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MEMORY GAME HAVING ROTATABLE DISC MEANS
FOR VARYING THE SYMBOLS DISPLAYED

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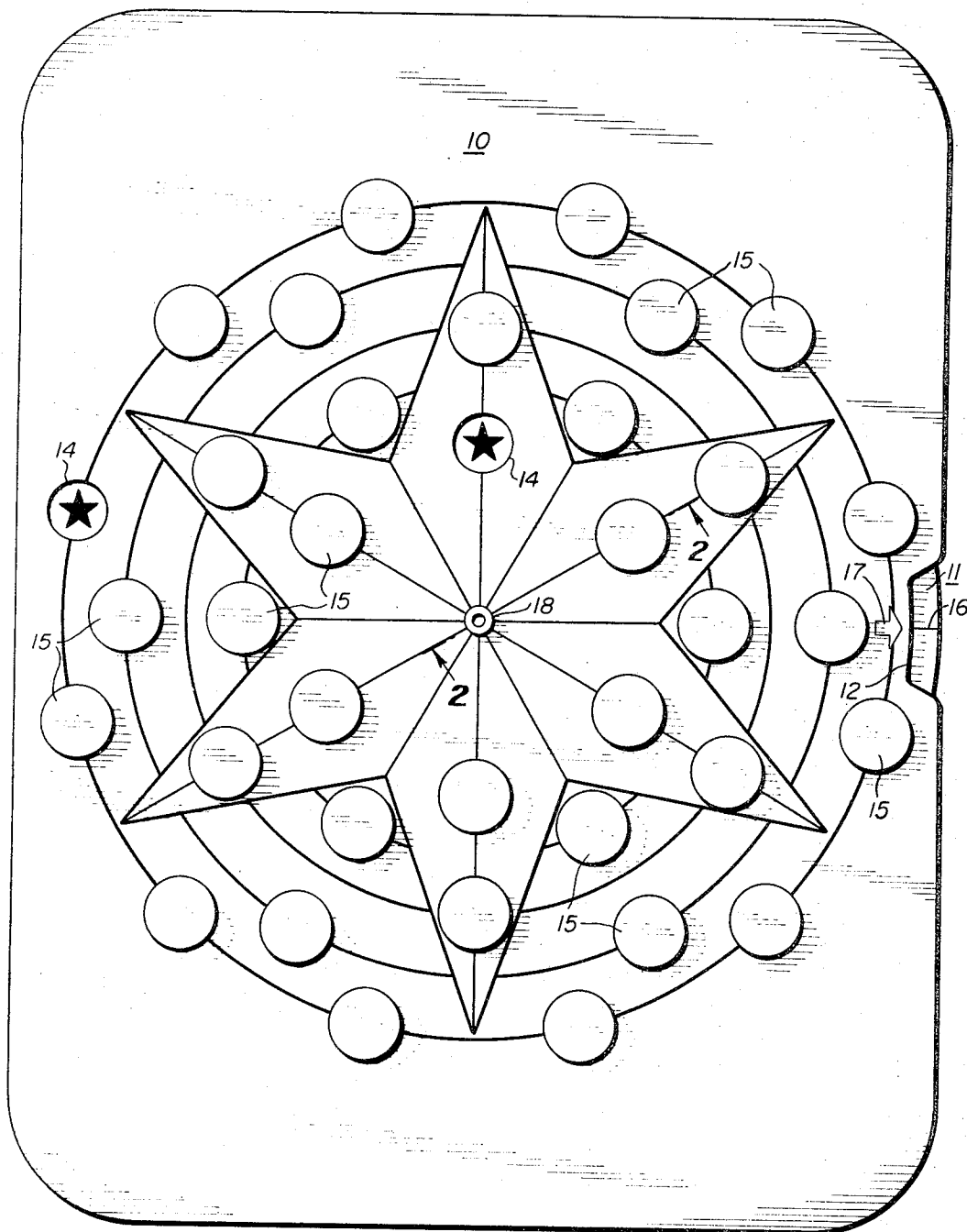


Fig. 1

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ABSTRACT OF THE DISCLOSURE

A memory game employing an apparatus comprising a rotatable disc mounted below a game board having a multiplicity of openings; the disc bears symbols comprising a plurality of sets of random arrangements of the same symbols each set including equal numbers of matched ones of the symbols and being positioned to register with the openings. The disc is rotated to select the different sets. Cover pieces for the openings are moved by the players seeking equal numbers, for example pairs, of matched symbols.

This invention relates to games employing mechanical boards and particularly to an improved game apparatus for playing a game similar to the card game known as "Concentration" or "Memory."

Game devices or apparatus have been provided heretofore which make it possible to play card games such as bridge and poker on boards generally simulating a card table. Such devices have been provided both for solitaire and for multi-player games.

The card game known as "Memory" or "Concentration" is played by placing all the cards of the deck face down and spread about in individual random positions. Two or more players then take turns at turning up a card and then trying to pair it with a second card, the player keeping the cards if they are a pair, but if they are not turning them face down again in their same positions. Each time a player turns up a pair he has another chance. The winner is the player who picks up the greatest number of pairs. Concentration is necessary and observation of position and memory of the location of cards which have been turned back bring success in turning up pairs as the game progresses. A full deck of cards is normally used although fewer cards may be used if desired. Substantial space is required for the game and the players must often reach across many cards to turn over one believed to be the other of a pair. Accordingly it is an object of this invention to provide an improved game apparatus for facilitating the playing of a game similar to the card game of "Concentration."

It is another object of this invention to provide an apparatus for playing a memory game and including an improved arrangement for providing a multiplicity of different game settings or shuffles without requiring separate parts to be inserted in the apparatus.

It is another object of this invention to provide a game apparatus for playing a game of "Concentration" including an improved arrangement for shifting from one complete deal of the playing symbols to another and different deal.

Briefly, in carrying out the objects of the invention in one embodiment thereof, a game board is constructed of flat fairly rigid sheet material in substantially rectangular configuration. Concentric rings of openings are formed in the top board about a center near the middle of the board. A disc is pivotally mounted below the board and marked with groups of different symbols which register with respective openings when rotated into posi-

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tion. A different complete set of all pairs of symbols is in register with the openings in each successive one of a plurality of angular positions of the board and disc, the positions being indicated by marks at one edge of the board where the edge of the disc is accessible. The game is played by covering all openings with game pieces similar to checkers, the players in turn lifting two pieces, keeping them if a matched pair of symbols appears, but covering the openings again if the two are not a matched pair.

The features of novelty which characterize this invention are pointed out with particularity in the claims annexed to and forming a part of this specification. The invention itself, however, both as to its organization and manner of use, together with further objects and advantages thereof, will be better understood upon reference to the following description taken in connection with the accompanying drawings in which:

FIG. 1 is a top plan view of a game apparatus embodying the invention;

FIG. 2 is an enlarged sectional view of a portion of the apparatus taken along the line 2—2 of FIG. 1; and

FIG. 3 is a plan view of the central disc of the apparatus of FIG. 1 showing the arrangement of the game symbols.

Referring now to the drawing, the game apparatus as shown in FIG. 1 comprises a flat substantially rigid board 10 of rectangular configuration with rounded corners and a revoluble disc 11 an edge of which is exposed in a notch or recess 12 in the right hand edge of the board. The board in the illustrated embodiment is formed with thirty-six openings or windows two of which are shown at 14, the game pieces having been removed from these openings, the remainder of the openings being covered by game pieces 15 shown as round discs essentially the same as the pieces used in the game of checkers. In this embodiment the openings are arranged in five concentric circles, the four inner circles each containing six equally spaced openings and the outermost circle twelve equally spaced openings. The openings in adjacent circles are positioned in staggered relationship.

The disc 11 is marked with a multiplicity of symbols or game figures two of which, in the configuration of five pointed stars, are visible through the openings 14. The arrangement of the figures on the disc 11 is shown in FIG. 3, the symbols being arranged in five concentric circles of the same diameters as the corresponding circles of openings 14 in the board 10. In the illustrated embodiment six sets of eighteen different figures each have been employed and thus there are a great many possible different combinations of pairs of each symbol.

In the illustrated arrangement the symbols are marked on the disc 11 in three sets comprising eighteen pairs of symbols in each set. The position of the symbols may be determined during manufacture by placing a master disc under a board or template having openings positioned in the same configuration as the openings 14 in FIG. 1 and then marking or placing one set of eighteen pairs of symbols on the master disc in random arrangement and so that they register with the openings. The master disc is then rotated twenty degrees and another set of eighteen pairs of symbols marked in registering positions, and a third set is similarly marked after rotation of another twenty degrees. In this manner all the symbols may be located on the master disc in the pattern illustrated. Thereafter the game discs are made from the master disc. When the disc is rotated to each 20° position under the board 10 as indicated by radial marks 16 about the edge of the disc a full set of eighteen pairs of symbols is positioned below corresponding openings. An arrow 17 is provided on the board 10 to indicate the eighteen 20°

angular positions of the disc 11 and to facilitate alignment of the board and disc.

It will be understood that in the illustrated embodiment the same arrangement of the symbols is registered with the openings each time the disc is rotated through sixty degrees, thus each third 20° position exposes the same set of symbols as the starting position. However, because the position of the group as a whole is different with respect to the sides of the board 10 the symbols are shifted from their former positions so that recollection of their actual positions is rendered difficult, and the game, in effect, presents eighteen different arrangements of pairs of symbols.

As shown in FIG. 2 the disc 11 is pivotally mounted on the board 10 by a rivet 18 or other suitable fastener which passes through the centers of both sets of circles. A heavier base or supporting board 20 of the same configuration as the board 10 is bonded or otherwise attached to the board 10 about its edges and renders the entire assembly more rigid while affording easy rotation of the disc 11 between the two boards and protecting the disc from damage. The game pieces 15 are of a larger diameter than the holes 14 and are placed over the holes to conceal the symbols, as clearly shown in FIG. 2.

When game is to be played by two or more persons, all the holes 14 are covered by pieces 15 and the disc is then rotated to any position in which a line 16 on the disc lies at the point of the arrow 17 on the board. The first player then lifts two pieces, preferably one at a time, and if the symbols thus uncovered are a matched pair keeps the pieces and takes another turn. If the symbols are not a matched pair the player replaces the pieces and the next player attempts to match a pair by lifting two pieces and so on. The winner is the player having the greater number of pieces when the last pair has been turned up. Accurate observation of the symbols which have been uncovered and a good memory of their location are essential to consistent winning of the game and the game serves to exercise both observation and memory.

It will be understood that various arrangements of the openings in the board and of the symbols on the disc may be employed and various numbers of openings and of symbols. An important feature of the invention is the arrangement of the openings and of the symbols on the disc so that a large number of symbols remain covered during any game. Furthermore, by covering the symbols of a completed game before moving the disc to a new position, the direction of movement and the position of the symbols can be concealed when the disc is shifted between games. Thus it becomes possible to play many successive and interesting games with the one arrangement of the openings and the one arrangement of the symbols on the disc.

The markings of the concentric circles on the board and of the straight lines forming a six-pointed star are not essential and may be omitted. When used they may have the effect of assisting some memories but of hindering others and their presence may add some further interest to the game.

Although the invention has been illustrated and described in connection with a single embodiment thereof, various other arrangements will occur to those skilled in the art. Therefore, it is not desired that the invention be limited to the details illustrated and described and it is intended by the accompanying claims to cover all modifications which fall within the spirit and scope of the invention.

I claim:

1. A game apparatus comprising a board having a plurality of window openings therein arranged in concentric circles, a disc mounted below said board for rotation about the axis of the common center of said circles, means for selectively locating said disc in any one of a plurality of different predetermined angular positions

about said axis with respect to said board, a multiplicity of symbols on said disc including a plurality of different symbols and consisting of a plurality of sets each consisting of the same whole number of equal numbers of matching ones of the symbols and each set having said symbols in a different random arrangement, the number of said window openings being said equal number times the number of different symbols, said symbols of each set being positioned to register with said openings to present different random locations of said different symbols in each of said angular positions whereby the same whole number of equal numbers of matched ones of said symbols is in register with said openings in each position of said disc, and game pieces for covering all of said openings to conceal the symbols registering therewith.

2. A game apparatus comprising a board having a plurality of window openings therein arranged in concentric circles, the outermost of said circles containing a greater number of openings than any one of the other circles, a disc mounted below said board for rotation about the axis of the common center of said circles, means for selectively locating said disc in any one of a plurality of different predetermined angular positions about said axis with respect to said board, a multiplicity of symbols on said disc including a plurality of different symbols and consisting of a plurality of sets each consisting of the same whole number of equal numbers of matching ones of the symbols and each set having said symbols in a different random arrangement, the number of said window openings being said equal number times the number of different symbols, said symbols being arranged in concentric circles corresponding to the circles of said openings and the outermost circle having a proportionately greater number of symbols therein, said symbols of each set being positioned to register with said openings to present a different location of said different symbols in each of said angular positions whereby the same whole number of equal numbers of matched ones of said symbols is in register with said openings in each position of said disc, and game pieces for covering all of said openings to conceal the symbols registering therewith.

3. A game apparatus comprising a board having a plurality of window openings therein arranged in concentric circles, the outermost circle having twice as many openings as each of the other circles and said openings being spaced equally in their respective circles, a disc mounted below said board for rotation about the axis of the common center of said circles, means for selectively locating said disc in any one of a plurality of different predetermined angular positions about said axis with respect to said board, a multiplicity of symbols on said disc including a plurality of different symbols and consisting of a plurality of sets each consisting of the same whole number of equal numbers of matching ones of the symbols and each set having said symbols in a different random arrangement, the number of said window openings being said equal number times the number of different symbols, said symbols being arranged in concentric circles corresponding to the concentric circles of said openings and the outermost circle containing twice as many symbols as each of the inner circles, said symbols of each set being positioned to register with said openings to present a different location of said different symbols in each of said angular positions whereby the same whole number of equal numbers of matched ones of said symbols is in register with said openings in each position of said disc, and game pieces for covering all of said openings to conceal the symbols registering therewith.

4. A game apparatus comprising a board having a plurality of window openings therein arranged in concentric circles, there being an odd number of circles, all but the outermost circle having the same number of openings and the outermost circle containing twice as many openings as one of the others, a disc mounted below said board for rotation about the axis of the common

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center of said circles, means for selectively locating said disc in any one of a plurality of different predetermined angular positions about said axis with respect to said board, a multiplicity of symbols on said disc arranged in circles corresponding to the circles of said openings, the total number of symbols including a plurality of different symbols and consisting of the same number of each different symbol as the number of circles plus one, the total number of said window openings being a whole multiple greater than one of the number of different symbols, said symbols being positioned to register with said openings in arrangements each presenting a different random location of said different symbols in each of said angular positions and each presenting the same number of equal numbers of each symbol, and game pieces for covering all of said openings to conceal the symbols registering therewith.

5. A game apparatus comprising a board having a plurality of window openings therein arranged in concentric circles, the openings in each circle being equally spaced about the circle and the openings in adjacent circles being in staggered relationship, a disc mounted below said board for rotation about the axis of the common center of said circles, means for selectively locating said disc in any one of a plurality of different predetermined angular positions about said axis with respect to said board, a multiplicity of symbols on said disc including a plurality of different symbols and comprising a plurality of sets of symbols each consisting of an equal number of matching ones of the symbols, the number of said window openings being said equal number times the number of different symbols, said symbols being arranged in equal spacing in each circle and the number of symbols being a whole multiple of the number of openings in said board, said symbols of each set being positioned to register with said openings to present a different location of said different symbols in each of said angular positions whereby the same whole number of matched

ones of said symbols is in register with said openings in each position of said disc, and game pieces for covering all of said openings, to conceal the symbols registering therewith.

6. A game apparatus comprising a board having thirty-six window openings therein arranged in concentric circles, the inner four circles including six equally spaced openings and the outermost circle twelve equally spaced openings, a disc mounted below said board for rotation about the axis of the common center of said circles, indicia on said board and disc for selectively locating said disc in any one of eighteen different predetermined angular positions equally spaced about said axis with respect to said board, a multiple of thirty-six symbols on said disc arranged in concentric circles corresponding to those of the openings and there being a multiple of six symbols in each of the inner circles and a multiple of twelve symbols in the outermost circle, said thirty-six symbols consisting of eighteen matched pairs of symbols each pair being of a different symbol, said multiple of thirty-six symbols comprising a plurality of sets of said thirty-six symbols, the symbols of each set being arranged differently at random from those of the other sets and corresponding in position to said openings, said sets of symbols being arranged to register with said openings to present a different location of the matched pairs of said symbols in each of said angular positions, and game pieces for covering all of said openings to conceal the symbols registering therewith.

References Cited

UNITED STATES PATENTS

1,265,497	5/1918	Parker	273—134
2,545,415	3/1951	Podd	273—135
2,896,951	5/1959	Snow	273—135 X
3,195,896	7/1965	Markham	273—135

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