

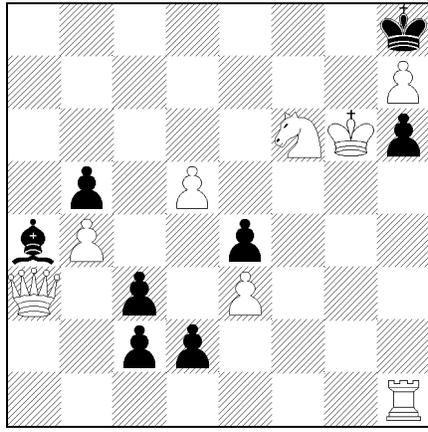
SOME PROBLEMS

22 January 2005

I am not a serious chess problem composer, and my few modest contributions do not in any way compare with the efforts of those who are. But for those who are curious, here are some of my problems. For some additional problems of a mathematical nature, see “Queue problems revisited” at www-math.mit.edu/~rstan/chess.

R. Stanley

The Problemist Supplement, Jan. 1998

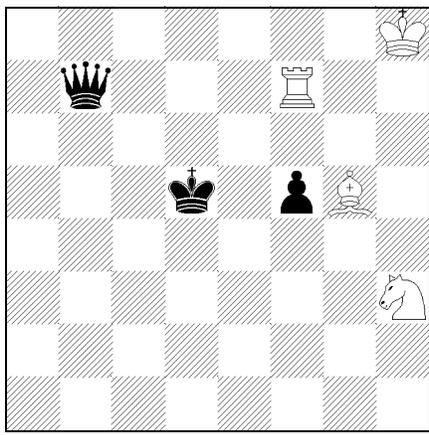


Mate in 3.

White moves first and checkmates Black in three or fewer moves against any Black defense.

Solution 1.Rc1 (2.Qxc3). 1..d1N 2.Nh5. 1..Bb3 2.Qa8≠.

R. Stanley
feenschach

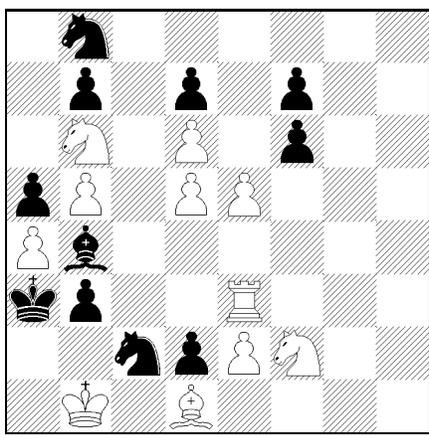


(a) Helpmate in 2. (b) Black retracts a move, then $h \neq 1$

In (a), Black moves first and cooperates with White so that White checkmates Black on White's second move. In (b), Black first retracts a move and then makes another move so that White can checkmate Black in one move.

Solution. (a) 1.Ke6 Bf4 2.Qd5 Ng5≠
 (b) Retract Ke6xRd5 for 1.Qxf7 Nf4≠.

R.Stanley and L. Balbus
The Problemist, 1973



Series Helpstalemate in 17

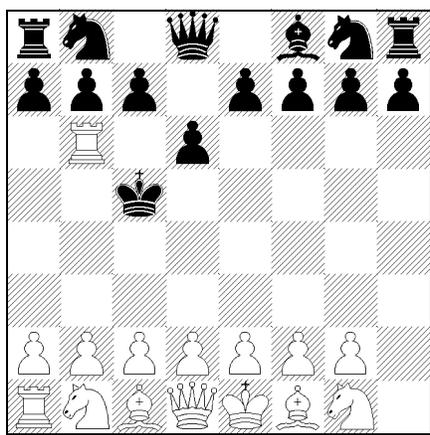
Reprinted in the article "Picture Perfect Endings" by G. Donati in *The Problemist Supplement*, issue 42, September 1999, p. 349.

Black makes 17 consecutive moves so that White can then stalemate Black in one move. Black may not move into check and may not check White (except possibly on Black's last move).

Solution. 1.fxe5 2.f5 3.f4 4.fxe3 5.b2 6.Kb3 7.Ba3 8.Kb4 9.Nd4 10.Nf5 11.Nxd6 12.Ne4 13.d6 14.Nd7 15.Nxb6 16.Nc4 17.b6 Nxe4=.

R. Stanley

2001

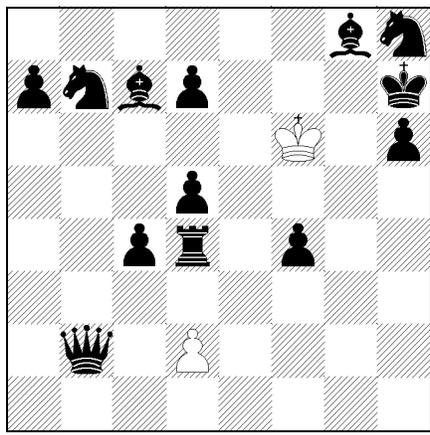


(a) PG 5.0 (b) PG in four turns, Progressive Chess

In (a), construct a game of chess that ends in the diagrammed position after Black's fifth move. In (b), construct a game of chess ending in the diagrammed position in which White makes one move, then Black two moves, then White three moves, and then Black four moves. Neither player may move into check at any time and can only check the other player at the last move of a series.

Solution. (a) 1.h3 d6 2.Rh2 Bxh3 3.Rxh3 Kd7 4.Rb3 Kc6 5.Rb6+ Kc5.
 (b) 1.h3 2.d6 Bxh3 3.Rxh3 Rb3 Rb6 4.Kd7 Ke6 Kd5 Kc5.

R. Stanley, N. Elkies, and O. Comay
StrateGems, 2001, Commended



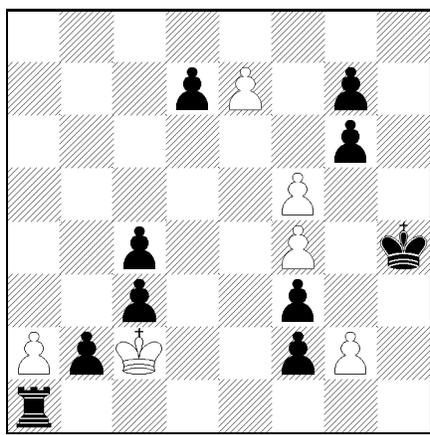
Helpmate in 5

Black moves first and cooperates with White so that White checkmates Black on White's fifth move.

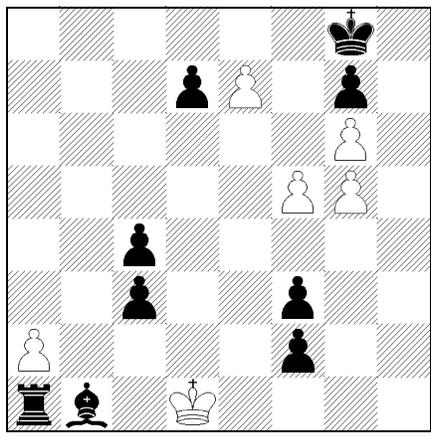
Solution. 1.Re4+ d4 2.Be5+ dxe5 3.Qb6+ e6 4.Qd8+ e7 5.Qf8+ exf8N#. Theme: excelsior by White pawn (i.e., promoting from original square) for which every Black move is a check.

R. Stanley and A. Buchanan

#8574, *feenschach*, XXVII (Nov.-Dec. 2001), Heft 144



Position A



Position B (stipulation below)

Obtain Position B from Position A (White to move) in (1) 5.5 moves, (2) 6.0 moves, (3) 6.5 moves, (4) 7.0 moves, (5) 7.5 moves, ... (A half-move consists of a single move by one player. Thus in (1), White makes six moves and Black five moves.)

Solution. (1,5,9,...) 1.g3+ Kh5 2.g4+ Kh6 3.g5+ Kh7 4.fg6+ Kg8! 5.f5 b1B+ 6.Kd1!

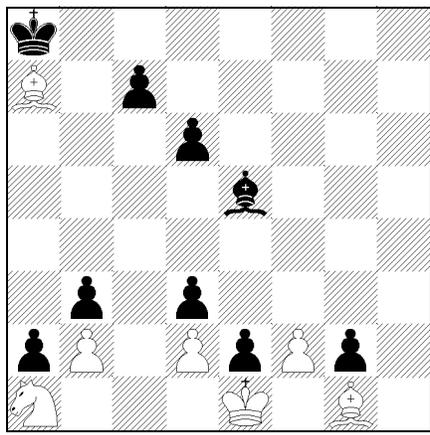
(2,6,10,...) 1.g3+ Kh5 2.g4+ Kh6 3.g5+ Kh7 4.fg6+ Kh8! 5.f5 b1B+ 6.Kd1! Kg8

(3,7,11,...) 1.g3+ Kh5 2.g4+ Kh6 3.g5+ Kh7 4.fg6+ Kh8! 5.f5 b1B+ 6.Kc1! Kg8 7.Kd1

(4,8,12,...) 1.g3+ Kh5 2.g4+ Kh6 3.g5+ Kh7 4.fg6+ Kg8! 5.f5 b1B+ 6.Kc1! Kh8 7.Kd1 Kg8 etc.

The point of the above problem is that it has infinitely many stipulations! Moreover, they are of the form $A \rightarrow B$ in k moves, $k + \frac{1}{2}$ moves, $k + 1$ moves, ... There was an attempt to make k as large as possible (with no solution in $k - \frac{1}{2}$ moves). It is much easier to compose such a problem if the required number of moves is $k, k + 1, k + 2, \dots$

R. Stanley
StrateGems, 2003



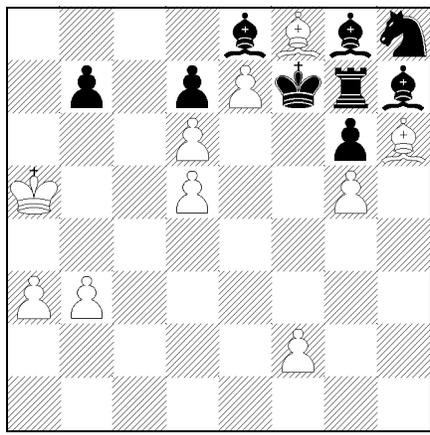
(a) h=5 (b) +bPh7

In (a) and (b), Black moves first and cooperates with White to stalemate Black on White's fifth move. In (b), a Black pawn should be added at h7.

Solution. (a) 1.c5 f4 5.c1N d8N= (b) 1.h5 f4 5.h1B c8B=. The theme is double excelsior matched minor piece promotions. It is widely believed that there does not exist a double excelsior helpmate in 5 with both pawns promoting to knight without promoted pieces on the board. (See next problem for an example with promoted pieces.) On the other hand, such a helpstalemate is trivial to construct, so the above problem makes it more interesting by twinning with a bishop promotion double excelsior.

R. Stanley

Chess Life & Review, 1974

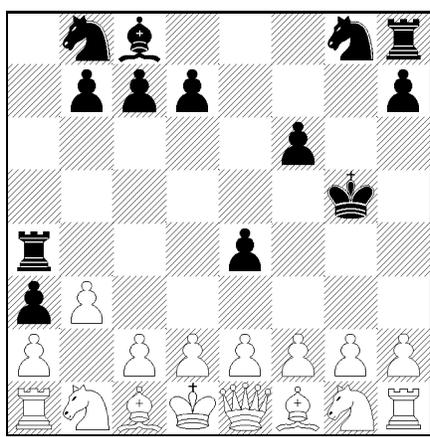


Helpmate in 5

Solution. 1.b5 f4 2.b4 f5 3.ba3 f6 4.a2 fg7 5.a1N gh8N \neq . Double excelsior helpmate in 5 with two knight promotions, widely believed to be impossible without promoted pieces on the board. If, for instance, the Black bishop at h7 is replaced by a Black pawn, then there is a cook (unwanted solution). Similarly, the White bishop at f8 cannot be removed.

R. Stanley

Strategems, 2005, to appear



PG 13.5

Construct a game of chess that ends in the diagrammed position after White's 14th move (not computer checked).

Solution. Omitted pending publication.

Problem. What is the shortest game with the condition “maximuming, mate by pawn”? In other words, each player must always play their geometrically longest legal move (being free to choose among more than one such move), and the game must end with checkmate by a pawn. Here is the current record of 14.0 moves, composed in 2000.

1.Nf3 Nf6 2.Nd4 Ne4 3.Nc6 Nxf2 4.Nxa7 Nxd1 5.Nc3 Ne3 6.Na4 Nxc2+ 7.Kf2 Ne1 8.Nc3 Nd3+ 9.Ke3 Nf4 10.Na4 Nd5+ 11.Kd4 Nc6+ 12.Kc5 Nc3 13.Nb5 Rxa4 14.Nd6+ cP or ePxd6≠.