March 10, 1964 G. W. PRESTON 3,124,357

MATRIX GAME

Original Filed July 1, 1957

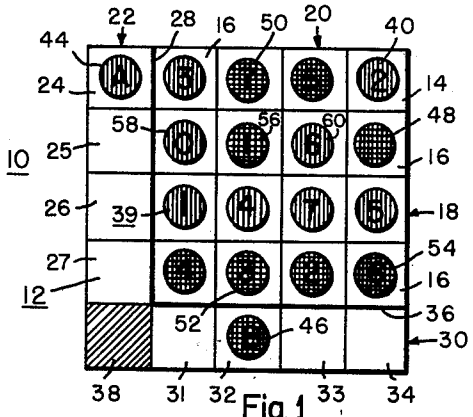


Fig. 1.

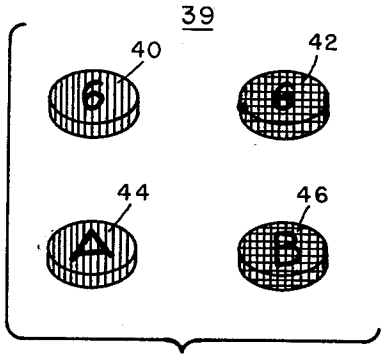


Fig. 2.

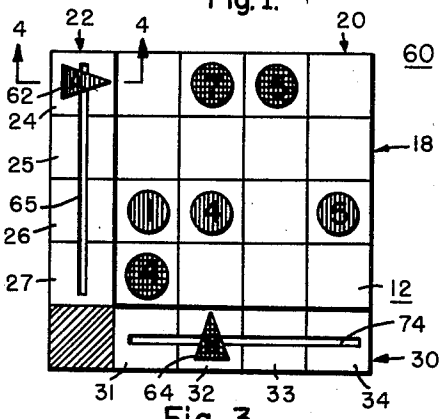


Fig. 3.

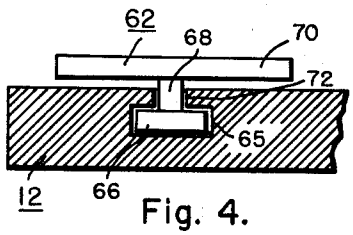


Fig. 4.

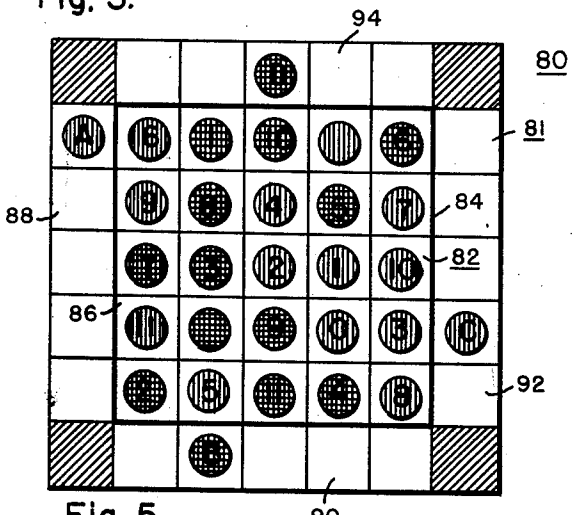


Fig. 5.

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MATRIX GAME

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Original application July 1, 1957, Ser. No. 669,293, now Patent No. 2,953,379, dated Sept. 20, 1960. Divided and this application June 2, 1960, Ser. No. 37,018

4 Claims. (Cl. 273—130)

This invention relates to game devices and more particularly to a matrix game, this application being a division of an application of the same inventor, Serial No. 669,293, filed July 1, 1957, now Patent Number 2,953,379.

The object of the invention is to provide a new and improved game which is highly enjoyable and entertaining.

Another object of the invention is to provide a new and improved matrix game which is played by two or more persons.

Another object of the invention is to provide a new and improved matrix game played by at least two opposing players and requiring thought and skill, and rewarding the use of tactics and strategy.

Another object of the invention is to provide a new and improved game which is simple to play and does not require complex and numerous rules and instructions.

Another object of the invention is to provide a new and improved matrix game in which the habits and mental processes of the opposing player may be utilized to advantage for winning the game.

Another object of the invention is to provide a new and improved matrix game allowing a wide diversity of selections and possibilities in the tactics and strategies of the players.

Another object of the invention is to provide a new and improved matrix game which may be readily varied to increase the possible number of plays and situations achievable.

Another object of the invention is to provide a new and improved matrix game which is inexpensive and durable.

The above objects are achieved by providing a matrix game comprising a board member with a plane playing field having regions arranged in intersecting rows and columns, a plurality of numbered counters for arbitrarily numerically evaluating the regions of said member, a first movable means for selecting any one of said rows and a second movable means for selecting any one of said columns.

The foregoing and other objects of the invention will become more apparent as the following detailed description of the invention is read in conjunction with the drawings, in which:

FIGURE 1 is a plan view of a matrix game embodying the invention,

FIGURE 2 is a perspective view of some of the counters of said matrix game,

FIGURE 3 is a modified form of the matrix game shown in FIGURE 1,

FIGURE 4 is an enlarged section view taken on the line 4—4, and

FIGURE 5 is another modified form of the matrix game shown in FIGURE 1.

Like numerals designate like parts throughout the several views.

The FIGURE 1 illustrates a matrix game 10 embodying the invention and including a board member 12 with a square playing field 14 having sixteen square regions arranged in four rows 18 and four columns 20.

A vertical column 22 of squares 24, 25, 26 and 27 is separated by a vertical line 28 from the playing field 14, while a horizontal row 30 of squares 31, 32, 33, and 34 is separated from the playing field 14 by a horizontal line

36. The corner square 38, in the present description, is not considered a member of either the marginal column 22 or the row 30.

A plurality of counters 39 may be utilized for giving numerical evaluations to the square regions 16 of the playing field 14. The counter evaluations may be positive, negative, zero or may have no value. Red counters 40 may be utilized to indicate negative values, while black counters 42 may indicate positive values. The various numerals on the counters 39 may indicate the absolute value of the counter.

A counter 44 may be assigned to the player A, while another counter 46 may be assigned to the other player B.

To illustrate one manner in which the matrix game 10 may be employed, the players A and B may initiate the game by mixing and then arbitrarily positioning the counters 39 upon the playing field 14. This provides a numerical evaluation, which may be positive, negative or zero value, for each of the square regions 16. A blank counter 39 such as counter 48 may also be utilized in which no evaluation is given to a particular square region 16.

The counter 44 of player A is positioned on one of the squares of the marginal column 22 while the counter 46 of player B is positioned on a square of the marginal row 30.

The players A and B now proceed by alternately respectively selecting rows and columns by positioning their counters 44 and 46. Thus, to start the game the player A may select the first row by positioning his counter in square 24, whereupon the player B may select the second vertical column 20 by positioning the counter 46 in the square 32 as illustrated in the FIGURE 1.

After making a move, the moving player acquires the counter 39 indicated by the positions of the counters 44 and 46. Thus, after the player B moves to square 32, he acquires the counter 50 positioned in the square region 16 indicated by the row and column respectively selected by the counters 44 and 46 of the players A and B.

It is noted that the previous move of the player A to square 24 allws the player B, by moving his counter 46, to select any of the counters in the first of the rows 18. By moving to the square 31 or 34 the player B would acquire counters 39 having negative numerical values. This generally is undesirable and should be avoided. The positioning of the counter 46 in either of the squares 32 or 33 results in obtaining a counter 39 having a positive value. It is noted that the counter 50 selected by positioning the counter 46 in the square 32 has the maximum positive value which can be acquired by the player B in this instance. However, it will be apparent that it is not always advantageous to obtain the maximum positive value counter at a particular time, since it may be possible to reduce the gain of the opposing player by taking another counter 39 having a lower value.

The player B now removes the counter 50 and adds its value to his score. The player A may now move his counter 44 for selecting a particular row and obtaining the counter 39 indicated thereby.

Depending on the tactics and strategy of player A, he may move his counter 44 to the square 27 to obtain the counter 52 with the maximum positive evaluation in the column selected, or he may take any of the other counters 39 which he deems most advantageous. Of course, it must be remembered that the choice of counters 39 which may be made by player B depends upon the particular row 18 previously selected by the player A. Thus, it is not always advantageous for the moving player to maximize the value of the counter 39 obtained, since this may result in a greater gain for the opposing player.

For example, if player A chooses square 27 he obtains the counter 52 having a positive evaluation of 3. This is the maximum value of the counters in the second column indicated by the counter 46 of player B. The player B

can then move to square 34 and obtain the counter 54 which has a positive value of 6. This is twice the value of the counter 52 obtained by player A. Thus, player A would be in a better position if he selected the second row by positioning his counter 44 in square 25, and obtaining the counter 56 having a positive value of one. This would force player B to take either the counter 58 having a zero value or the counter 60 having a negative value of 6. Should the player B move to the square 31 thereby obtaining the zero counter 58, the player A would still have a net gain of 1, whereas in the previously illustrated situation, he would have a relative loss of 3.

The regions from which the counters 39 have been removed or which contain a blank counter 48 may not be selected by either of the players. This limits the number of possible moves as the game progresses. It is noted that the use of blank counters 48 which provide the equivalent of a blank square region 16 simplifies the game, makes it less complex and tends to shorten the duration and extent of the game. The use of such blank counters for distinguishing the regions of the playing field may be of great importance, especially when a field is enlarged to have five or more columns and rows. This is also true in the case of the extension of the playing field into three dimensions or other enlarging and complicating aspects of the game.

The counters 39 such as counter 58 may be provided having a zero evaluation which is not equivalent to the blank counter 48, but allows the selection and removal of this counter 58 by the players, although it does not add any value to the score. However, since this may be the best counter to choose among several counters 39, as illustrated above, it has a positive aspect in the relative sense in that it does not detract from the score of the player acquiring it.

The zero valuation counter 58 may also be utilized, if so desired by the players, for replacement upon a blank square region 16 of the playing field 14 by a player having its possession. This will allow such a player to select a row or column, which he would otherwise not be able to select because of the absence of a counter in the desired position. The zero counter 58 may thus pass from one player to the other player, thereby providing flexibility and additional interest to the game. It is noted that more than one of the zero counters 58 or blank counters 48 may be provided and utilized as desired by the players.

The game may be brought to a close, even though counters yet remain upon the square regions 16 of the playing field 14 when the last player to move his counter 44, 46, obtains the last remaining counter 39 in his row or column, so that the other player cannot obtain a counter 39 by any of his possible selections. However, if such player has a zero counter 58, under the application of the rules previously stated, he may select a blank square region 16, thereby preventing the termination of the game at this point. Of course, in selecting the blank region the player will select a row or column which will be of greatest advantage to him.

The score of each player is determined by the number resulting from the addition of the positive values of the counters which he has obtained from which is subtracted the total value of the negative counters which he has acquired. The player with the higher positive score at the end of the game would be the winner. Thus, the player with the greater positive score may desire to terminate the game, while the other player would desire to continue playing so that he may increase his score and overtake his opposer.

The above rules and moves of the players A and B have been described for purposes of illustration and many variations of these rules may be utilized in accordance with the desires of the players.

The FIGURES 3 and 4 illustrate a matrix game 60 which is a modified form of the device 10 shown in the

FIGURE 1. The matrix game 60 differs from game 10 by providing a movable indicating means 62 in the form of a pointer for selecting one of the rows 18 by being slidably positionable within one of the squares 24, 25, 26 and 27. A second movable means 64 similar to the means 62 is slidably positionable in one of the squares 31, 32, 33 or 34 for selecting one of the columns 20. The movable means 62 may be actuated by the player A, while the movable means 64 may be actuated by player B. Of course, the game 80 also may be played in accordance with the rules described above in connection with the matrix game 10.

The FIGURE 4 illustrates in detail by means of an enlarged sectional view, the construction of the movable means 62 and its slidable interaction with the board member 12. The board member 12 is provided with a slot 65 extending through the squares of the marginal column 22. The slot 65 slidably receives a guide member 66 which is secured by a projecting portion 68 with the pointer element 70 of the movable means 62. The slot 65 is narrowed at its upper region 72, thereby retaining the movable means 62 in position for slidable action along its slot 65.

The movable means 64 is constructed in a manner similar to that of the means 62 and is retained for slidable positioning within the slot 74 extending through the squares of the row 30 in the marginal region of the member 12.

Although the game apparatus 60 does not have the simplicity of construction of the game device 10, it affords a highly desirable means for indicating the rows 18 and columns 20 selected by the players.

Refer now to the FIGURE 5, which illustrates another matrix game 80 which is a modification of the game 10. The game apparatus 80 comprises a board member 81 provided with a central playing field 82 within a square border line 84. The playing field 82 has 25 square regions 86 arranged in five rows and columns.

Of course, the number of regions 86 may be increased or decreased for the purpose of increasing or decreasing the complexity of the game.

The board member 81 is provided with four peripheral or marginal regions 88, 90, 92 and 94, each subdivided into five square regions for correspondence with a row or column, as the case may be.

The counters A, B, C and D may be respectively positioned in the square regions of the marginal portions 88, 90, 92 and 94 for selecting particular rows and columns for playing the game in the manner described in connection with the matrix game 10 of the FIGURE 1.

When two persons are to play the game, then the first player may utilize the counter A for selecting rows of the square regions 86, while the second player may move the counter B for selecting columns of square regions 86 of the playing field 82. The first and second players may alternate their moves as described previously. If four players are to participate in the game, the third and fourth players may respectively utilize counters C and D and moves may be taken in sequence by the participants so that a player selecting a row is preceded and followed by players selecting columns, while a player selecting a column is preceded and followed by players selecting rows. Such an arrangement is achieved when the players take their moves in accordance with their counter-clockwise position about the field 82 of the board member 81. Of course, the game also may be played in the clockwise direction.

When the game is played by four players, two teams may be provided so that certain players can cooperate with each other for the purpose of maximizing their score. If the players A and B are partners, and the players C and D are partners, and the game is played in the counter-clockwise direction, then the player A would select a row to obtain the most beneficial result by the following action which may be taken by his partner B. However, the

player B in selecting a column would also consider minimizing or preventing the following player C, his opponent, from gaining an advantage. Likewise the player C sets up the action to be taken by his partner, the player D, by anticipating the selection which may be made by player D. Thus, the game played with four players may be carried out in a manner similar to that of the game illustrated by the description of FIGURE 1 in connection with the action of two players. Of course the moves by the partners may be alternated with the moves of the opposing partners when A and C, and B and D, are made partners.

It is noted that the matrix game 80 is of increased utility since the game may be played by two or more persons. It is also noted that when only two players oppose each other, the playing field 82 may be limited to 16 square regions 86 by utilizing only four rows and four columns. The field may also be extended to include the marginal regions 92 and 94 thereby providing a square playing field with 36 square regions formed by six rows and six columns.

While only a few representative embodiments of the invention disclosed herein have been described in detail, there will be obvious to those skilled in the art, many modifications and variations accomplishing the foregoing objects and realizing many or all of the advantages, but which do not depart essentially from the spirit of the invention.

What is claimed is:

1. A game apparatus comprising a substantially flat surface, a playing field outlined on a portion of said surface by means of mutually intersecting heavy lines, said field being subdivided into regions arranged in intersecting rows and columns by means of light dividing lines, said light lines extending beyond said heavy lines to define on said surface outside said playing field regions forming extensions of said intersecting rows and columns of regions and a corner region adjacent each intersection of said heavy lines, all of said corner regions being marked distinctively to distinguish them from other regions on said surface, a plurality of counters equal to the number of said regions within said playing field for placement in said last named regions, any two of said counters being marked to represent different numerical values, and at least two additional counters for placement on said additional regions in visible alignment with one of said rows and one of said columns, respectively, each of said additional counters being of one-piece construction and of a size small enough to fit within any one of said additional regions.

2. The apparatus of claim 1 characterized in that each of said additional counters is completely detachable from its position on said additional regions outside said playing field.

3. The apparatus of claim 1 further characterized in that the number of said additional counters equals the number of intersecting heavy lines at which said rows and columns terminate.

4. The apparatus of claim 1 characterized in that said playing field is outlined by four orthogonal heavy lines and the number of said additional counters is four, one for placement outside each said line.

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