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PLAYING APPARATUS

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2 Sheets-Sheet 1

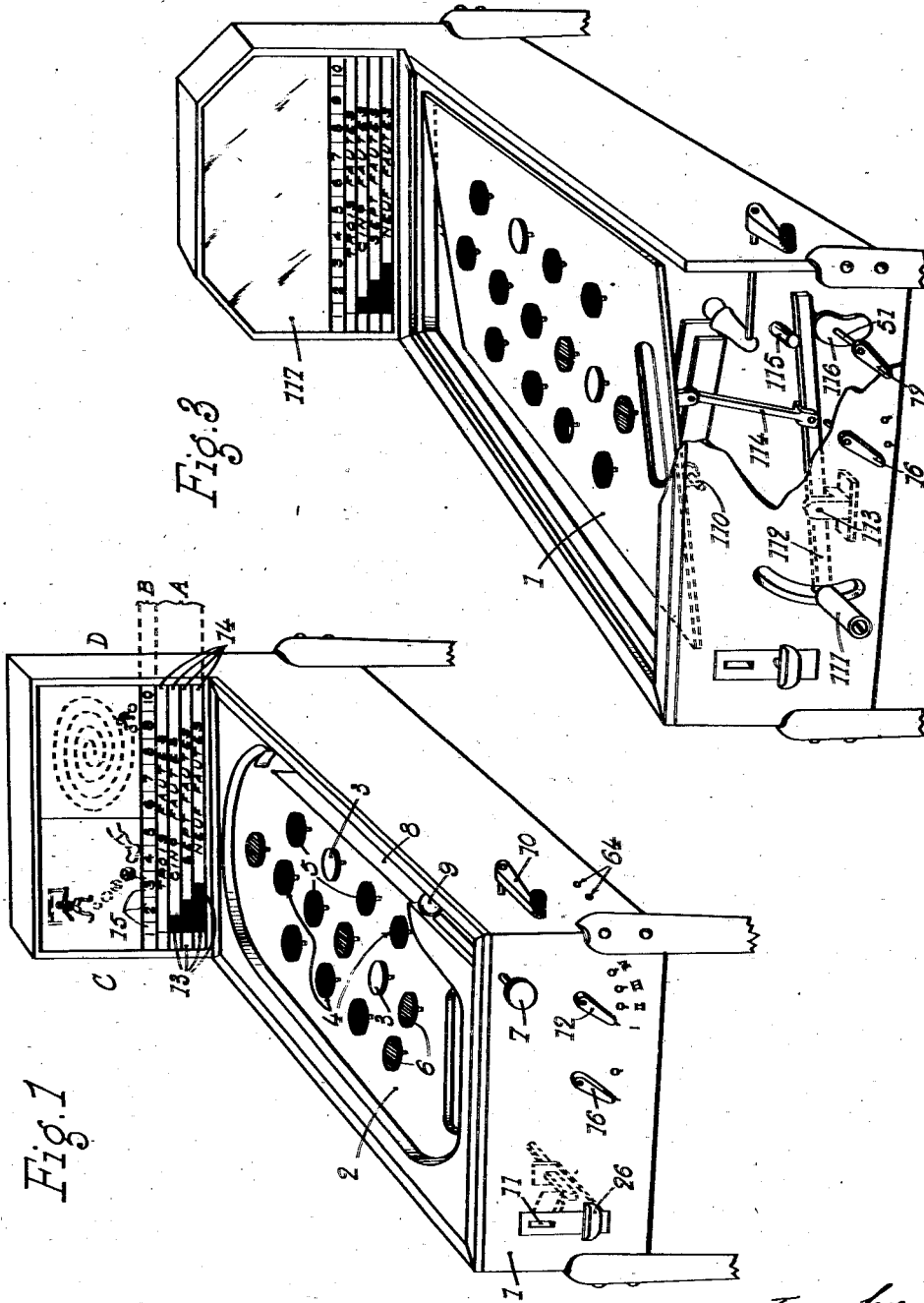


Fig. 1

Fig. 3

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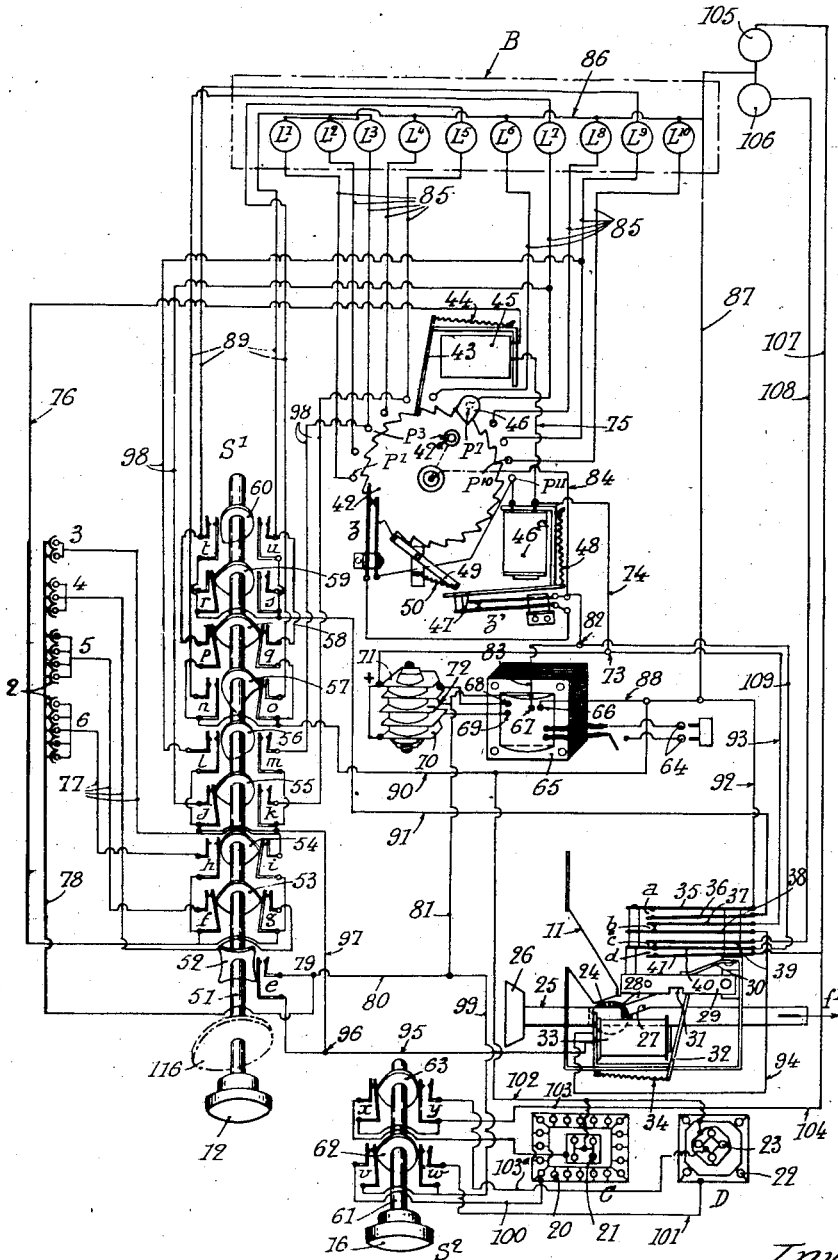
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2 Sheets-Sheet 2

Fig. 2



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UNITED STATES PATENT OFFICE

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PLAYING APPARATUS

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9 Claims. (Cl. 273—121)

Playing apparatus are in use, and chiefly apparatus termed American billiards, or games with balls, which serve, by the insertion of a coin or counter, to provide the player with one or more balls.

These balls are sent out, or put in the game, by a suitable device, and move upon a flat board which is usually stationary and inclined, and comprises orifices or posts which form part of an electric circuit.

The contact made by the ball or balls with the edges of the orifices or with the posts will close a circuit supplying a mechanical or an electro-mechanical device adapted to actuate a counter for indicating a certain number of scores.

The scores which are made are added to the preceding scores, according as they are realized, in order to form a total at the end of the game. If this total should attain or exceed a minimum specified total, the player receives a reward in the shape of counters which may be exchanged, or any other object, or may again use the game without laying any stake beforehand.

The present invention has for its object to greatly increase the commercial yield and the possibilities, both attractive and spectacular, of such apparatus or of all other playing apparatus.

Thus the invention relates to a playing apparatus with balls or the like, which is chiefly characterized by the fact that it is so arranged as to provide successively, with the same mechanisms and owing to a suitable selecting device, for several different games which can be chosen by the player, one by one, and at his will and choice.

These games may differ among themselves in various ways, as it will appear from the following description.

In the accompanying drawings, which are given solely by way of example:

Fig. 1 is a perspective view of an apparatus according to the invention.

Fig. 2 is a diagram of the corresponding electric connections.

Fig. 3 is a perspective view of a modification in which, in addition to the selection of the maximum number of faults and of the contact-pieces which are not to be struck, it is possible to regulate the amount of the movements which may be given to the board carrying the contact-pieces.

In the embodiment represented in Fig. 1, the apparatus is of the known type comprising a case whose upper transparent wall shows, through a glass plate, an inclined board 2 having four sets of electric contact-pieces 3, 4, 5, 6, the contact-pieces of the different series being in different number

or not, and having different colours, for instance, two red contact-pieces 3, three blue contact-pieces 4, four green contact-pieces 5, and five yellow contact-pieces 6. The said contact-pieces are connected in an electric circuit in such manner that when one of these, which is supposed to be in circuit, is struck by a ball sent upon the board 2, a meter will move forward by one or more units.

The game consists, by means of a known ball-propeller 7, in sending upon the board 2 through the guide 8, one or more successive balls 9 which are supplied to the player by a known device 10 which is released by the insertion of a counter or a coin at 11. The game is won when the ball or balls sent upon the board make contact with less than a specified total number of contact-pieces of one or more series which have been preliminarily chosen, and each contact constitutes a fault and is registered by the meter. The game may be so arranged that the game shall be won as follows:

In the case of the first series or rule of the game (with only the red contact-pieces 3 in circuit) if the number of contact-pieces struck is less than three (which supposes the use of several balls, as the number of contact-pieces 3 is for instance only two) (game I).

In the case of the second series or rule of the game (with the blue and red contact-pieces 3 and 4 in circuit), if the number of contact-pieces struck is less than five, for instance (game II).

In the case of the third series or rule of the game (with the red, blue and green contact-pieces 3, 4 and 5 in circuit) if the number of contact-pieces struck is less than seven, for instance (game III).

In the case of the fourth series or rule of the game (with the red, blue, green and yellow contact-pieces in circuit) if the number of contact-pieces struck is less than nine, for instance (game IV).

These different combinations for the game can be chosen at will, by means of a selecting device S¹ which is operated by a handle 12.

Moreover, the arrangement is such that if the game is won, the player receives a reward, or may play another game, as the device 10 is free and will serve to place another set of balls in the game.

At the upper part of the apparatus, several indicating plates are disposed.

The lower plate A shows, by luminous indicators 13 and 14, the combination or the rule of the game which is chosen by the selector S¹.

The plate B consists of a certain number of

squares 15 corresponding to the maximum total number of faults allowed. Each square corresponds to a fault, and each of these squares is provided with an electric lamp. The lamps will light up successively from one square to another, starting from the left, according to the faults. In the present embodiment, for convenience in the drawings, the number of squares is supposed to be limited to ten, but it is evident that the apparatus may be arranged for tens, hundreds and even thousands of faults. In such case, lamps may only be provided for tens or hundreds of faults, etc.

The juxtaposed plates C and D represent spectacular designs of any kind, for instance a game of football at C or a bicycle race at D. These plates are provided with a certain number of lamps supplied by an auxiliary selector S² with operating handle 16, which permits of choosing, at will, any one of the plates, and by electric connections such that the corresponding plate will only be lighted when the game is won or lost, according to the case.

In Fig. 2, the lamps of the plate B are shown at L¹ to L¹⁰. The plates C and D comprise two sets of lamps 20, 21 and 22, 23.

To the left of Fig. 2 is represented the board 2, which is metallic and is insulated from earth, by a series of semicircles which are connected together. The adjacent points represent the contact-pieces 3, 4, 5 and 6, which are connected in four groups.

In the lower right-hand corner, above the plates C and D, is shown the mechanism for starting the game. This mechanism comprises a channel 11, through which the player introduces his coin or counter 24. Below the lower end of said channel 11 is located the mortise of a rod 25 for starting the game, which has a square section and is provided with a knob 26, and is slidable in the front wall of the case 1 (Fig. 1); its rear end, when it is pushed in the direction of the arrow *f*¹, releases, in a known manner, the ball or balls 9 which have been kept in reserve since the end of the preceding game. The rod 25 comprises, in the rear of its mortise, a notch 27 in which a pawl 28 is engaged, in the idle position. The said pawl turns upon a pivoted lever 29 which is urged downwardly by a spring 30. The said lever has a notch 31 in its lower face, in which is engaged, in the idle position, the end of the armature 32 of an electro-magnet 33, and said armature is drawn back by a spring 34 when the electro-magnet is not excited.

The operation of this device is as follows. When no counter is engaged in the mortise of the rod or push-piece 25, this push-piece cannot be driven in by bearing upon it, as the pawl 28 is engaged in the notch 27. The end of the armature 32 is engaged in the notch 31, against the action of the spring 34 which is now stretched. When the player inserts a counter 24 (or a coin) into the channel 11, this coin will come into the mortise of the rod 25, and thus when the knob 26 is pressed, the said counter will act as a cam and will raise the pawl 28 and the lever 29, against the action of the spring 30. This will release the said armature 32, which now turns into the position shown in Fig. 2 by the action of the spring 34. In these conditions, and as long as the electro-magnet 33 is not energized, the armature will hold the lever 29 in the raised position, and the pawl 28 will move out of the way above the notch 27 of the push-piece. Thus until the electro-magnet 33 is energized, the said

push-piece 25 remains free, even after the counter 24 has left (in the known manner) the said push-piece 25, after the first action upon this push-piece. Thus until the electro-magnet 33 is energized, the push-piece 25 is free, and the player is enabled, after a game, to make a set-off for another game. On the contrary, when the electro-magnet 33 is energized, it attracts the armature 32 which now comes adjacent the notch 31 of the lever 29, and thus allows this lever and the pawl 28 to again descend by the action of the spring 30 into the position for locking the rod 25, which can no longer be operated by the player unless he places another coin or counter in the channel 11.

The mechanism above described is completed by the strips 35, 36, 37, 38, 39, 40 and 41 which form, from top to bottom, four switches *a*, *b*, *c*, *d*, actuated by the lever 29. The said strips are combined with this lever in such way that when the lever is raised, the switches *b* and *c* are closed and the switches *a* and *d* open, and the contrary is true when the said lever is lowered.

Above the lamps L is situated the counter for the faults. The said counter comprises a ratchet wheel 42, which is acted upon by the electro-magnet 44 used for the faults, by means of its armature 43 which is controlled by a spring 44. The wheel 42 carries a friction piece or brush 46 adapted to make contact successively, according to the rotation of the wheel, with contact-pieces P¹ to P¹¹ uniformly distributed around the wheel and corresponding to the lamps L¹ to L¹⁰. The contact-piece P¹¹ is an additional contact-piece which is connected to an electro-magnet 46^a adapted for setting back to zero, and its armature 47, when attracted against the spring 48, releases a pawl 49 serving to retain the wheel 42 and normally applied against this wheel by a spring 50.

It should be noted that the said counter is represented as having but a single wheel, for the sake of convenience in the description and drawings, but it may comprise several stages, such as tens, hundreds, thousands, etc., and in this case the contact-pieces P will be situated in any desired manner.

From a mechanical point of view, Fig. 2 also shows the selectors S¹ and S².

The selector S¹ comprises a rotatable shaft 51 terminated by an operating knob 12. To this shaft are keyed, in suitable angular positions, nine cams 52 to 60.

The cam 52 comprises as many bosses as there are possible rules for the games, I, II, III, IV, or four in the present example. The said cam 52 cooperates with the movable strip of a switch *e*, and its angular position is such that the said switch *e* will be open when the selector S¹ has the position corresponding to any one of the four rules of the game, but will be closed when the selector has any intermediate position. A luminous device shows the rule of the game which is chosen.

The two cams 53 and 54, termed selecting cams, each cooperates with the movable strips of two selecting switches *f* *g* and *h* *i*, each of which is used with one of the groups of contact-pieces 3, 4, 5, 6. The angular position of the cams 53 and 54 is such that each switch, *f*, *g*, *h*, *i*, will be closed when the corresponding group of contact-pieces is selected.

The two following cams 55 and 56, used for locking, are combined in like manner with the movable strips of four switches *j*, *k*, *l*, *m*, which

are associated with the lamps L^3, L^4, L^7, L^9 used for instance for the limiting number of faults for the four games I, II, III, IV which can be selected, and this is carried out in such way that only the switch of the set f to m corresponding to the selected game will be closed.

The two following cams 57 and 58 are combined with switches n, o, p, q each of which is allotted to one of the games which can be selected, and this is effected in such way that only the switch corresponding to the selected game will be open.

The last two cams 59 and 60 are combined with four switches, r, s, t, u , each of which is used for one of the games which can be selected, and in such way that only the switch corresponding to the selected game will be closed.

As to the selector S^2 its knob 16 actuates a shaft 61 to which are keyed two cams 62 and 63, each cooperating with two switches v, w and x, y , the switches v and x being closed when the switches w and y are open, and inversely.

The whole device is completed by a plug contact 64 for alternating current, supplying a transformer 65 having two secondary windings with terminals 66, 67 and 68, 69. One of these windings supplies a rectifier 70 in such way that the terminal 71 is a positive terminal and the terminal 72 a negative terminal.

In these conditions, the electric circuits are as follows:

The circuit of the electro-magnet 45 used for the faults, which operates the counter: the positive terminal 71 of the rectifier 70, the point 73, conductors 74 and 75, electro-magnet 45, conductor 76, the inner strips of the switches f, g, h, i , controlled by the cams 53 and 54, conductors 77 connected in parallel and connecting the outer strips of said switches to the contact-pieces 3, 4, 5, 6, the plate 2, conductor 78, point 79, conductors 80 and 81 leading to the negative terminal 72 of the rectifier 70. It will be noted that the electro-magnet 45 is energized by this circuit each time that a ball 9 strikes one of the contact-pieces 3, 4, 5 or 6, for which the corresponding switch f, g, h or i is closed, i. e. one of the selected contact-pieces.

The circuit of the electro-magnet 46^a for setting the counter at zero: This circuit is first closed as follows when the brush 46 comes upon the contact-piece P^{11} : the positive terminal 71 of the rectifier 70, conductor 74, electro-magnet 46^a, contact-piece P^{11} , brush 46, conductors 84 and 83, negative terminal 72 of the rectifier 70. The electro-magnet 46^a will be energized, thus attracting the armature 47 and closing the switch z' . The armature 47 will hold the pawl 49 in the released position, thus allowing the ratchet wheel 42 and its brush to return to the initial position as at the start of the game. As the armature 47 has been attracted by the electro-magnet 46^a, the switch z will be closed, thus permanently maintaining the excitation of the electro-magnet during the return of the ratchet wheel to zero through the following circuit: terminal 71, conductor 74, electromagnet 46^a, contact-piece P^{11} , switches z and z' , point 82, conductor 83 and terminal 72. When the ratchet wheel has resumed its zero position, a stop 42^a acts upon the switch z , which thus opens the exciting circuit of the electro-magnet 46^a. The armature 47, which is brought back by its spring 48, releases the retaining pawl 49, and the switch z' is again opened.

The circuits of the lamps, $L^1, L^2, L^4, L^6, L^8,$

L^{10} which do not correspond to the maximum number of admissible faults for the different rules of the game I, II, III, IV: the terminal 67 of the secondary of the transformer, conductors 83, 84, brush 46, contact-pieces P^1 to P^{10} in parallel, conductors 85 in parallel, lamp bulbs, conductors 86, 87 and 88, terminal 66. It will be noted that the circuit of each lamp will be closed when the brush 46 comes upon the corresponding contact-piece P .

The circuits of the lamps L^3, L^5, L^7, L^9 corresponding to the maximum number of admissible faults for the different rules of the games selected: terminal 67 of the secondary, conductors 83 and 84, brush 46, contact-pieces P^3, P^5, P^7, P^9 in parallel, the corresponding conductors 85 in parallel, lamp bulbs, conductors 89 in parallel, outer strips of the switches in parallel n, r or o, s or p, t or q, u . The inner strips of the switches n, o, p, q are connected in common, by a conductor 90, to the terminal 66, and thus when each switch is closed, the corresponding lamp or lamps will be lighted when the brush 46 comes upon the corresponding contact-piece P . The inner strips of the switches r, s, t, u , are connected in common by a conductor 91 to the strip 36 of the switch a of the device for starting the game, the other strip 35 being connected by the conductor 92 to the terminal 66 of the transformer, and thus each lamp L^3, L^5, L^7 or L^9 can be supplied by the auxiliary circuit above described, when the brush 46 is upon the corresponding contact-piece P , with the switch r, s, t or u closed and the switch a also closed.

The circuit of the electro-magnet 33 adapted for the locking of the device for starting the game: the positive terminal 71 of the rectifier, conductor 93, switch b , conductor 94, terminals of the electro-magnet 33, conductor 95, point 96; after this point, the circuit of the electro-magnet can be closed either by the switch e of the selector, the point 79, the conductor 80 and the negative terminal 72, or by the conductor 97, any one of the switches j, k, l, m , and any one of the conductors connected to the contact-pieces P^3, P^5, P^7, P^9 , that is, to the lamps L^3, L^5, L^7, L^9 .

The circuits for the plates C and D. The inner strips of the switches v and w are connected by the conductor 99 to the terminal 67 of the transformer; the outer strips are connected to the lamps 20 and 22 of the plates by the conductors 100 and 101, and the return to these lamps is effected in parallel by the conductor 102 which is connected to the conductor 90 and to the terminal 66; as the cam 62 constantly closes one or the other of the switches v, w , the lamps 20 or 22 of the selected plate C or D are thus constantly lighted. As concerns the lamps 21 and 23, which will only be lighted when the game is won, they have the same return to the terminal 66 as the lamps 20 and 22, and are connected to the outer strips of the switches x and y by the conductors 103 and 103^a; the inner strips of these switches are connected in parallel by the conductor 104 to the strip 41 of the switch d of the starting mechanism.

The lamps 105 (out of the game) and 106 (to be played again) have a common terminal which is directly connected by the conductor 87 to the terminal 66 of the transformer. The second terminals of the lamps are connected by the conductors 107 and 108 respectively to the strips 41 and 39 of the switches c and d , and the common strip 40 for these switches is connected by the conductor 109 to the terminal 67.

The operation of the apparatus is as follows:

1. The player selects his indicating plate.
2. The player operates the selector S^2 , and if he has chosen the plate C, he brings this selector into the position represented. The lamps 20 of this plate are now lighted.
3. The player operates the selector S^1 , and he chooses a rule of the game, for instance the rule III, for which the contact-pieces 3, 4, 5 are to be employed, the contact-piece 6 being eliminated. The game is such that it is won if the number of contact-pieces struck by the balls is less than seven, according to the above indications. Thus the player brings the pointer which is mounted on the knob 12 of the selector, in coincidence with a mark on the case 1 corresponding to the chosen rule of the game. The selector will now have the position herein represented. The cam 52 holds the switch e open, and thus the electro-magnet 33 cannot be directly energized by 79, 80, 81. The cams 53 and 54 hold the switches f , g and i in the closed position, and their outer strips are connected by the conductors 77 to the contact-pieces 3, 4, 5. On the other hand, the cam 54 holds the switch h in the open position, and its outer strip is connected to the contact-pieces 6, and these latter, which have not been chosen, are thus isolated. The cam 55 closes the switch j which is connected by the conductor 98 to the lamp L^7 , and the switches k , l , m for the respective lamps L^5 , L^9 and L^3 are now open. The switch n is opened by the cam 57; the said cam 57 and the cam 58 close the switches o , p and q . On the other hand, the cam 59 holds the switch r in the closed position, whilst the switches s , t , u , are now open.

As concerns the plate A, the row corresponding to the chosen game III is now lighted, by the use of one or more lamps whose circuit, not shown, is automatically closed by the selector when it has the position corresponding to the game III.

The three aforesaid operations are performed before the insertion of the coin or counter, and the alternate lighting of these selections is effected by means of an intermediate lighting, for instance by a knob which is operated by the player.

4. The player inserts a counter 24 into the channel 11, and then drives in the push-piece 25. From now on, as the game is in progress, it cannot be changed. The counter 24 acts as a cam to raise the pawl 28 and the lever 29, which is now held in the raised position by the armature 32, as above set forth. The switches b and c are closed, and the switches a and d are open.

The player now sends out, one by one, the balls 9 with which he has been supplied. When a ball strikes one of the contact-pieces 3, 4 or 5, the circuit of the electro-magnet 45 will now be closed through one of the switches f , g , i . If a ball should strike a contact-piece 6, this will have no effect, as the switch h is open by the game III in question. Upon each contact between a ball and one of the contact-pieces 3, 4, 5, i. e., for each fault, according to rule, the wheel 42 of the counter will move forward by one unit. Thus the brush 46 will advance successively upon the contact-pieces P^1 , P^2 , P^3 , etc. When the brush comes upon any one of the contact-pieces P^1 , P^2 , P^4 , P^6 , P^8 , P^{10} , the circuit of the corresponding lamp L^1 , L^2 , L^4 , L^6 , L^8 , L^{10} will be directly closed upon the terminals 66 and 67. When the brush comes upon the terminals P^3 and P^5 corresponding to the maximum number of allowable faults for the games I and II, these lamps will be lighted, as their circuits are closed upon the terminal 66 by

the conductor 90, the closed switches q or o , and the corresponding conductors 89.

If the total number of faults in the game should be less than seven, the player will receive a prize, or the whole will remain in the same condition, and the player can commence another game. The lamp 106 ("to be played again") is lighted by the circuit comprising the terminal 66, conductor 87, lamp 106, conductor 108, switch c , conductor 109, terminal 67, and possibly a third game, but the time for the continuous use of the apparatus is limited to x minutes from the first start, by means of a suitable known mechanism.

During the first game or after n successive games, when the brush comes upon the contact-piece P^7 used for the lamp L^7 , the situation now changes. In fact, at this time, the lamp L^7 cannot be lighted, for the moment, by the circuit 89, the switch n and the conductor 90, as the switch n is open. But at the same time, the circuit of the electro-magnet 33 is closed, through the circuit: terminal 71, conductor 93, closed switch b , conductor 94, electro-magnet 33, conductor 95, point 96, conductor 97, closed switch j , conductor 98, conductor 85, contact-piece L^7 , brush 46, conductor 84, terminal 72. The electro-magnet 33 being energized, the armature 32 is attracted, and the lever 29 drops together with its pawl 28, thus definitively holding the push-piece 25 which can now only be operated by the insertion of another counter at 11.

Owing to the descent of the lever 29, the switches b and c are open, and the switches a and d are closed. Due to the closing of the switch a , the lamp L^7 is supplied by the circuit: terminal 67, lamp L^7 , conductor 89, closed switch r , conductor 91, switch a , conductor 92, terminal 66. At the same time, by means of the switch d , the lamp 105 "out of the game" is supplied, and the same is true for the lamps 21 of the plate C, by means of the conductor 104, the switch x and the conductor 103.

It is required to employ two sets of switches (n , o , p , q) and (r , s , t , u) owing to the fact that it is necessary to relieve the lamps L^3 , L^5 , L^7 and L^9 of the sum of the direct and alternating voltages which they would be obliged to support if the circuits of these lamps were closed directly upon the terminal 66 in the same way as the circuits of the other lamps.

During a game, if the player should change the position of the selector in order to choose a simpler game, he will then close the switch e , thus supplying the electro-magnet 33 which will then lock the push-piece 25, thus preventing the player from making any new game or from receiving a prize, and this will actuate an indicator for "out of the game."

Fig. 3 represents a modified form of the apparatus, in which the board 1 is pivotally mounted on a longitudinal shaft 110. The player can change the inclination of this board, for instance by means of a handle 111, a lever 112 turning upon a stationary axle 113, and a link 114. The pivoting of the lever 112 and hence of the said board 1, is limited by a stationary stop 115 and a movable stop 116, which latter is keyed to the shaft 51 of the selector S^1 (shown in dotted lines in Fig. 2) in such way that the maximum degree of the pivoting movement which the player can give to the said board 1 will depend upon the selected game I, II, III, IV.

In this embodiment, it is supposed that the two plates C and D are superposed. They are provided with a common screen 117, behind which

the auxiliary selector S^2 can light either of the two groups of lamps, and thus either of the two designs can appear upon the said screen 117.

Obviously, the invention is not limited to the 5 embodiments herein described and represented, which are given solely by way of example. The apparatus have been described on the supposition that the contacts are faults, but it might be supposed that each contact represents a score, and 10 in this case the game could not be again played unless the player should make a minimum number of scores. In this case, the push-piece can be normally locked after it is first released by the counter, and it can only be again released by en- 15 ergizing the electro-magnet 33, which will now represent an electro-magnet for release and not for locking, as in the apparatus above described.

Having now described my invention what I 20 claim as new and desire to secure by Letters Patent is:

1. A game apparatus comprising a metallic plate, a plurality of groups of electric contact members mounted on said plate and insulated with relation to said plate, the contact mem- 25 bers of each group being electrically connected together, movable elements of conductive material adapted to be moved on said plate and to be brought into contact with any one of said electric contact members, whereby said contact 30 member is electrically connected with said plate, a source of current, for each group of contact members a selective switch having one terminal connected with its corresponding group of con- 35 tact members, the other terminals of said switches being connected together and said switches being adapted to be opened and closed selectively, electric connecting means between said source of current and said plate and between said source of current and said other terminals of said 40 switches, and indicating means interposed in said connecting means and adapted to be operated by the current circulating in said connecting means.

2. A game apparatus according to claim 1 further comprising a rotatable shaft and cams on 45 said shaft adapted to close and to open selectively said switches separately and in combinations when said shaft is rotated.

3. A game apparatus comprising a metallic plate, a plurality of groups of electric contact 50 members mounted on said plate and insulated with relation to said plate, the contact members of each group being electrically connected together, movable elements of conductive material adapted to be moved on said plate and to be 55 brought into contact with any one of said electric contact members, whereby said contact member is electrically connected with said plate, a source of current, for each group of contact members a selective switch having one terminal connected 60 with its corresponding group of contact members, the other terminals of said switches being connected together and said switches being adapted to be opened and closed selectively, electric connecting means between said source of 65 current and said plate and between said source of current and said other terminals of said switches, an electromagnet interposed in said connecting means and provided with an armature adapted to be moved towards and away from 70 said electromagnet, a number of indicating devices adapted to be operated by an electric current and each provided with two terminals for electric current, a multiple way switch comprising a movable member adapted to be operated 75 by said armature of said electromagnet and a

number of contact pieces at least equal to the number of indicating devices and adapted to be engaged successively by said movable member, each contact piece corresponding to and being 5 connected with one terminal of one indicating device, the other terminals of said indicating devices being connected together, and electric current supplying means adapted to be connected on one side with said movable member and on 10 the other side with said other terminals of said indicating devices.

4. A game apparatus according to claim 3, further comprising between said other terminals of part of said indicating devices and the common 15 connecting point of the terminals of all said indicating devices auxiliary switches adapted to be selectively opened and closed.

5. A game apparatus according to claim 3 further comprising an operating member provided with a notch and adapted to assume two extreme 20 positions, the one in which access is given to said movable elements and the other in which said movable elements are not accessible, a spring pressed pivoted lever provided with a recess and carrying a pawl adapted to engage said notch in 25 said operating member and to maintain said member in the position corresponding to said movable elements being not accessible, means adapted to cooperate with said operating member and to remove said pawl from said notch 30 and to move said pivoted lever away from said operating member, electromagnetic means provided with a spring pressed armature adapted in one position to engage said recess in said lever and to permit said pawl of engaging said 35 notch and in the other position to serve as a stop for said pivoted lever and to maintain said pawl out of engagement with said notch, controlling switches adapted to be selectively opened and closed and corresponding to a number of said 40 indicating devices and having their terminals connected respectively with said contact pieces corresponding to said indicating devices and with said electromagnetic means, and electric connections between one terminal of said source of current and said electromagnetic means and between the other terminal of said source of current and said movable member of said multiple way switch, whereby said electromagnetic means is energized when said movable member of said 50 multiple way switch has been moved on a contact piece corresponding to a closed controlling switch and causes said pivoted lever to move and to bring said pawl in engagement with said notch in said operating member. 55

6. A game apparatus according to claim 1 further comprising an operating member provided with a notch and adapted to assume two extreme 60 positions, the one in which access is given to said movable elements and the other in which said movable elements are not accessible, a spring pressed pivoted lever provided with a recess and carrying a pawl adapted to engage said notch in said operating member and to maintain said 65 member in the position corresponding to said movable elements being not accessible, means adapted to cooperate with said operating member and to remove said pawl from said notch and to move said pivoted lever away from said operating member, electromagnetic means provided with a spring pressed armature adapted in one position to engage said recess in said lever and to permit said pawl of engaging said notch and in the other position to serve as a stop for 70 said pivoted lever and to maintain said pawl 75

out of engagement with said notch, a rotatable shaft and cams on said shaft adapted to close and to open selectively said switches separately and in combinations when said shaft is rotated, 5
5 a controlling switch connected with said electromagnetic means, electric connections between one terminal of said source of current and said electromagnetic means and between the other terminal of said source of current and said controlling switch, and a further cam on said shaft 10
10 adapted to open said controlling switch when one at least of said selective switches is closed and to close said controlling switch when said selective switches are open, whereby said operating member is locked by said pawl when said shaft is rotated from one position in which at 15
15 least one selective switch is closed towards another position.

7. A game apparatus according to claim 1 fur-

ther comprising a luminous board carrying different spectacular designs, and electric means for illuminating said designs selectively.

8. A game apparatus according to claim 1, in which said metallic plate is pivotally mounted 5
5 and may assume different inclined positions.

9. A game apparatus according to claim 3, further comprising an additional electromagnet provided with an armature, an additional contact piece on said multiple way switch connected with 10
10 said additional electromagnet, arresting means adapted in their operative position to prevent said movable member of said multiple way switch from moving backwards, and means actuated by 15
15 said armature and adapted to bring said arresting means in their inoperative position and to release said movable member.

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