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[54]	ELECTRI APPARA	CALLY-OPERABLE GAME TUS
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[51]	Int. Cl.	
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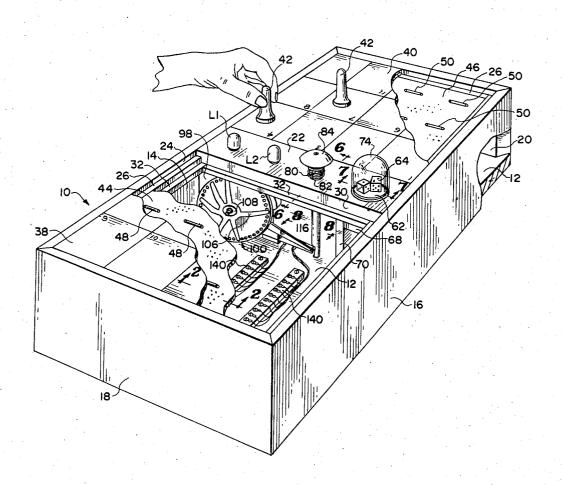
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Primary Examiner—Richard C. Pinkham Assistant Examiner—Joseph R. Taylor Attorney, Agent, or Firm—Norman H. Gerlach

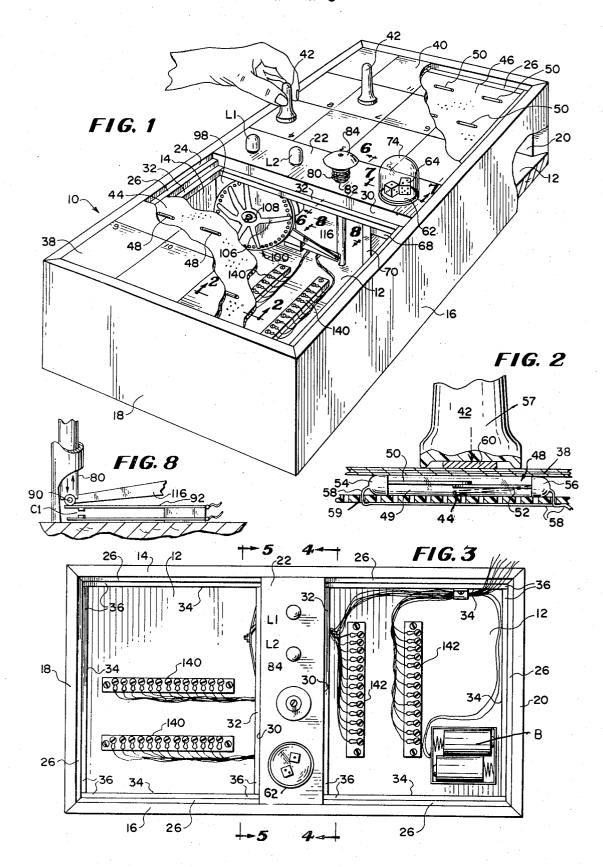
[57] ABSTRACT

An electrically-operable game apparatus consisting of a playing board and a plurality of playing pieces which, when selectively placed on the playing board according to the dictates of a pair of dice, initiate by magnetic control means a signal which is indicative of either a game function to be performed by a player or a game result. Initial depression and release of a start plunger effects a dice throw through the medium of an electrically-driven, rotary cage-like device and also indexes a ratchet-controlled distributor mechanism which, in turn, effects a potential change in the magnetic control means whereby the next successive depression of the start plunger by an opposing player will afford a different signal resulting from a successive throw of the dice.

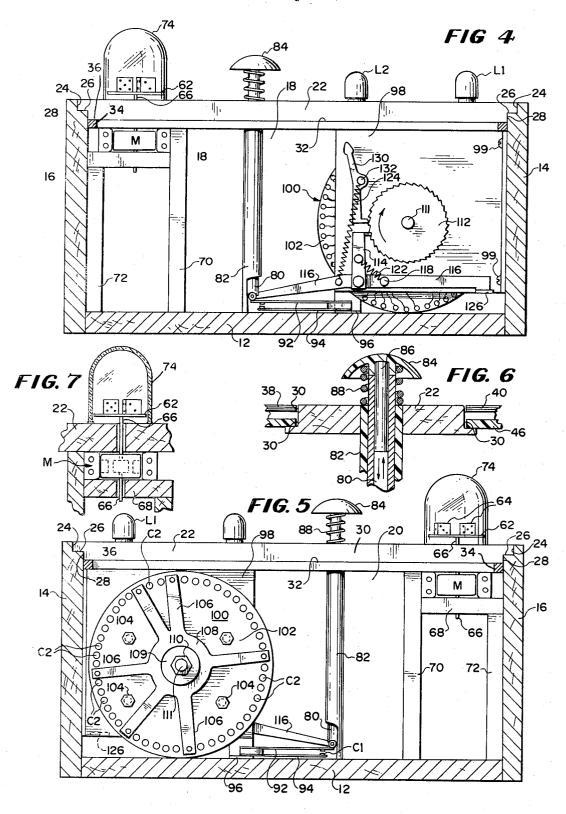
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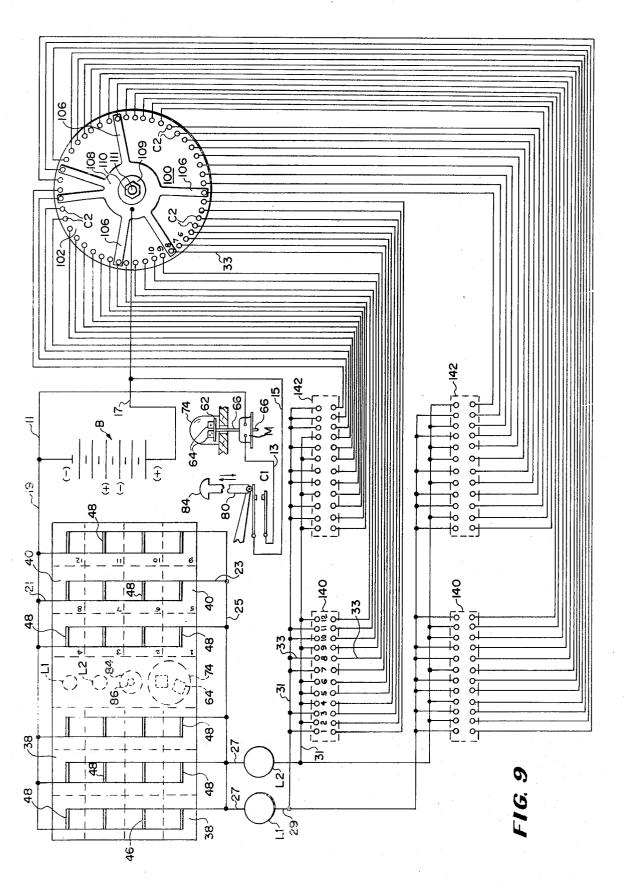
SHIET 1 OF 3



SHEET 2 OF 3



SHEET 3 OF 3



ELECTRICALLY-OPERABLE GAME APPARATUS

The improved game apparatus comprising the present invention is designed primarily as a war game whereby opposing players who are in possession of 5 playing pieces in the form of war-waging units such as soldiers, cannon or other artillery, tanks or other armored vehicles, effect strategic placement of such warwaging units on an opponent's battlefield which is represented on a playing or game board, in an effort to 10 capture such battlefield, while at the same time preserving control of each player's own battlefield. The invention is, however, capable of other uses and, if desired, it may, by suitable modification of the playing board and playing pieces, have other basic motifs, such, 15 for example, as the winning of a financial empire by the acquisition or loss of money, stocks, and bonds, or other assets; the simulation of athletic games such as baseball, football, or the like where assets such as bases or runs are effected, or yards are gained or lost, touch- 20 downs are accomplished, etc.; or the simulation of card or other games where, in the case of poker or bridge, for example, cards are delt and held in competitive relationship and other appropriate game functions are indicated. Irrespective, however, of the particular use to 25 which the game apparatus may be put, the essential features thereof are at all times preserved.

Briefly, in carrying out the invention, there is provided a box-like game apparatus is provided the upper surface of which defines a playing board and exhibits 30 two side-by-side or adjacent playing areas which, in the instance where the apparatus is based upon a war motif as previously indicated, represent opposing player's battlefields. Numbered squares or other areas on such battlefields represent strategic locations for the deploy- 35 ment or placement of war-waging units such as soldiers, cannon or other artillery, tanks or other armored vehicles and the like. A dice-manipulating or "throwing" device is effective under the control of a plunger to render a numerical indication by means of which a player 40 positions a magnetic playing piece in the form of a warwaging unit on the particular location of his opponent's battlefield having the number corresponding to the total number of the thrown dice. Each battlefield location has associated therewith a magnetically-responsive 45 circuit-making switch which becomes effective when a playing piece is positioned on the location potentially to close an electric circuit for a signal lamp, the illumination of which, according to the rules of the game, indicates that the selected location is mined and the player must lose his playing piece, or, alternatively, potentially to close an electric circuit for a different signal lamp, the illumination of which indicates that the player must draw a card from a stack of cards and follow directions which are printed on such card. The various cards represent messages from headquarters which may be of either a favorable or an unfavorable nature requiring a specific action or inaction on the part of the player. The various circuit-making switches are electrically connected to a ratchet-controlled distributor mechanism in such a manner that the circuits which are potentially closed by placement of playing pieces on the numbered locations of the battlefields are not necessarily completed by such placement of playing 65 pieces. It is only when the distributor mechanism and a given magnetically-operable circuit-making switch are arranged in series relationship with one of the signal

lamps that the latter becomes illuminated. Failure of a signal lamp to become energized or illuminated incident to placement of a playing piece on a particular battlefield location indicates that although the associated circuit-making switch has become closed, the distributor mechanism is not conditioned to complete the circuit through the signal lamp. In such an instance, the playing piece, by failure of an illuminated signal to appear, is considered to be "safe." The distributor mechanism is effective under the control of the aforementioned plunger which also effects the dice-manipulating device to alter the circuitry leading from the various magnetically-operable switches and distributor mechanism to the signal lamps in such a manner that each time the plunger is depressed and released a new circuit condition obtains and a strategic battlefield location which at one game inning may render an illuminated signal will not necessarily render such signal during the next succeeding game inning.

The invention is concerned essentially with the structural aspects of the game apparatus by means of which a game such as has briefly been suggested above, or by means of which similar games, not necessarily related to armed conflict, may be played. Principal among the features of novelty which are associated with and inherent in the present invention are the nature of the cagelike dice-manipulating or "throwing" device and of the distributor mechanism, as well as of their association with the actuating plunger which is common thereto; the nature of the playing board and its two side-by-side playing areas and of its association with the various magnetically-operable circuit-making switches; and the electrical circuitry by means of which all of these instrumentalities are coordinated for game-playing purposes. The disclosure of the invention herein is directed solely to the structural features by means of which such principal features of novelty are carried out and are embodied in a compact box-like environment for the convenience of the players of the apparatus. Certain other features which are associated with the manner in which a particular game may be played when utilizing such structural features, as, for example, the aforementioned information-carrying cards, as well as the information which may be printed thereon, are not disclosed herein since such information may be varied at will without affecting the essential electrical and mechanical features of the game apparatus which comprises the

The provision of a game apparatus which affords the essential structural features which have briefly been outlined above, and by means of which a variety of competitive games may be played in the manner also briefly indicated, constitutes the principal object of the present invention.

The provision of a game apparatus which is relatively simple in its construction and, therefor, may be manufactured at a comparatively low cost; one which is comprised of a minimum number of parts, particularly moving parts and, therefore, is unlikely to get out of order; one which is rugged and durable and, therefore, will withstand rough usage; one which is capable of ease of assembly and dismantlement for purposes of inspection, replacement, or repair of parts; one which is attractive in its appearance and pleasing in its design, are further desirable features which have been borne in mind in the production and development of the present invention.

Other objects of the invention and the various characteristics and advantages of the present electrically-operable game apparatus will be apparent from a consideration of the following detailed description.

The invention consists in the several novel features 5 which are hereinafter set forth and are more particularly defined by the claims at the conclusion hereof.

In the accompanying three sheets of drawings forming a part of this specification, one illustrative embodiment of the invention is shown.

In these drawings:

FIG. 1 is a perspective view of a game apparatus embodying the principles of the present invention, portions of the playing board and an underlying switch- 15 supporting plate being broken away in order more clearly to reveal the nature of the invention;

FIG. 2 is an enlarged fragmentary sectional view taken on the vertical plane indicated by the line 2—2 of FIG. 1 and in the direction of the arrows;

FIG. 3 is a top plan view of the game apparatus with the playing board and underlying switch-supporting plates removed or omitted;

FIG. 4 is a vertical transverse sectional view taken on the line 4—4 of FIG. 3;

FIG. 5 is a vertical transverse sectional view taken on the line 5—5 of FIG. 3;

FIG. 6 is an enlarged vertical sectional view taken substantially on the vertical plane indicated by the line 6-6 of FIG. 1 and in the direction of the arrows;

FIG. 7 is an enlarged vertical sectional view taken substantially on the vertical plane indicated by the line 7—7 of FIG. 1 and in direction of the arrows;

FIG. 8 is an enlarged fragmentary side elevational view of a pair of plunger-actuated contacts which are employed in connection with the invention, the view being taken in the vicinity of the line 8—8 of FIG. 1 and in the direction of the arrows; and

FIG. 9 is a schematic circuit diagram of the game apparatus.

Referring now to the drawings in detail and in particular to FIGS. 1, 3, 4 and 5, the game apparatus of the present invention involves in its general organization an elongated rectangular box-like structure 10 comprising a bottom wall 12, a pair of opposed upstanding side walls 14 and 16, and a pair of opposed upstanding end walls 18 and 20 between and in fixed relation with the end margins of the side walls 14, said side and end walls of the box-like structure establishing an upper open rectangular rim. Preferably, but not necessarily, the box-like structure 10 is formed of wood, although a plastic material or suitable sheet metal is contemplated. Extending across the upper open rim of the structure 10 midway between the two end walls 18 and 20 is a horizontal, transversely extending shelf 22.

The upper edges of the four upstanding walls 14, 16, 18 and 20 have their inner marginal portions rabbeted so as to provide rabbles 24 throughout their entire lengths, thus establishing a flat, upwardly facing, narrow, upper ledge 26 which is continuous about the rim of the box-like structure 10. The lower marginal portions of the opposite ends of the shelf 22 are rabbeted as indicated at 28 (see FIGS. 4 and 5) for a complementary fit with the rabbetted inner marginal portions of the side walls 14 and 16 on which such ends of the shelf rest. For purposes of discussion herein, as well as for subsequent claim terminology, the relatively narrow

shelf 22 may be regarded as constituting a limited top wall portion for the box-like structure 10.

The upper marginal portions of the opposite side edges of the shelf 22 are rabbeted as indicated at 30 (see FIGS. 1 and 6), the depth of the rabbets being somewhat greater than the depth of the rabbets 24 in order that the rabbets 30 thus establish narrow transverse ledges 32 which lie a comparatively small distance below the level of the continuous upper ledge 26 on the side and end walls of the box-like structure. Horizontally extending wooden or other strips 34 are glued or otherwise secured to the side and end walls so that their upper surfaces lie in the plane of the ledges 32, and thus, in combination with the deep rabbets 30 of the shelf 22, establish a pair of continuous, rectangular, lower ledges 36 immediately below the continuous upper ledge 26 which is formed by the aforementioned rabbets 24.

As best shown in FIG. 1 of the drawings, the uppermost continuous ledge 26 serves as a support for removably receiving a pair of flat rectangular panels 38 and 40. These two panels, when considered collectively, constitute a divided composite game board on which a series of magnetic playing pieces 42, such as 25 are shown in FIGS. 1 and 2, are adapted to be manually placed during playing of a game. Each of the two panels 34 and 36 is divided into a predetermined number, say, twelve, placement locations for selective reception thereon of the playing pieces 42, such locations in the illustrated form of the invention being arranged in checkerboard fashion or relationship and being numerically designated in similar fashion in FIG. 1. The panels 34 and 36 are constructed of a relatively thin nonmagnetic material which conveniently may be plywood, laminated or pressed fiberboard, or any other relatively stiff material.

The lower continuous ledges 36 on opposite sides of the shelf 22 serve removably to support two additional rectangular panels 44 and 46. These panels may conveniently be in the form of Bakelite or other stiff plastic sheets, the dimensions of which are slightly less than those of the panels 38 and 40. When in position in the box-like structure, the panels 44 and 46, due to their particular thickness, underlie but are spaced slightly from the panels 38 and 40 (see FIG. 2). The panels 44 and 46 constitute supporting means for a plurality of magnetically-responsive circuit-making and breaking devices 48 in the form of conventional contact units which will, in the interests of brevity, be hereinafter referred to simply as switches. As shown in FIG. 2, each switch 48 consists of commercially available unit in the form of a small glass or other non-magnetic dielectric tube 49 within which there is disposed a pair of cooperating contact arms in the form of an upper, fixed, electrically-conductive arm 50 of non-magnetic material such as silver, brass, or the like, and a lower, vertically-movable, electrically-conductive arm 52 of a magnetic material such as iron or nickel. The two arms 50 and 52 extend lengthwise of the tube 49 and are arranged so that they are lengthwise offset and have their inner ends in overlapping relation. Electric terminals 54 and 56 on the opposite ends of the tube 49 establish connections for lead-in wires 58 which extend through holes 59 in the associated panel 44 or 46 as the case may be. The lower arm 52 is of a yieldable flexible nature and it normally assumes the open dotted-line posi-

tion in which it is shown in FIG. 2. However, when the

switch has a magnetic field imposed thereon and such field attracts the lower magnetic arm 52 in an upward direction, the arm flexes upwardly to the closed position wherein it is shown in full lines, thus establishing a circuit through the switch.

It is to be noted at this point that the various switches 48 on the panels 44 and 46 directly underlie the various numbered locations where it is intended that the playing pieces 42 shall be selectively positioned during game-playing operations. Thus, when one of the magnetic playing pieces is positioned on a given location, the lower arm 52 of the associated subjacent switch 48 will be attracted upwardly toward such playing piece as shown in full lines in FIG. 2 and any potential circuit within which such switch is included will be completed. 15 As will be described presently, effective closure of any given switch 48 will effect selective energization of a pair of signal lamps L1 and L2 which are mounted on the shelf 22 (see FIGS. 1, 3, 4 and 5).

The particular magnetic playing pieces 42 which are 20 used in connection with the game apparatus will vary according to the nature of the game which is to be played in connection with use of the present game apparatus. Where the game is predicated upon the waging of a war between the players as in the described form 25 of game, the playing pieces may be in the form of soldiers, jeeps, or armored vehicles, artillery pieces and the like. The particular playing piece form which is illustrated in the drawings assumes the form of a chess pawn in the interests of drafting simplicity, but it will 30 be understood that a wide variety of playing piece shapes may be resorted to if desired. Regardless of the particular shape or configuration of the playing piece which is used with the game apparatus, such piece will invariably embody a body portion 57 (see FIG. 2), to the underneath side of which there is fastened a disk magnet 60 which serves to attract the lower arm 52 of any one of the switches 48 when such playing piece is positioned on the playing location immediately above the switch.

Referring now to FIGS. 1 and 7 of the drawings, placement of a playing piece 42 on the various placement locations on either of the panels 38 or 40 is adapted to be made under the dictates of a wheel-like dice-manipulating device 62 on which there loosely rests a pair of dice 64. The device 62 is carried at the upper end of a vertically extending shaft 66 which is associated with and forms the driven or out-put shaft of an electric motor M (see FIG. 5). Such motor is mounted on a supporting shelf 68 which is positioned 50 in the box-like structure 10 a short distance below the transverse shelf 22, the shelf 68 being supported by means of vertical columns 70 and 72 which extend upwardly from the bottom wall 12 of said box-like structure. In order to retain or capture the dice 64 and maintain the same at all times in rolling or tumbling contact with the dice 62 when the latter is being rotated by the motor M, there is provided a transparent glass or plastic dome 74 which encompasses the device 62 and the 60 dice thereon and has its lower rim glued or otherwise secured to the subjacent portion of the upper surface of the shelf 22.

Energization of the electric motor M is effected under the control of a vertically extending depressible plunger 80 which is preferably of tubular construction and slides vertically within a vertically extending encompassing guide sleeve 82 (see FIGS. 1, 4, 5 and 6).

The upper end of the plunger projects above the level of the shelf 22 while the lower end thereof is designed for engagement with a pair of normally open, upper and lower, switch contacts C1 for contact-closing purposes at such time as the plunger is depressed. A button 84 (see FIG. 6) rests on the upper end of the tubular plunger 80 and is provided with a depending pilot stem 86 which projects into and is suitably fixed within the plunger. A helical compression spring 88 surrounds the upper end of the plunger 80, is interposed between the button 84 and the upper surface of the shelf 22, and serves to retract the plunger after it has been depressed and then released. As best shown in FIG. 8 of the drawings, the lower end of the plunger 80 is notched so as to seat loosely on a protuberance 90 which rests on the distal or outer end of a horizontally extending spring upper arm 92, the latter being fixedly mounted at its proximal end and carrying the upper contact C1 at its other end. A horizontally extending, fixed lower arm 94 underlies the upper arm 92, carries the lower contact C1 at one end thereof in alignment with the upper contact C1, and has its other end supported on a bracket extension 96 (see FIG. 4) which is formed on one of the lower corners of a rectangular, vertically extending distributor-supporting plate 98. The latter extends under and lengthwise of the transverse shelf 22 and has its outer side margin bent at right angles and secured by screws 99 to the central portion of the inner face of the side wall 14 of the box-like structure 10. The gravitational weight of the plunger 80 and the flexibility of the upper arm 92 of the contacts C1 are such that normally the arm, together with the spring 88, supports the plunger in an elevated position while the contacts C1 remain open. However, when the button 84 is depressed manually, the entire plunger moves downwardly, thus flexing the upper arm 92 to a contact-closing position. The two contacts C1 constitute a switch for controlling the motor M.

Depression of the plunger 80, in addition to effecting closing of the contacts C1 and consequent energization of the motor M and rotation of the dice-manipulating or "throwing" device, also effects actuation of a rotary distributor mechanism 100 which is capable of being indexed in step-by-step fashion and by means of which varying circuits which are associated with the aforementioned signal lamps L1 and L2 are established. Accordingly, as best shown in FIGS. 1, 4 and 5 of the drawings, the distributor mechanism 100 involves in its general organization a circular fixed distributor plate 102 which is secured by horizontal fastening bolts 104 to the aforementioned distributor-supporting plate 98 and carries a multiplicity of circumferentially-spaced contacts C2 in the peripheral regions thereof. These contacts C2 are designed for successive engagement with the outer ends of a series of wiper arms 106 which extend radially outwardly from a rotatable hub 108. The hub and its wiper arms are pressed against the distributor plate 102 by a washer 109 and 110. The hub 108 is mounted on and secured to a horizontal shaft 111 which is rotatably journalled in the distributorsupporting plate 98 and also carries a ratchet wheel 112 (see FIG. 4). The latter cooperates with a vertically extending pawl arm 114 which is pivoted at its lower end to the medial region of an elongated, horizontally extending rocker arm 116. The medial region of the rocker arm 116 is pivoted on a horizontal pin 118 which is carried by the distributor-supporting plate

98; and the left-hand end region of the rocker arm, as viewed in FIG. 4, slants slightly downwards and is connected to the aforementioned protuberance 90. From the above description, it will be apparent that at such time as the plunger 80 is depressed, not only do the 5 contacts C1 become closed, but also the rocker arm 116 will be swung in a counterclockwise direction, thus lowering the pawl arm and moving the same out of engagement with one tooth on the ratchet wheel 112 and into effective engagement with the next succeeding or 10 following tooth. A helical tension spring 122 which has one end attached to the pivot pin 118 and its other end connected to the pawl arm 114 yieldingly biases said parl arm against the ratchet wheel 112, while a second helical tension spring 124 yieldingly biases the rocker 15 arm 116 in a clockwise direction. A laterally extending ear 126 on the outer lower corner of the distributingsupporting plate 98 underlies the extreme right-hand end of the rocker arm 116 and serves as a limit stop for such arm. A holding pawl 130 is centrally pivoted on 20 be provided. a horizontal pin 132 on the plate 98 and prevents reverse rotation of the ratchet wheel 112 at such time as the pawl arm 114 moves upwardly under the influence of the spring 124. When the pawl arm moves upwards as the result of retraction of the plunger 80, the ratchet wheel 112 is rotated one step in a clockwise direction as viewed in FIG. 4 and causes corresponding rotary movement of the wiper arms 106 to the end that the outer ends of the arms move into contact with the next preceding contacts C2. A pair of terminal strips 140 30 (see FIGS. 1 and 3) is mounted on the bottom wall 12 on one side of the shelf 22, and a similar pair of such strips 142 is mounted on said bottom wall on the other side of the shelf 22. These terminal strips provide anchor or solder terminals for various circuit wires which are employed in connection with the electrical components of the present invention and the nature of which will be made clear subsequently when the operation of the apparatus is set forth. The game apparatus is electrically-powered by means of a battery pack B which is conveniently disposed within the box-like structure 10 as shown in FIG. 3 and is hereinafter referred to as "the battery." As previously indicated, the game apparatus constituting the present invention is capable of being used in various ways according to the rules and regulations which govern the playing of any given game. In a game where the drawing of cards from a stack is involved, obviously the information contained on any drawn card will dictate certain procedure which that player or his opponent must follow in order to continue the game. The operation of the present game apparatus may best be set forth by considering the manner in which a war game is played by two opposing players.

Accordingly, commencement of a game is inititated by depression of the plunger 80 by one player and release thereof. As previously stated, such depression of the plunger 80 will establish an electrical circuit through the motor M which operates the wheel-like dice-manipulating or "throwing" device 62, such circuit extending from one side of the battery B (see FIG. 9) through a lead 11, the motor M, a lead 13, the contacts C1, and leads 15 and 17 back to the other side of the battery. Energization of the motor M will thus 65 ferent reading of the dice 64, such reading necessitateffect rotation of the device 62 and cause dice tumbling to take place. The other player will then depress the plunger 80 and this similarly effects a "throw" of the

dice. The player with the highest dice score will make the first play of the game. It is to be noted that during this initial determination of which player is to precede the other player in commencing the actual playing of the game apparatus, the rocker arm 116 which becomes displaced during downward movement of the plunger 80 effects a shifting of the position of the hub 108 and its radial wiper arms 106, thus altering potential circuit conditions as previously described. However, such circuit alteration is without effect except insofar as it establishes a particular potential circuit condition which remains effective at the time the first play of the game is made.

It will be understood that for the playing of the war game, each player will be furnished with a predetermined number of playing pieces 42. These pieces may assume the form of war-waging units such as soldiers, tanks, jeeps, cannon or other artillery. Additionally, a stack of information-containing cards (not shown) will

The first player will again depress the plunger 80 and thus obtain a second dice reading which, for purposes of discussion, will be assumed to be the number "8." Such player will then place one of his playing pieces 42 on his opponent's game board panel in the location bearing the numerical designation "8" in such a manner that the magnet 60 which is associated with the playing piece directly overlies the particular subjacent switch 48, thus closing such switch in the manner previously described. At this time, depending upon the position of the hub 108 and the wiper arms 106, a circuit through one of the signal lamps L1 or L2 may or may not be completed. Assuming, however, that a circuit through the signal lamp L1 is completed, such circuit will extend from one side of the battery B, through leads 19, 21, the switch 48 beneath the location bearing the numerical designation "8," leads 23, 25, 27, the lamp L, leads 29, 31, No. 8 connection of the terminal strip 140, a lead 33, the 8 contact C2 on the circular rotary distributor plate 102, the wiper arm 106, the hub 108, and leads 17, back to the other side of the battery

The lamps L1 and L2 are differently colored and for purposes of discussion it may be assumed that the lamp L1 is colored yellow, while the lamp L2 is colored red. According to the prescribed rules of the game, illumination of the yellow lamp L1 dictates that the player shall draw a card from the stack of cards and follow the directions printed on such drawn card. In this connection, it is contemplated that each card will have an indication that the then active and "in play" playing piece shall be moved to a different location.

In the interests of brevity, only one circuit which extends through the lamp L1, the switch 48 at the location designated "8," the No. 8 connection of the terminal strip 140, and the No. 8 contact on the distributor plate 102 has been described herein. It will be understood that a similar circuit will exist for each of the remaining switches 48, both on the panel 38 and the panel 40, and that one-half of these circuits will extend through the lamp L1 while the other half will extend through the lamp L2.

Assuming now that the first player had obtained a difing his placing a playing piece on a panel location 40 in which the underlying switch 48 is disposed in a circuit which is potentially open due to lack of contact between one of the radial wiper arms 106 of the distributor 100 and the corresponding contact C2. In such an instance, no illuminated signal will be rendered and the player may regard such location as being "safe" and he may leave the playing piece 42 on the location which 5 was originally indicated by the player's "throw" of the dice 64.

Assuming otherwise that the first player has obtained a dice reading which causes the red-colored lamp L2 to game, may signify that the location is "mined" and, accordingly, the player will forfeit his playing piece.

After the first player has completed his turn, the second player will depress the plunger 80 and, as determined by the reading of the dice 64, follow the proce- 15 dure outlined above in connection with the first player's turn, utilizing for playing piece placement purposes, however, his opponent's game board panel instead of his own game panel.

It is to be noted that at the time the second player 20 commences his turn by depressing the plunger 80, a new circuit condition will exist inasmuch as after the plunger 80 has been released, the operation of the pawl arm will be such that it advances the wiper arms 106 collectively to a new position with respect to the vari- 25 ous contacts C2 on the peripheral regions of the circular rotary distributor plate 102.

The outcome of the game will, of course, be largely dependent upon the predetermined game rules, as well as by the information or directions which are printed 30 on the cards that are drawn from the stack of cards. For example, one card may have the words "D-Day" printed thereon and this may signify that the player drawing such card has won the war. The game may also be won by one player placing one of his playing pieces 35 on a particular location of the opposing player's game panel, say, for example, the No. 12 location. This may occur by the one player having a dice throw of twelve or drawing a card which directs the one player to move his playing piece to the No. 12 location. The game may also be won by one of the players as the result of the opposing player losing all his playing pieces by locating them on locations which are "mined" as determined by lighting of the red signal lamp L2. The latter is by reason of the fact that the playing pieces 42, which are used in connection with playing of the game, are subject to loss at any time either by the appearance of a red signal from the lamp L2 or by information printed on a drawn card.

The invention is not to be limited to the exact ar- 50 rangement of parts shown in the accompanying drawings or described in this specification as various changes in the details of construction may be resorted to without departing from the spirit or scope of the invention. For example, although the playing of the game has been described as being predicated upon the use of a particular digital indicator in the form of a pair of dice which are tumbled or rolled under the control of a wheel-like rotary device, it is within the purview of the invention to employ a tumbling cage for the dice or, alternatively, to eliminate the use of dice altogether and instead employ a rotary pointer and numbered disk or dial arrangement if desired. Additionally, whereas in the illustrated form of the invention, the game board is 65 of a divided nature and consists of two playing sectors embodying the panels 38 and 40, if desired a single undivided game board may be employed, in which case

the shelf 22 will be positioned at one end or alongside the game board. Therefore, only insofar as the invention is particularly pointed out in the accompanying claims is the same to be limited.

Having thus described the invention what I claim as new and desire to secure by Letters Patent is:

1. A game apparatus comprising a playing board having designated locations thereon, a playing piece embodying a magnet and adapted for selective positioning become illuminated, this, according to the rules of the 10 on said locations, a normally open, magneticallyresponsive, circuit-making and breaking switch disposed beneath each of said locations and effective when the playing piece is positioned on the superjacent location to become closed, an electricallyenergizeable signal device connected to all of said switches, an indexable distributor mechanism having a series of contacts, one for each switch, said contacts being electrically connected to said signal device, said distributor mechanism further including a movable wiper arm adapted to traverse said contacts successively upon indexing of the distributor mechanism, a pair of electric leads adapted for connection to a source of electric current, one of said leads being connected to all of said switches, the other lead being connected to said wiper arm, and manually-operable means for indexing said distributor mechanism.

2. A game apparatus comprising a playing board having numerically-designated locations thereon, a playing piece embodying a magnet and adapted for selective positioning on said locations, a normally open, magnetically-responsive, circuit-making and breaking switch disposed beneath each of said locations and effective when the playing piece is positioned on the superjacent location to become closed, a pair of electrically-energizeable signal devices each of which is connected to all of said switches, an indexable distributor mechanism having a series of contacts, one for each switch, certain of said contacts being electrically connected to one of said signal devices and the remainder of said contacts being electrically connected to the other signal device, said distributor mechanism further including a movable wiper arm adapted to traverse said contacts successively upon indexing of the distributor mechanism, a pair of electric leads adapted for connection to a source of electric current, one of said leads being connected to all of said switches, the other lead being connected to said wiper arm, and manuallyoperable means for indexing said distributor mechanism.

3. A game apparatus as set forth in claim 2 and wherein said playing board is divided into two sections having numerically-designated locations thereon which are identical in number and relative disposition thus affording a playing terrritory for each of two players.

4. A game apparatus as set forth in claim 2 and wherein said indexable distributor mechanism embodies a fixed distributor plate on which said contacts are arranged in a circular series in circumferentiallyspaced relationship, the wiper arm extends radially of said series so that its distal end traverses the series and moves from one contact to another during each indexing operation of the mechanism, and said manuallyoperable means for indexing the distributor mechanism comprises a ratchet wheel connected to the wiper arm, a pawl for periodically advancing said ratchet wheel, and a spring-biased plunger effective upon depression and release therof to actuate said pawl.

5. A game apparatus as set forth in claim 4 and including, additionally, an electrically-operable mechanism effective upon energization thereof to render a numerical indication corresponding to the numerical designations of said locations on the playing board, and 5 means effective upon depression of the plunger to energize said indicating mechanism.

6. A game apparatus as set forth in claim 4 and wherein said electrically-operable mechanism embodies a pair of dice having number-representing indicia 10 thereon, a movable dice-tumbling support for said dies, a motor for moving said support, an electric circuit including a pair of normally open contacts for said motor, and means effective upon depression of said plunger for closing said contacts to establish the motor circuit. 15

7. A game comprising a box-like structure embodying a bottom wall, opposed upstanding side and end walls, and an open upper rectangular rim having extending thereacross a shelf which establishes a partial 20 top wall, a playing board supported on said rim, forming the remainder of said top wall and having designated locations thereon, a playing piece embodying a magnet and adapted for selective positioning on said designated locations, a normally open, magnetically- 25 responsive, circuit-making and breaking switch disposed beneath each of said locations and effective when a playing piece is positioned on the superiacent location to become closed, an indexable distributor mechanism disposed within said box-like structure and including a fixed distributor plate having a circular series of circumferentially-spaced contacts thereon, one for each switch, a shaft projecting through said plate at a point constituting the center of the circular series, a plurality of radially extending wiper arms mounted on 35 said shaft and designed or circumferential sweeping movement in traversing relationship over said circular series of contacts in step-by-step fashion upon successive indexing of the distributor mechanism, a signal lamp mounted on said shelf, all of said contacts being 40 electrically connected to said signal lamp, a source of current supply, a pair of electric leads connected to said source, one of said leads being connected to all of said switches and the other lead being connected to said wiper arms, a ratchet wheel on said shaft, a pawl 45 plunger for closing said contacts to establish the motor for periodically advancing said ratchet wheel, and a spring-biased plunger projecting through said shelf and effective upon depression and release thereof to actuate said pawl.

8. In a game apparatus, in combination, a box-like 50 structure embodying a bottom wall, opposed upstanding side and end walls, and an open upper rectangular rim having extending thereacross a shelf which establishes a partial top wall, a playing board supported on said rim, forming the remainder of said top wall and 55 having numerically designated locations thereon, a playing piece embodying a magnet and adapted for selective positioning on said designated locations, a normally open, magnetically-responsive, circuit-making

and breaking switch disposed beneath each of said locations and effective when a playing piece is positioned on the superjacent location to become closed, an indexable distributor mechanism disposed within said box-like structure and including a fixed distributor plate having a circular series of circumferentiallyspaced contacts thereon, one for each switch, a shaft projecting through said plate at a point constituting the center of the circular series, a plurality of radially extending wiper arms mounted on said shaft and designed for circumferential sweeping movement in traversing relationship over said circular series of contacts in stepby-step fashion upon successive indexing of the distributor mechanism, a pair of signal lamps mounted on said shelf, certain of said contacts being electrically connected to one of said signal devices and the remainder of said contacts being electrically connected to the other signal lamp, a source of current supply, a pair of electric leads connected to said source, one of said leads being connected to all of said switches and the other lead being connected to said wiper arms, a ratchet wheel on said shaft, a pawl for periodically advancing said ratchet wheel, and a spring-biased plunger projecting through said shelf and effective upon depression and release thereof to actuate said pawl.

9. A game apparatus as set forth in claim 8 and including, additionally, an electrically-operable indicating mechanism having numerical display means overlying said shelf and effective upon energization thereof to render a numerical indication corresponding to the numerical designations of said locations on said playing board, and means effective upon depression of said plunger for energizing said indicating mechanism.

10. A game apparatus as set forth in claim 9 and wherein said electrically-operable indicating mechanism embodies a pair of dice having numberrepresenting indicia thereon, a movable dice-tumbling support for said dies overlying said shelf, an electric motor beneath said top wall, a driving connection extending between said motor and dice-tumbling support and projecting through said top wall, an electric circuit including a pair of normally open contacts for said motor, and means effective upon depression of said circuit.

11. A game apparatus as set forth in claim 10 and wherein said dice-tumbling support is in the form of a rotary circular dice-supporting wheel, said driving connection is in the form of a shaft which projects through an opening in the shelf, and an inverted transparent plastic dome encloses said dice and wheel and has its rim secured to said shelf.

12. A game apparatus as set forth in claim 8 and wherein said shelf is relatively narrow and projects transversely across said playing board medially thereof and divides the latter into two playing areas, one on each side of the shelf.