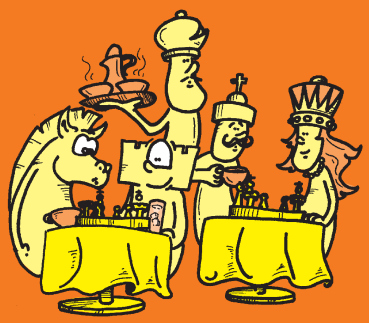


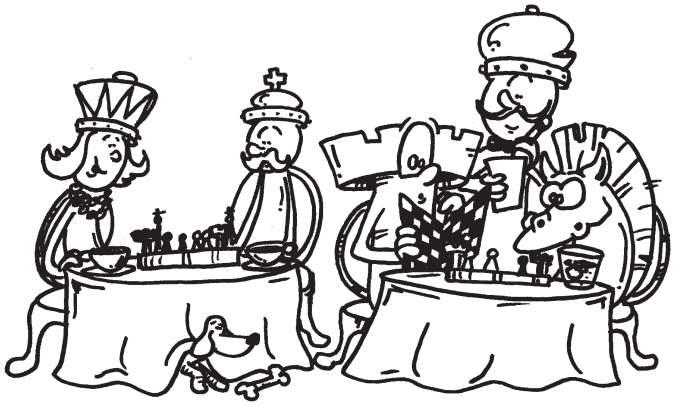
THE PUZZLING SIDE OF CHESS

Jeff Coakley

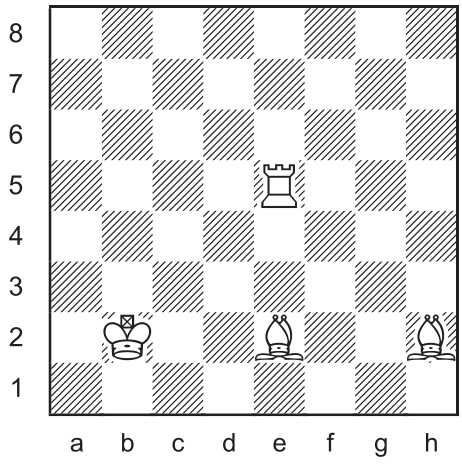
SMORGAS SCHMORGAS

number 178 May 30, 2019

Bored with the humdrum of everyday chess? Then *bord* XXVI is the dish for you. A full plate of assorted problems and word play. Sit at any board you like. The waiter will be right over.



Triple Loyd 80



Place the black king on the board so that:

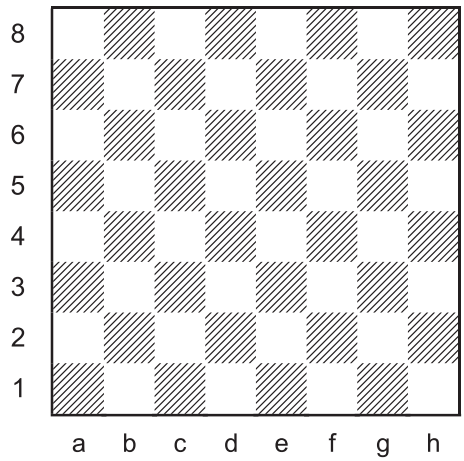
A. Black is in checkmate.
B. Black is in stalemate.
C. White has mate in 1.

The next puzzle repeats a *total domination* task from column 15, prompted by the discovery of two new solutions by Adrian Storisteanu, one from 1949, the other from 1989.

To quote *The Complete Book of Chess* (1963) by I.A.Horowitz and P.L. Rothenberg: "*Except for possibility of interchange of King and Queen, the pattern is unique and completely symmetrical.*"

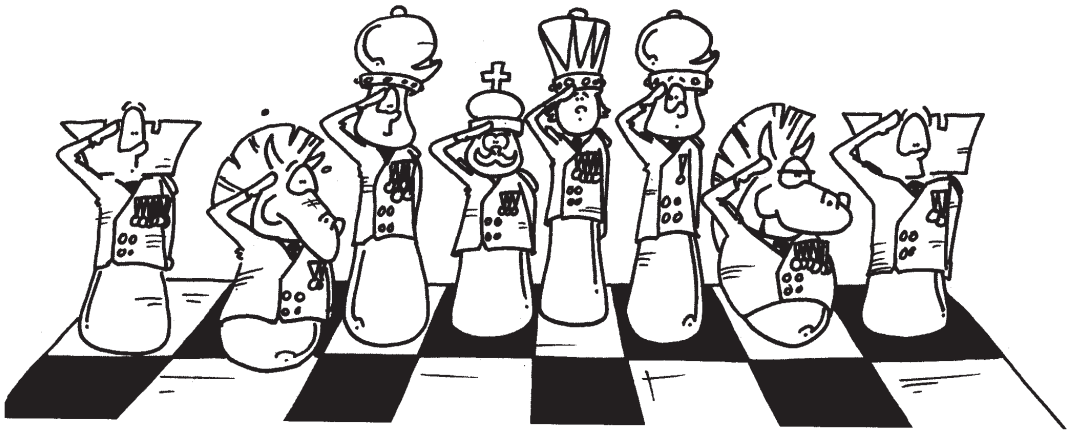
They were right about the symmetry, but wrong that the position was unique. There are in fact three solutions.

Eight Officers 03c



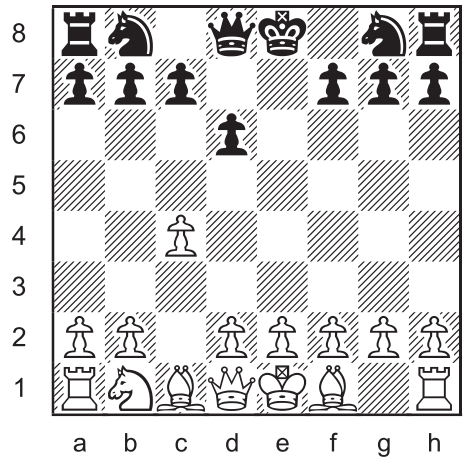
Place the eight officers on the board
so that they attack all 64 squares.
To achieve this task, both bishops must
be on the same colour squares.

As you probably know, a piece does not attack the square it stands on.



The aim of a proof game is to *prove* that a position is legal by showing that it can be reached from the initial array, usually in a precise number of moves.

Longer Proof Game 73 (5.5 moves)



This position was reached after
White's sixth turn. What were the moves?

Words schmurds. Languages are full of surprises. One funny example in English is something called "shm-reduplication", a construction in which a word is repeated with the initial consonant of the second instance replaced by 'shm-' or 'schm-'. The purpose of such expressions is to lightheartedly downplay or dismiss the importance of a topic.

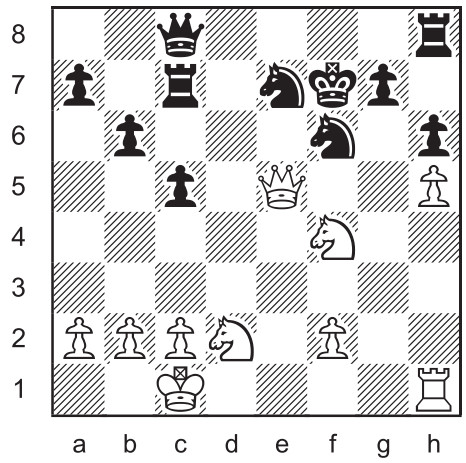
This form of reduplication is derived from Yiddish and became popular in New York City more than a century ago.

Have you heard the album *Nilsson Schmilsson* by Harry Nilsson?

"Put the lime in the coconut."

A blah-blah haze of ho-hum days. Let's leave them all behind. Time for a slice of the cyclotronic life.

Cyclotron 71



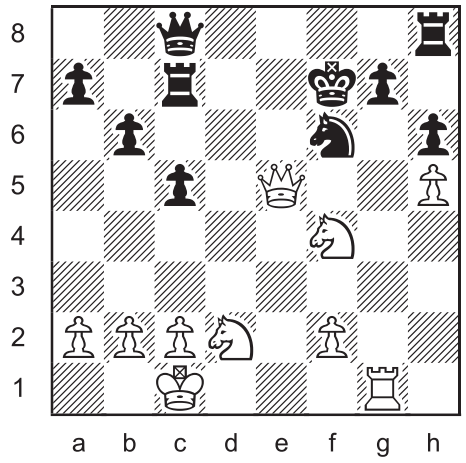
Cycle three pieces so that
Black is in checkmate.

Switch the position of three pieces so that Black is in checkmate. No actual chess moves are made. The pieces simply swap squares. The pieces trade places in a "cycle". Piece A goes to square B, piece B goes to square C, and piece C goes to square A.

Any three pieces can trade places. Colours do not matter. The cycled pieces can be all white, all black, or a mix of both.

The position after the cycle must be legal.

Cyclotron 72

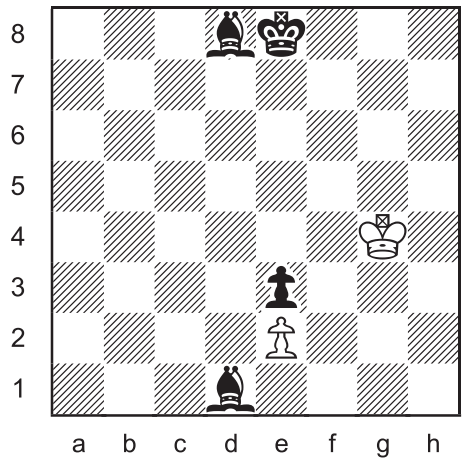


Cycle three pieces so that
Black is in checkmate.

In a *helpmate*, Black cooperates with White to checkmate the black king. Black normally goes first.

Here is one of my favourite problems by Ohio composer Ron Fenton from his new book called *Stipulations.* In his words, “To checkmate Black, White needs a lot of help - from what is left of the Black army of course, but also from his foot soldier on e2. In the end, it takes 7 moves to sort it all out.”

Helpmate 14



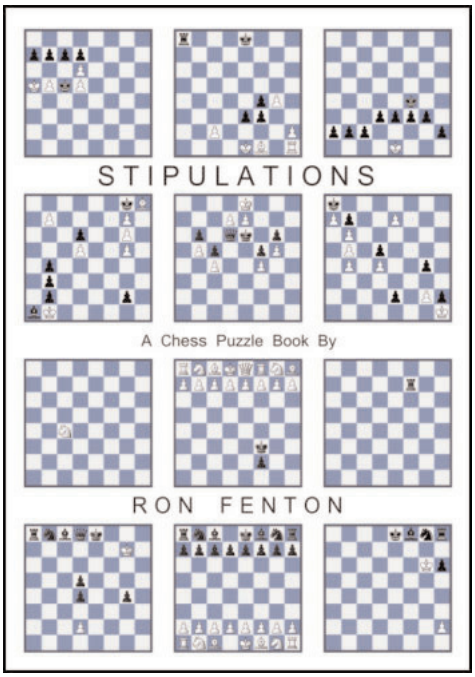
Helpmate in 7

Black moves first and helps White checkmate
the black king on White’s seventh move.

Stipulations (2018) by Ron Fenton

If you like helpmates and other types of chess puzzles, then I am sure you will enjoy this well-produced and entertaining book. Full of engaging positions and enigmatic solutions, it includes his prize-winning helpmate from the 2013 Puzzlers Cup as well as a proof game that previously appeared on the *Puzzling Side* (columns 54, 99).

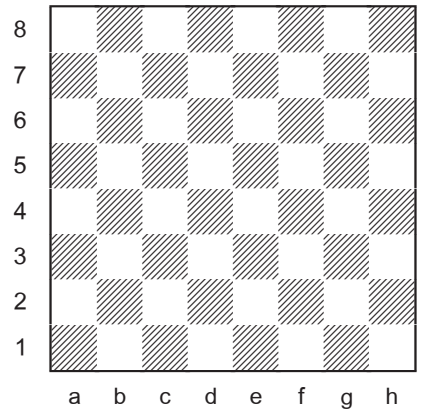
Available for purchase on Ebay.
Search ‘stipulations chess’.
164 pages



Next up is a replay of a *construction task* from column 176 in which the goal is a dead position with the most possible moves. Or to be more accurate, the most legal but unplayable moves. After all, the position is dead!

Positions involving retrograde analysis can be divided into three types according to how we know whose turn it is. The three parts of this puzzle correspond to those categories. None of the records have been confirmed by computer. Can you set a new mark?

Dead Position Move Maximizer



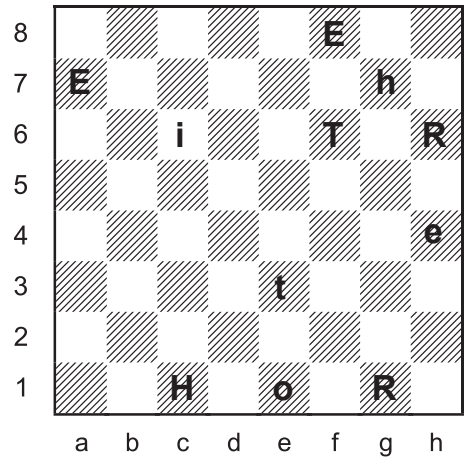
Construct a dead position in which the number of possible moves is maximized.

1. Type A position. Retroanalysis proves it is White to move.
2. Type B position. White to move is stipulated.
3. Type C position. White is in check, so it is White to move.

The position must be legal, which means *reachable in an actual game*. In a dead position, a *possible move* is “legal but unplayable”.

The final problem is a case of “Either/Or”. Appropriate lettering for the deductive reasoning involved in solving a chess rebus.

Rebus 24



Each letter represents a different type of piece.
Uppercase is one colour, lowercase is the other.
Determine the position and the last move.

Søren Kierkegaard (1813-1855) was a Danish existential philosopher, best known for his two volume work titled *Either/Or*.

A few quotes from his many writings:

The question is not "To be or not to be." It is what we should be until we are not.

Face the facts of being what you are, for that is what changes what you are.

I see it all perfectly; there are two possible situations - one can either do this or that. My honest opinion and my friendly advice is this: do it or do not do it - you will regret both.

There are two ways to be fooled. One is to believe what isn't true; the other is to refuse to believe what is true.

It is better to try something and fail than to try nothing and succeed. The result may be the same, but you won't be. We always grow more through defeats than victories.

SOLUTIONS

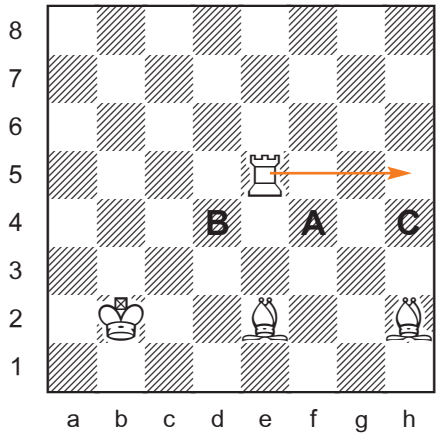
PDF hyperlinks. You can advance to the solution of any puzzle by clicking on the underlined title above the diagram. To return to the puzzle, click on the title above the solution diagram.

Archives. Past columns are available in the *Puzzling Side* archives.

Triple Loyd 80

Jeff Coakley 2019

Puzzling Side of Chess



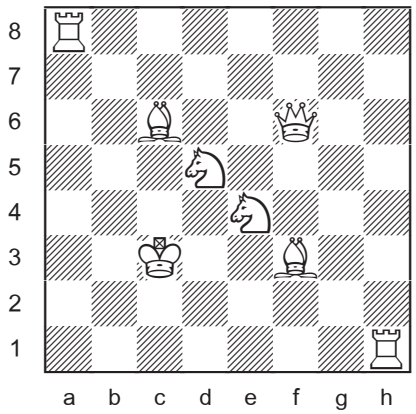
A. Kf4#
B. Kc4 =
C. Kh4 (Rh5#)

R & B special.

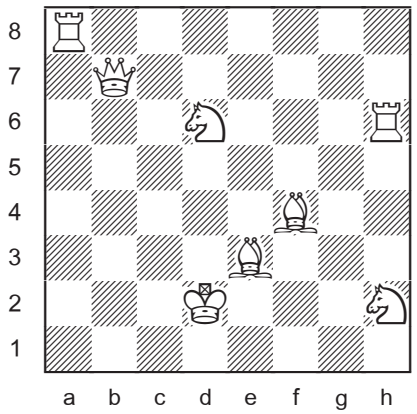
Green Pieces (*Minsk*) *Valery Liskovets*

Eight Officers 03c

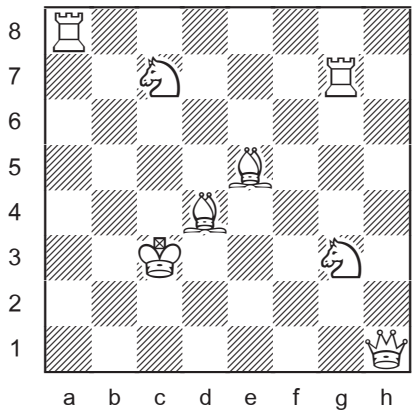
Josef Kling 1849



I. Armeanu 1949
Revista Romana de Sah



A.D. Robison, B.J.Hafner, & S.S. Skienna 1989



All 64 squares attacked.

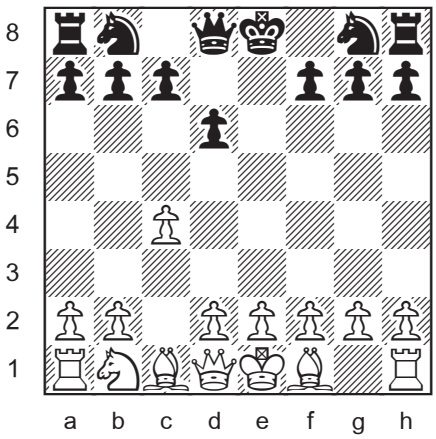
The task has three solutions, not counting reflections and rotations.

Thanks to Adrian Storisteanu for setting the record straight on the number of solutions and their source. After recently finding the second solution in the Romanian magazine *Revista Romana de Sah* (Nr. 5-7, May-July 1949), he later came across all three solutions in an article titled *Eight Pieces Cannot Cover a Chess Board* in *The Computer Journal* (Vol. 32, No. 6, 1989). The results of the authors' computer research on this task have been confirmed by the program Caisay.

The time gaps between the publication dates are 100 and 40 years.

Longer Proof Game 73 (5.5 moves)

Jeff Coakley 2019
Puzzling Side of Chess

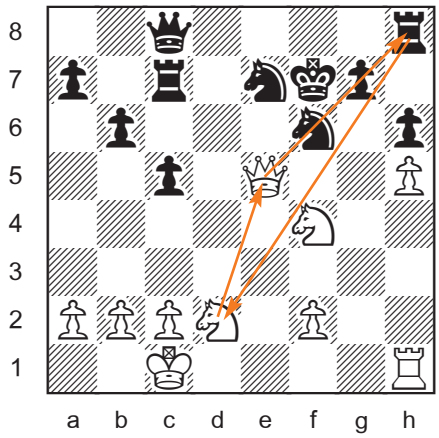


1.Nf3 e5 2.Nxe5 Ba3 3.Nc4 d6 4.Ncxa3 Bf5 5.c4 Bxb1 6.Nxb1
Impostor knight captures both black bishops.

Cyclotron 71

Jeff Coakley 2019

Puzzling Side of Chess



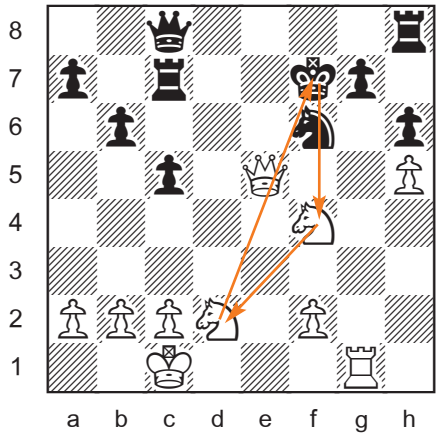
Nd2→e5 Qe5→h8 Rh8→d2

The white queen takes control of the 8th rank.

Cyclotron 72

Jeff Coakley 2019

Puzzling Side of Chess



Nd2→f7 Kf7→f4 Nf4→d2

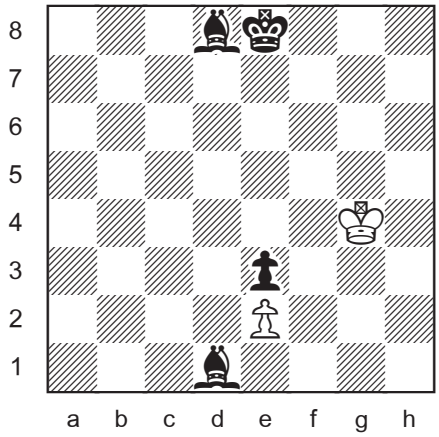
S*ynchrotron*: a cyclotron in which the solution is a cycle involving two pieces of the same type and colour.

This kind of puzzle can be solved as a *switcheroo*. (Nf5↔Kf7)

Helpmate 14 (in 7 moves)

Ron Fenton 2018

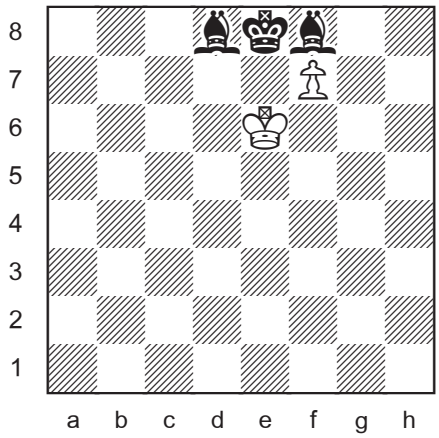
Stipulations



In helpmate notation, the black moves are listed first.

Black	White
1. Ba4	Kf5
2. Bc6	Ke6
3. Bf3	exf3
4. e2	f4
5. e1=B	f5
6. Bb4	f6
7. Bf8	f7#

Ron Fenton: "*A minimalist setting with an 'ideal' solution. Bishops may come and Bishops may go but only if would-be solvers find the counterintuitive key. In another case of a 'wrong color' Bishop, even after losing a tempo (to b3 for example), it can't sacrifice on d3 because White's pawn blocks the promoted Bishop's path to f8.*"

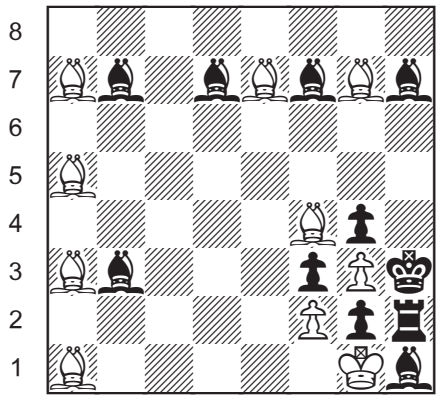


Dead Position Move Maximizer

1. Type A position

Jeff Coakley & Andrew Buchanan 2019

Puzzling Side of Chess



(10 + 11)

Retroanalysis proves that it is White to move.

47 legal but unplayable moves

(B5+B5+B7+B5+B8+B9+B8)

1) There are 11 pieces available for capture by pawns in retroplay, six white, five black.

2) White has their original dark-square bishop and six promoted dark-square bishops. Black has their original light-square bishop and five promoted light-square bishops. The 11 promotions (on the appropriate colour squares) required 11 captures, closing the material balance.

3) Therefore the last move was not a capture.

4) The last move was not by White because the position would already be dead (since there is no way to release stalemate).

5) Black made the last move. It could only be 1...g5-g4, otherwise the position was already dead. With the black pawn on g5, there are many moves that would have kept the position alive.

This position breaks the previous record of 9 moves from column 176.

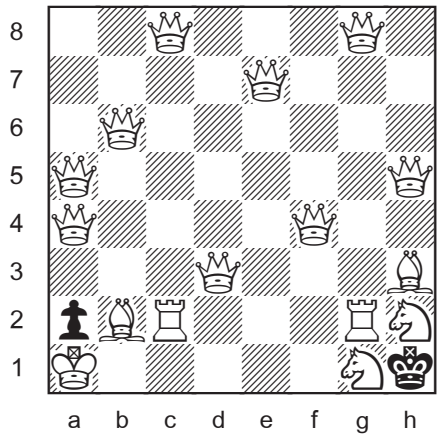
Thanks to François Labelle for pointing out the possibility of incorporating multiple opposite-colour bishops in this kind of task.

Dead Position Move Maximizer

2. Type B position

Jeff Coakley 2019

Puzzling Side of Chess



White to move is stipulated.

195 legal but unplayable moves

Same solution as in column 176.

White cannot release the stalemate. The last move was 1...a3-a2 with the option to keep the position alive by 1...axb2+.

Dead Position Move Maximizer

3. Type C position

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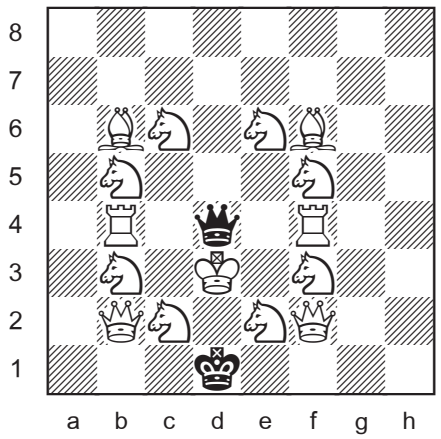
Puzzling Side of Chess



White is in check so it is White to move.

15 legal but unplayable moves

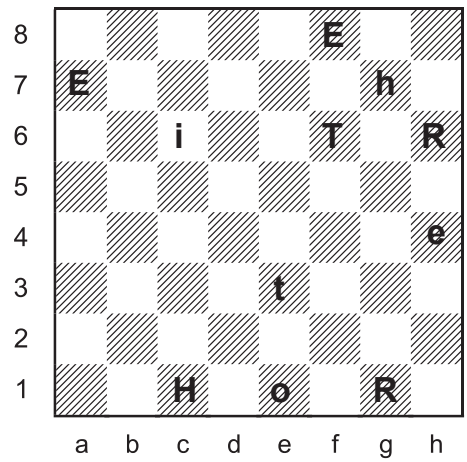
Each of the 15 white pieces can capture on d4, resulting in stalemate. The position is dead because White must capture the queen.

Rebus 24

Andrey Frolkin & Jeff Coakley 2019

Puzzling Side of Chess

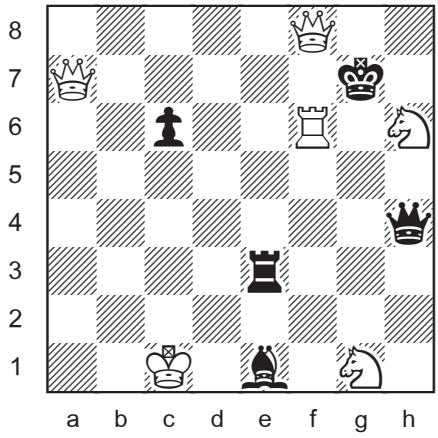
"Either/Or"



E = queen
I = pawn
T = rook
H = king
O = bishop
R = knight

caps = white

last move:
1.>f8=Q#



♔ = (HT) Letters with one uppercase, one lowercase.

♙ = (IT) Letters not on 1st or 8th rank.

T ≠ ♔ If T = ♔ I = ♙

E ≠ ♕♗ (a7+ h4+) Both kings in check.

H ≠ ♕♗ (c1+ g7+) Both kings in check.

R ≠ ♕♗ (g1+ h6+) Impossible double check.

♕♗ = Ø? Impossible to assign <u>both</u> queen and rook.

H = ♔

T ≠ ♕ (e3+ f6+) Both kings in check.

R ≠ ♕ (g1+ h6+) Impossible double check.

O ≠ ♕ If O = ♕ (e1+) <u>Check</u>.

R ≠ ♖ (g1+) Both kings in check.

E ≠ ♖ (a7+) Both kings in check.

I ≠ ♖ (c6+) Impossible double check.

T = ♖

I = ♙

E ≠ ♗ (f8+) Both kings in check.

R ≠ ♗ (h6+) Both kings in check.

♗ = Ø? No piece can be bishop.

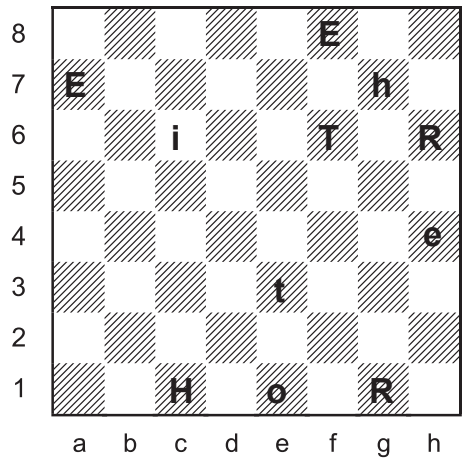
I ≠ ♕ If I = ♕ (c6+) Check.
T = ♗
E ≠ ♖ (a7+) Both kings in check.
O ≠ ♖ (e1+) Impossible double check.
R ≠ ♖ (g1+) Both kings in check.
♖ = Ø? No piece can be rook.

E = ♕ (a7+ f8+) Double check.

last move: 1.f7-f8=Q# or 1.e7xf8=Q#

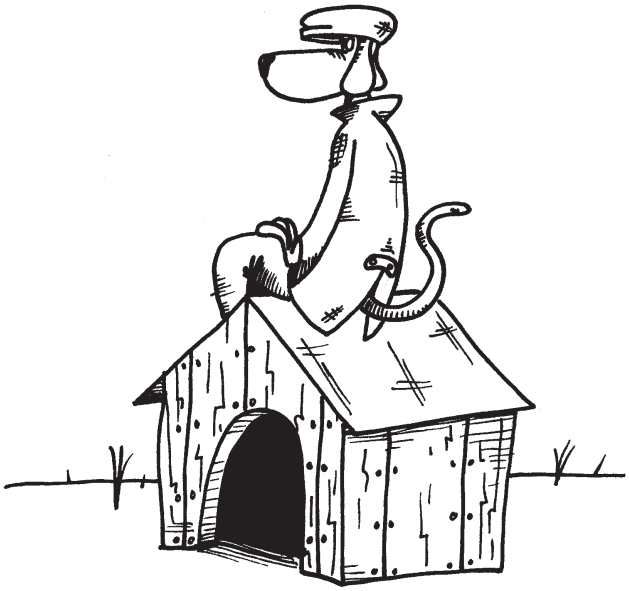
caps = white Promotion on f8.

R ≠ ♖ (g1+) Triple check.
R ≠ ♘ (h6+) Triple check.
R = ♘
T ≠ ♘♗ (f6+) Triple check.
T = ♖
I = ♗
O = ♘



Life can only be understood backwards; but it must be lived forwards.

Søren Kierkegaard



Until next time!