

Chess with Mined Squares

Abstract

This patent relates to a variation of the game of chess. It would probably be played on an electronic board. The only difference to traditional chess is that some squares are mined. This means that pieces cannot then move to those squares. As a result, extra skills will be required to plan strategies and tactics round the mined squares. An element of chance will also be introduced as the mines can be hidden initially and then exposed only when a piece moves onto one. If the mines remain hidden, then memory is also required to remember which squares are mined.

Description of the Invention

Statement of Invention

This is a variation of chess that includes an element of chance. It would probably be played on an electronic board as part of a computer program. The game is essentially the same as traditional chess, with the same board and piece types. The rules are also the same, except for the fact that some of the squares are mined. These would probably be some of the squares in the central rows, from square a3 up to square h6. The player can specify how many squares are mined. The computer program then randomly selects the specified number of squares and marks them as being mined. You can then play against the computer or against another player on an electronic board. There are different options with regard to showing the mines or allowing moves onto them. It might be advisable to allow pawns to move to any square, whether mined or not. If pawns cannot move onto mined squares, then they will be blocked from moving (advancing) at all by a mined square. The other pieces can be allowed the first move onto the mined square, or be asked to make a different move when the mine is first exposed. The mines can be visible or hidden. If they are visible, then if you move a piece onto a mined square it is 'blown up' and immediately removed from the board. If the mines are hidden, then the first time that you move a piece to one of the squares you will expose and prime the mine. You will then be instructed to make a different move or be allowed to keep the move, depending on whether the first move is allowed. Once the mine is primed it can be made permanently visible, or hidden again so that the player must remember where the mines are. Once the mine is initially exposed however, whether it is made permanently visible or hidden again, any subsequent moves to the square will 'blow up' the piece that moves there and it will be immediately removed. If a piece is removed, then the player can be asked to make another move or forfeit his move altogether.

Advantages

This variation adds an additional skill level to the game of chess, because you must adjust your strategy and tactics to manoeuvre around the mined squares. If the player is allowed to move again when a piece is removed due to a mine, then this provides the possibility that he can purposely move onto a mined square to remove a piece, so as to open a file for another piece. This provides yet another tactic to consider that must also be covered by the opponent. There is also an element of chance as to which squares are mined, although some form of symmetry can be controlled by the computer. There is also an element of memory, if the mined squares remain hidden even when discovered.

An experienced player would normally plan complex strategy and tactics based on complete information. If a square suddenly becomes unavailable, this could spoil the whole plan. This might be considered to spoil the game. However, the player must now adjust for uncertainty, which will introduce new thought processes and change the whole dynamics of the game. In

speed chess it should be particularly enjoyable. The option to allow a piece to move onto the square when the mine is hidden would also allow the tactics, at least, to be more reliable and consistent.

Detailed Description

The new features and rules of the game are described below. These are additional to the traditional rules, pieces and board of the game of chess and do not change these in any way.

New Features

1. The novelty of this game is the fact that a specified number of squares are 'mined'.
2. This prevents pieces from moving to those squares, when they can then be immediately removed from the board.
3. The mines can be permanently hidden, permanently exposed, or hidden and then exposed.
4. Both strategy and tactics are affected, but possibly the game will become more strategic, as complex tactics could be spoiled if a certain square is not available.
5. An element of chance is entered into the game as the mines can be hidden initially.
6. Additional memory skills might be required to remember what squares are mined.

New Rules

1. The players decide how many squares should be mined.
2. The computer program selects the squares to be mined.
3. The players decide if the mines are always exposed, hidden then exposed, or always hidden.
4. The pawns will be called 'minor' pieces while the kings, queens, rooks, bishops and knights will be called 'major' pieces.
5. A pawn can move to any square, whether mined or not.
6. Any piece can safely capture any other piece on any square.
7. A move to an unexposed mined square will prime the mine but will not necessarily undo the move.
8. A major piece cannot move to a vacant mined and primed square.
9. There are two options for the major pieces moving to un-primed mined squares:
 - 9.1. Option 1 – If a major piece moves to the square this then primes the mine, the move is undone and the player must make a different move. If any major piece then moves to the square again it is removed from the board.
 - 9.2. Option 2 – If a major piece moves to the square this then primes the mine, but the move is still allowed. The major piece can stay on the square and any other piece can

safely capture that piece on the square. Once the square is vacated however, any other move to the square by a major piece will remove the piece from the board.

10. If the mine is hidden, then a move to the square can expose it permanently, or the players can be informed that the square is mined but the mine remains hidden. Then they have to remember that the square is mined so as not to move any other major piece to the square.
11. When a piece is removed because it lands on a mine, the player can either be allowed to make another move or forfeit his move altogether.

Examples

The drawings below are example chess positions that show how the new rules would alter the game. The examples below give different scenarios where the new rules apply. To represent the mines in black and white, exposed but un-primed mines are represented by the darker squares with a thin border, while exposed and primed mines are the darker squares with a thick border.

Example1 - The mines are always visible

This shows what the chessboard might look like when the mined squares are always exposed. The mines can be initially indicated in one colour, as shown by the darker squares with thin borders in Figure 1. This indicates their position, but shows that they are not primed. After a piece moves onto them, they can become primed and change into a different colour, as shown by darker squares with thick borders in Figure 2. Thus a pawn move onto the d4 square can prime the mine. Then any major piece moves onto the square will remove the piece.

Example2 - The mines are initially hidden and then exposed

Following shows an example of when a piece would be removed. In this example, the mines are initially hidden and then exposed when a piece lands on them. Figure 3 is a position at the start of the game. The square c3 has been mined. The player plays his knight to c3, as shown in Figure 4. The computer then indicates that this square is mined and orders the player to play a different move. The piece is replaced on its original square, as shown in Figure 5. If the player then moves to the same square again, as shown in Figure 6, the piece is automatically removed from the board, as shown in Figure 7.

Claims

1. This patent relates to a variation of the game of chess, the novelty being the fact that a specified number of squares are 'mined'.
2. The mined squares prevent pieces from moving to those squares, when they can then be immediately removed from the board.
3. Thus the novelty would probably require a computer program to play the game, but it would also change the thought processes of the game itself through new rules.
4. The new chess variation uses the same board, pieces and rules as the traditional game of chess, but then adds some new rules.
5. There are two players, usually called Black and White, with the standard 8x8 chessboard of alternating coloured squares and the standard pieces of king, queen, rook, bishop, knight and pawn.
6. The pawns will be called 'minor' pieces while the kings, queens, rooks, bishops and knights will be called 'major' pieces.
7. The mines can be initially hidden and then exposed when a piece moves onto them.
8. Alternatively, the mines can be made permanently visible.
9. Alternatively, the mines can be made permanently hidden, but a player is told when he moves onto one.
10. Any move onto an un-primed mined square will prime the mine but will not necessarily undo the move.
11. Pawns can move to any square whether mined or not.
12. If a piece can safely stay on a square, any other piece can safely capture that piece on the square.
13. If a major piece moves onto an un-primed mined square, one option is for the move to be undone and the player must make a different move.
14. If a major piece moves onto an un-primed mined square, the other option is for the move to still be allowed.
15. Once the mined square is primed and vacant however, any subsequent move to the square by a major piece will remove the piece from the board.
16. When a piece is removed because it lands on a mine, the player can either be allowed to make another move or forfeit his move altogether.
17. The player can play against the computer or against another player.
18. The player(s) decide how many squares should be mined.
19. The computer program can randomly select the squares to be mined.
20. The player(s) decide if the mined squares are always exposed, hidden then exposed, or always hidden.
21. The player(s) can also choose to allow the first move of any piece onto a mined square, or allow another move when a piece is 'blown up' by a mine.

Drawings

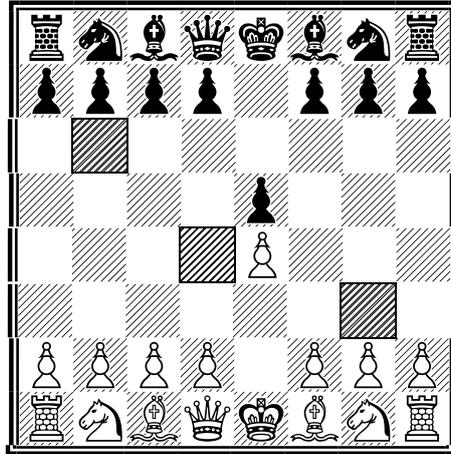


Figure 1: Position near the start of the game. The mined squares are the darker squares g3, d4 and b6.

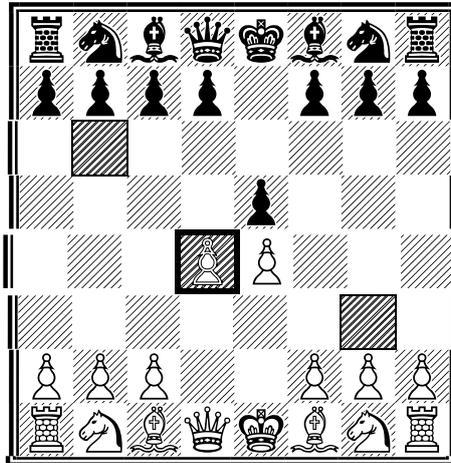


Figure 2: The pawn move to d4 primes that mined square, shown by placing a thicker border round the square.

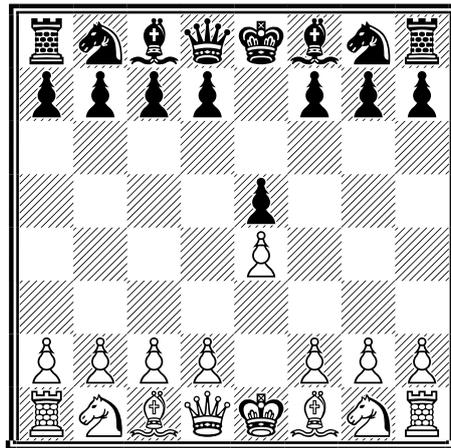


Figure 3: Position near the start of the game.

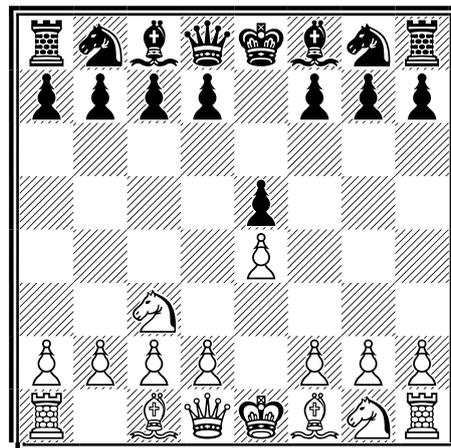


Figure 4: White plays Nc3.

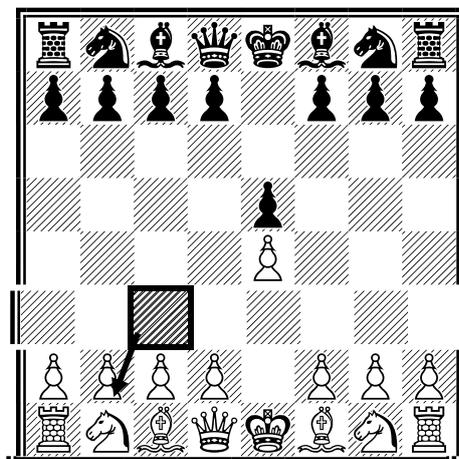


Figure 5: The c3 square is exposed as a mine. The player's move is undone.

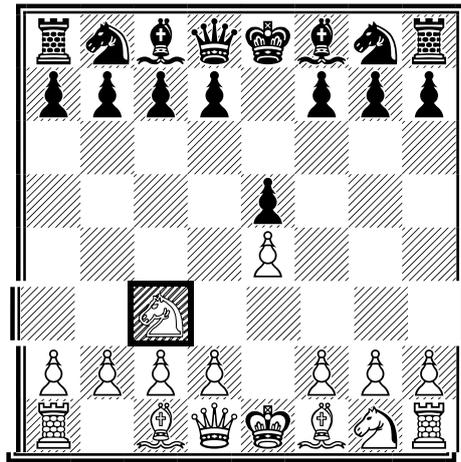


Figure 6: The player moves his piece to the mined c3 square after the square is exposed.

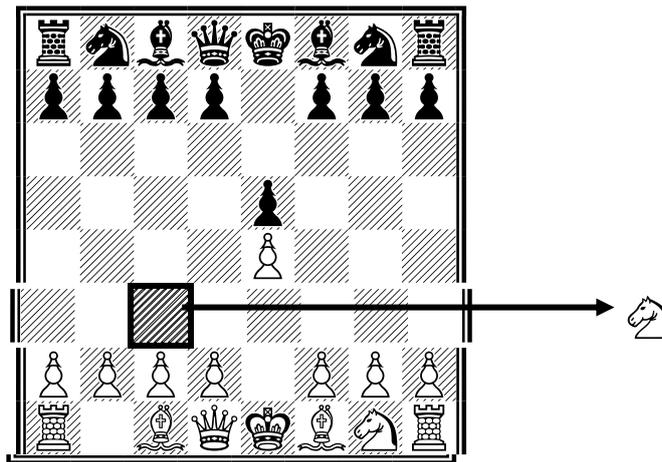


Figure 7: The piece is automatically removed from the board.