

United States Patent

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[54] CUBE GAME
2 Claims, 8 Drawing Figs.

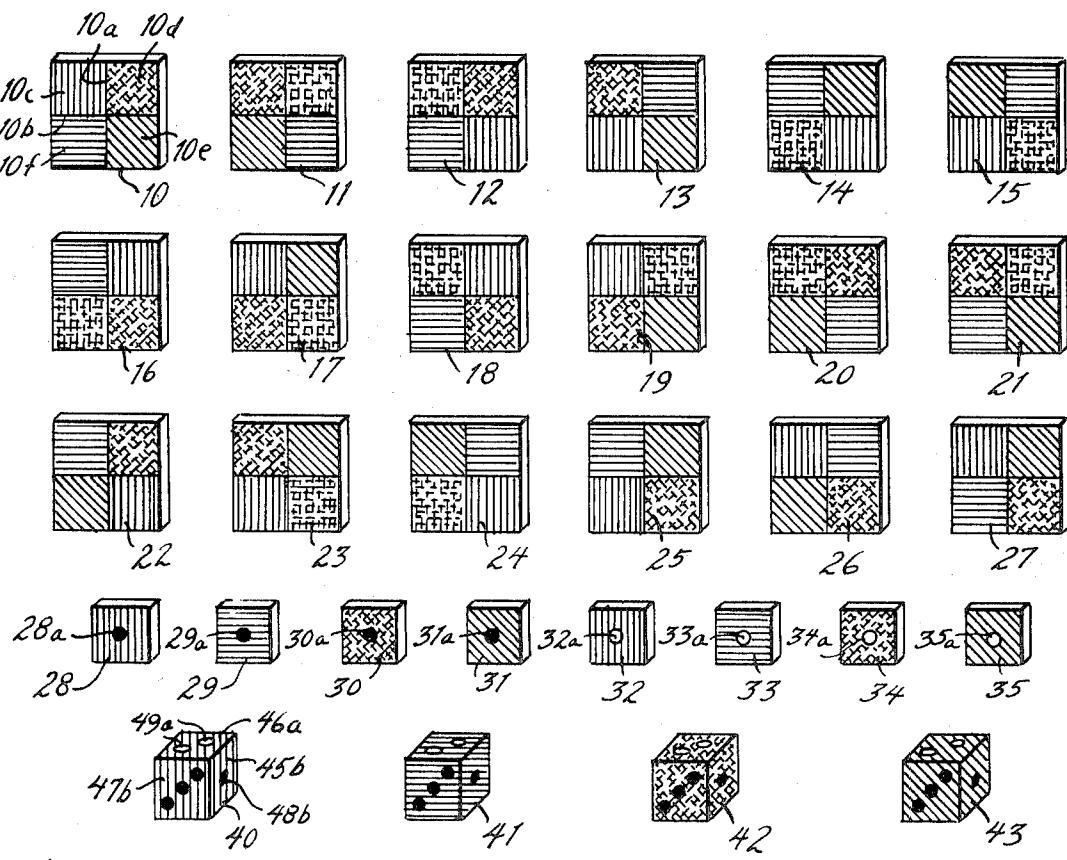
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273/132, 273/153 R
[51] Int. Cl. A63f 3/02,
A63f 9/06
[50] Field of Search 273/131,
134, 153, 132

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ABSTRACT: A game construction wherein a playing surface is marked to provide a plurality of congruent, contiguous squares, and playing pieces are provided, each being of cubical configuration with its faces each congruent to the playing surface squares for aligned superposition on a respective square and selective rolling into aligned superposition on a contiguous square, the playing piece faces and the playing surface squares being provided with characteristic markings of corresponding form, and the playing piece face markings being one or more in number.



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SHEET 1 OF 2

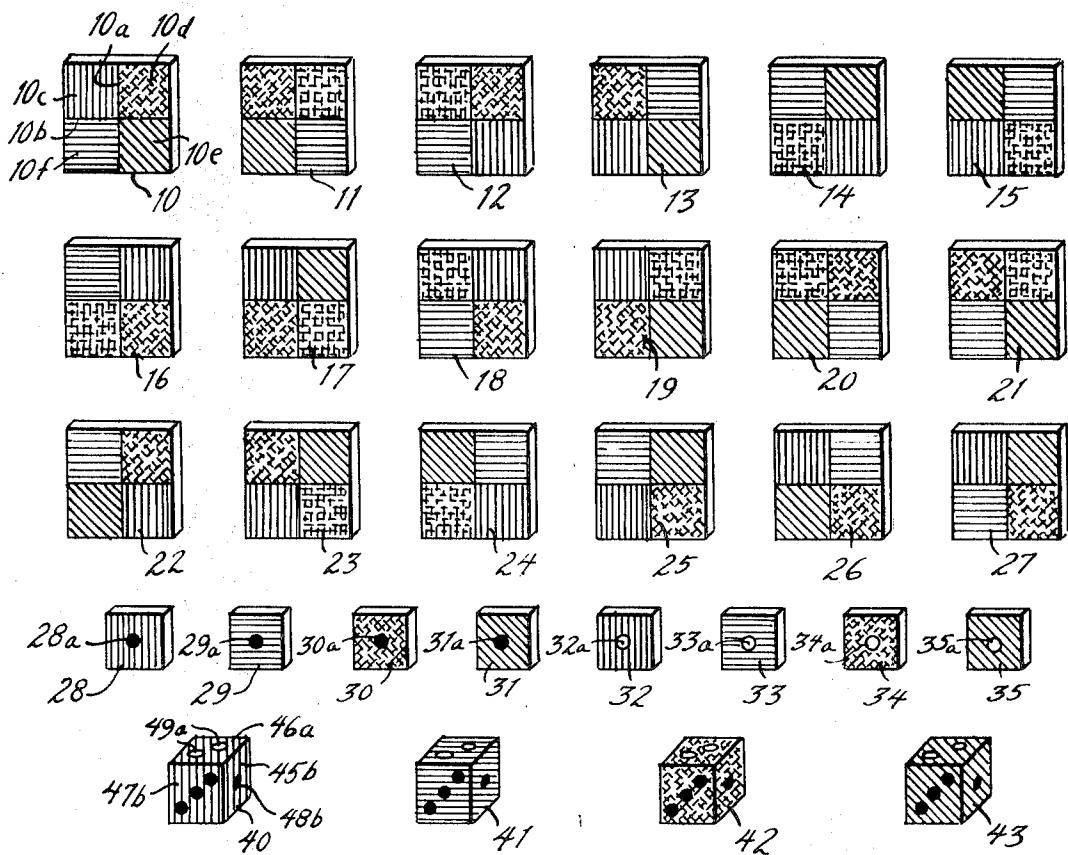


Fig. 1

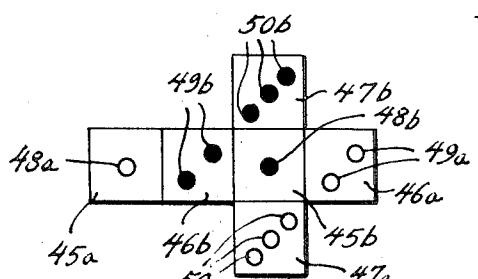


Fig. 2

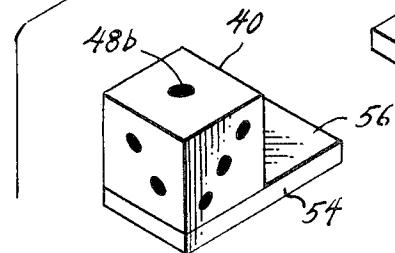
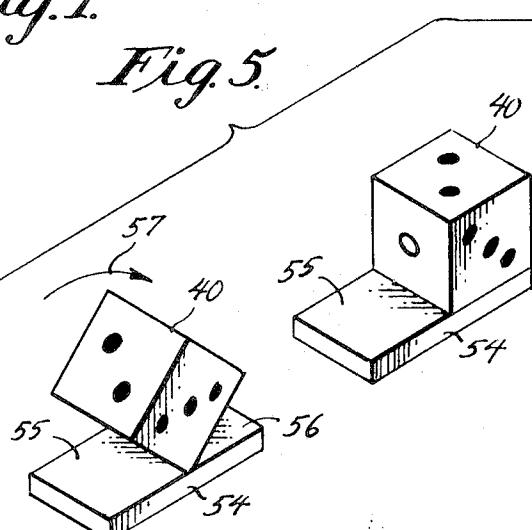


Fig. 5



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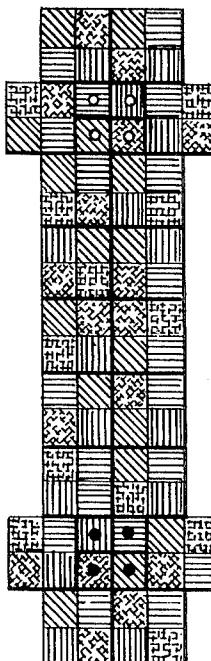


Fig. 4.

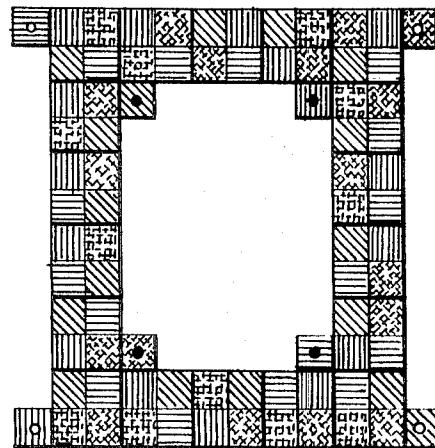


Fig. 3.

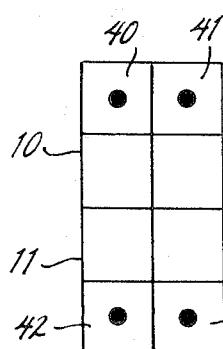
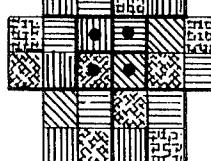


Fig. 7.

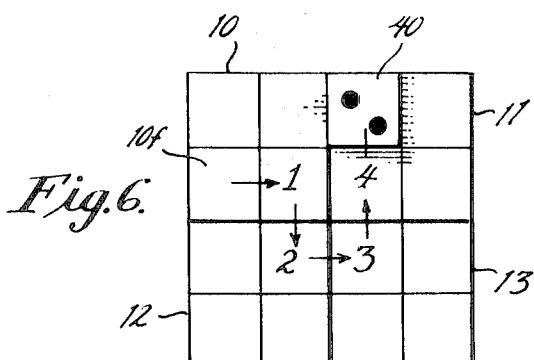
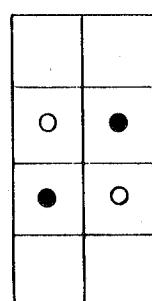
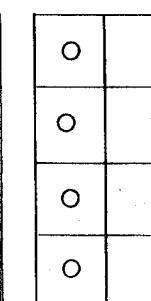
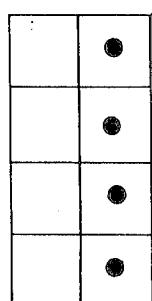
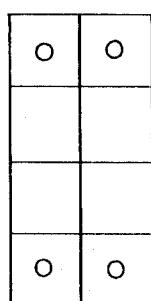
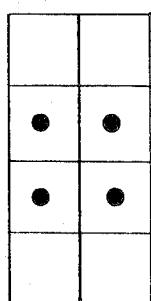


Fig. 6.

Fig. 8.



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CUBE GAME

SUMMARY OF THE INVENTION

It is an important object of the present invention to provide a game or puzzle which is extremely simple in construction, requiring but relatively inexpensive parts, which parts are capable of assembly and use in an extremely wide variety of games and puzzles, so that an extremely long span of interest is exhibited by persons of all ages.

It is more particular object of the present invention to provide a game construction of the type described which is capable of intriguing entertainment for the entire family, serving to utilize, exercise and enhance powers of reasoning and observation, as well as pattern perception and spacial relations concepts.

It is more particular object of the present invention to provide a unique game construction wherein the playing surface is composed of a plurality of board pieces adapted to be arranged in a multitude of different relationships, so that even a single game becomes novel upon being played on effectively different playing surfaces.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings, which form a material part of this disclosure.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts, which will be exemplified in the construction hereinafter described, and of which the scope will be indicated by the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view showing a number of component parts adapted to be employed in the instant game construction.

FIG. 2 is a development of the exterior surface of a cubical playing piece of FIG. 1.

FIG. 3 is a plan view showing one pattern of playing surface of the present invention.

FIG. 4 is a plan view showing another pattern of playing surface of the present invention.

FIG. 5 is a perspective view illustrating the procedure of playing piece movement of the playing surface, illustrating successive stages thereof.

FIG. 6 is a diagrammatic plan view illustrating the manner of playing piece movement between spaced locations of the playing surface.

FIG. 7 is a plan view illustrating a starting condition of a puzzle of the present invention.

FIG. 8 is a plurality of plan views illustrating several possible final conditions of the puzzle of FIG. 7.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now more particularly to the drawings, and specifically to FIG. 1 thereof, there are illustrated therein a plurality of rectangular or square board pieces or tiles, which may be advantageously fabricated on any suitable flat sheet material, and are respectively designated 10-35.

The board pieces or tiles 10-27 are relatively large, each being square and subdivided into four equal size or congruent squares. For example, the playing piece or tile 10 is subdivided by a pair of linear markings or lines 10a and 10b, each extending in equally spaced parallelism between an opposite pair of side edges of the board piece 10 and disposed at right angles with respect to each other, so as to subdivide the board piece 10 into equal sized congruent squares 10c, 10d, 10e and 10f. The relatively large board pieces or tiles 10-27 are all essentially identical to the board piece or tile 10, being subdivided by a pair of linear markings or lines each extending in equally spaced parallelism between a respective opposite pair of side edges of the associated board piece, intersecting at right angles to each other and subdividing the board piece into four equal size, congruent squares.

Further, the square subdivisions or squares of each tile or board piece 10-27 are of different colors. That is, no two or more squares of a particular tile or board piece 10-27 are of the same color. For example, in the tile piece 10 the square 10c is red, the square 10d being orange, the square 10e green and the square 10f being blue. Similarly, each of the remaining board pieces or tiles 11-27 is subdivided into four different color, congruent squares. However, no two board pieces or tiles 10-27 have the same combination and arrangement of colored squares.

In addition, the tiles or board pieces 28-35 may also be of rectangular or square outline configuration, each being smaller than the first described board pieces or tiles. More specifically, the small board pieces or tiles 28-35 are each of a size and shape congruent to the subdivisions or squares of the relatively large board pieces or tiles 10-27. The small square board pieces or tiles 28-31 are each provided, say centrally on one face thereof, with a single characteristic marking, say a solid spot, as at 28a, 29a, 30a and 31a, respectively, or other suitable single characteristic marking. The several small board pieces or tiles 28-31 are each further marked in a different or distinctive color, for example the tile 28 being red, the tile 29 blue, the tile 30 orange and the tile 31 green. Hence, each of the tiles 28-31 is distinctive.

The additional small tiles 32-35 are each square and of a size congruent to the small tiles 28-31 and the square subdivisions of the large 10-27. Provided on each of the small tiles 32-35, say centrally thereof, is a single characteristic marking, such as an open dot or circle, being respectively designated 32a, 33a, 34a and 35a. Of course, other suitable single characteristic marking may be provided on each of the several board pieces or tiles 32-35, if desired. Additionally, the several tiles or board pieces 32-35 are marked with different distinguishing colors, say tile 32 being red, tile 33 being blue, tile 34 being orange and tile 35 being green.

It will now be appreciated that each of the plurality of board pieces or tiles 10-35 is distinctive or different from the remaining tiles, as by the color or other characteristic markings thereof.

In addition to the tiles, the equipment of the instant game includes a plurality of playing pieces, as at 40, 41, 42 and 43. Each of the playing pieces 40-43 is of cubical configuration, and further each playing piece has each of its fixed square faces congruent to the smaller tiles 28-35, and congruent to the square subdivisions or squares of the larger tiles 10-27.

The playing pieces or cubes 40-43 are all provided on their several square faces with spots, dots or other suitable characteristic markings, which may be identical to each other. The external surface of a single playing piece 40 has been developed in FIG. 2, there being designated 40', and may be essentially identical to a development of each of the remaining playing pieces. It will there be seen that the development illustrates a first pair of opposite faces 45a and 45b, a second pair of opposite faces 46a and 46b, and a third pair of opposite faces 47a and 47b. The opposed pair of faces 45a and 45b are each provided with a single characteristic marking, such as a single open spot or circle 48a of square or face 45a, and a single closed spot or dot 48b of square or face 45b. A pair of open spots or circles 49a are marked on face 46a, while the opposite face 46b is provided with a pair of closed circles or dots marked thereon, as at 49b. Further, the opposite faces 47a and 47b are respectively provided with three open dots or circles 50a, and three closed dots or circles 50b.

As described above, the several playing pieces 40, 41, 42 and 43 may be identical. However, by way of distinguishing the several playing pieces from each other, they are characteristically marked with different colors, for example playing piece 40 being red, playing piece 41 blue, playing piece 42 orange and playing piece 43 green.

Having the hereinbefore described game construction, a variety of games may be played. Further, the games may be played by the same rules, but be inherently different by virtue of the playing surface being differently assembled. For example, as in FIGS. 3 and 4, a game of the same rules may apply.

Each of two, three or four players uses a single cubical playing piece or cube, in play of a game on the playing surface of either FIG. 3 or FIG. 4. Also, additional configurations of playing surfaces may be employed as by imaginative rearrangement of the board pieces or tiles 10-35.

A primary objective of the game employing the game surface of FIG. 3 or 4 is for the player to move his playing piece from the correspondingly colored square or tile 32-35 to the correspondingly colored square or tile 28-31. In the playing surface patterns of FIGS. 3 and 4, the colors of board pieces or tiles 10-27 are not critical and need not be as illustrated. However, the arrangement of colored board pieces or tiles 28-35 is preferred.

Initially, each player tosses his playing piece, and then places it in the matching color start tile 32-35 with the spots tossed facing upwardly.

The players may take turns, as by a predetermined order of colors, and each player may move a number of squares equal to the sum of all the displayed spots of the same character or color on his and the other cubes. For example, if the red playing piece 40 is first, and shows two open spots or circles upwardly having been tossed, while the playing piece 41 shows three dots upwardly, the playing piece 42 showing one circle upwardly, and the playing piece 43 showing three open spots or circles upwardly, the red playing piece would move $2 + 3 + 1$, or 6 squares on his turn.

The manner of a playing piece moving on a playing surface is critical to the instant game construction, and is illustrated in FIG. 5. It is there shown that a playing piece, say cubical piece 40, is resting with a single black spot or dot 48b upwardly. In this condition, the playing piece 40 rests on a playing surface 54 having squares 55 and 56. In the initial, leftward condition illustrated in FIG. 5, the playing piece 40 rests congruently on the square 55 of board piece 54, which square is contiguous to square 56. In order to move one square, the playing piece 40 must be rolled, say in the direction of arrow 57, to a contiguous square 56, as illustrated in the final, rightward condition of FIG. 5. Of course, the playing piece 40 may be rolled in any of four directions to any one of four contiguous squares, as desired.

The movement of a playing piece five squares as illustrated in FIG. 6, a playing surface there being composed of board pieces or tiles 10, 11, 12 and 13 in adjacent relation with each other. An initial location of a playing piece 40 is illustrated at square 10f, from which the playing piece is rolled to the square designated 1, thence being rolled to the square designated 2, thence being rolled to the square designated 3, thence being rolled to the square designated 4, and thence being rolled to the position of playing piece 40 as illustrated.

The players continue to take turns rolling their playing pieces in the manner described above, a player being allowed to roll his playing piece into any empty adjacent or contiguous square except the one from which it started, or just left. Unless blocked by another playing piece, a player must always roll his playing piece his full number of squares, and his turn ends when he has rolled the proper number of squares or is blocked. If a player can end his turn with his playing piece on a square of the same color as his playing piece, and with the black spots or dots up, he may then change places with any other playing piece having any number of black spots up. If he ends his turn on a yellow square with the hollow spots or circles up he may send any other playing pieces with the same number of hollow spots or circles up back to the starting position. The playing pieces are maintained in their original

directions or orientations when being changed or sent back to start.

The first player to roll his playing piece into the end square, or the square with a black spot or dot of his respective color, is 5 the winner. One player's playing piece may not be rolled into or through another player's end or finish square. Also, in order to win a playing piece must land in its proper end square in the exact number of squares the playing piece is to roll on its turn.

A wide variety of games and puzzles may be played with the 10 instant game structure, such as arrangement of tiles 10-27 to form symmetrical color designs.

Additionally, the apparatus of the instant game may be employed to provide attractive puzzles as shown in FIGS. 7 and 8. For example, FIG. 7 may illustrate a pair of tiles or board pieces, say 10 and 11 arranged in adjacent side-by-side relation 15 to form a playing surface two squares wide and four squares long. The playing pieces 40, 41, 42 and 43 are located in the outer four corner squares, each with a single black dot or spot upwardly. The object of a puzzle of this type is then to 20 rearrange the playing pieces 40-43, by rolling the playing pieces as described hereinbefore, into a selected one of a patterns or designs shown in FIG. 8. The playing pieces may not be moved other than by the rolling into a contiguous square, as described hereinbefore. Of course, other puzzles may be 25 utilized, limited only by the player's imagination.

From the foregoing, it is seen that the present invention provides a game construction which fully accomplishes its intended objects and is well adapted to meet practical conditions of manufacture, distribution and use.

Although the present invention has been described in some 30 detail by way of illustration and example for purposes of clarity of understanding, it is understood that certain changes and modifications may be made within the spirit of the invention.

I claim:

1. A game construction comprising a playing surface, said playing surface being provided with a pair of groups of parallel equally spaced line markings defining a plurality of congruent squares in contiguous relation with each other, and a plurality of cubic playing pieces each having its faces congruent to said 35 squares for conforming superposition of each playing piece on a respective square and selective rolling of the playing pieces into conforming superposition on contiguous squares, said playing pieces each being provided on two faces thereof with distinguishable respective single characteristic markings, a first plurality of said squares being provided with a single characteristic marking corresponding to a respective one of said two playing piece faces to define a starting location for receiving a respective playing piece with said one face upwardly, a second plurality of said squares each being provided 40 with a single characteristic marking corresponding to the other of said two playing piece faces to define a finish location for receiving a respective playing piece with said other face up, the remaining faces of said playing pieces being provided with plural characteristic markings of the same form as the 45 said single characteristic markings for upward presentation to indicate by addition of upwardly presented markings the number of contiguous space rolls of each player's playing piece.

2. A game construction according to claim 1, said playing 50 pieces each additionally being of a characteristic color, and each of said first and second plurality of squares being of a respective one of said colors, to determine the respective start and finish squares of each playing piece.