July 5, 1966 L. A. DURANT 3,259,388

SIMULATED POOL GAME

Filed Aug. 12, 1964 8 Sheets-Sheet 1

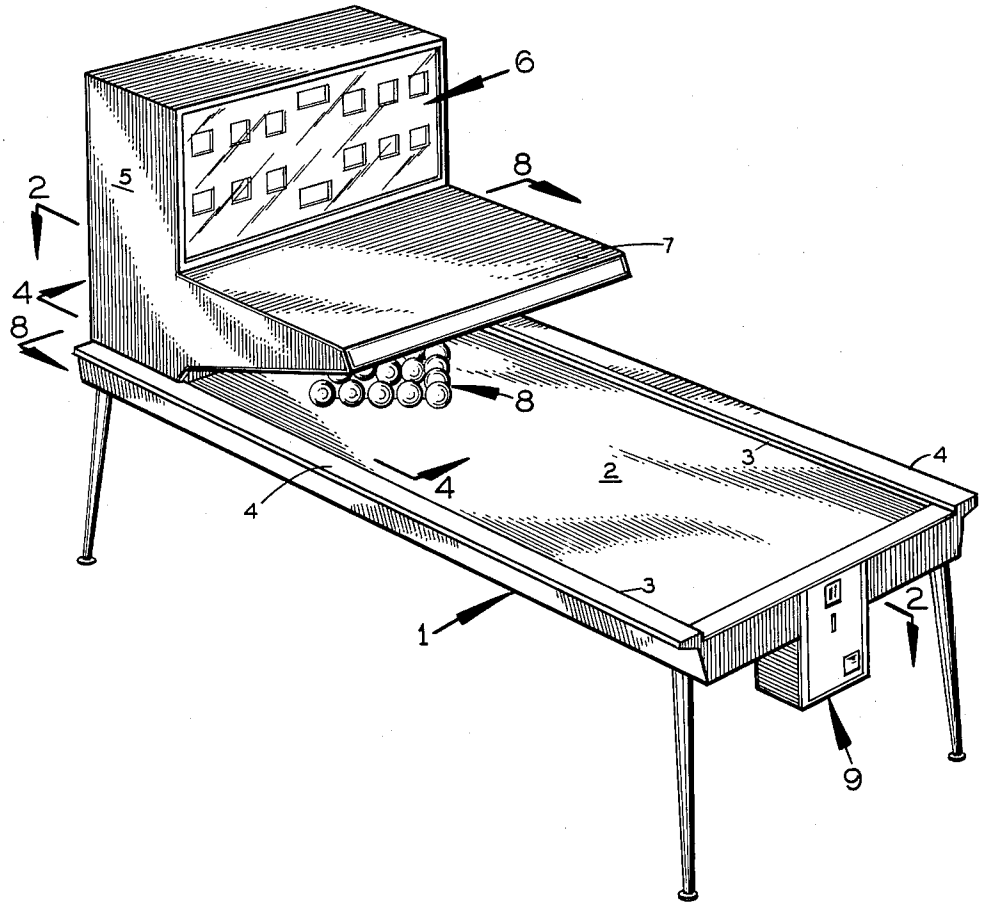


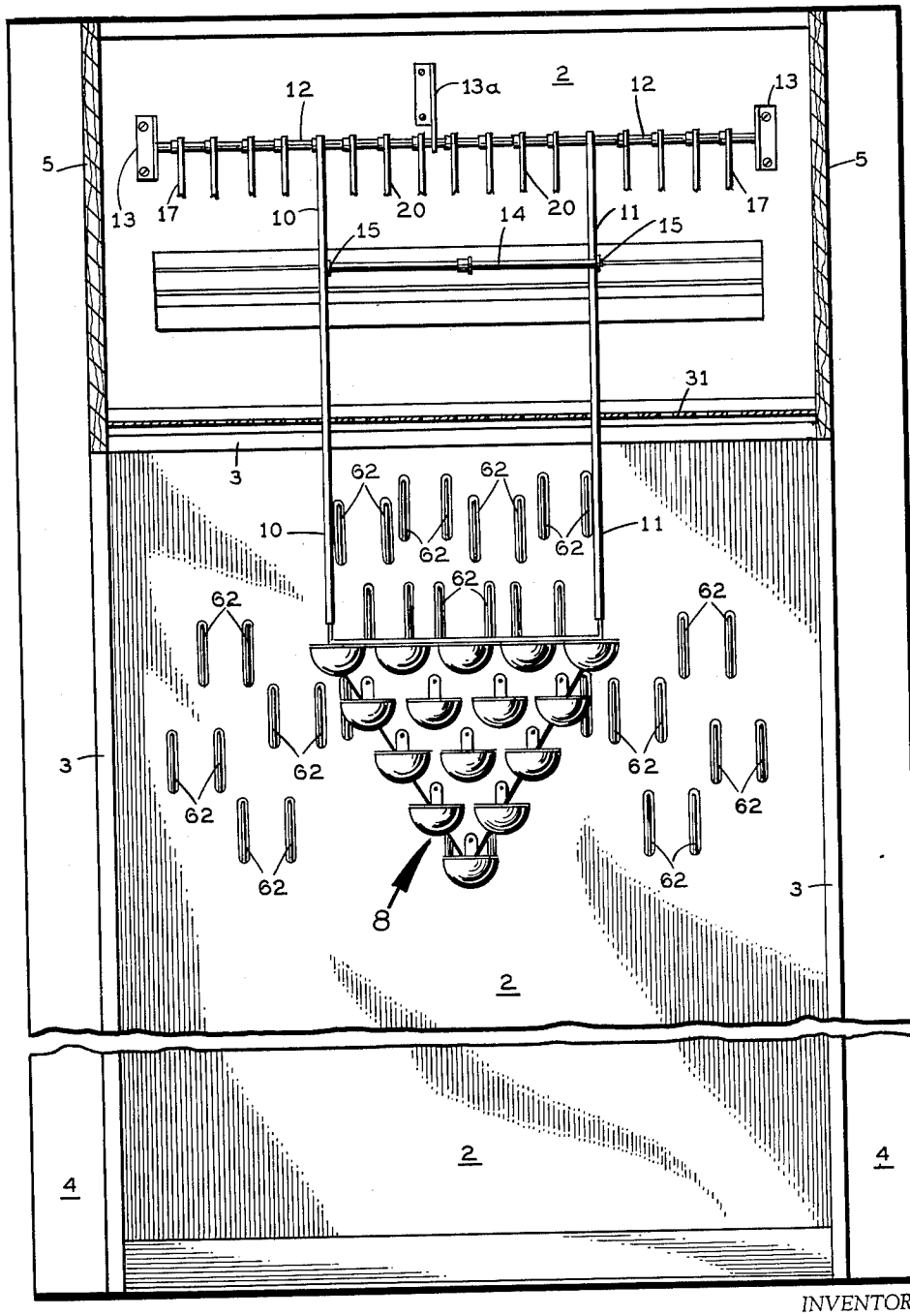
FIG. 1

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SIMULATED POOL GAME

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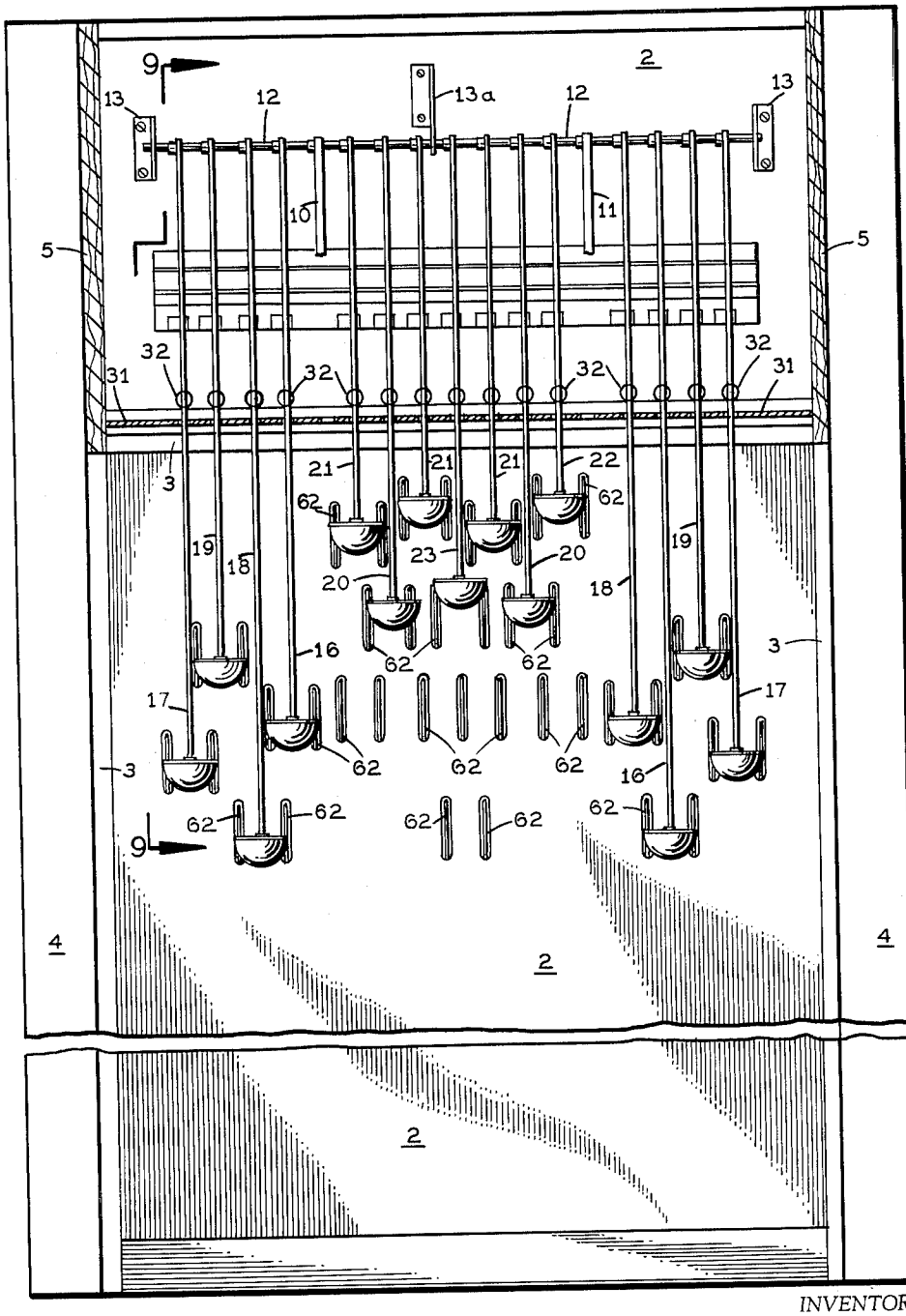
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FIG. 2

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SIMULATED POOL GAME

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FIG. 3

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SIMULATED POOL GAME

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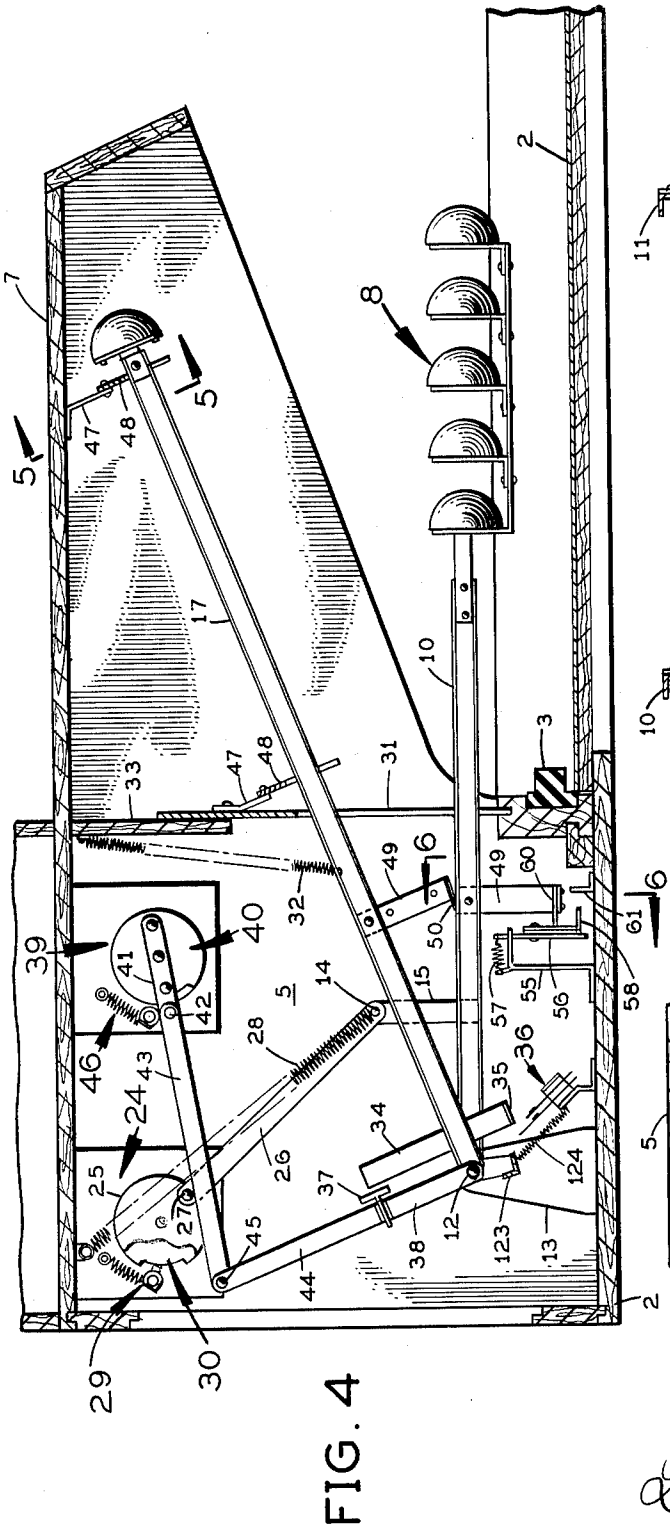


FIG. 4

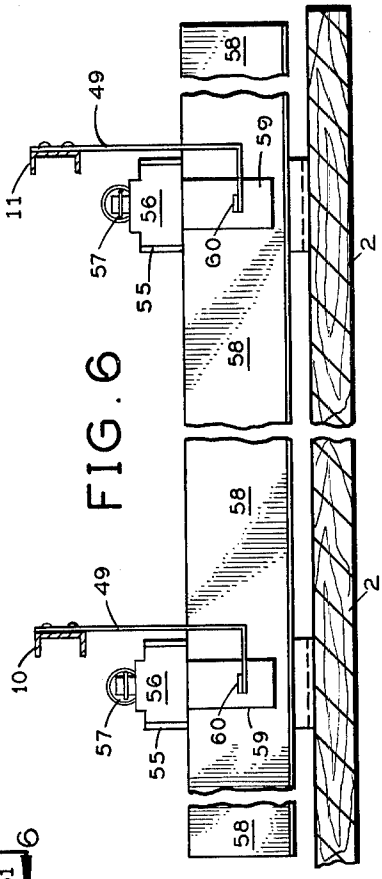


FIG. 6

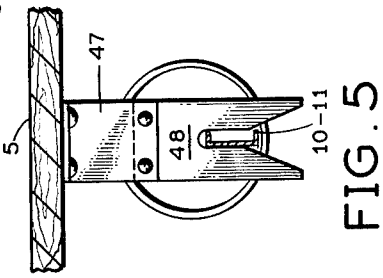


FIG. 5

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SIMULATED POOL GAME

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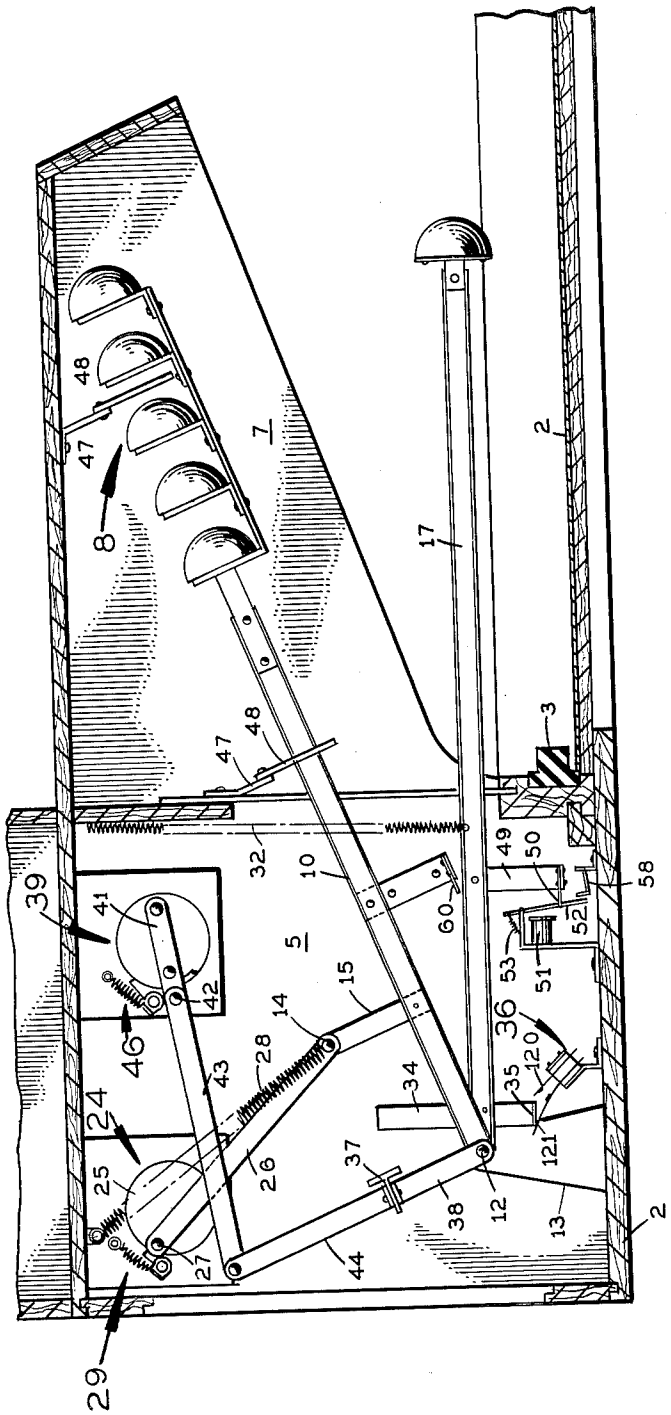


FIG. 7

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FIG. 9

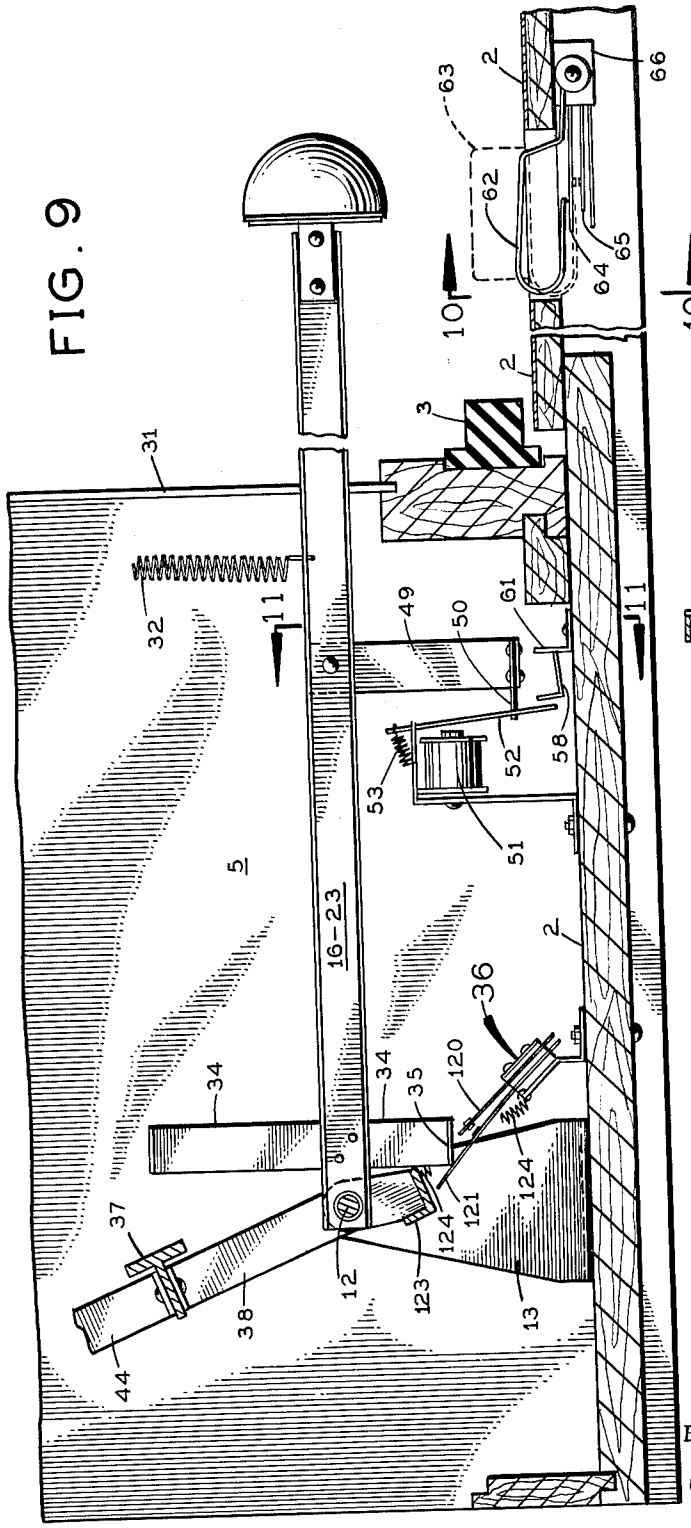


FIG. 11

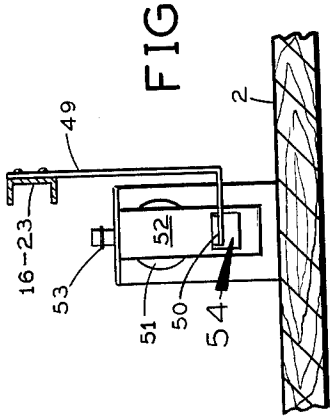
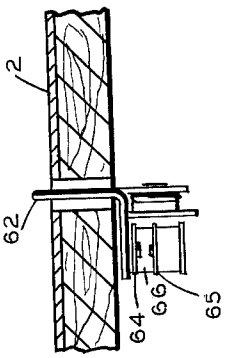


FIG. 10



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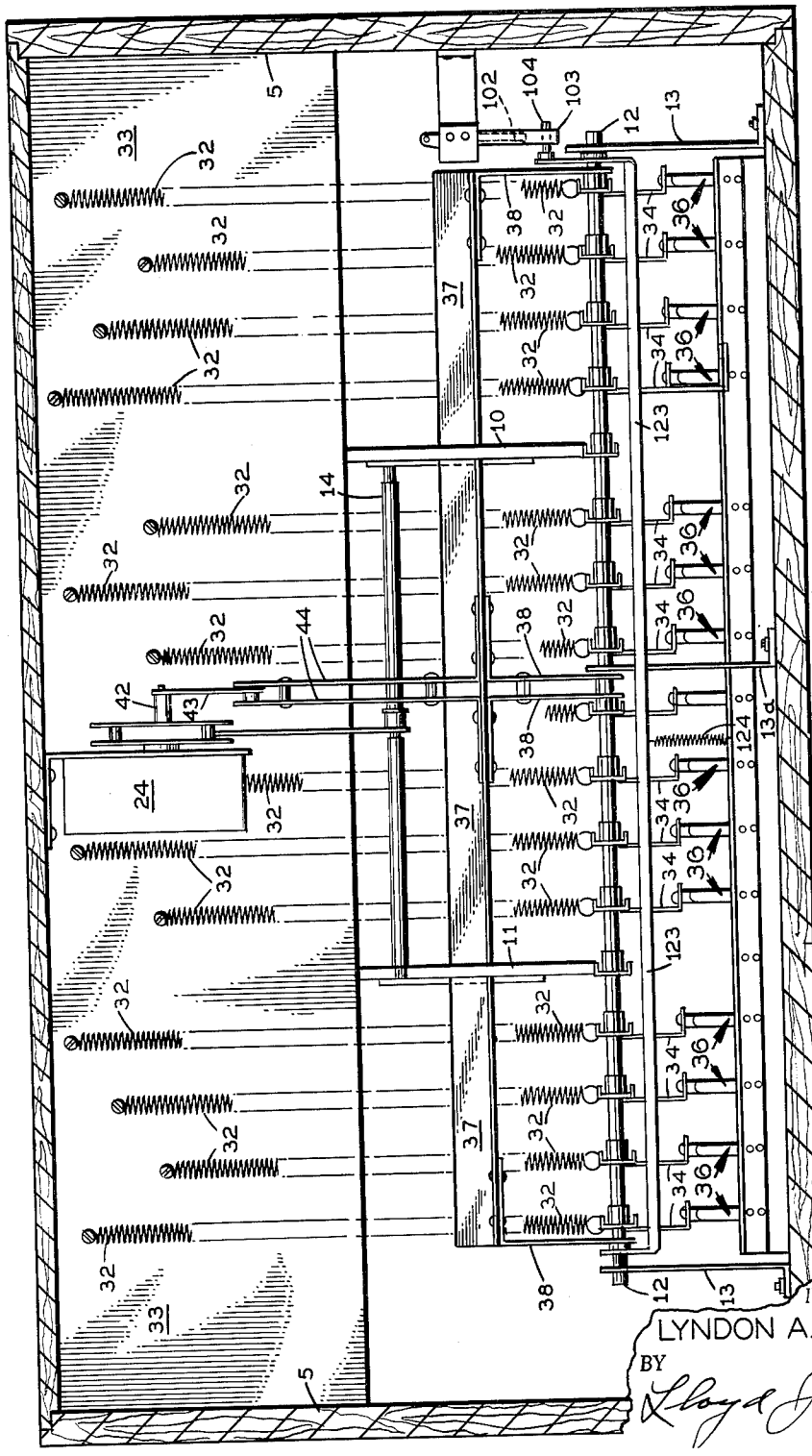


FIG. 8

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SIMULATED POOL GAME

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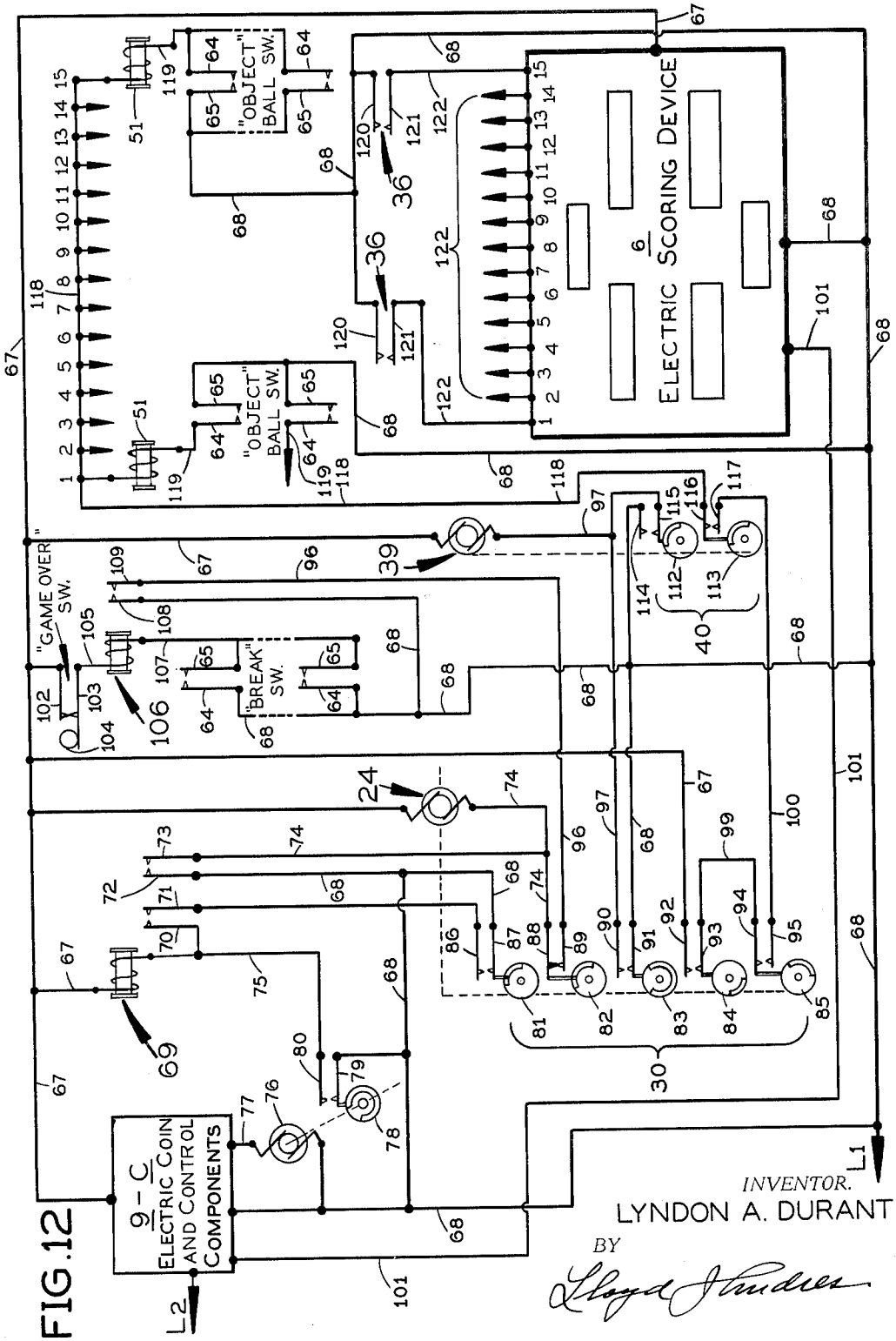


FIG. 12

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United States Patent Office

3,259,388

Patented July 5, 1966

3,259,388

SIMULATED POOL GAME

Lyndon A. Durant, Chicago, Ill., assignor to United Manufacturing Company, Chicago, Ill., a corporation of Illinois

Filed Aug. 12, 1964, Ser. No. 389,024
6 Claims. (Cl. 273—126)

This invention relates in general to mechanical games and more particularly to a coin operated automatic simulated pocket billiard or pool game including an automatic scoring means therefor.

Prior coin operated pool games were mere adaptations of a conventional pool game with the exception of a coin operated means for releasing the balls for manual transfer to the table for racking.

The present game comprehends a model of a set of racked balls normally positioned a predetermined distance above the table when idle, which model is raised out of sight from the table following the "break" shot manually made with a puck whereby a predetermined number of simulated balls are automatically moved downward to predetermined positions close to the surface of the table following the "break" shot.

The game is preferably played with pucks which are manually projected on the table and caromed from side cushions on the table for paths over electric switches which when operated in predetermined paths of the puck will result in the removal of certain predetermined simulated balls.

Reference is had to applicant's U.S. Patents Nos. 2,572,466 and 2,962,285.

The particular embodiment of the game hereinafter described comprehends the automatic placement of fifteen object balls in predetermined location on the table and a predetermined number of "slide-over" switches in predetermined placement on the table. When a puck, or ball, is manually directed in a predetermined path, whether in a direct path or caromed from a cushion, certain switches will operate to remove one or more of the placed balls by momentarily energizing certain ball release means, which construction is a principal feature of the game.

Another object of the invention is the provision of a simulated group of racked pool balls normally positioned close to the surface of the table including electro-mechanical means for raising same from the table out of normal sight upon the predetermined operation of one or more roll over switches in the table by a manually propelled puck representing the so-called "break" shot.

Another object of the game is the provision of a plurality of simulated balls individually movable downward from out of sight rest position to predetermined positions close to the surface of the table following the so-called "break" shot.

A further object of the invention is the provision of an electric transmission for simultaneously removing a model simulating a group of racked balls from close proximity to the top of the table and rapidly substituting therefor a plurality of individually movable balls responsive to the subsequent operation of roll over switch means by a manually propelled puck.

Another object of the invention is the provision of a plurality of individual simulated pool balls positioned close to the top of the table with an electro mechanical

means for rapidly and sequentially removing same by the operation of one or more roll over switches which are operated by the manual movement of a puck including electric scoring means individually responsive and corresponding with the removal of individual simulated balls.

These and other objects and advantages in one embodiment of the invention are described and shown in the following specification and drawings, in which:

FIG. 1 is a perspective view of the game in reduced scale.

FIG. 2 is a plan view of the game taken through section line 2—2, FIG. 1, when the game is at rest.

FIG. 3 is the same as FIG. 2 following the first play.

FIG. 4 is a cross sectional elevation taken through section line 4—4, FIG. 1, when the game is in rest position.

FIG. 5 is an enlarged cross sectional view taken through section line 5—5, FIG. 4.

FIG. 6 is an enlarged cross sectional view taken through section line 6—6, FIG. 4.

FIG. 7 is the same as FIG. 4 in changed position.

FIG. 8 is a cross sectional rear elevation taken through section line 8—8, FIG. 1.

FIG. 9 is a fragmentary cross sectional view taken through section line 9—9, FIG. 3.

FIG. 10 is a cross sectional view taken through section line 10—10, FIG. 9.

FIG. 11 is a cross sectional view taken through section line 11—11, FIG. 9.

FIG. 12 is a schematic diagram of the electric circuit of the game.

FIG. 1 illustrates one embodiment of the game which comprises in general a playing table assembly 1 having a conventional top 2 with inward facing cushions 3 along opposite sides and rear end thereof extending above the surface of top 2 and retained on rails 4, as shown. A casing 5 secured to the rear portion of table 1 serves as a housing for the operating mechanism to be hereinafter described, and for a scoring device 6 including a canopy 7 positioned over a portion of the top and a simulated model of a plurality of racked balls 8. An electric coin control unit 9 secured to the front portion of the table is adapted to electrically condition the game for play upon the deposit therein of a predetermined coin.

Referring to FIG. 2, a model of a plurality of fifteen racked balls 8 is shown in idle position in close proximity to table top 2 and secured to two arms 10 and 11 which are pivoted for vertical oscillation on shaft 12 retained by brackets 13–13*a* on the table top 2. A control bar 14 is retained by opposite ends thereof a predetermined distance above arms 10 and 11 by brackets 15—15, better shown on FIG. 4.

Referring to FIG. 3, each of fifteen object balls are shown in play position in close proximity to top 2 with each secured to an independent arm which are of eight different lengths, 16, 17, 18, 19, 20, 21, 22 and 23 respectively. Each of the arms 16–23 are pivotally secured for independent vertical oscillation on shaft 12, as previously described.

Referring to FIG. 4, an electric gear motor 24 for motivating the racked balls is secured in casing 5 and is constructed and adapted to rotate crank disc 25 when energized.

One end of a connecting rod 26 is pivotally connected to a crank pin 27 on disc 25 with the opposite end thereof

pivotally connected to shaft 14 which is secured in brackets 15 as previously described. A pair of spaced springs 28 secured at one end to shaft 14 and anchored at the opposite ends thereof to casing 5 counter balances the weight of the arms 10 and 11 and the racked balls 8, as shown in FIG. 7.

A spring detent means 29 associated with disc 25 and motor 24 is positioned to retain disc 25 and the racked balls in their lowered break position, as shown. A cam switch assembly 30 is coaxial with disc 25 and rotated by motor 24 and adapted to operate five pairs of electric switch blades shown in FIG. 12. Thus it is now apparent that when the disc 25 is rotated 180 degrees, the racked balls 8 are moved from their break position shown in FIG. 4 to their hidden idle position within canopy 7 as shown in FIG. 7, and when the disc 25 is rotated a further 180 degrees the racked balls 8 are returned to the normal break position, as shown in FIG. 4.

Referring to FIGS. 3 and 4, each of the object balls carried by arms 16–23 are guided by corresponding slots in a barrier member 31, secured in casing 5, as shown. One end of springs 32 is secured to each of the arms 16–23 with the opposite ends thereof secured to a partition 33 straddling the casing 5, better shown in FIG. 8, thus independently urging each of the arms into its upward hidden idle position as shown in FIG. 4.

Referring to FIGS. 4 and 9, each of the arms 16–23 has secured thereto a bar 34 which projects normal to each arm, as shown. The lower end 35 of the bar is positioned to operate an electric switch assembly 36 and the upper portion of bar 34 is positioned for engagement and movement by object ball placement bar 37 which member is pivotally retained on shaft 12 by two pairs of brackets 38, better shown in FIG. 8. A gear motor 39 secured to casing 5 is provided with a rotary cam switch assembly 40 on which is secured a crank arm 41 having a crank pin 42 therein for pivotally retaining one end of a connecting rod 43. The opposite end of the connecting rod is pivotally retained to an actuating arm 44 by a stud 45. A spring detent means 46 is associated with switch assembly 40 for urging same into its idle position when the corresponding switch blades thereof, shown in FIG. 12, are in their idle position.

It is now apparent that the arms 16–23 are urged into their uppermost idle position by springs 32 and that all of the arms and their corresponding simulated object balls are moved downward and latched into predetermined proximity with the surface of the table top 2 by one oscillation of the placement bar 37 when the gear motor 39 has rotated crank pin 42 360 degrees. The bars are held in their lowered idle play position by the independent engagement of pawls 50 with corresponding one of arms 16–23 by brackets 49 and each latch 52 is urged into latching position by independent spring 53 retained on each electro-magnet assembly 51 which correspond to each arm 16–23.

Each of the arms 16–23 are selectively unlatched to return to their normal idle upper positions by the energy in each corresponding spring 32 when each electro-magnet assembly 51 is momentarily energized, as hereinafter described.

To alleviate shock and to facilitate the uniform registration of each of the arms 10 and 11 when rapidly returned to their upper idle position, a guide stop means, shown in FIG. 5, is employed. Each stop means comprises a bracket 47 secured to barrier 31 and a resilient fork 48, such as leather or other resilient materials, is secured to and projecting from the free end of bracket 47 as shown.

Fifteen like brackets 47 and forks 48 are secured and spaced in canopy 7 for guiding and engaging each of the arms 16–23 when they are moved into their upper idle positions, as shown in FIG. 4.

Referring to FIGS. 4 and 7, when the crank arm 41 is rotated 360 degrees from its idle position shown in FIG. 4, all of the arms 16–23 will be moved into latching engagement with latches 52 with all of the object balls in predetermined formation and in play position over the surface of top 2 as shown in FIG. 3.

Referring to FIGS. 4 and 6, a pair of laterally spaced brackets 55 are secured to top 2 beneath each of the arms 10 and 11 respectively. Each of these brackets have hinged thereon a rocker member 56 normally urged outward by spring 57. A transverse release member 58 is secured to rockers 56 and positioned adjacent all of the armature-latches 52. Friction pads 59 are secured in spaced relation to the front side of member 58 for frictional contact and movement by a pair of spaced abutment tongues 60 secured to the downward depending members 49 secured to arms 10 and 11. A suitable pair of stop brackets 61 are secured to top 2 to limit the forward motion of member 58 when under the influence of springs 57 as illustrated in FIG. 4.

When the arms 16–23 are in their downward play position, they are individually latched by corresponding armature-latches 52 as shown in FIG. 9 with the release member 58 in its idle position against stop brackets 61. During the play of the game to be hereinafter described, the bars of the group 16–23 are selectively released for upward movement to their idle positions by the momentary energizing of corresponding electro magnet assemblies 51.

In order that the game may be restored to its idle position in the event certain arms of the group 16–23 remain in their lowermost position, then the lowering of the racked balls will engage tongues 50 with friction pads 59 and release all of the remaining armatures 52 for permitting the corresponding arms 16–23 to return to their upward idle position by virute of springs 32.

Referring to FIGS. 9 and 10, the plurality of strategically placed "slide-over" switch levers 62 are positioned to project through suitable apertures in table top 2 a predetermined distance above the playing surface thereof. Each switch lever 62 is normally positioned at an oblique angle with respect to said surface so that a puck 63 sliding over the table top will progressively bend the lever 62 downward and momentarily close contact blades 64–65 which are secured to the body 66 of the switch assembly. Thus the blades are self restoring as the puck 63 passes over the lever 62.

Referring to FIG. 8, an elongated bale member 123 parallel with and journalled at opposite ends thereof on shaft 12 terminates at one end in a crank 104 for operating blade 103 of the "game-over" blades 102 and 103 secured to casing 5.

A spring 124 having one end connected to the bale 123 and its opposite end connected to the base of switch assemblies 36, normally urges the latter in a forward position holding the switch blades 102–103 in open position.

When any one of the arms 16–23 is latched in its lower play position, the bale 123 will move rearward and permit blades 102–103 to close for the energizing of a portion of the electric circuit of the game.

The diagram shown in FIG. 12 includes the circuitry required for the automatic operation of the movable components described and omits detailed circuitry of well known electric components, such as employed in the coin control and score recording devices.

The circuit provides for three major sequences of operation following the idle position of the circuit when de-energized.

Following the deposit of a coin, a first portion of the circuit is energized by a so-called "break" operation by operating any one of a plurality of predetermined slide-over switches by a manually propelled puck which will sequentially energize gear motors 24 and 39 to raise the racked balls 8 from their position over the table top into hidden position in the canopy of the housing and concurrently lower the fifteen object balls from the canopy

into their predetermined play positions over the table top.

A second portion of the circuit provides for the individual release and raising of each object ball into hidden idle position in the canopy upon the operation of corresponding predetermined object ball "slide-over" switches when operated by a propelled puck moving in a predetermined path, both from direct and indirect paths from carom locations along the cushions.

It is to be noted that the puck is propelled over the "slide-over" switches and will strike the rear bumper **3**, shown in FIG. 4, and rebound outward from under the canopy.

The third or final position of the circuit is energized at the completion of the raising of all object balls and the display of the total score on the scoring device and the automatic re-cycling of the circuit elements to their original idle positions by the action of control components, not shown.

An auxiliary motor driven timing circuit is connected in the circuit for re-cycling the game into idle position following the elapse of a predetermined time period after the beginning of each game, thus eliminating unnecessary excessive play periods.

Referring to FIG. 12, the block **9–C** represents a well known electro-mechanical coin device for receiving coins and energizing the circuit for a corresponding number of plays. The block also represents well known electro-mechanical control components for automatically cycling a well known scoring device illustrated by block **6** and for restoring the circuit to idle position at the end of each play.

The gear motor **24** for raising the racked balls from their idle position is energized by relay **69** which includes a pair of n.o. blades **70–71** and **72–73** and the latter blade is connected to one terminal of motor **24** by a conductor **74**. The remaining treminal of motor **24** is connected to a main conductor **67** which originates in block **9–C**.

Blade **72** is connected to the opposite main conductor **68** which runs to one side of a source of electric power L_1 and the remaining side of the power source L_2 is connected in block **9–C** which is adapted to energize main conductor **67** when a coin is deposited.

One terminal of the coil or relay **69** is connected to conductor **67** and the remaining terminal thereof is connected to a conductor **75**.

A timing motor **76** has one terminal connected to conductor **68** and the remaining terminal thereof connected to block **9–C** by conductor **77**.

A switch cam **78** driven by timing motor **76** is adapted to operate n.o. blades **79–80** with the latter connected to conductors **68** and **75** respectively.

The switch cam assembly **30** driven by motor **24**, shown in FIG. 4, consists of the equivalent of individual cams **81, 82, 83, 84**, and **85** which are adapted to operate blades **86–87, 88–89, 90–91, 92–93**, and **94–95** respectively.

Blades **86–87** are connected to conductors **71** and **68** respectively. Blades **88–89** are connected to conductors **74** and **96** respectively. Blades **90–91** are connected to conductors **97–68** respectively. Blades **92–93** are connected to conductors **67** and **99** respectively. Blades **94–95** are connected to conductors **99** and **100** respectively.

The "game-over" n.c. blades **102–103** are connected to conductors **67** and **105** respectively and are actuated by crank **104** shown in FIG. 8.

Relay **106** has the coil terminals thereof connected to conductors **105** and **107** and the n.o. blades thereof **108–109** are connected to conductors **68** and **96** respectively.

A predetermined number of "break" switches have their n.o. blades **64–65** connected to conductors **68** and **107** respectively.

The gear motor **39** for simultaneously lowering the object balls has one terminal thereof connected to conductor **67** and its remaining terminal connected to conductor **97**.

The cam switch assembly **40** driven by the object ball motor **39**, shown FIG. 4, consists of the equivalent of individual cams **112** and **113** which are adapted to close and open blades **114–115** and blades **116–117** respectively.

Blades **114–115** are connected to conductors **68** and **97** respectively. Blades **116–117** are connected to conductors **100** and **118** respectively.

Each of fifteen release electro-magnet assemblies **51** corresponding to each of the object balls has one terminal of each connected to conductor **118**. For convenience only two assemblies **51** are shown in FIG. 12.

As an example, FIG. 12 illustrates a plurality of single slide-over switches connected to corresponding assemblies **51** and also shows parallel connected slide-over switches connected to assemblies **51**.

Each of the fifteen ball arm n.c. switch assemblies **36** correspond to each of the object balls and each blade **120** thereof is connected to conductor **68** and each mating blade **121** is connected to each terminal **1** through **15** respectively of the scoring device **6** by conductors **122**. Two of the switches **36** are shown in FIG. 12.

The conductors **67** and **68** are connected to terminals of the scoring device for energizing same and a remaining terminal on block **9–C** is connected to the remaining terminal on the scoring device **6** by conductor **101** for energizing, restoring and resetting circuits and components not shown.

In operation, and under the assumption that the game is connected to a source of electric power and is in idle position with the racked balls in "break" position in close proximity over a predetermined group of "break" slide-over switches, the deposit of a predetermined coin in coin unit **9**, shown FIG. 1, will energize and operate components in block **9–C**, shown FIG. 12, and energize conductor **67** with respect to conductor **68**.

A manually propelled puck shot over the surface of table top **2** and over any one of the "break" switches **64–65** will momentarily energize relay **106** through conductor **67** through n.o. switch blades **102–103**, conductors **105, 107** to conductor **68**. Thus the momentary closure of relay blades **108–109** will energize the racked ball motor **24** through conductors **67, 74**, n.c. blades **88–89**, conductor **96** to conductor **68**. The disc **25**, shown in FIG. 4, will now rotate **180** degrees and raise the racked balls **8** into the canopy **7** shown FIG. 7, with arms **10** and **11** engaged in forks **48**. Following the 180 degree revolution of disc **25**, the motor **24** will be de-energized by the opening of blades **88–89** by cam **82** at which point the detent assembly **29**, shown FIG. 4, will engage disc **25** and hold the racked balls in an upper hidden position.

Concurrent with the above initial operation of motor **24**, cam **83** will permit the momentary closure of n.o. blades **90–91** and energize the object ball gear motor **39** for sufficient rotation to permit the holding cam **112** driven thereby to close blades **114–115** to provide 360 degrees rotation of crank arm **41**, shown FIG. 4, to oscillate actuating arms **44**, brackets **38** and oscillating bar **37** about shaft **12**, also for engagement with all the bars **34** secured to arms **16–23**. The oscillation of bar **37** will move all arms and object balls secured thereto from their upper hidden poistion in canopy **7**, as shown in FIG. 4, to their lowered play position in proximity to and over a predetermined number of "object ball" slide-over switch levers **62**. The detent assembly **46**, shown in FIG. 4, will hold the motor **39** in its normal rest position.

Referring to FIGS. 4, 6, 9 and 11, and when the racked ball arms **10** and **11** move upward from their lower "break" position, as described, each tongue **60** projecting from member **49** will move away from holding engagement against corresponding friction pads **59** on the transverse release member **58** as shown FIG. 4, which will permit the two springs **57** to move the rocker member **56** forward into inactive poistion which in turn permits each of the fifteen armature latches **52**, shown in FIG. 9, to move forward into latching position by virtue of latch springs **53**.

Each of the object ball arms **16–23** will be temporarily retained in their lower play positions by the engagement of each corresponding pawl **50** with corresponding latches **52** when the pawls **50** move into mating aperture **54** against the restraining action of each latch spring **53**, shown FIGS. 9 and 11.

In playing the game, the object is to remove as many object balls as possible with the least number of shots of the puck by sliding the puck over a predetermined one or a number of slide-over switches related to each object ball in play position.

Referring to FIGS. 9 and 12, and assuming that the puck is momentarily propelled in a path over a particular object ball slide-over switch **64–65**, shown in FIG. 12, then a corresponding electro-magnet assembly **51** will be energized by a circuit from conductor **67** through the now closed cam switch blades **92–93** of the motor **24**, conductor **99**, through the n.c. cam switch blades **94–95**, conductor **100**, and through the n.c. cam switch blades **116–117** of motor **19**, through conductors **118**, **119** and **68**.

It is apparent that when an electro-magnet assembly **51** is energized, its corresponding latch **52** will be withdrawn from engagement with its mating pawl **50** which will permit a corresponding one of arms **16–23** to rapidly accelerate the ball attached out of vision into the canopy **7** by the action of spring **32** attached thereto.

Simultaneously, the lower end **35** of bar **34** corresponding to the raised arm will permit n.c. blades **120** and **121** of each switch assembly **36** to close and complete a circuit through a terminal on the scoring device **6** corresponding to the raised ball, which operation will result in a sequential totalized score displayed on the scoring device by means not shown.

The play of each game is completed when all of the object balls have been released and raised into the canopy as previously described or a predetermined time for the play has elapsed, whichever occurs first. In the former instance, the last object ball arm raised into the canopy will permit the bale **123**, shown FIGS. 8 and 9, to move forward about shaft **12** under the influence of spring **124** which will rotate crank **104** and open the "game-over" switch **102–103**, shown on FIG. 12, and thus disable the circuit to the "break" slide-over switches and the circuit to object ball gear motor **39** and de-energize conductor **67** to the scoring device permitting the latter to display the end of the game and a total score thereof.

In the event that a predetermined time element is exceeded before the fifteen object balls are raised into the canopy, then the timing motor **76**, shown in FIG. 12, which has been energized since the start of the game by means in block **9–C**, not shown, will rotate cam **78** and after the predetermined time, will operate blades **79** and **80** and energize relay coil **69** via conductors **68**, **75** and **67**.

The closing of relay blades **70–71** and **72–73** will re-energize the motor **24** while the closure of blades **70** and **71** will operate a holding circuit to cycle the motor 180 degrees to its original idle position.

The re-cycling of motor **24** will rotate the cams driven thereby 180 degrees which will place the racked balls in their idle position over the table top and the downward arcuate movement of arms **10** and **11** will move both tongues **60** into engagement with corresponding friction pads **59** and move the release member **58** rearward and thus release any of the arms **16–23** remaining in latched play position down for upward movement by springs **32** into the canopy by the disengagement of pawls **50** from corresponding armature latches **52**.

Simultaneously the scoring device **6** is conditioned for a subsequent game by the action of circuitry and components not shown.

Certain modifications to the above construction utilizing the features described are intended to come within the scope of the appended claims.

Having described my invention, I claim:

1. A simulated pool game comprising a means forming a table having a planar upper playing surface,

a housing on a rear portion of said table including a canopy extending forward therefrom over a portion of said surface in spaced relation thereto,

a plurality of simulated racked object balls secured in adjacent relation to an arm means pivoted in said housing for movement above said surface between a break position in predetermined spaced proximity to said surface and a retracted hidden position in said canopy,

electric motor means coupled to said arm means adapted and constructed to move said racked balls from said break to said retracted position when momentarily energized,

a first group of a predetermined number of electric momentary slide-over switches projecting through said surface under said racked balls when the latter are in said break position for operation by a puck propelled on said surface in predetermined paths,

a like plurality of object ball arms pivoted to said table in said housing for independent oscillation in parallel spaced planes normal to said surface with each of said arms of predetermined length and terminating at the outer ends thereof in simulated object balls of different numbers,

each of said object balls adapted to independent oscillation by corresponding arms between an idle hidden position in said canopy and a play position in predetermined proximity to and in different lateral positions with respect to said surface,

a spring means biased between said housing and each of said object ball arms for urging the latter into said idle position,

a second group of a predetermined number of said switches projecting through said surface and positioned under said object balls when the latter are in play position,

an electro-magnetic latch means in said housing corresponding with each of said object ball arms adapted and constructed to engage and temporarily hold each of said arms in said play position when the latter are moved thereto and to independently release each of said arms to return to said idle position when each one of said corresponding latch means is momentarily energized,

a source of electric energy,

circuit means connecting said source of energy and said electric motor means and said first and second groups of said slide-over switches and said latch means whereby a puck propelled over said surface in a predetermined path will operate a predetermined one of said first group of said switches and momentarily energize said motor means and raise said racked balls from said break to said retracted position and whereby a puck propelled on said surface in predetermined different paths will operate each one of said second group of said switches and energize each corresponding one of said latch means for releasing each corresponding said arm and raising each object ball thereon from said play to said idle position.

2. In a pool game of the character described a table means having a planar playing surface,

a plurality of object ball arm members pivoted on said table means for independent oscillation about a common axis and spaced in parallel planes above and normal to said surface,

each of said members of predetermined length and including a simulated and numbered object ball secured to the outer end thereof and adapted for independent oscillation between an elevated idle position and a play position with the said object

ball thereon in predetermined spaced proximity with said surface,

a like plurality of spring means biased between said table means and each of said members for independently urging each of the latter into said idle position,

a like plurality of electro-magnetic latch means on said table means with each one thereof including an armature member pivoted thereon constructed to self-engage and hold a corresponding one of each of said members in said play position when the latter is moved from said idle to said play position and to release each of said arms to return to said idle position by the restraining action of a corresponding said spring means when energized,

a placement bar pivoted in said table for oscillation in parallel relation to said axis and intersecting the path of travel of all of said members for simultaneously moving the latter from said idle to said play position when oscillated,

electric power means operatively coupled to said bar for oscillating same when energized,

a like plurality of electric momentary slide-over switches in said table means projecting upward from said surface corresponding to each said object balls respectively for independent operation by a puck propelled on said surface,

a source of electric energy,

a circuit means connecting each latch means with each of said corresponding switches and said source of energy whereby all said balls will move from said idle to said play position when said power means is energized and each said ball will retract from said ply to said idle position when each corresponding said switch is operated.

3. The construction recited in claim **2** including a like plurality of electric scoring switches with each one thereof positioned on said table means for independent engagement and operation by a corresponding one of said arm members when moved between said play and said idle positions,

an electric scoring device adapted and constructed to display selective and sequential scores of said game when selectively energized,

a scoring circuit means connected to said source of energy and said plurality of scoring switches and said device for selectively and sequentially energizing same and displaying thereon the sequential and total scores corresponding to predetermined values of each said object ball when each of the latter are moved from said play to said idle position.

4. In a pool game of the character described a means forming a table having a planar playing surface,

a plurality of simulated racked balls secured to an elevating means movably positioned in said table for predetermined oscillation between a break position in predetermined spaced proximity to said surface and a predetermined elevated idle position,

a first electric motor means operatively coupled to said elevating means for oscillating same when energized,

a plurality of object ball arms including an object ball secured thereto being pivoted on said table for independent oscillation about a common axis spaced in parallel planes above and normal to said surface,

each of said arms of predetermined length being adapted for independent oscillation between an elevated idle position and a play position,

independent spring means biased between said table and each of said arms for urging each of same into said idle position,

a latch means on said table adapted and constructed to independently self-engage and hold each of said arms in said play position when moved thereto,

a placement bar retained on said table for oscillating movement co-linear with said arms and intersecting the paths of movement thereof for simultaneously abutting and moving said arms from said idle to play position in holding engagement with corresponding said latch means when oscillated,

a second electric motor means coupled to said placement bar for oscillating same when energized whereby said racked balls will be moved from said break to said idle position and said object balls will be moved from said idle to said play position when said first and second motor means are sequentially energized for predetermined time periods.

5. The construction recited in claim **4**, including a release member movably retained on said table in transverse adjacent relation to all said latch means for movement from an idle to a displaced position and adapted and constructed to simultaneously move all of said latch means from a latched position in engagement with any of said corresponding arms to a release position disengaged therefrom when moved from said idle to said displaced position,

abutment means secured on said elevating means positioned to engage and move said release member from said idle to said displaced position for permitting each of said object balls to move from said play to said idle position when said racked balls are moved from said idle to said break position.

6. In a pool game of the character described a table means having a planar playing surface,

a plurality of object ball arms pivoted on said table for independent oscillation about a common axis in spaced parallel planes above and normal to said surface,

each of said arms including a simulated object ball secured to the outer end thereof adapted for independent oscillation between an elevated idle position and a play position with each said object ball in predetermined spaced proximity with said surface,

independent spring means biased between said table means and each of said arms for independently urging each of the latter into said idle position,

a latch means on said table means adapted and constructed to independently self-engage and hold each of said arms in said play position when moved thereto,

a placement bar retained on said table means for oscillating movement co-linear with said arms and intersecting the paths of movement thereof for simultaneously abutting and moving all said arms from said idle to said play position and into holding engagement with a corresponding said latch means when oscillated one cycle,

a first electric gear-motor including a first crank and cam means secured on the output shaft thereof for rotation thereby,

means connecting said crank means and said placement bar adapted and constructed to oscillate said bar said one cycle for each revolution of said crank,

a first electric cam switch operatively related to said first cam means for holding a circuit connected to said motor for each revolution of said cam means when said circuit is energized,

a like plurality of simulated racked balls secured to an elevating means movably positioned in said table means for oscillation between a break position in predetermined spaced proximity to said surface and a predetermined elevated idle position,

a second electric gear motor with a second crank and cam means secured on the output shaft thereof for rotation thereby,

means connecting said second crank means and said elevating means adapted and constructed to oscillate said elevating means two sequential one-half cycles when said second crank rotates two sequential one-half revolutions respectively,

a second electric cam switch operatively related to said

second cam means for holding a circuit connected to said second motor for each of two one-half revolutions of said second cam means when said circuit is sequentially energized,

a third switch means operatively related to said second cam means for momentary operation thereby including a secondary circuit means connecting said third switch means and said first motor for momentarily energizing the latter when said first motor is energized,

circuit means connecting said first motor and switch means and said second motor and second switch means and said secondary circuit means whereby said racked balls will be moved from said break to said idle position and all said object balls will be moved from said idle to said play position when the second motor is momentarily energized.

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