S. B. REEDER.

GAME APPARATUS.

APPLICATION FILED OCT. 18, 1912.

1,068,449.

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Fig. 1.

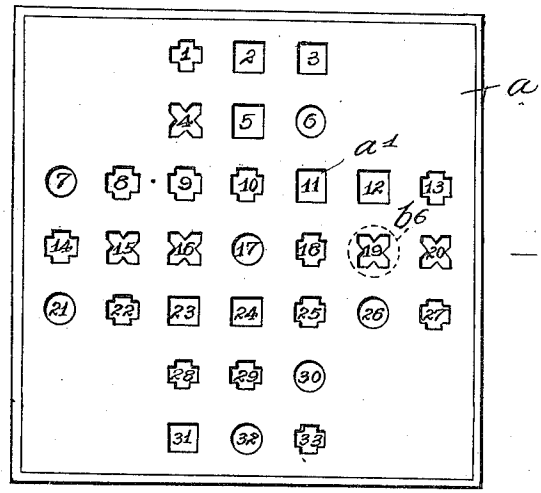


Fig. 2.

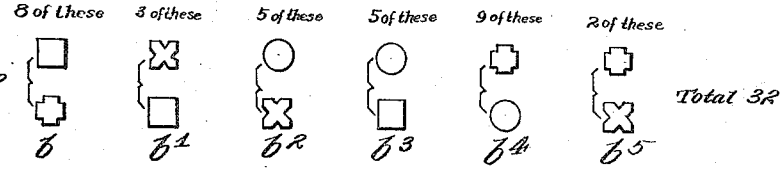


Fig. 3.

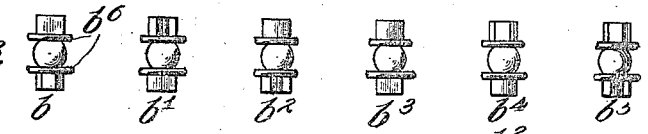


Fig. 4.

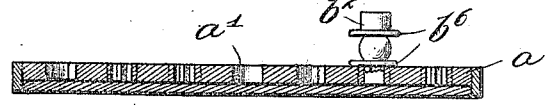


Fig. 5

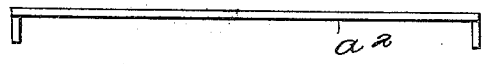
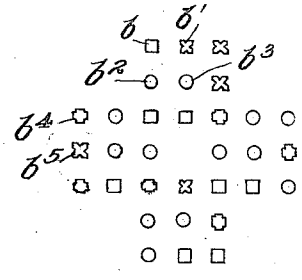


Fig. 6.



WITNESSES

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GAME APPARATUS.

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To all whom it may concern:

Be it known that I, SAMUEL B. REEDER, a citizen of the United States, and residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Game Apparatus, of which the following is a specification.

My invention relates to improvements in game apparatus and has particular relation to that class employing a board over which playing pieces or men are adapted to be moved.

The objects of my invention are to provide an apparatus which may act in the nature of a puzzle, the solution of which is obtained by manipulating the playing pieces in a predetermined order; to provide an apparatus in which the playing pieces are formed to enable either end to be used, with the board provided with configurations complemental to both ends of the pieces, thereby restricting the moves of the playing pieces; and to provide an apparatus which will not only require study to solve the puzzle but which will be amusing to the manipulator or onlookers.

To these and other ends, the nature of which will be readily understood as the invention is hereinafter discussed, my invention consists in the improved construction and combination of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

In the drawings, in which similar reference characters indicate similar parts in each of the views: Figure 1 is a plan view of one form of the board forming part of my apparatus. Fig. 2 is a collective diagrammatic view showing the configuration of the ends of the several playing pieces used in connection with the board of Fig. 1. Fig. 3 is a side elevation of the several pieces referred to in connection with Fig. 2. Fig. 4 is a sectional view showing the general idea and illustrating one way in which the board may be arranged, the section being on line 4—4 of Fig. 1. Fig. 5 is an end view of a different form of board, and, Fig. 6 is a diagrammatic view showing the initial arrangement of the playing pieces on the board required to provide a solution of the puzzle.

The main feature of the board portion of the apparatus is the arrangement and configuration of the positioning means for the playing pieces. I prefer to provide actual depressions or sockets to receive the pieces, but the manner in which these are provided is immaterial. For instance, the board may be made as shown in Figs. 1 and 4, wherein the board is indicated at —*a*—, and in which the construction is such as to form sockets —*a'*—. It will be obvious, however, that a similar result in the playing of the game will be provided by the use of a plate —a^2— through which openings the equivalent of the sockets —*a'*— extend, the openings or the formation of sockets either by a construction such as shown in Fig. 4 or by simply providing recesses within a board, being considered as equivalents, the term sockets employed herein being intended to include any form of construction which will permit of the seating of the playing piece in a manner to practically prevent promiscuous movement of the playing pieces about the board.

As shown in Fig. 1, the sockets —*a'*— are preferably arranged in rows which intersect each other at right angles, the configuration of the sockets as an entirety resembling a Greek cross, the drawings showing three parallel vertical rows and three parallel horizontal rows, each row having seven sockets, the total number of sockets being 33. As shown in Fig. 1, I preferably form the sockets with various configurations, the present form showing the use of four different configurations, these configurations being arranged in a pre-determined form in the present instance in order that the game may be restricted to a solution only by one prescribed form of manipulation.

The playing pieces or men, indicated in Figs. 2 and 3, as —*b*—, —*b'*—, —b^2—, —b^3—, —b^4—, and —b^5—, are preferably in the form of double ended pieces, the ends being adapted to enter the sockets —*a'*—, the two ends of a piece being of a configuration complemental to two sockets of different configuration; I preferably provide a flange —b^6— for each end of the piece, these flanges being of a size to preferably cover the socket when the piece is in posi-

tion. As will be readily understood, and as shown in Figs. 2 and 3, this particular way of forming the pieces permits of the employment of a number of combinations, and it is in this respect that there is a particular coöperation between the board and the playing pieces. As shown in Fig. 2, the pieces are duplicated in desired numbers, the particular arrangement of the board shown preferably employing the number of each type indicated in said Fig. 2, the total number of pieces being one less than the number of sockets in the board.

The preferred form of manipulating the game disclosed herein is along the lines of the game of checkers, the movements of the pieces, however, being restricted to the jumping of a piece with the direction of jumping movement confined to the direction of length of the rows, it being understood that the pieces may move along the short or the long rows, but not diagonally.

As the number of pieces is one less than that of the board, and the pieces have their ends of different configuration, it will be readily understood that while the pieces must be seated in the sockets with complemental configurations, the board thus indicating the general arrangement in which the pieces are placed, the opposite ends of the pieces which thus become exposed differ from the arrangement shown in the board, so that the selection of pieces when the latter are placed in position is of importance, an incorrect placing practically rendering it impossible to solve the puzzle, and this fact constitutes the first portion of the puzzle. In Fig. 6, is shown the manner in which the exposed ends of the pieces must be arranged initially in order that the puzzle may be successfully worked. The placing of the pieces however, does not constitute the entire puzzle, since they must be manipulated in pre-determined order and in pre-determined directions in order to provide the final successful outcome. For the purpose of explaining this, I will give the successive movements of the pieces, it being understood that the pieces are initially placed so as to leave the central socket blank, and the puzzle is to provide successive jumps in such manner that the last jump will carry the remaining piece into said central socket. For the purpose of illustrating the successive movements, I have indicated the sockets by successive numerals. In the following table, I give the successive movements (the first numeral indicating the socket from which the piece is being moved, while the second numeral indicates the socket to which the piece is to be moved), and also give the socket from which the piece is thereby eliminated by being jumped, those numerals which are followed by bracketed numerals indicating the socket from which the piece is eliminated and also the socket originally occupied by the piece so removed.

No. of move.	*Move.*	*Piece eliminated.*
1	29—17	24
2	22—24	23
3	31—23	28
4	24—22	23 (31)
5	26—24	25
6	17—29	24 (26)
7	32—24	29
8	33—25	30
9	24—26	25 (33)
10	27—25	26 (32)
11	18—30	25 (27)
12	13—27	20
13	12—26	19
14	27—25	26 (12)
15	30—18	25 (13)
16	10—12	11
17	3—11	6
18	18—6	11 (3)
19	1—3	2
20	3—11	6 (18)
21	12—10	11 (1)
22	9—1	4
23	7—9	8
24	16—4	9 (7)
25	1—9	4 (16)
26	10—8	9
27	21—7	14
28	7—9	8 (10)
29	22—8	15
30	8—10	9 (21)
31	5—17	10 (22)

As will be seen, some of the moves require a reversal of the piece while others do not have such requirement, each piece therefore being capable of moving to two sockets, thus requiring a selection as between which end is to be employed.

As will be obvious, the particular configuration of the sockets and of the ends of the pieces is such that there is a suggestion as to the succeeding move where it is known which piece is to be moved, and this aids somewhat in the playing of the game, although the question of which end is to be employed requires selection. This will be indicated from the showing of Fig. 6 with respect to the first move indicated in the above explanation. The piece of either of sockets 5, 15, 19 or 29 may provide the first move, the exposed end of these pieces being of the same configuration with that of the open socket 17; while this apparently permits of the use of either one of four moves as an initial move, it will be found that none will provide the result with the exception of that starting from socket 29.

While I have shown a particular arrangement of sockets as well as a particular configuration of the sockets, it will be understood that I do not limit myself to either this particular arrangement or to the par-

ticular form of socket configuration, the essential being that the board have sockets of different configuration and the playing pieces have complemental configurations to provide a selection between sockets, the piece configuration being complemental to that of the sockets so that there is a restriction as to movement of a piece but at the same time providing for a selection and suggestion in moves. As heretofore pointed out, the particular form of the board is immaterial, and the playing pieces can also be provided in any desired form so long as they possess the characteristics herein noted.

Having thus described my invention, what I claim as new is:—

1. Game apparatus comprising a board having a plurality of independent configurations adapted to indicate the location of playing pieces, said configurations being arranged in geometrical order and being differentiated to provide at least two series, and playing pieces adapted to coöperate with and render all of said configurations active in the playing of the game, each piece carrying configurations complemental to two board configurations of different series.

2. Game apparatus comprising a board having a plurality of sockets arranged in geometrical order, said sockets having at least two series of differentiated variations, and playing pieces adapted to coöperate with the sockets in the playing of the game, each piece carrying configurations complemental to two sockets of different configuration.

3. In game apparatus, a board having a plurality of sockets arranged in geometrical order, said sockets having at least two series of configurations differentiated by contour.

4. In game apparatus, a playing piece having ends adapted to be received by a game board, said ends having cross-sectional contours differing one from the other, whereby either end may become active as a support for the piece during the playing of a game.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL B. REEDER.

Witnesses:
HORACE G. SEITZ,
A. M. WILSON.