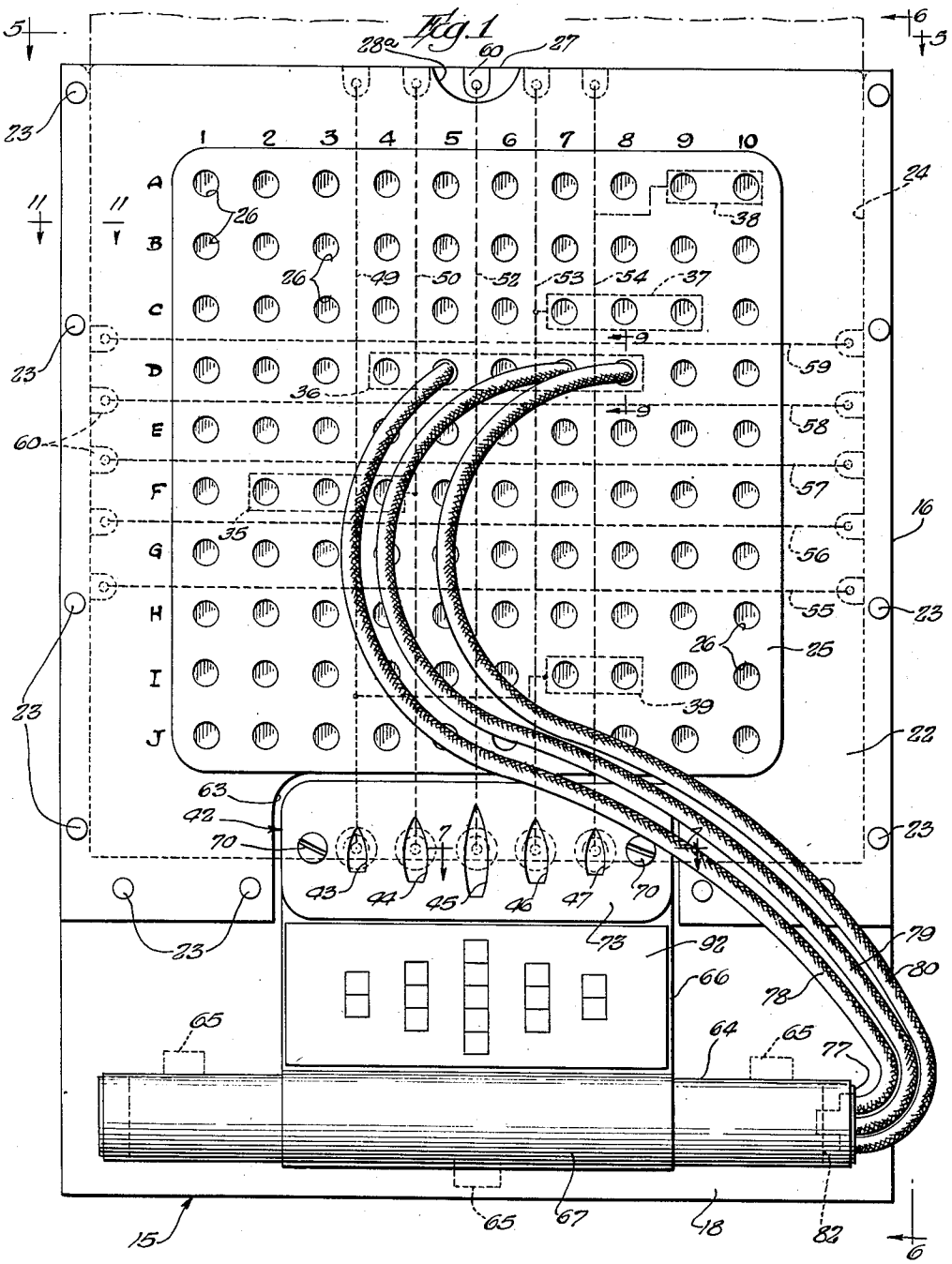
June 27, 1950 H. BADER 2,512,820

ELECTRICAL GAME BOARD FOR SALVO GAMES

Filed Sept. 25, 1946 4 Sheets-Sheet 1

Fig. 1



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ELECTRICAL GAME BOARD FOR SALVO GAMES

Filed Sept. 25, 1946 4 Sheets-Sheet 2

Fig. 2

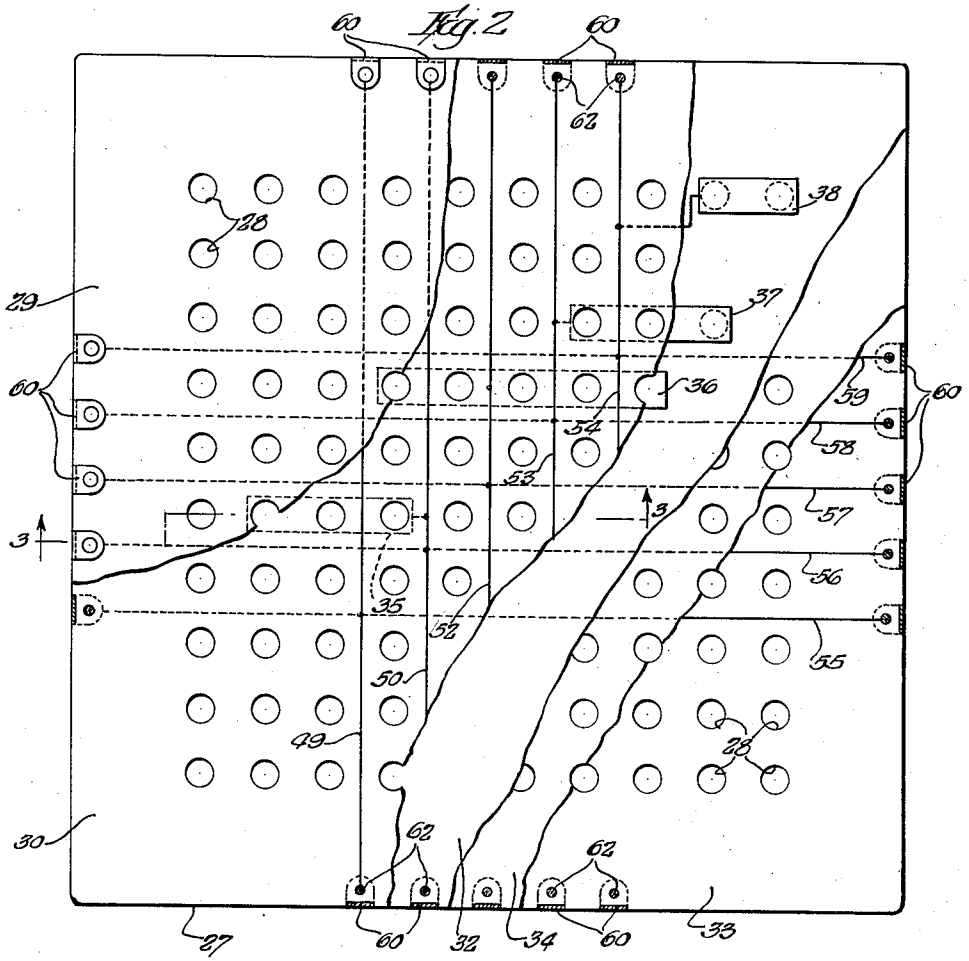
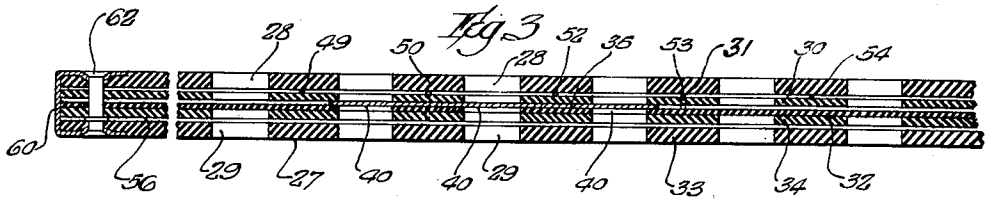


Fig. 3



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ELECTRICAL GAME BOARD FOR SALVO GAMES

Filed Sept. 25, 1946 4 Sheets-Sheet 3

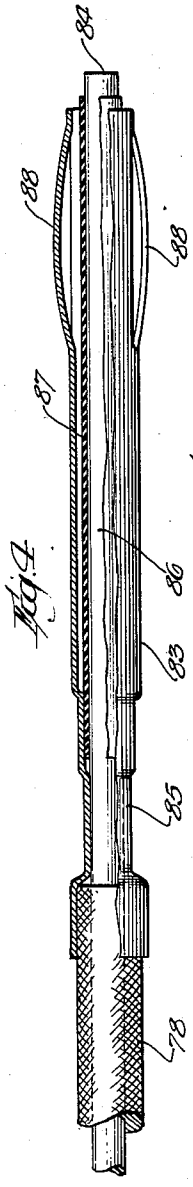


Fig. 4

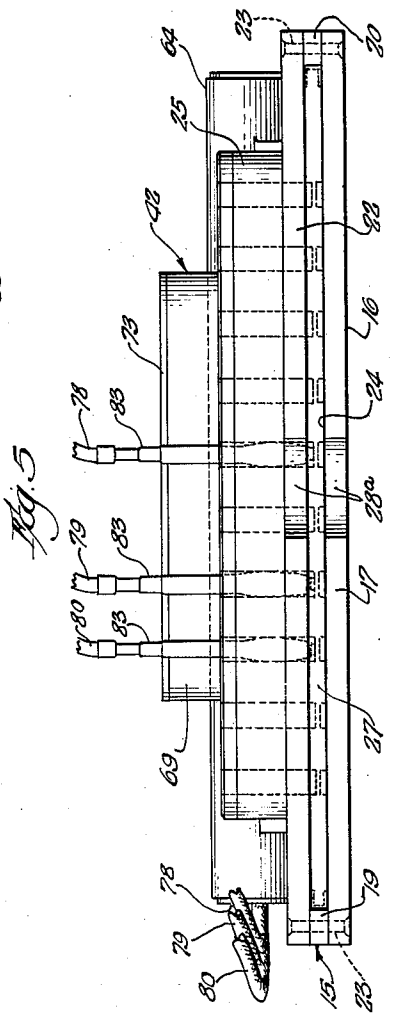


Fig. 5

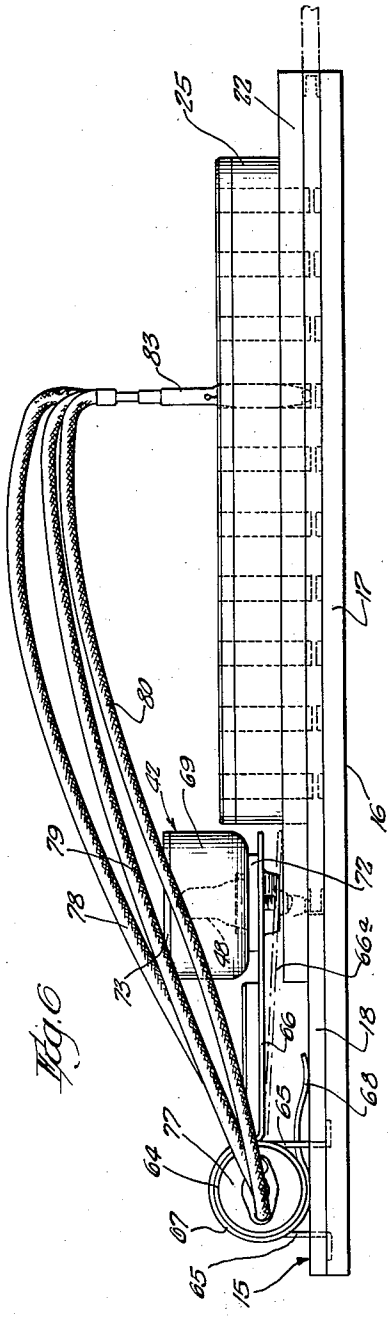


Fig. 6

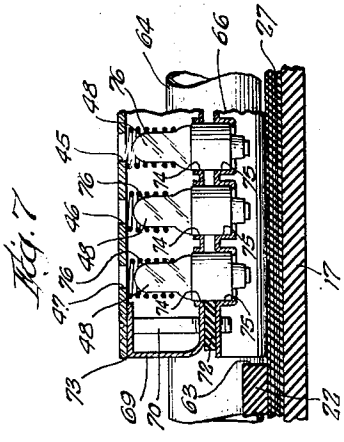


Fig. 7

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ELECTRICAL GAME BOARD FOR SALVO GAMES

Filed Sept. 25, 1946 4 Sheets-Sheet 4

Fig. 8

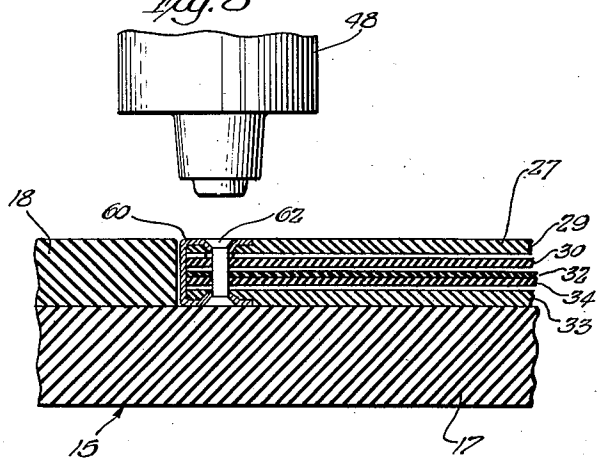


Fig. 9

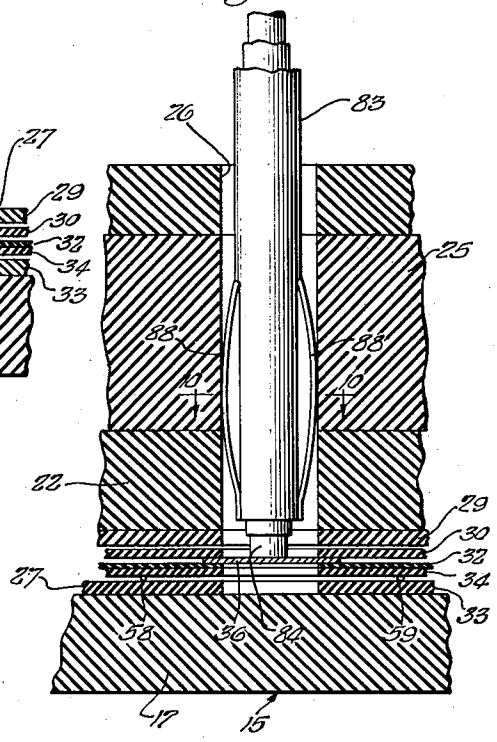


Fig. 10

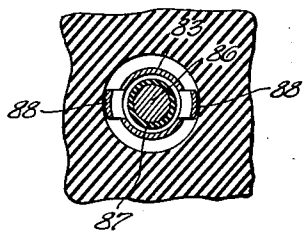


Fig. 12

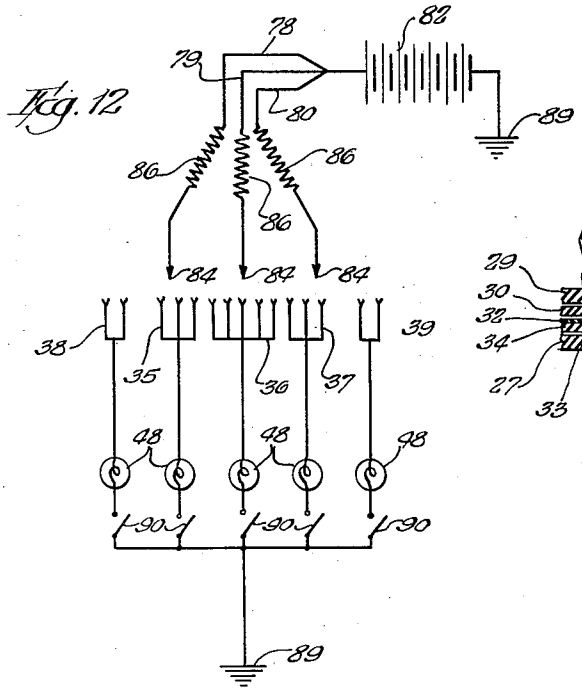
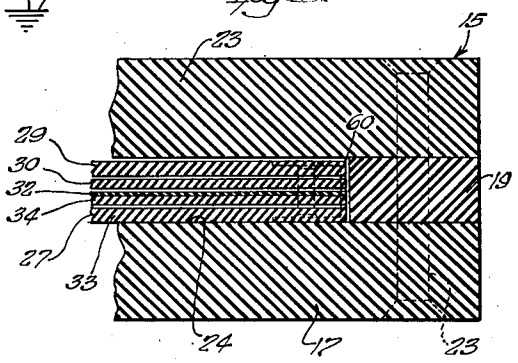


Fig. 11



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Patented June 27, 1950 2,512,820

UNITED STATES PATENT OFFICE

2,512,820

ELECTRICAL GAME BOARD FOR SALVO GAMES

Hans Bader, Palos Heights, Ill., assignor of one-half to David J. Jones, Chicago, Ill.

Application September 25, 1946, Serial No. 699,147

9 Claims. (Cl. 273—130)

1

This invention relates to games and more particularly to a game involving both chance and skill and which may be played either with or without an opponent.

Whether played with or without an opponent, the game assumes the presence of a predetermined number of obstacles of predetermined size to be overcome with the least possible expenditure of chances. One may, for example, assume the presence within a given area of an enemy fleet of a predetermined number and sizes of ships. Then, whether those ships are placed in battle positions by an opposing player at the beginning of a game or thus disposed in the form of an unknown playing record, the object of the player is to find the enemy ships and place in each the required number of shots for sinking with the least total expenditure of shots. When played against an opponent, turns are taken and the first to sink the other's fleet as deployed, is the winner. When played solitaire against an unknown record opponent, the object is to work for the low score of shots expended, as in golf.

With the foregoing general explanation in mind, at least some of the following objects of my invention may be more readily understood.

As a general object, my present invention contemplates the provision of a game and the playing apparatus therefor which involves both skill and chance and which may be played by one person alone, as well as with an opponent.

It is a further object of this invention to provide a game adapted to solitaire play and wherein a single record type opponent gives a plurality of unknown combinations for play.

My invention additionally comprehends the provision of a game utilizing a playing board adapted to the reception of various unknown record type obstacle combinations to be overcome in the process of play.

Another object of the invention is to provide a solitaire game embodying electrical means for indicating the progress of play in the game.

For another object my invention contemplates the provision of a solitaire game utilizing record type opponents and wherein both turning and reversal of the records are utilized to vary and multiply the combinations of play attainable.

As a further object the invention comprehends the provision of an electrical system for indicating the progress of play which is adapted selectively to distinguish various results of said progress.

It is another purpose of this invention to provide a unique combination of apparatus for incorporating the various aforementioned features of my game into a compact, effective, intriguing and salable structure.

2

Additionally, my present invention has for an object the provision of unique record type opponents for a solitaire game which are salable separately or with the game.

Other objects and advantages of the invention will be apparent from the following description and the accompanying drawings in which similar characters of reference indicate similar parts throughout the several views.

Referring to the drawings, of which there are four sheets,

Fig. 1 is a top plan view of a game embodying a preferred form of my present invention;

Fig. 2 is a top plan view of a removable part of the apparatus for the game shown in Fig. 1, wherein various portions have been cut away at successively different levels to illustrate certain details of the construction;

Fig. 3 is a fragmentary sectional view of a portion of the apparatus shown in Fig. 2 drawn to an enlarged scale and wherein the section is taken substantially on a line 3—3 of Fig. 2;

Fig. 4 is a plan view of a part of the apparatus utilized in the game shown in Fig. 1 and wherein portions are cut away to indicate details of internal construction;

Fig. 5 is an end elevational view of the game shown in Fig. 1 which depicts the apparatus when viewed substantially as indicated by a line 5—5 in Fig. 1 and the accompanying arrows;

Fig. 6 is a side elevational view of the game shown in Fig. 1, wherein the structure is depicted as viewed from a position such as that illustrated by a line 6—6 in Fig. 1 and the accompanying arrows;

Fig. 7 is a fragmentary sectional view of a portion of the apparatus shown in Fig. 1 and wherein the section is taken substantially on a line 7—7 of Fig. 1;

Fig. 8 is a fragmentary sectional view of a portion of the apparatus illustrated in Fig. 6 and drawn to an enlarged scale;

Fig. 9 is a fragmentary sectional view drawn to an enlarged scale and wherein the section is taken substantially on a line 9—9 of Fig. 1;

Fig. 10 is a fragmentary sectional view with the section taken substantially on a line 10—10 of Fig. 9;

Fig. 11 is a fragmentary sectional view drawn to an enlarged scale of a portion of the apparatus as indicated by a line 11—11 in Fig. 1; and

Fig. 12 is a schematic circuit diagram depict-

ing my preferred electrical circuit for the game illustrated in Fig. 1.

Having reference to the structural details of the exemplary embodiment of my game playing apparatus shown in the accompanying drawings for purposes of illustration, a playing board 15 includes a base 16 which is preferably made of insulating material. The disclosed structure depicts a base construction which is not only durable and satisfactory for the intended purpose but is also relatively inexpensive to produce. In the disclosed base structure, a bottom panel 17 has secured thereto at one end an end panel 18. Extending from the end panel toward the opposite end of the bottom panel adjacent opposite side edges of the bottom panel are narrow strips 19 and 20 of substantially the same thickness as the end panel 18. An intermediate panel 22 overlies the side strips 19 and a marginal portion of the end panel. The side strips and end panel are secured together and to the bottom panel and intermediate panel by fastening means, such as rivets 23. The panels and strips thus secured together form a relatively deep record-receiving recess or pocket 24 of rectangular shape opening outwardly of the base at the end opposite the end panel 18.

On the top of the intermediate panel 22 and substantially over the central portion of the record-receiving recess or pocket is secured a relatively thick top panel 25. The top panel 25 and the intermediate panel 22 are drilled or punched with a multiplicity of apertures 26, which apertures are, by preference, systematically arranged so that any one may be designated by a system of coordinates. In the disclosed playing board the apertures 26 are separated in rows and the rows are separated in a direction lateral to the separation of the apertures in the rows. Although not particularly essential, the spacing of the apertures in the rows is substantially equal to the separation of the rows whereby the apertures define a rectangular pattern wherein their individual locations may be designated by a coordinate system of letters and numerals. In Fig. 1 I have indicated that the rows along one side may be designated by letters, such as "A," "B," "C," etc. while the transverse rows are designated by a series of numbers, such as "1," "2," "3," etc.

The top panel 25, and particularly the area covered by the apertures 26, is desirably smaller than the record-receiving recess so that a marginal space is left between the edges of the recess and the apertured area. A target record 27, shown in Figs. 2 and 3, fits into the record-receiving recess 24 and has apertures 28 and 29 in opposite sides thereof disposed for alignment with the apertures 26 in the top panel when one or the other of the faces of the record is placed uppermost. The marginal portion of the record surrounding the apertures corresponds to that between the openings 26 and the edges of the record-receiving recess so that the alignment of the apertures in the record with those in the top panel is effected upon the insertion of the record into the recess. At the open end of the recess, the bottom and intermediate panels 17 and 22, respectively, are preferably notched at their mid-portion, as indicated at 28a in Figs. 1 and 5, to leave an exposed edge of the record which may be readily gripped during removal and insertion of the record.

By making the record square as well as rectangular, it may be readily understood that a single record may be inserted into the record-receiving recess in four different positions which provide alignment of the record apertures with those in the top panel. Also, by providing apertures in both faces of the record, the number of possible positions of placement of the record within the recess is doubled, whereby a single record provides a possibility of eight variations of the game. The removability of the records further provides for variations of the game by the interchange of records as well as by changing the record positions.

For use in my presently disclosed game which is adapted to solitaire playing by one person and has an electrically operated indicator, the target records may be constructed as shown in Figs. 2 and 3. That is, each record includes a plurality of layers or sheets of insulating material of like size and shape placed together in face-to-face relationship and comprising outer and inner apertured layers 31 and 30, respectively, on one side of an intermediate sheet 32 and outer and inner apertured layers 33 and 34 on the opposite side of the intermediate sheet. The apertures in both outer and inner layers correspond in number and placement with the apertures in the top panel 25 of the playing board. One or more target elements, such as 35 in Fig. 3, of electrically conductive material, such as metal foil, are interposed between the inner apertured layer 30 and the intermediate sheet 32. Each such target element is aligned with one or more of the apertures 28.

As indicated in Figs. 1 and 2, a plurality of target elements 35, 36, 37, 38 and 39 are disposed in spaced relationship between the inner apertured layer 30 and the intermediate sheet 32 to symbolize a fleet. The target elements are distributed in spaced relationship over the apertured playing area of the board in positions unknown to the player. The coloring of the intermediate sheet 32 and the various target elements is preferably such that they cannot be readily distinguished by looking into the apertures of the target record before it is inserted into the playing board. Furthermore, the intermediate sheet 32 acts as a blinding layer and has apertures, such as 40 (Fig. 2), only at the positions of the target elements. With this construction, all of the target record apertures appear to be closed at their mid-portion but the apertures 40 at the positions of the target elements permit electrical contact with those target elements through the apertures on both sides of the record. Thus, both sides of the record may be utilized to provide variations of the game through reversal as well as rotation thereof so as to change the positions of the various target elements with respect to the apertures in the top panel.

For each placement of the target record in the playing board, the object of the game is to locate all of the target record apertures with which a target element is associated and through the use of as few chances as possible. When the game is played with an opposing player, each player may arrange and know the positions of his target elements. The other player, without such knowledge, seeks to find the opposer's target positions, which may be designated by coordinates, the one giving the positions of the other's target elements through the use of the least number of searching chances wins the game.

In order to adapt my game to solitaire playing, I prefer to use an electrically operated indicator 42 having separate indicating positions 43, 44,

45, 46, and 47 associated with each of the target elements. By preference, the separate indicating positions may even indicate the size of their associated target elements. With each indicating position is associated an electrically operated visual indicating element 48, which, as shown in Fig. 7, comprises a miniature lamp bulb.

To effect the operation of each indicating element when its associated target element is contacted, each target element is connected by an electrical conductor to a terminal connector on the edge of the target record which serves as a part of a battery operated electrical circuit through one of the indicating elements. Additionally, in the presently disclosed apparatus and for the purpose of making the target record usable in any one of a plurality of positions, the terminal connectors are mounted in symmetrically disposed relationship on each edge of the target record.

Referring again to Figs. 2 and 3, a plurality of conductors 49, 50, 52, 53, and 54 are mounted in spaced and substantially parallel relationship between the outer and inner apertured layers 29 and 30, respectively. Between the outer and inner apertured layers 33 and 34 are mounted a plurality of similarly spaced and parallel conductors 55, 56, 57, 58 and 59 extending across the target record in a direction transverse to that of the previously mentioned conductors. At their opposite ends the conductors are each connected to a terminal connector 60, which terminal connectors overlap side edge portions of the assembled insulating layers which constitute the target record and are secured in place by fastening means, such as rivets 62, which also hold the parts of the target record in their assembled relationship.

Although the transversely disposed groups of conductors are normally separated and insulated from each other by the intervening layers 30 and 34 and the intermediate sheet 32, predetermined ones of the conductors of each group are paired with and connected to predetermined ones of the conductors in the other group. As indicated in Fig. 2 by dots which indicate connections between the conductors, the following conductors are connected together:

54 and 59,
53 and 58,
52 and 57,
50 and 56, and
49 and 55.

Then the target elements are each connected to one of the conductors of each group, either directly or through the connections between conductors. That is, the target element 38 is connected to conductors 54 and 59; the target element 37 is connected to conductors 53 and 58; the target element 36 is connected to conductors 52 and 57; the target element 35 is connected to conductors 50 and 56; and the target element 39 is connected to conductors 49 and 55.

Regardless of the spacing and distribution of the target elements with reference to the apertures through which they are contacted, the laterally disposed groups of conductors and their associated terminal connectors are desirably symmetrically and uniformly arranged with respect to the various sides of the target record and are preferably grouped at the mid-portion of each side so that when the record is placed in the recess of the playing board in any one of its various positions and with either side up, the terminal connectors are disposed in predetermined positions relative to the playing board.

In the disclosed embodiment of my invention, and as depicted in Figs. 1 and 7, the intermediate panel 22 of the base has a cut-away portion 63 at the end thereof adjacent the end panel 18 and through which the terminal connectors 60 of the target record are exposed when the record is properly placed in the recess of the playing board. Although means might be provided for making continuous electrical connections to the terminal connectors of the record when it is inserted into the playing board, I prefer to use the indicator 42 as a part of a switch which normally maintains the circuit open while the chance connections to the target elements are being made so that an indication of the success or failure of the chance connection is not provided until after the chance connection is completely made and the switch is closed.

As shown in Figs. 1, 6 and 7, my preferred construction embodies a battery case 64 mounted relative to the base along one edge of the end panel 18 and supported by suitable brackets 65 which are anchored to the base. For resiliently supporting the electrically operated indicator 42, a support arm 66 has a portion 67 which fits around the battery case with a curved end portion 68 engaging the end panel 18 of the base. At the projecting end of the support arm, an indicator housing 69 is secured thereto by fastening means, such as screws 70, at a position over the cut-away portion 63 and is insulated therefrom by a strip of insulating material 72. The housing 69 has a removable cover 73 which is also held in place by the screws 70 and has apertures therein which provide the indicating positions 43, 44, 45, 46 and 47.

The base portion of the housing 69 and the extending end of the support arm 66 are provided with aligned apertures 74 and 75, respectively, the edges of which are formed to provide sockets for receiving and holding the miniature lamp bulbs 48, as shown in Fig. 7; there being one of the lamp bulbs below each of the indicating positions in the cover. Compression springs, such as 76, are disposed between the lamp bulbs and the cover 73 to hold the lamp bulbs in their respective sockets. In each instance, one electrical connection is made to each of the lamp bulbs through the engagement of the base shell of the bulb with the support arm, and in each instance the base terminal of the bulb extends through one of the apertures in the support arm to an exposed position below the arm and spaced for engagement with one of the terminal connectors 60 of the target record when the support arm is manually moved to a position, such as that indicated in dot and dash lines at 66*a* in Fig. 6.

One connection to the batteries carried by the case 64 is made through the battery case, and thence to the support arm 66 and the base shell terminals of each of the lamp bulbs. Although the game might be played with a single connection to the other terminal of the battery, I prefer to improve the interest of the game by providing a plurality of such connections. In the disclosed embodiment, an insulating cap 77 fits into one end of the battery case and has anchored thereto the ends of a plurality of flexible electrical conductors 78, 79 and 80, which conductors are electrically connected together and make contact with the end terminal of a battery 82, as indicated in Fig. 1. Each flexible conductor is sufficiently

long to reach any of the apertures 26 in the playing board and carries at its free end a connector plug 83 which is adapted to fit into any of the apertures 26 and has an exposed end terminal 84 which is electrically conductive and provides a circuit from one of the target elements to the battery when such target element is engaged thereby.

My preferred construction for the connector plug 83 is depicted in Fig. 4. An outer metal shell 85 covers and is secured to the end of one of the flexible conductors, such as 78, and provides a carrier for a plug conductor 86 which I desire to make of electrical resistance material and which is exposed to provide the end terminal 84. The plug conductor is insulated from the surrounding shell by a layer of insulating material 87. Also, as shown in Figs. 4, 9 and 10, end portions 88 are longitudinally segregated from the remainder of the shell by longitudinal slots and formed to provide resilient laterally projecting springs adapted to engage the surfaces of the apertures 26 firmly to support the plug when placed therein.

When a plurality of flexible conductors are used, it is possible to simultaneously effect contacts with different target elements or to have more than one contact at a time with a single target element. It is for this reason that I prefer to include an electrical resistance element in series with each of the flexible conductors, which, in the present instance, comprises the plug conductor 86. When one of the flexible conductors makes contact with only one of the target elements and the indicator is manually depressed so that the lamp terminals make contact with their respective connector terminals of the target record, a circuit is completed to the indicating element associated with the contacted target element to effect a normal indication by that indicating element. On the other hand, when a plurality of flexible conductors make contact with a single target element, the effect is to connect the series resistances of the conductors in parallel; thus effecting a more brilliant indication by the lamp which is associated with the contacted target element.

In the circuit diagram disclosed in Fig. 12, the parts thereof have been numbered to correspond with the structural parts which have been illustrated and described, but the representation is diagrammatic. For instance, the battery connection to the battery case is indicated as a ground connection at 89. The switches 90 are provided by the resilient support for the indicator housing which normally opens the circuit to a terminal of each of the indicator elements. The various target elements are indicated as providing a number of connectors corresponding to the number of apertures 26 which they underlie.

As the game is played, the connector plugs are each inserted into selected ones of the apertures 26 before the indicator is moved downwardly to complete the circuit. After they have been placed, the indicator is manually depressed to complete the circuit, whereupon the illuminated lamps, together with their brilliance, provide an indication of the success or failure of the chance attempts to locate one of the target elements, as well as providing an indication of the target element located and the number of conductors contacting the target element. During the progress of the game the total number of chances is scored to determine the number required to locate all of the target elements and the number of apertures covered by those target elements.

For convenience in playing the game and keeping track of the number of hits scored on each target element, I prefer to provide a score marking sheet 92 on the upper surface of the support arm 66, which may be checked or otherwise marked to show the number of hits scored on each target element as the game progresses. By preference, the score marking sheet is one of the well known varieties of sheets from which marks may be readily erased or removed at the beginning of each game. One such marking sheet, which is well known, is often referred to as a "magic slate."

As a further playing convenience, a sheet of thin paper may be placed over the top panel 25 and apertures 26, so that each time a plug is placed the paper is punched to leave a record of the apertures tried. As an alternative, a punched sheet of the type referred to for keeping score may be secured to the top panel for recording by marks the apertures tried.

While the initial location of a target element is a matter of chance, the use of the indications obtained and the further determination of the full extent of the target element and its disposition are influenced by skill as well as chance. The use of the three flexible conductors simultaneously in playing the game, particularly in association with a switch which keeps the indicator circuit open until after the plugs are placed, adds intrigue to the game and may well offer opportunity for the exercise of skill in the location and determination of the full number of hits required for each target element.

While I have illustrated a preferred embodiment of my invention, many modifications may be made without departing from the spirit of the invention, and I do not wish to be limited to the precise details of construction set forth, but desire to avail myself of all changes within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

1. A game incorporating battery operated signal means and comprising, in combination, a playing board including a base of insulating material, an apertured top panel of insulating material secured to the top surface of the base, the apertures in said top panel being arranged in equally spaced parallel rows and the apertures in said rows being equally spaced from each other so as to form rows disposed laterally to the first mentioned rows, said base having a record-receiving recess therein underlying and parallel to said top panel, the dimensions of the recess being such that marginal portions thereof extend beyond the top panel, said base having an opening therein at one side of the top panel and adjoining one of the marginal portions of the record-receiving recess, a battery case secured to the base adjacent said opening, a lamp housing having therein and supporting a plurality of miniature light bulbs spaced from one another in a row, means resiliently supporting said lamp housing at a position over said opening, contact means for each of said light bulbs facing said opening, a target record composed of insulating material having thereon conductive strips of predetermined sizes at positions unknown to the player and such that they each underlie a plurality of said apertures, said target record being of a size and shape to fit into said recess and

having contacts on one margin underlying said contact means and each connected electrically to one of said conductor strips, a plurality of flexible conductors anchored to said battery case and electrically connected to one battery terminal, said flexible conductors having terminal plugs thereon adapted to fit into said apertures to contact said conductive strips, means connecting the other battery terminal in series with said light bulbs so that when one of the target strips is contacted by one of the terminal plugs and said lamp housing is manually moved to effect engagement of said contact means and contacts a circuit is closed from the battery to an appropriate one of said lamps.

2. A game incorporating battery operated signal means and comprising, in combination, a playing board including a base, an apertured top panel secured to the top surface of the base, the apertures in said top panel being arranged in symmetrically spaced relationship so that each has a position definable by coordinates, record-holding means on the lower side of the base opposite said top panel, a battery case secured to the base near one end of the top panel, a lamp housing having therein and supporting a plurality of miniature light bulbs spaced from one another, means for resiliently supporting said lamp housing relative to the base, said lamp housing being normally biased from the base and manually movable toward it, contact means for each of said light bulbs facing the base, a target record composed of insulating material having thereon conductive strips of predetermined sizes at positions unknown to the player and such that each underlies a plurality of said apertures, said target record being of a size and shape to fit said record-holding means, means for effecting electrical connections between each of said contact means and a preselected one of said conductive strips when said lamp housing is manually moved toward said base, a plurality of flexible conductors anchored to said battery case and electrically connected to one battery terminal, said flexible conductors having terminal plugs thereon adapted to fit into said apertures to contact said conductive strips, means connecting the other battery terminal in series circuit relation to said light bulbs so that when one of the target strips is contacted by one of the terminal plugs and said lamp housing is manually moved a circuit is closed from the battery to a preselected one of said lamps.

3. A game incorporating battery operated signal means and comprising, in combination, a playing board including a base having a top panel portion, said top panel portion being provided with a multiplicity of contact-receiving means distributed in spaced relationship over the surface thereof, record-holding means on the lower side of the top panel, a battery case secured to the base, electrically operable visible indicating means mounted on the base and including a plurality of indicating elements, normally open circuit-interrupting means in circuit forming relationship with the indicatng means, a pluralty of flexible leads each anchored at one end and being of a length sufficient to reach any of said contact-receiving means, each of said flexible leads having a terminal plug on the free end thereof adapted to fit said contact-receiving means, said circuit-interrupting means, indicating means and the battery carried by said case being connected in series circuit relation and having each one of said flexible leads connected in series therewith, a target record removably mounted in said record-holding means and including a number of electrically conductive target elements equal to the number of said indicating elements, said target elements being electrically insulated from one another and being of various predetermined sizes and disposed in positions unknown to the player of the game at which they underlie various groups of said contact-receiving means, and means for completing the series connection of each of the indicating elements to the battery when one of said terminal plugs is placed in a contact-receiving means on a predetermined one of said target elements and said circuit-interrupting means is closed.

4. A game incorporating battery operated signal means and comprising, in combination, a playing board including a base having a top panel portion, said top panel portion being provided with a multiplicity of contact-receiving means distributed in spaced relationship over the surface thereof, record-holding means on the lower side of the top panel, battery-holding means on the base and including battery terminal connectors, electrically operable indicating means mounted on the base, normally open circuit-interrupting means, a flexible lead anchored at one end and being of a length such that it will reach any of said contact-receiving means, terminal means on the free end of the flexible lead and adapted to fit said contact-receiving means, said circuit-interrupting means, indicating means, battery terminal connectors and flexible leads being connected together in series circuit relation, a target record removably mounted in said record-holding means and including an electrically conductive target element disposed in relation to the position of one of said contact-receiving means, and means for completing the series connection of the indicating means to the battery when one of said terminal connectors is placed in the contact-receiving means with which said target element is associated and said circuit-interrupting means is closed.

5. A game as defined in claim 2 and further characterized by resistors connected in series with said flexible conductors, whereby a more brilliant indication of one of the lamps is provided when two of said terminal plugs contact the same conductive strip so as to place said resistors in parallel circuit relationship with respect to one of the lamps.

6. A game as defined in claim 3 wherein said target record is shaped for mounting in said record-holding means in any one of a plurality of positions, whereby the positions of the target elements are changed with respect to the contact receiving means of the top panel to vary the game.

7. In a game incorporating electrically operated signal means, the combination with a playing board having a multiplicity of perforations defining playing positions, and record-holding means adjacent said playing positions, of a reuseable target record of a size and shape to fit and be held by said record-holding means in any one of a plurality of positions and including electrically insulating carrying means symmetrically shaped and having like dimensions in a plurality of positions, a plurality of electrically conductive target elements carried in separated positions by said carrying means, said carrying means having a multiplicity of apertures spaced for alignment with said playing positions and symmetrically disposed with respect to the shape of the carry-

ing means and some of which apertures coincide in positions with the placement of the target elements so that the target elements may be contacted therethrough, groups of terminal contacts mounted at symmetrically placed positions on the carrying means, and electrically separated conductors connecting each of said target elements to one of the terminal contacts of each of said groups.

8. In a game incorporating electrically operated signal means, the combination with a playing board having a multiplicity of symmetrically disposed playing positions, a plurality of means for selectively engaging each of said positions, means for releasably retaining a target record, and substantially stationary electrical contact means on the playing board, of the structure comprising a target record of a size to fit said retaining means and including a plurality of superimposed square pieces of electrical insulating material having therein a multiplicity of symmetrically disposed apertures corresponding in position to placement of said playing positions, a plurality of electrically conductive target elements placed at separated positions and each engageable through a plurality of said apertures, said target elements being held between two of said pieces of insulating material, electrical conductors mounted between others of said plurality of pieces of insulating material and each connected to one of said target elements, contact means connected to each of said conductors and secured to edge portions of said pieces of insulating material in positions for engagement with the first mentioned contact means.

9. In a game incorporating electrically operated signal means, a target record having contours and structure such that it may be used in any one of a plurality of positions, whereby one such record provides a plurality of variations of the game, and comprising electrically insulating carrying means symmetrically shaped and having like dimensions in a plurality of positions, a plurality of electrically conductive target elements carried in separated positions by said carrying means, said carrying means having a multiplicity of apertures therein symmetrically disposed with respect to the shape of the carrying means and some of which coincide in positions with the placement of the target elements so that the target elements may be contacted therethrough, groups of terminal contacts mounted at symmetrically displaced positions on the carrying means, and electrically separated conductors connecting each of said target elements to one of the terminal contacts of each of said groups.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,346,493	Hammond	July 13, 1920
1,518,845	Foley	Dec. 9, 1924
1,744,518	Becker	Jan. 21, 1930
1,868,403	Weller	July 19, 1932
2,043,291	Hamilton	June 9, 1936
2,066,469	Haas	Jan. 5, 1937
2,120,172	Burnett	June 7, 1938
2,214,317	Bash	Sept. 10, 1940
2,240,276	Williams	Apr. 29, 1941
2,244,015	MacKinnon	June 3, 1941
2,424,574	Marco	July 29, 1947

FOREIGN PATENTS

Number	Country	Date
41,216	Holland	Feb. 15, 1937