May 20, 1969 W. H. HUNTER 3,445,115

MAGIC SQUARE BOARD GAME APPARATUS

Filed Aug. 9, 1965

Fig. 1

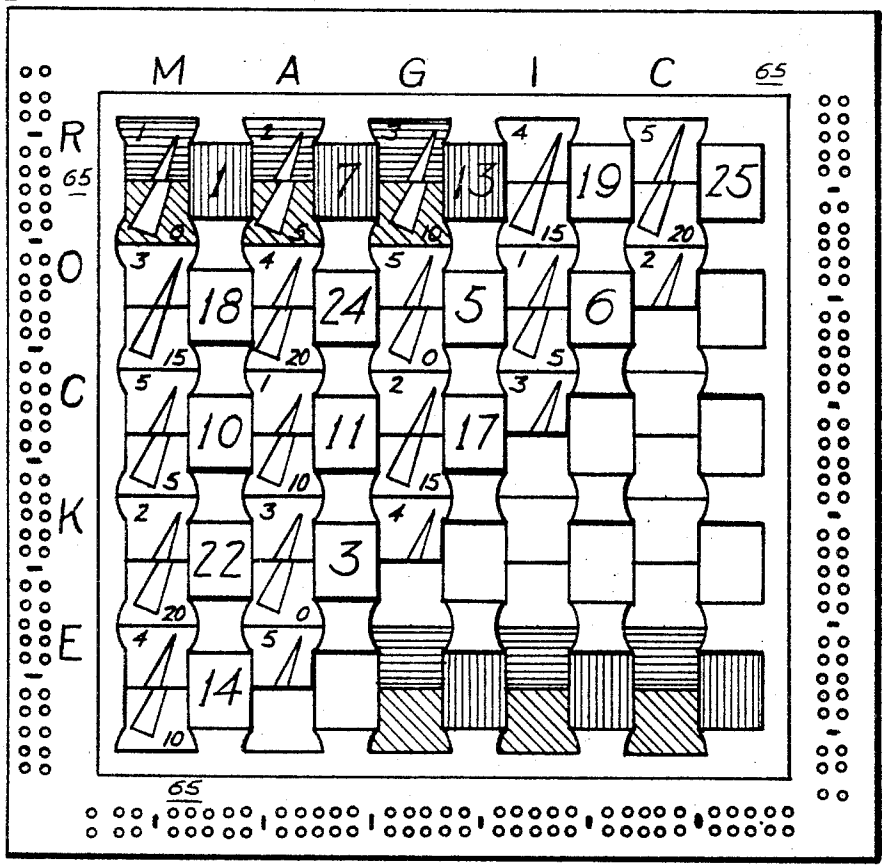


Fig. 2



Fig. 3



Fig. 4

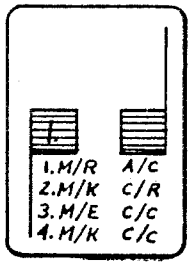


Fig. 5

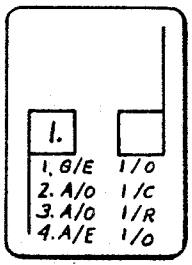
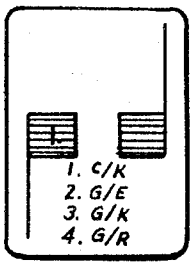


Fig. 6



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MAGIC SQUARE BOARD GAME APPARATUS

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ABSTRACT OF THE DISCLOSURE

A game apparatus including a game board defining a plurality of master spaces arranged in the form of a square and two auxiliary spaces adjacent each master space, a master playing piece for each master space, an auxiliary playing piece for each auxiliary space, said playing pieces all being numbered, and playing cards, one for each auxiliary playing piece, which cards designate the positions of the auxiliary playing pieces on the board, said cards designating positions such that the master playing pieces form a magic square when each of said pieces is positioned so that its number equals the sum of the numbers on the two adjacent auxiliary playing pieces.

The game is based on the principles of the so-called "Magic Square" of numbers in which consecutive numbers from 1 through the square of the number of cells or spaces on each side of a given square, are arranged in the cells in such variable combinations that the sum of the numbers in any straight row, horizontal, vertical or diagonal, is constant for the given square. The example illustrated is for a master series of numbers 1-through-25 in a square containing five cells on each side for a total of 25 cells. These principles are used to designate the predetermined relative positions on a playing board of two 5-times-repeated series of auxiliary numbered playing pieces, 50 in all, which in turn determine the relative positions of the "Master Pieces," numbered consecutively 1-through-25, for the square illustrated. Various combinations are obtainable by changing the positions of the auxiliary pieces, such as placing them in regular order 1–2–3–4–5 or 3–4–5–1–2; or by skipping one or more in sequence, as 1–3–5–2–4, 5–2–4–1–3 or 1–4–2–5–3, et cetera. Both series of auxiliary pieces are varied in this manner to produce different combinations. A general system of constructing magic squares, without using two separate auxiliary spaces, was first developed by the French mathematician, De La Hire, early in the 18th century.

The details and advantages of the present invention are hereinafter set forth with reference to the drawings wherein:

FIGURE 1 is a plan view of a game board constructed in accordance with the present invention.

FIGURE 2 is a perspective view showing the six faces of one of a pair of dice.

FIGURE 3 is a perspective view of the other die.

FIGURES 4, 5 and 6 are plan views of playing cards used in the game of the present invention.

On the drawing, FIGURE 1 shows a partially filled "Playing Board" with part of the numbered playing pieces arranged in a certain combination. The sum of the master numbers in the completed horizontal, vertical and diagonal rows is 65. The position of any auxiliary playing piece is designated by the letters in the word "M-A-G-I-C" at the top of the board and the first five letters of the word "R-O-C-K-E-T" at the left side of the board.

FIGURES 2 and 3 show the markings on a specially designed pair of dice. FIGURES 4, 5 and 6 illustrate three cards included in one of ten series of cards, each containing five cards, 50 in all, one card for each auxiliary playing piece. The series consists of two identical cards as illustrated in each of the FIGURES 4 and 5 and one card as illustrated in FIGURE 6.

Playing the game involves the use of the following items:

Item 1.—The "Playing Board," illustrated on the drawing in FIGURE 1, consists of an irregular border and uniformly spaced isolated islands marked to receive the numbered playing pieces.

Item 2.—The auxiliary numbered "Playing Pieces" consisting of five sets of the series of numbers 1-through-5, 25 pieces, color coded blue, bearing the symbolic imprint of the upper portion of a rocket, and designated as the "Upper Series," and five sets of the series of numbers 0, 5, 10, 15 and 20, 25 pieces in all, color coded green, bearing the symbolic imprint of the lower portion of a rocket and designated as the "Lower Series." The upper series plays in the top horizontal row of auxiliary spaces and each alternate row thereafter. The lower series plays in the second horizontal row from the top and each alternate row thereafter. The two adjacent auxiliary pieces on which the rocket design either matches exactly or is slightly mismatched are complementary and the sum of the two numbers thereon determines the number of the adjacent "Master Piece." The imprints on the upper series of pieces are so placed that only one of each set will exactly fit the imprint on a lower series piece.

Item 3.—The 25 numbered "Master Playing Pieces," colored red and numbered 1-through-25 play in the spaces designated on the board as determined by the sum of the numbers on the two adjacent auxiliary pieces having the same coordinates such as M/R or G/O.

Item 4.—A fifty-two card deck of playing cards consisting of one card for each of the 50 auxiliary playing pieces, with corresponding color coding and markings, one penalty card and one bonus card. The characters on only one end of the cards are shown in FIGURES 4, 5 and 6; the other end being marked identically, except in reverse so the card will be legible from either end. Each card is marked with the coordinates designating the board location or choice of locations to play the auxiliary playing piece identified on the card. Each card shows four different combinations of arranging the playing pieces. Each different combination will result in providing a magic square of the master pieces different from the other master squares.

Item 5.—A specially designed pair of dice with markings of blank, one spot or two spots, such that on any roll of the dice the markings on the top faces add up to 1, 2, 3 or 4, corresponding to the four different combinations of coordinates on the playing cards described in Item 4 above. On the drawing, FIGURE 2 shows the six faces of one die, three blank and three with two spots each; and FIGURE 3 shows the six faces of the other die, three faces with one spot, and three faces each with two spots.

Play of the game.—The game may normally be played by 2, 3, 4, 6, 8, 9 or 12 players. If more than three play, players are divided into partnerships, teams. For two players, the sequence of play is as follows:

(1) All the numbered pieces are removed from the board, the auxiliary pieces separated into groups of five of the same color code and number and the groups are placed in numerical order, by color, in holders. The master pieces are arranged in groups of five in numerical order (1-through-5; 6-through-10; et cetera) and placed in holders in ascending order;

(2) A "dealer" is chosen by the high number rolled with one turn of the dice;

(3) The dealer shuffles the deck of cards, offering it to the other player to cut, and then places it face down on the table;

(4) The other player now rolls the dice to determine which of the four combinations on the cards will be played throughout the game.

(5) The dealer now starts the actual play by turning the top card on the deck, which designates which playing piece he is to play and the position or choice of positions on the board on which he may play it, for the combination of coordinates selected by the dice. For example: the roll of the dice results in a blank and a two spot turning for a count of two; the card drawn indicates an auxiliary piece numbered 3 in the upper series and reads for combination 2, M/O or I/C; the player picks up the top number 3 of the upper or blue series and places it either under M in the row marked O or in the column marked I in row C. The players continue taking turns, rotating to the left if more than two are playing, until all cards have been turned. As the second of two adjacent complementary pieces is placed on the board, the numbers are added to determine the value of the "master" adjacent piece which is placed by the player who placed the second auxiliary piece.

Scoring is as follows: for playing the second of any two complementary pieces, two points; for playing a second complementary piece that also completes the imprint of a perfect rocket symbol, an additional three points; for playing either an auxiliary or master piece, whose number added to *any* adjacent piece makes five or any multiple of five, two additional points for each such combination not previously counted; for drawing the "bonus" card, three points; for drawing the "penalty" card, a loss of three points. Scores may be kept by moving two pegs in a manner similar to the use of the pegs in scoring the game of cribbage. Each player or team is provided with a course of holes which are shown on the board in FIGURE 1. A game is won when one player or team has pegged twice across the course in both directions and ends up with the peg exactly moving into the end hole. If an earned score is in excess of the number required to move the peg into the last hole, the peg will be backed off two holes so the next count of two scored will put the player out.

I claim:

1. A game apparatus comprising
a playing board,
said playing board having defined thereon a plurality of master spaces in the form of a square and a plurality of auxiliary spaces with two auxiliary spaces being adjacent each master space,
a plurality of master playing pieces consecutively numbered starting with the number one,
a plurality of auxiliary playing pieces, and
a plurality of playing cards,
each of said cards being marked to designate the position for playing one of said auxiliary playing pieces,
said auxiliary playing pieces being numbered and positioned so that the sum of the numbers of two auxiliary playing pieces equals the number on the master playing piece to be positioned in the adjacent master space in order to arrange the master playing pieces in a magic square.

2. A game apparatus comprising
a playing board,
said playing board having defined thereon a plurality of master spaces arranged in a square and two auxiliary spaces adjacent one side of each master space and positioned one above the other,
said playing board being marked along two sides thereof to provide a coordinate identification of each of said master squares,

a plurality of master playing pieces, one for each master space defined on said board,
said master playing pieces being numbered consecutively starting with the number one through the number of master playing pieces,
a plurality of auxiliary playing pieces, one for each auxiliary space defined on said board,
one-half of said auxiliary playing pieces having a first indicia and adapted to be positioned in the upper auxiliary spaces,
said upper auxiliary playing pieces being provided in groups, each group containing the same number of pieces, and the pieces in each group being numbered consecutively starting with the number one,
the other one-half of said auxiliary playing pieces having a second indicia and adapted to be positioned in the lower auxiliary spaces,
said lower auxiliary playing pieces being provided in groups, each group containing the same number of pieces, and the pieces in each group being numbered in a sequence of integral multiples of the number of master spaces on each side commencing with the number zero,
a playing board for each of said auxiliary playing pieces,
each of said cards being marked to designate either the upper or the lower half of said auxiliary playing pieces,
said cards also being marked to designate a particular auxiliary playing piece and at least one position in which their auxiliary playing pieces are played,
the designated positions being such that the sum of the numbers on the two auxiliary playing pieces positioned adjacent each of said master spaces is equal to the number of the particular master playing piece to be positioned in the master space in order to arrange the master playing pieces in a magic square.

3. A game apparatus according to claim 2 wherein
said auxiliary pieces have a design on their upper surfaces, and
only one of each of said groups of said upper auxiliary pieces has a design complementary to the design of said lower auxiliary pieces.

4. A game apparatus according to claim 2 wherein
at least a portion of said playing cards are marked to designate two alternative positions in which their auxiliary playing pieces may be played.

5. A game apparatus according to claim 2 wherein
said cards are marked to designate a plurality of positions in which their auxiliary playing pieces may be played.

6. A game apparatus according to claim 2 including
a bonus card, and
a penalty card.

7. A game apparatus according to claim 5 including
a pair of dice having spots on the faces thereof to be used to preselect the particular position designations on said playing cards which are to be used.

References Cited

UNITED STATES PATENTS

1,650,840	11/1927	Katz	273—130
2,333,002	10/1943	Goloborodko.	
2,760,619	8/1956	Peak	273—135 X
2,805,069	9/1957	Bonari et al.	273—135

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