United States Patent [19]

Hale

[11] **3,778,065**

[45] **Dec. 11, 1973**

[54] **THREE-PLAYER CHESS GAME APPARATUS**

[76] Inventor: **Norman L. Hale**, P.O. Box 246, Santa Cruz, N. Mex. 87567

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[52] **U.S. Cl.** ... **273/131 AB**, 273/131 F, 273/131 L, 273/131 KN

[51] **Int. Cl.** **A63f 3/02**

[58] **Field of Search** 273/131

[56] **References Cited**

UNITED STATES PATENTS

259,695	6/1882	Kingwill	273/131 F
3,533,627	10/1970	Deffenbaugh et al.	273/131 L
3,652,091	3/1972	Zubrin	273/131 B
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Primary Examiner—Delbert B. Lowe
Attorney—Harvey B. Jacobson

[57] **ABSTRACT**

A game apparatus consisting of a hexagonal, planar board comprising a plurality of equi-dimensional, contiguous, uniformly distributed hexagonal playing spaces thereon and three sets of chessmen adapted to be disposed on the board and to be moved thereover in accordance with the rules of the game. The board has a hexagonal periphery including three sides made up of eight playing spaces each and three sides made up of six playing spaces each. One-third of the spaces are of a first color, one-third of a second color, and one-third of a third color, and the spaces are so arranged that each space is completely surrounded by spaces of a different color. The sets of chessmen are differently colored and each includes nine pawns, two rooks, two bishops, two knights, a queen and a king.

4 Claims, 7 Drawing Figures

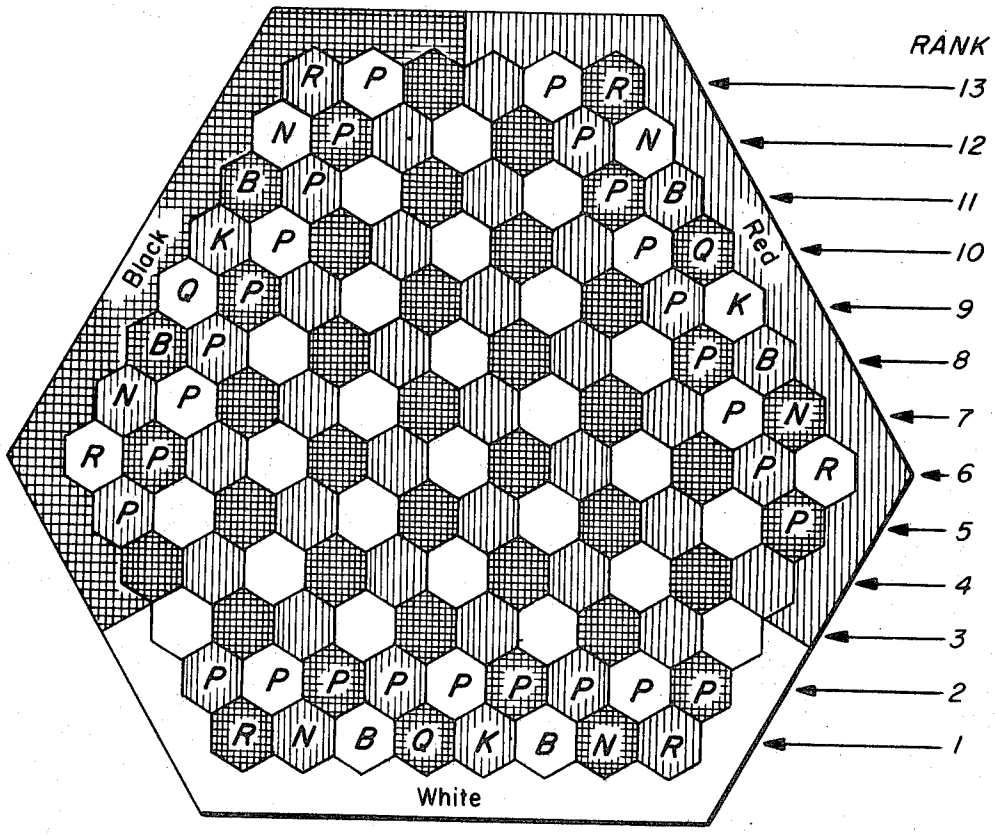


Fig. 1

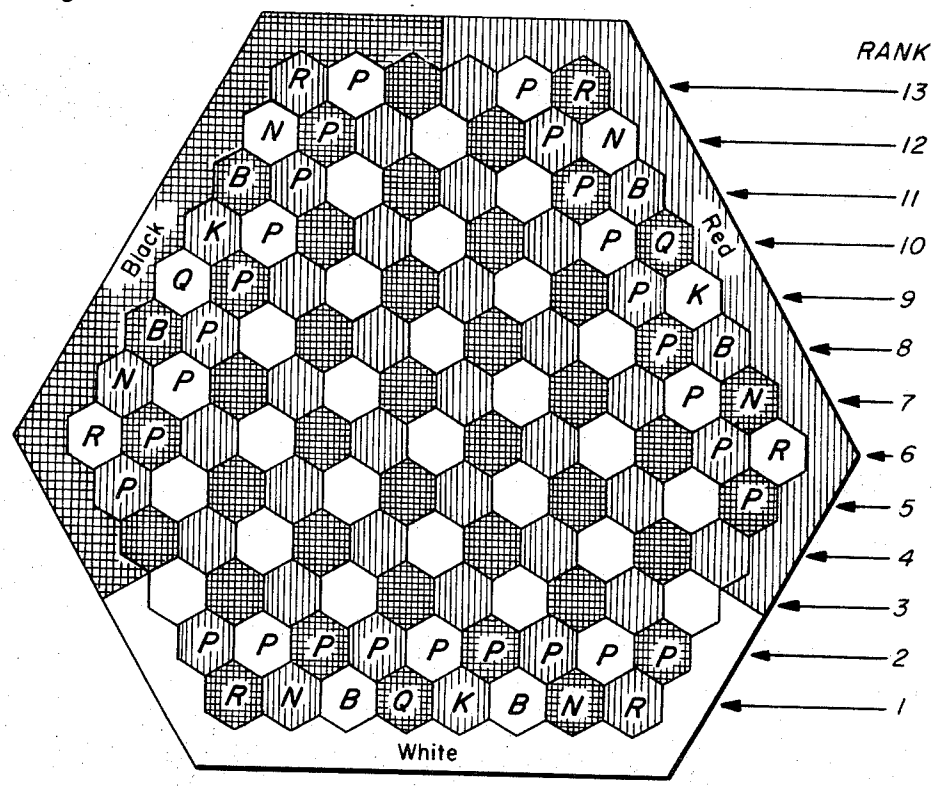


Fig. 2

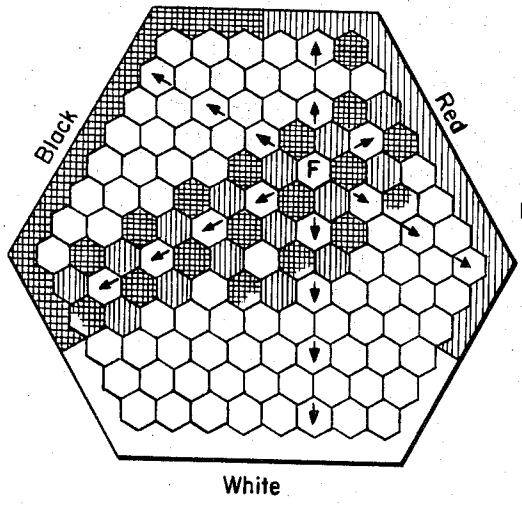


Fig. 3

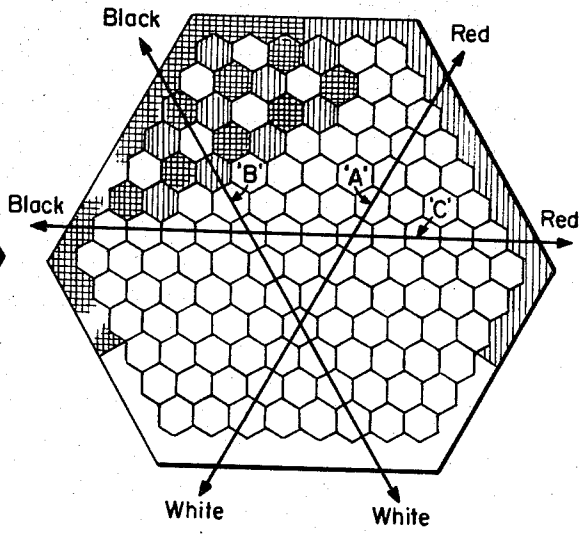


Fig. 4

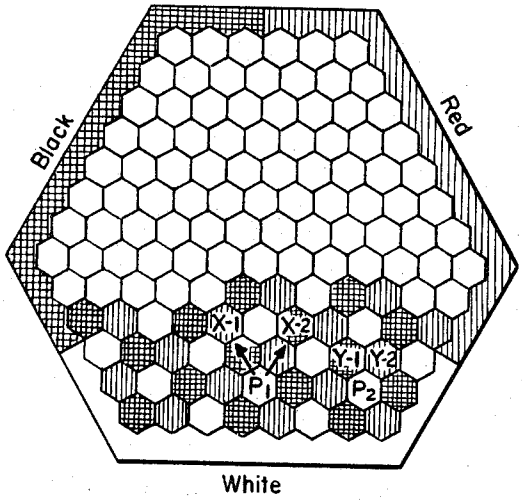


Fig. 5

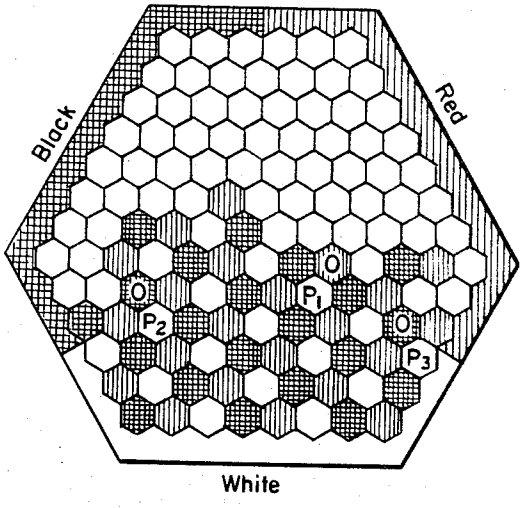


Fig. 6

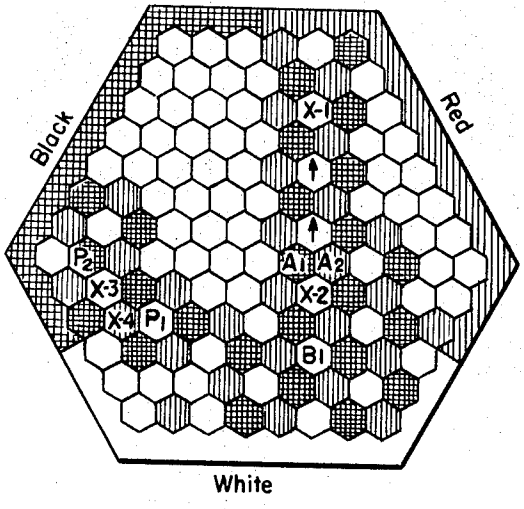
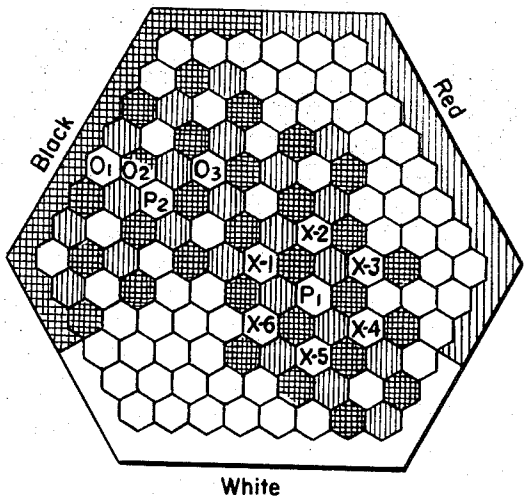


Fig. 7



THREE-PLAYER CHESS GAME APPARATUS

The present invention relates to a game apparatus and, more particularly, to a chess apparatus and game for three players.

A chess game which may be simultaneously played by three persons has heretofore been proposed. For example, an apparatus for such a game is disclosed in U.S. Pat. No. 3,533,627 wherein a hexagonal board having 142 equilateral triangular playing spaces thereon is used in conjunction with three sets of the conventional 16 chessmen.

It is therefore an object of the present invention to provide a chess game apparatus suitable for simultaneous play by three players.

It is another object of this invention to provide a chess game apparatus wherein the game board consists of a plurality of hexagonal playing spaces, which board is simple and easy to use and thereby contributes to the enjoyment of the game.

It is still another object of this invention to provide a chess game apparatus for use in conjunction with 17 chessmen of 6 different types, each different type of which has its own unique ability to move over a game board.

Other objects and advantages will beocme apparent from the following description and appended claims.

Briefly stated, in accordance with the aforesaid objects, the present invention provides a game apparatus comprising a hexagonal, planar game board having a plurality of hexagonal playing spaces thereon, a first color indicia marking one-third of said spaces, a second color indicia marking one-third of said spaces and a third color indicia marking the remaining one-third of said spaces. The apparatus further includes three sets of chessmen, each set consisting of nine pawns, two rooks, two bishops, two knights, a queen and a king. For ease of description, each chessman will be identified herein and in th drawings by the first letter of its name, except the knight which will be designated by "N."

The invention will be better understood from the following description taken in conjunction with the accompanying drawings.

FIG. 1 is a plan view of the game board of the present invention showing three sets of chessmen positioned thereon for the start of a game.

FIG. 2 shows, in schematic fashion, all possible diagonal movements of a chessman. FIG. 3 shows, in schematic fashion, the files of the game board of FIG. 1.

FIG. 4 shows the conventional movements of a pawn on the game board of FIG. 1 according to the rules of the three-player chess game.

FIG. 5 shows a situation on the game board of FIG. 1 in which a pawn's advance may be partially or completely blocked in accordance with the rules of the three-player chess game.

FIG. 6 shows situations on the game board of FIG. 1 in which (1) diagonal movement of a diagonally movable chessman may be blocked, and (2) a pawn may capture in passing, according to the rules of the three-player chess game.

FIG. 7 shows situations on the game board of FIG. 1 in which a pawn may attack and capture according to the rules of the three-player chess game.

Referring now to the drawings there is shown in FIG. 1 a three-player chess board which consists of a hexagonal playing surface containing a plurality of equidimensional, contiguous, uniformly distributed hexagonal olaying spaces thereon. Preferably the board contains 126 hexagonal playing spaces of which 42 are identified by marking with a first indicia, 42 are identified by marking with a second indicia and 42 are identified by marking with a third indicia. Preferably the indicia are different colors and may, in a particularly preferred embodiment, be the colors red, white and black. The hexagonal playing surface includes three sides consisting of eight playing spaces each and three sides consisting of six playing spaces each. Within the hexagon defined by these six sides the remaining hexagonal playing spaces are contiguously and uniformly distributed. The indicia are marked on the playing spaces and the spaces are arranged in such a manner that each playing space is completely surrounded by playing spaces marked with different indicia. Thus each red playing space is surrounded, in the particularly preferred embodiment, by black and white playing spaces only. For ease and clarity of description, the invention will be hereinafter described in connection with a game board marked with the color indicia red, while and black, it being understood however that the indicia useful in the present invention may constitute any identifiable markings whatsoever.

Each of the eight playing space sides is termed a base line or starting position for each player and, for convenience, each base line is identified by the indicia which appears in only two of the eight spaces. Thus, in the particularly preferred embodiment, as can be seen in FIG. 1, the white base line contains three red playing spaces, three black playing spaces and two white playing spaces. In like manner the red and black base lines contain two red and two black playing spaces, respectively. One preferred manner of distributing color indicia on the playing spaces is to arbitrarily select a base line, denominate it the white base line, and, commencing at the right edge of the base line and moving across it to the left, marking the spaces sequentially with the colors red-black-white-red-black-white-red-black. Having established the white base line in this manner, the remaining hexagonal playing spaces on the board may be marked by following the single rule that each playing space must be completely surrounded by playing spaces marked with a different color. FIG. 1 shows the game board of the present invention with each of the base lines identified and each of the hexagonal playing spaces marked with a single identifying color. It will be noted that the color arrangement is such that for each hexagonal playing space the matrix lines radiating outwardly from each of its six vertices connect directly to a playing space marked with the same color.

In order to more clearly describe the game board and the movements of the chessmen thereon, it is convenient to identify the rows of hexagonal playing spaces parallel to each base line as "ranks." As can be seen in FIG. 1, which identifies and numbers the "white" ranks, there are 13 ranks for each color.

The term "files" is applied to parallel rows of hexagonal playing spaces which connect one base line with another. Thus, as can be seen in FIG. 3, the letter "A" denotes the red-white or white-red file, "B" denotes the black-white or white-black file, and "C" denotes the black-red or red-black file. It will be apparent that each file is identified by the base lines which it connects.

"Diagonals" are the straight lines of connected hexagons, marked with like indicia, which are connected by the matrix lines radiating outwardly from te vertices of each hexagonal playing space on the board. FIG. 2 shows that for playing space designated "F" three diagonals pass therethrough, each diagonal extending through opposite vertices of the hexagon.

The playing pieces utilized with the game board of FIG. 1 include 17 conventional chessmen, i.e. the conventional 16-piece chess set plus an additional pawn. Thus each of the three complete sets of chessmen used in the three-player chess game includes nine pawns, two rooks, two knights, two bishops, one queen and one king. Each set is separately marked with an identifying indicia, preferably corresponding to the indicia of the chess board. In the particularly preferred embodiment the sets of chessmen are marked with the colors red, black and white to correspond to the red, black and white game board shown in FIG. 1. The power of each of the six different kinds of chessmen is reflected in its own peculiar ability to move over the board. The value of each chessman is also directly relates to its power over the entire playing surface. While, as hereinbefore indicated, chessmen in each of the three sets correspond to the conventional types of chessmen used in two-player chess games, these otherwise conventional chessmen move over the three-player game board in a unique manner.

As in conventional chess, the king is the major piece on the board and is always the tallest piece. Its power limits its use as an aggressive or attack piece. The king moves one hexagonal playing space at a time in any direction, along a file or a diagonal, thus giving it the ability to move to any one of 12 different positions. It may not move to a position attacked by an adverse piece or a position occupied by a piece of its own color. The value of the king is absolute and no numerical valuation applied since the loss of the king means loss of the game.

The queen is the most powerful piece on the board and is the second tallest piece. Its power derives from being able to move in any direction along straight lines of unoccupied hexagonal playing spaces, either along files or diagonals, and for any distance. The numerical value of the queen is nine as it has the ability to attack any position on the board.

The rook also has the ability to attack any position on the board, as dows the queen, but does not have the power to move diagonally. Its moves must be along the unoccupied files in a straight line. The numerical value of the rook is five.

The knight may move one position along any file and then change direction along another file for two positions. The angle thus formed must be open or obtuse. The knights are not hampered by any of the positions being occupied by another piece of any color except for the final position. It will be appreciated that the knight always terminates on a hexagonal playing space marked with a different color than the color of its starting space. The numerical value of the knight is three.

The bishop is limited to moving along diagonal lines only. It will be apparent from FIG. 1 that the bishops are initially positioned on playing spaces marked with colors matching the color of the set of chessman to which they belong, and, inasmuch as bishops are limited to diagonal movement, they will only move along playing spaces marked with their own color. The numerical value of the bishop is two.

The pawn is the shortest piece on the board. It moves only away from its own base line on either file. It may never move parallel to nor toward its own base line. On its initial move, it has the option of moving either one or two playing spaces in a straight line along either file. Thereafter, it may only move one position at a time. It may, however, change course. The numerical value of the pawn is one. As can be most clearly seen in FIG. 4, pawn P_1 may elect to move two positions on its initial move along either file to playing spaces designated X–1 and X–2. Alternatively, it may move only one position, as shown, whereby pawn P_2 may move to playing spaces designated Y–1 and Y–2.

A pawn's advance is said to be "blocked" when the adjacent hexagonal playing space along the shortest file to the nearest adverse base line is occupied by any other piece. A "blocked"pawn may not elect to move on the alternative file normally open to it. This situation is illustrated in FIG. 5 wherein adverse piece 0 is shown occupying the hexagonal playing space adjacent pawn P_1 along the shortest file, red-while, to the nearest adverse base line, red. Thus P_1 is blocked from advancing either along the red-white file or along its normally available alternative, the black-white file. In similar manner, adverse piece 0 blocks the movement of P_2 along either file. However, adverse piece 0 blocks pawn P_3 from advancing only along the black-white file but does not block its movement along the red-white file since adverse piece 0 is not positioned relative to P_3 along the shortest file to the nearest adverse base line, but rather along the longest file.

Blocking may also occur with respect to any piece which has the ability to move on the diagonal, e.g. the queen and the bishop. Such a piece is deemed to be blocked when two pieces on adjacent hexagons flank the diagonal along which it is moving. Thus, as shown in FIG. 6, bishop B_1 is blocked from moving along the indicated diagonal to position X–1 by the fact that it would have to advance between diagonal flanking pieces A_1 and A_2. However, B_1 may move to position X–2 on the same diagonal inasmuch as such a move will not require that it move between blocking pieces A_1 and A_2. If either one of the blocking pieces is moved, the diagonal is then open for further advancement.

All pieces except the pawn capture in the same way as they move. The capture is effected by displacing the adverse piece if an adverse piece stands on a hexagonal playing space that any other piece can normally move to, except for a pawn, the move captures it. The captured piece is removed from the board and the position it occupied is taken by its captor. The pawn alone has a different method of capture. It cannot attack a piece on either file to which it normally could move. Instead, if a piece is positioned on either file, as hereinbefore exaplined, movement of the pawn along either or both files may be blocked. Indeed, the pawn may not attack along a file. The pawn attacks and captures one space along any of the three diagonal positions comprising a move away from its own base line. In FIG. 7 white pawn P_1 may capture an adverse piece positioned on any of spaces X–1, X–2 or X–3. It may not capture a piece on spaces X–4, X–5 or X–6 since such a move would constitute a move toward its own base line. A blocked pawn retains the ability to capture any piece moving within the scope of its attack, thereby breaking the

block. Thus, referring again to FIG. 7, pawn P_2 may capture opposing pieces 0_1 or 0_3 notwithstanding the fact that opposing piece 0_2 would otherwise block movement of pawn P_2.

The pawn has still another peculiarity. Due to its ability to elect a 2-space initial move, it could conceivably avoid capture by an adverse pawn by electing to move two spaces instead of one, thereby moving past the position under attack by the adverse pawn. This situation is depicted in FIG. 6 wherein pawn P_1 has position X–3 under attack. Adverse pawn P_2, noting that position X–3 is under attack could elect an initial two-space move to position X–4 and thereby move past the position under attack by P_1. In order that no unfair advantage be realized by the choice of the two-space opening move, any pawn such as P_2 may be captured in passing (en passant) by pawn P_1 as if the opening pawn had moved only one space. Thus, if P_2 moves two spaces to position X–4, pawn P_1 may capture P_2 by moving to X–3 and removing the opening pawn P_2 from the board. Such a capture in passing must take place on the very next move available to P_1 after P_2 has elected the two-space move. Failure to exercise the privilege to capture in passing on the very next move following the two-space opening move, constitutes a waiver of the privilege.

The method of play is very much analogous to the rules governing conventional two-player chess. When the indicia are the colors white, red and black, as shown in FIG. 1, white moves first, followed by black and then red in a clockwise fashion. The object of the game is to effect the capture of both adverse kings. The capture, however, is never actually made. If either king is attacked and there is no way of escape, it is said to be checkmated. The conquering player then assumes command of the defeated king's remaining forces and proceeds to resume the attack on the remaining adverse king. Play then shifts to an alternation of moves and the combined forces are considered to be one. In the process of an attack on an adverse king, a player is required to announce that he has placed that particular king in "check" or the "check" cannot be considered valid. Due to the complexity of three-player chess, it is possible for a king to be inadvertently placed in "check" without either the attacker or the attacked being aware of it. Such a situation does not constitute a mis-play, nor require the board to be returned to the position when the inadvertent checking move was first made. It does mean, however, that whenever the attacking player realizes that the check has been placed, he must announce the check and then the checked player must parry the check on his very next move. It is also possible that a king may be placed in check by both adverse players, one following the other. However, the player first placing a king in check resulting in a checkmate is declared victor over the king and assumes command of the king's remaining pieces. At the time that a king is defeated and taken over, the defeated king ceases to be designated a king insofar as no additional check or checkmate may be placed against the defeated king. The defeated king becomes merely another piece in the command of the conquering player and retains the same ability to move and capture as any king. The defeated king can be used to check or checkmate the other king, or can even be allowed to be captured.

No player may resign from the game as long as all three players are still functioning on the board. However, in the opening stages of the game, a particular player may find itself so decimated in strength as to be virtually powerless to effect a checkmate. Such a player may elect to "declare neutrality" if the combined numerical values of his remaining pieces total eight or less, and providing that such player elects to declare neutrality in lieu of his very next move after becoming so weakened, and providing further that he is not in check by another player. If such a player does not declare neutrality immediately after totalling eight or less points, he loses opportunity to do so at a future time. Upon legally declaring neutrality, all remaining pieces belonging to the neutral player must remain fixed in the positions they occupied when neutrality was declared throughout the remainder of the game and can neither capture nor be captured. The neutral pieces have no further effect on the game other than that of being obstacles. The two remaining players then move alternately to determine the outcome of the game. After a player has been defeated or has legally declared neutrality, then either of the two remaining players may resign, at their own discretion, thereby ending the game, or they may continue to play until the outcome is decided by a final checkmate or a drawn game. A game may be drawn where: (1) there is not enough power in the remaining pieces to force a checkmate (lack of force); (2) the players agree to draw after each has completed his thirtieth move (agreement); (3) one player demonstrates that he can continually check the adverse king (perpetual check): and, (4) a player finds that he can make no legal move without placing his king in check although his king is not in check before the move (stalemate).

Castling is a move that can be made, if at all, only once in a game. It is actually a move of two pieces at once, the king and one rook. The move is legal only if both pieces stand on their original hexagonal playing spaces and neither has moved previously, if the two or three hexagonal playing spaces between king and rook are vacant, if the king is not in check, and if the two hexagonal playing spaces the king must cross are not guarded by an adverse player. Castling consists of moving the king two hexagonal playing spaces toward the rook and then placing the rook on the hexagonal playing space jumped over by the king. It will be appreciated that the purpose in castling may be to remove the king to a place of greater security behind unmoved pawns or to connect the rooks and bring them to central files that have been partially or wholly cleared by pawn advances.

Queening is the act of advancing a pawn to either adverse base line without it being captured. Upon reaching the adverse base line the pawn may be exchanged for a queen, rook, bishop or knight. Queening is legal even if the player still has his queen. There is no limit to the number of queens a player may have. If one adverse player has been defeated, the player who has control of the defeated player's pieces can only queen a pawn of either of the sets of chessmen under his control by advancing the pawn to the remaining adverse player's base line. The remaining opponent has the advantage of being able to queen a pawn at either of the adverse base lines. If one player has legally declared neutrality, no queening is permitted at the neutral base line.

While the present invention has been described with respect to particular embodiments thereof, it will be understood that numerous modifications can be made by those skilled in the art without actually departing from the scope of the invention. Accordingly, all suitable modifications and equivalents may be resorted to which fall within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A game apparatus for three-players comprising:

a. a hexagonal game board having a planar surface, a plurality of equi-dimensional, hexagonal playing spaces uniformly distributed over and occupying substantially the entire surface area of said board, three sides of said board consisting of eight adjacent playing spaces alternating with three sides of said board consisting of six adjacent playing spaces, first indicia on one-third of said spaces, second indicia on one-third of said spaces, and third indicia on one-third of said spaces, adjacent spaces having different indicia thereon and each space other than a space positioned on one of said sides totally surrounded by spaces having different indicia thereon, said spaces containing said first, second and third indicia being uniformly intermixed throughout said plurality of spaces; and

b. three sets of chessmen, each set having indicia thereon corresponding to one of said three indicia and consisting of 17 chessmen including nine pawns.

2. A game apparatus, as claimed in claim **1,** wherein said indicia are different colors.

3. A game apparatus, as claimed in claim **2,** wherein the right side playing space of each said eight playing space sides has a different color thereon.

4. A game apparatus, as claimed in claim **3,** wherein said board consists of 126 playing spaces.

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