**Epaminondas**

**Ludus**

**History**

This game was invented by Robert Abbot in 1963. His original name was *Crossings* and was first published in 1969 in [GG]. Crossings was played on an 8×8 square board. Its rules were revised and published in 1975 under the new name Epaminondas, a Theban general, inventor of the phalanx, used to defeat Sparta in 371 b.C.

**Material**

A square board with 12 rows and 14 columns, 28 white and 28 black pieces.

Initial setup:
Definitions

Phalanx — an orthogonal or diagonal line of one or more adjacent friendly pieces.

Rules

On each turn, each player moves one friendly phalanx.

A phalanx moves over the line that defines it, with a moving range up to the number of its pieces. E.g., a phalanx with four pieces can move up to four squares along its line.

If the phalanx, while moving, encounters an enemy phalanx with a smaller number of pieces, that phalanx is captured. In this case, the friendly phalanx stops with its first piece on the square of the first enemy piece of the captured phalanx. In all the other cases, the moving phalanx must always move over empty squares.

Capturing is not mandatory.

Goal

If a player, at the beginning of his turn, has more friendly pieces in his last row than his opponent does, he wins the game.

E.g., if White, at the beginning of his turn, has three white stones in the last row, and Black only has two black stones in his last row, then White wins the game.

Notes

An isolated piece is a phalanx of size one. So it can move to any adjacent empty square. Isolated pieces cannot capture (because captured phalanxes must always be smaller).

It is not mandatory to move an entire phalanx. A player with a phalanx of five stones, may decide to move, say, just the first three stones (i.e., he moves a phalanx of size three).

Phalanxes may move to either direction along the line (e.g., a horizontal phalanx may move to the right or to left).
The winning condition is verified before the player begins his turn. If, after the move, a player has more pieces than the adversary, the adversary still has one chance to balance the position and continue the game (either by capturing some enemy pieces from his first row or by adding friendly pieces to his last row).

The next diagram shows some phalanx moves. Starting the game, White moved one square the phalanx defined by f1-g2, putting the first phalanx stone at h3. We describe this move as f1,g2-h3. Next, Black moved e12,f11-h9. White replied with a vertical phalanx, from h1 to h3, moving it to the maximum of three squares, i.e., h1,h3-h6. The result of these moves was:

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  abcdefg hijklmn
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In the next diagram there is an example of phalanx capture. The black phalanx h12,h9, with four stones, moves three squares down until it finds the first white stone of a phalanx with size three. Since the white phalanx is smaller, it is captured and removed from the board. If the white phalanx had four or more stones, this move would be invalid.
The next illustration shows a position where White has the advantage. The horizontal white phalanx in the first row is made of seven pieces, it is able to resist the attacks of the two potential black phalanxes (e5,c3 and e5,e3.) But the horizontal black phalanx at row 12, with six pieces, cannot avoid
the white double attack (a8,a9 and j5,j8), because these are separated by eight columns. White starts with j5,j8-j12, capturing one black stone. Black must capture that white stone at row 12 (or else, he would lose immediately) and White continues these captures, eroding the black phalanx. When these moves end, the other white phalanx at a8,a9 can move to row 12 without resistance.

References