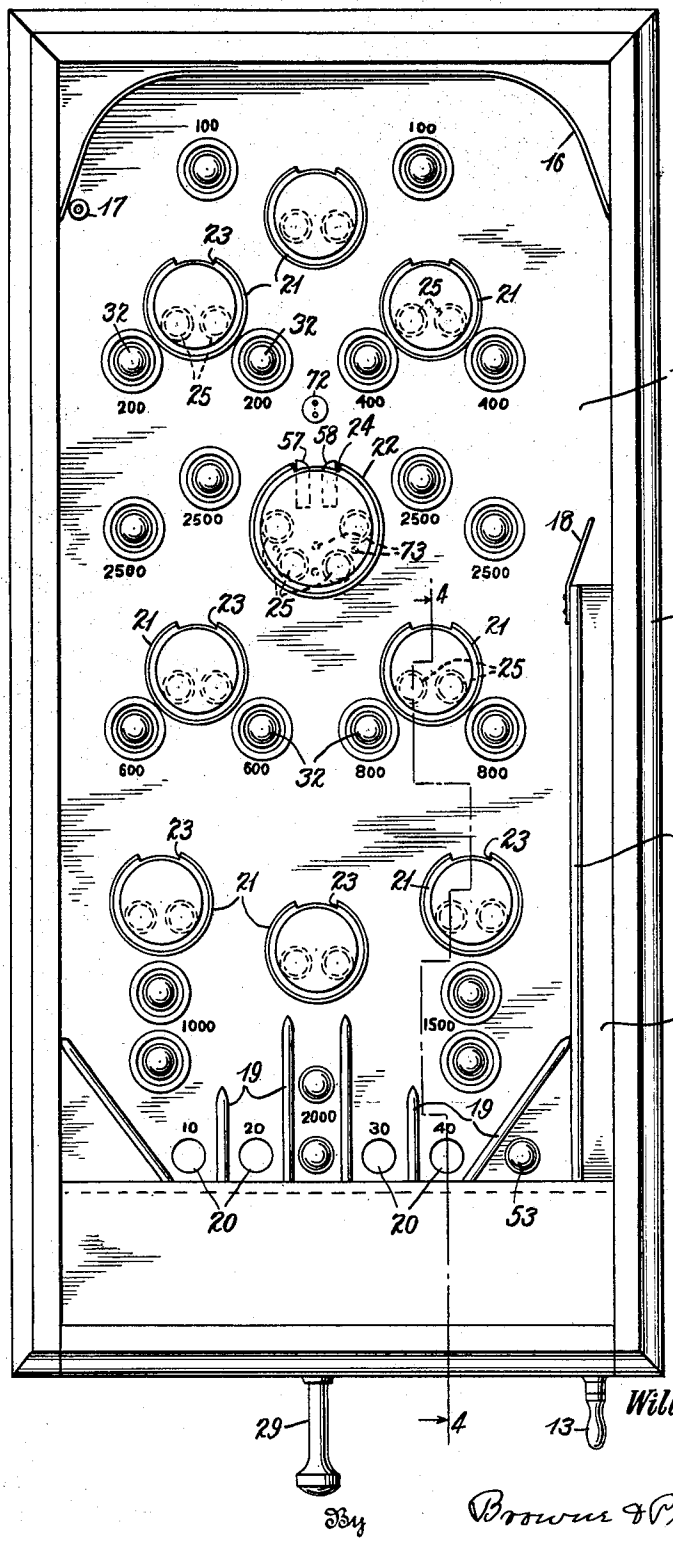
March 20, 1934. W. A. FULD 1,951,973

ILLUMINATED GAME BOARD

Filed Aug. 18, 1932 3 Sheets-Sheet 1

Fig. 1.



Inventor
William A. Fuld

By Brown & Phelps
Attorneys

March 20, 1934. W. A. FULD 1,951,973

ILLUMINATED GAME BOARD

Filed Aug. 18, 1932 3 Sheets-Sheet 2

Fig. 2.

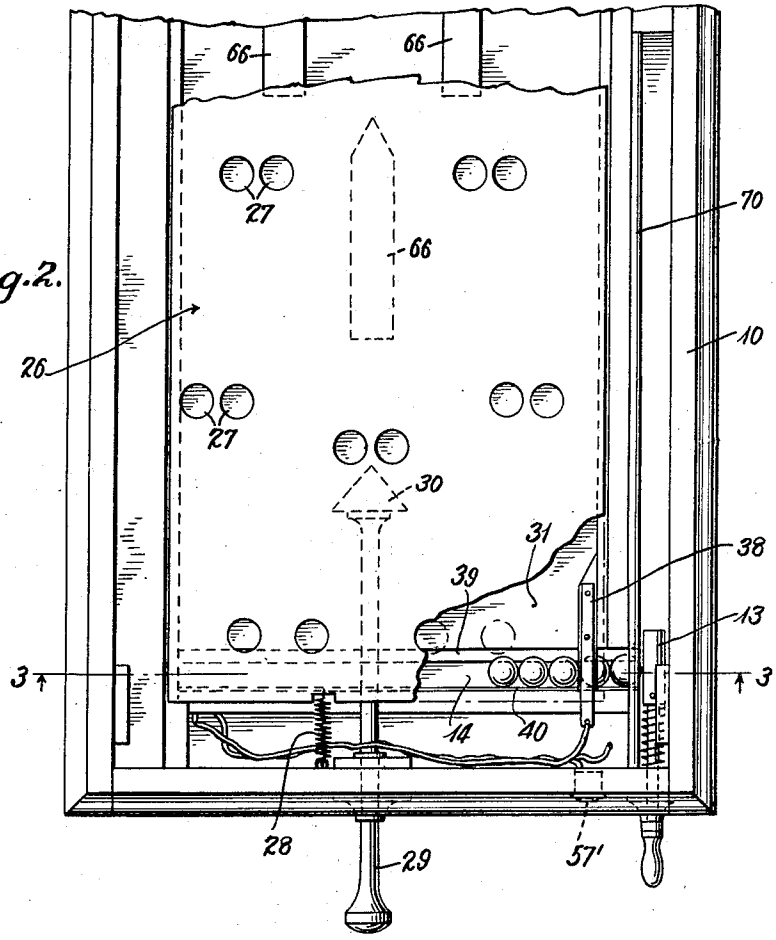
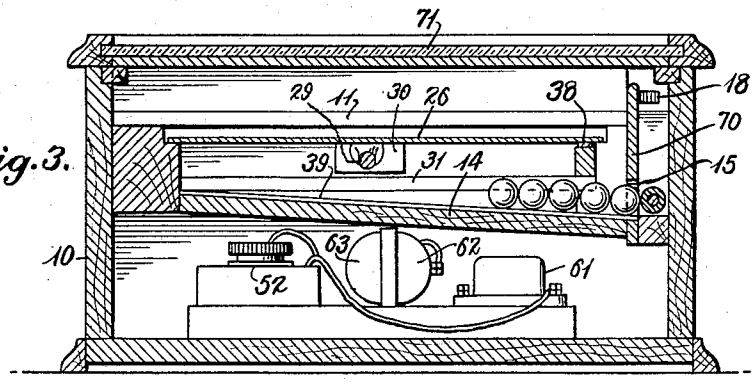


Fig. 3.



Inventor

William A. Fuld

By Browne & Phelps

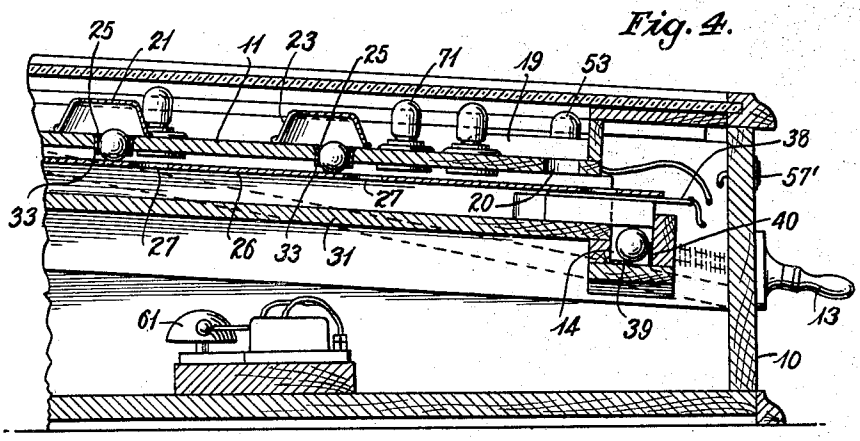
Attorneys

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ILLUMINATED GAME BOARD

Filed Aug. 18, 1932 3 Sheets-Sheet 3

Fig. 4.



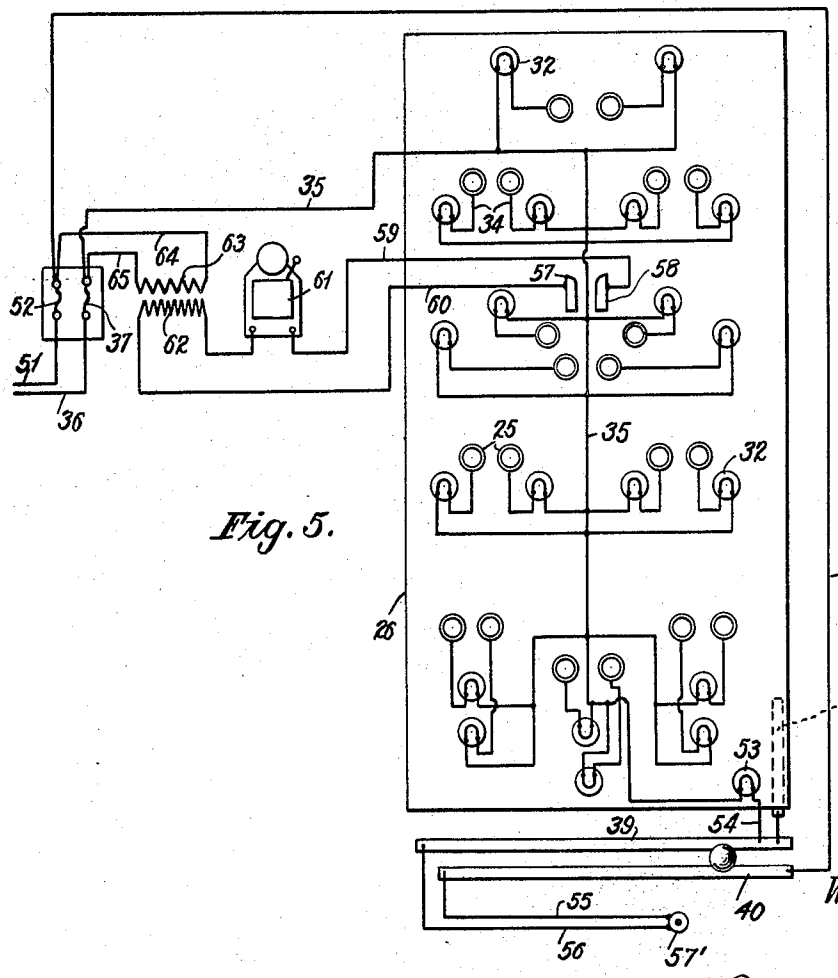


Fig. 5.

Inventor
William A. Fuld

By Brown & Pluggs
Attorneys

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ILLUMINATED GAME BOARD

William A. Fuld, Baltimore, Md.

Application August 13, 1932, Serial No. 629,358

7 Claims. (Cl. 273—121)

The invention relates to illuminated game boards and has as an object a game board equipped for scoring by means of projectiles impelled over the board, the score being indicated by electric lamps associated with each scoring device.

It is a further object of the invention to provide a board of this character in which circuit through the scoring lamps is completed by the presence of a ball in position to be played, a circuit closer and a shunt circuit being provided to indicate the final score after the last projectile has been played.

It is a further object of the invention to provide a game board having scoring pockets, a plurality of pockets being grouped in a single scoring device.

It is a further object of the invention to provide a game board having a signal lamp the circuit through which is closed by the presence of projectiles in position ready to be played.

It is a further object of the invention to improve generally upon the structures of game boards of this character.

Further objects of the invention will appear from the following description when read in connection with the accompanying drawings showing an illustrative embodiment of the invention, and wherein:—

Fig. 1 is a plan view;

Fig. 2 is a detail plan view of a portion of the board having the playing surface removed;

Fig. 3 is a vertical transverse section on line 3—3 of Fig. 2;

Fig. 4 is a detail vertical section upon an enlarged scale on line 4—4 of Fig. 1; and

Fig. 5 is a diagram of circuits.

As shown the device comprises a casing 10 having a playing surface provided by a board 11 downwardly sloping toward the player, to which projectiles are impelled by the resiliently actuated plunger 13 to fly to the top of the board.

The projectiles ready for play are shown as contained in a chute 14 from which they roll through opening 15 to a position in front of the plunger 13 one by one as the plunger is successively pulled back from the position shown in Fig. 2. Upon release of the plunger the balls are violently thrown upwardly in the lane provided by the partition 70 and striking the surface of members 16 at the upper end of the board they are deflected toward the center of the upper end of the board from which they roll downwardly to enter some one of the plurality of scoring devices determined by the skill of the player. A deflecting member 17 is shown terminating the deflecting surface 16. A resilient member 18 is shown at the termination of the projecting lane to direct the projectile along the side of the playing surface in its upward path.

At the lower end of the playing surface there are shown a plurality of partitions 19 by which balls are directed to some one of the lower value scoring openings 20 at the bottom of the board, which openings may be scoring openings or may be ruled as lost balls. The last named scoring openings are not provided with illuminating devices associated therewith.

Scoring devices are shown upon the board in the form of receptacles 21 and a high scoring receptacle of the same general character is indicated at 22 at the portion of the board most difficult of access by the scoring projectiles. Each receptacle 21 and 22 is shown as formed with a restricted opening 23 and 24 respectively to increase the difficulty of scoring.

In accordance with the invention each of the scoring receptacles has a plurality of scoring pockets therein indicated at 25, two being shown in each of the receptacles 21, and four thereof being shown in receptacle 22. This provision of a plurality of scoring pockets in each receptacle is for the purpose of preventing the loss of a score, as is the case with similar devices in present use, by a second projectile entering the same receptacle.

Underlying the playing surface 11 there is shown a metallic plate 26 having openings 27 therein corresponding to each of the scoring pockets 25 but normally out of registry therewith. The plate 26 is slidable within the casing and is retracted to normal position by means of a spring 28 anchored to the plate and to the casing, as shown in Fig. 2.

When the projectiles fall into any of the pockets 25 they will be held therein until after the last projectile has been played and the final score made up, whereupon pressure upon plunger 29 abutting block 30 carried by the plate 27 will cause the plate to move to bring the openings 27 into registry with the pockets 25 when the balls will fall through the openings 27 upon a board 31 along which they will roll by gravity to fall into the chute 14 down which chute they roll to a position to be again played by the plunger 13.

Associated with each of the score receptacles 25 is shown an electric lamp 32 and to close a circuit through said lamp each of the said pockets

is shown as containing a metallic sleeve 33 connected by means of wire 34 to one terminal of each lamp, the remaining terminals of each of the lamps being connected to wire 35 leading to one of the power wires 36 through fuse 37. To complete the circuit through the lamps by means of a metallic projectile in contact with the sleeve 33 and with the underlying plate 27, the plate 27 is shown as lying at one portion upon a stationary metallic strip 38, which strip is connected to a conducting strip 39 exposed in the chute 14, a second strip 40 being also exposed in the chute 14 in spaced relation thereto, the last named strip being connected by means of a wire 50 to the remaining power wire 51 through fuse 52.

To indicate that there are balls in the chute 14 ready to be played, a signal lamp 53 is shown at a lower corner of the playing board and outside of the confines of the playing surface thereof behind one of the partitions 19 as shown in Fig. 1, which lamp is connected by wire 54 to strip 39, circuit through the lamp 53 being closed by the presence of a metallic projectile in the chute 14 bridging the strips 39—40.

When the projectiles have all been played, the signal lamp 53 will be extinguished and since the circuit will then be broken at 39, 40, the scoring lamps will also be extinguished even though there are projectiles present in some of the pockets 25. To indicate the final score there is a pair of wires 55, 56 shown as connected to the strips 39, 40 in shunt of the path through the playing projectile, which wires may be connected by means of a circuit closer 57' to cause the scoring lamps to be illuminated.

To give an audible signal when a projectile enters the receptacle 22, there is shown a pair of strips 57, 58 exposed in the opening into said receptacle 22, over which a projectile must roll passing into the receptacle, thereby closing a circuit through wires 59, 60, through an audible signal 61 shown as provided with current from the secondary coil 62 of a transformer, primary coil 63 thereof being connected by wires 64, 65 through the fuses 37, 52 and thereby to the power wires 36, 51.

Deflecting blocks 66 are shown upon the board 31 to distribute the balls rolling to the chute 14 after their release through the openings 27. As shown in Fig. 4, the audible signal in the transformer may be housed in the casing under the board 31.

A coin release device forming no part of the present invention may be substituted for the plunger 29 in order that balls may be delivered to the chute 14 only through the medium of a coin inserted in the mechanism of the plunger substituted for plunger 29 if the device is to be used upon a prepaid basis.

A glass plate 71 may be placed over the scoring board to prevent interference with the projectiles as they are played.

An obstructing button 72 is shown placed in front of the receptacle 22 to increase the difficulty of scoring in said receptacle and pins 73 are shown within the receptacle to ensure that a projectile rolling into said receptacle shall enter one of the scoring pockets 25 therein.

The operation of the device will be clear from the above description. Minor changes may be made in the physical embodiment of the invention within the scope of the appended claims without departing from the spirit of the invention.

I claim:

1. A game apparatus comprising, in combination: a board having a sloping surface; a plurality of scoring pockets on said board, an electric lamp associated with each of certain of said pockets; means to close one point of a circuit through each lamp by presence of a projectile in its associated pocket; means to impel projectiles; a chute to hold projectiles ready for play; spaced conductors in said chute to be brought into circuit closing relation by a projectile therein and connected to complete a circuit through any of said scoring lamps.

2. A game apparatus comprising, in combination: a board having a sloping surface; a plurality of scoring pockets on said board, an electric lamp associated with each of certain of said pockets; means to close one point of a circuit through each lamp by presence of a metallic projectile in its associated pocket; means to impel projectiles; a chute to hold projectiles ready for play; spaced conductors in said chute to be bridged by a metallic projectile therein and connected to complete a circuit through any of said scoring lamps, a circuit in shunt of said spaced conductors and a circuit closer therein to illuminate the lamps through which a scoring circuit is closed after the last projectile has been played.

3. A game apparatus comprising, in combination: a board having a sloping surface; a plurality of scoring pockets on said board; an electric lamp associated with each of certain of said pockets; means to close a circuit through each of said lamps at one point by presence of a metallic projectile present in its associated pocket; a signal lamp; a chute to hold projectiles ready for play; means to impel the projectiles; spaced conductors in said chute to be bridged by a metallic projectile therein and connected to complete a circuit through said signal lamp and through another point in the circuits through each of said scoring lamps; a circuit in shunt of said conductors; and a circuit closer in said shunt circuit to close a circuit through all otherwise complete circuits including scoring lamps, for final score indication.

4. A game apparatus comprising, in combination: a board having a sloping surface; a plurality of scoring pockets on said board; an electric lamp associated with each of certain of said pockets; means to complete a circuit through each of said lamps by presence of a metallic projectile in its associated pocket; spaced conducting means exposed in the path of projectiles to one of said pockets; an electric sound producing signal connected in a circuit to be completed by a metallic projectile bridging said conductors.

5. A game apparatus comprising, in combination: a board having a sloping playing surface; means to impel projectiles to said surface to roll downwardly thereover; a plurality of scoring pockets carried by said board comprising openings therein to receive a projectile; an electric lamp associated with each of certain of said pockets; a metallic member carried by a wall of said pocket and connected to a terminal of the associated lamp; a second metallic member to be contacted by the projectile in the pocket; a chute to hold projectiles ready for play; spaced conductors in said chute to be bridged by a metallic projectile therein; one of said conductors connected to the second named metallic member of the pockets; the remaining conductor and the remaining terminal of each lamp connected to a source of electric energy.

6. A game apparatus comprising, in combination: a board having a sloping playing surface; means to impel a projectile to said board to roll down said surface; a plurality of scoring pockets comprising openings in said board; a metallic plate slidably mounted below said board and spaced therefrom less than the diameter of the projectile to be used therewith; said plate having an opening corresponding with each scoring pocket and normally out of register therewith; a sloping return board spaced below said plate; a chute to hold projectiles to be played transverse of the low end of the return board; an electric lamp associated with each pocket; a metallic member carried by the wall of each pocket and connected to one terminal of the associated lamp; spaced conductors in said chute to be bridged by a metallic projectile therein, one of said conductors electrically connected to said plate and the other to a source of electric energy; means to connect the remaining terminal of each lamp to the source of energy; and means to reciprocate said plate to bring its openings into registry with the scoring pockets for discharge of projectiles to said return board.

7. A game apparatus comprising in combination: a board having a sloping playing surface; means to impel projectiles to said surface to roll downwardly thereover; a plurality of scoring receptacles carried by said board; a plurality of scoring pockets in certain of said receptacles, each of said pockets of a depth less than the diameter of said projectiles; said pockets spaced in such relationship to each other that a portion of any projectile falling into one of said pockets will project above the rim of such pocket to such an extent and in such manner as to deflect a projectile subsequently entering said receptacle into an adjacent pocket therein; an electric lamp associated with each of certain of said pockets; and means to close a gap in a circuit through one of said lamps by presence of a projectile present in its associated pocket.

WM. A. FULD.