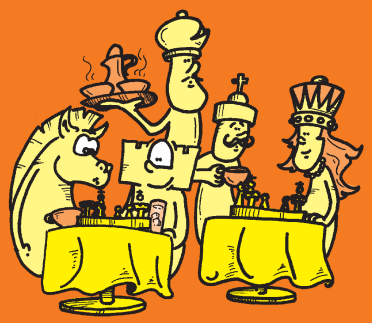


THE PUZZLING SIDE OF CHESS

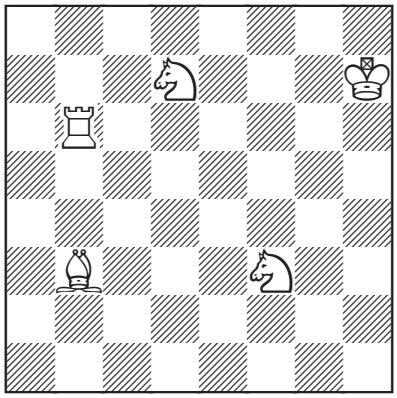
Jeff Coakley

TWO HUNDRED **Smorgasbord XXXI**

number 200 March 31, 2021

Column 200. A nice round number and a fitting place to end season 5. But not to worry. The *Puzzling Side* will return this summer. For now, here are eight problems to wile away your idle time.

Triple Loyd 85

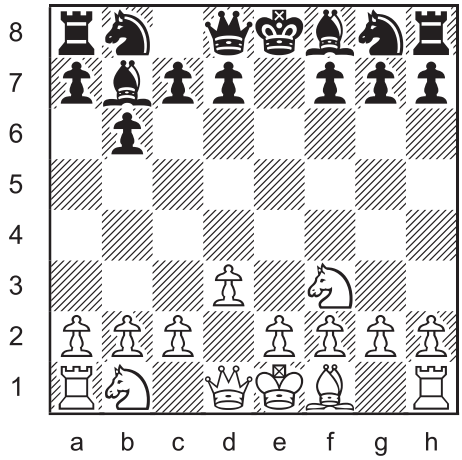


Place the black king on the board so that:

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

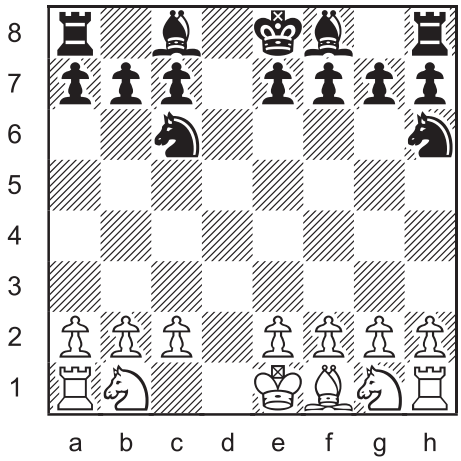
The goal in proof games is to go back to where the game starts. Take a ride on the Reading and collect $200.

Longer Proof Game 84 (4.5 moves)



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

Longer Proof Game 85 (6.0 moves)



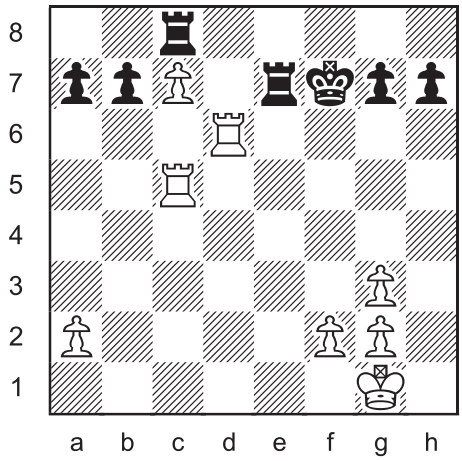
This position was reached after
Black's sixth turn. What were the moves?

The next problem is an ending played 200 years ago at the *Café de la Régence*. The French master Alexandre Deschapelles was recognized as the world's best player from 1800 to 1821. His opponent and the victor in this game was John Cochrane of Scotland. His name and fame live on in the Cochrane Gambit, a bold and unrefuted sacrifice of a knight in the Russian Defence. 1.e4 e5 2.Nf3 Nf6 3.Nxe5 d6 4.Nxf7!?

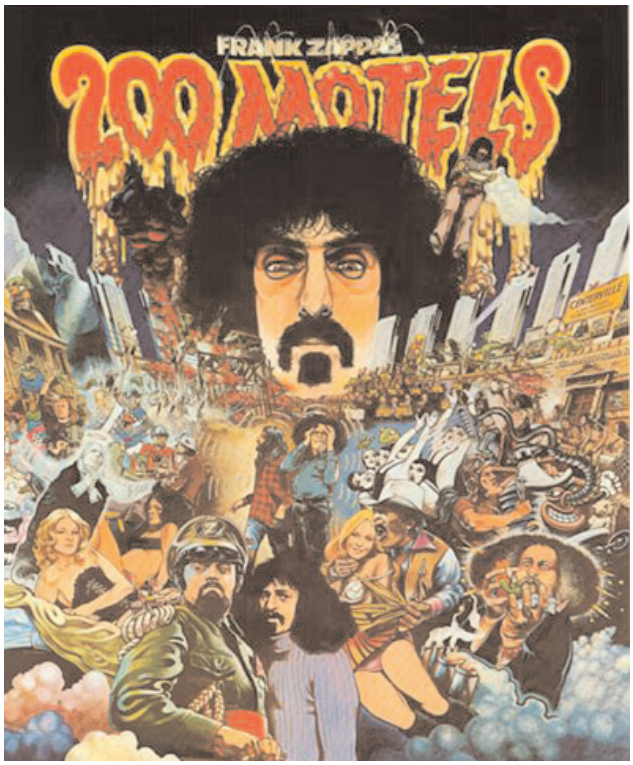
Endgame Study

John Cochrane - Alexandre Deschapelles

Paris 1821



White to move and win.



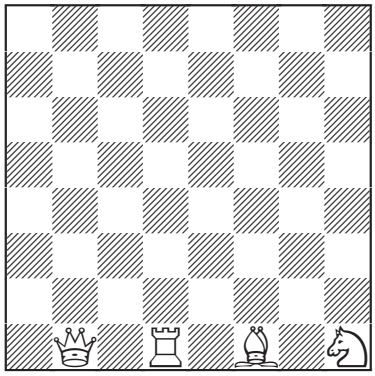
Mothers of Cinematic Invention

The following three-part puzzle, specially composed for column 200, is by Adrian Storisteanu. It requires counting possible last moves.

A retraction can be a non-capture or an uncapture. If the last move was a capture, then the type of piece taken has to be specified. Each type of piece captured counts separately. In other words, a piece can take back up to six different moves from one square to another. For example, Ra4-g4, Ra4xQg4, Ra4xRg4, Ra4xBg4, Ra4xNg4, Ra4xPg4. It should also be noted that the opposing king may not be in check after a move is retracted. *It cannot be White's turn if Black is in check*.

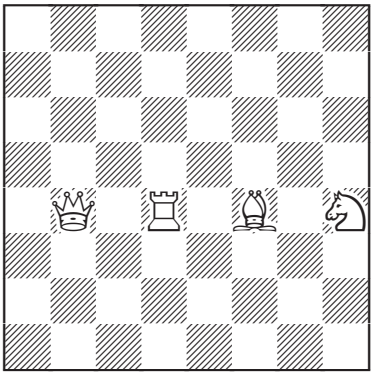
200 Last Moves

A

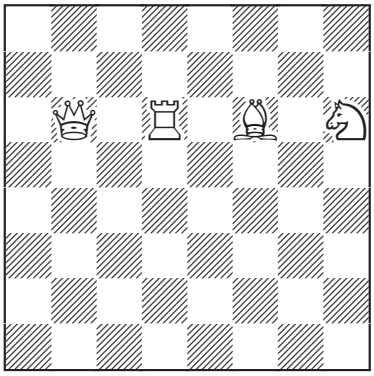


Add a white king and black king
so that White has 200 possible retractions.

B

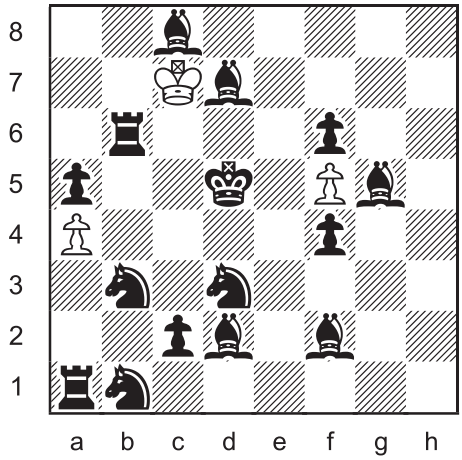


C



Series-mates are exercises in one-sided chess. The motionless defender is no match for the greatly outnumbered opponent.

Multi-Wham 50



series-mate in 60

White plays sixty consecutive moves to mate Black.

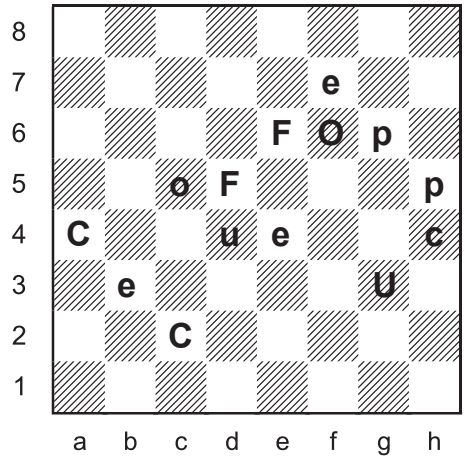
Only the last move may give check. Captures are allowed. White may not place their own king in check. Black does not get a turn.

Each year the Royal Canadian Mint produces a limited number of commemorative pure gold $200 coins. Strangely enough, the coin is worth thousands of dollars.

Did you know that the ideal water temperature for brewing coffee is 200° Fahrenheit? For most of the world, that's 93° Celsius.

Rebus 66

"coffee cup"



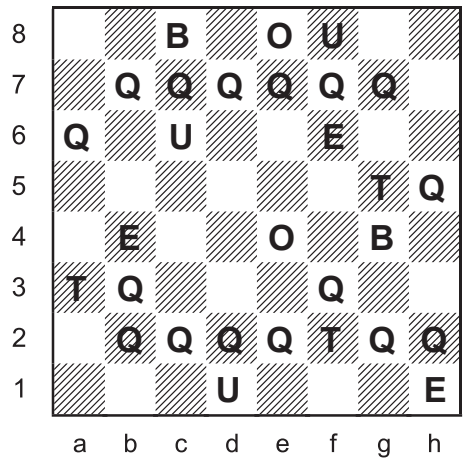
Each letter represents a different type of piece.
Uppercase is one colour, lowercase is the other.
Determine the position and, if possible, the last move.

The *Puzzling Side of Evaporation*. A cup of brake fluid would boil at 200° C. Please do not attempt to verify this useless fact at home.

The season finale is a *colour-free* rebus. The lack of hues in this "bouquet" adds an extra dimension to unravelling the position.

Rebus 67

"bouquet"



Each letter represents a different type of piece.
No indication is given for colour.
Some instances of a letter can be white,
other instances of the same letter can be black.
Determine the position and last move.

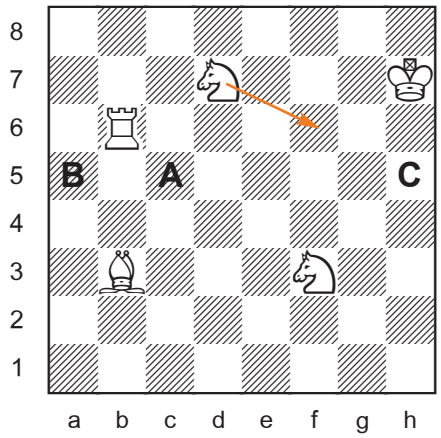
SOLUTIONS

Unless noted otherwise, problems are by J. Coakley, *Puzzling Side of Chess* (2021). Proof game 91 is from *Winning Chess Puzzles For Kids Volume 2* (2010) Rebuses 66-67 are joint compositions with Andrey Frolkin.

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. An index of problems, composers, and miscellanea is also included.

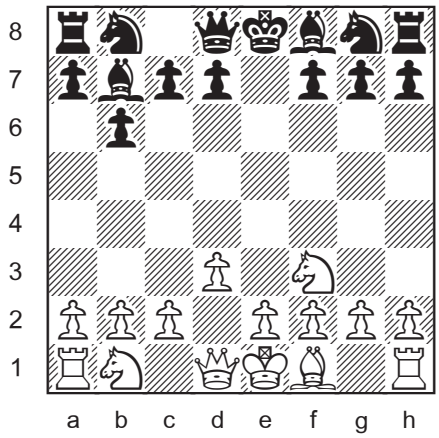
Triple Loyd 85



A. Kc5#
B. Ka5 =
C. Kh5 (Nf6#)

Fifth rank dimension.

Longer Proof Game 84 (4.5 moves)



1.d3 b6 2.Bg5 Bb7 3.Bxe7 Qc8 4.Bd8 Qxd8 5.Nf3

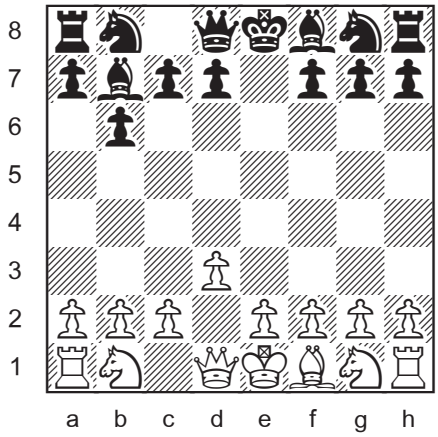
Switchback of black queen with *Orbán effect*.

The problem is an extension of the following shorter proof game.

Proof Game 91 (4.0 moves)

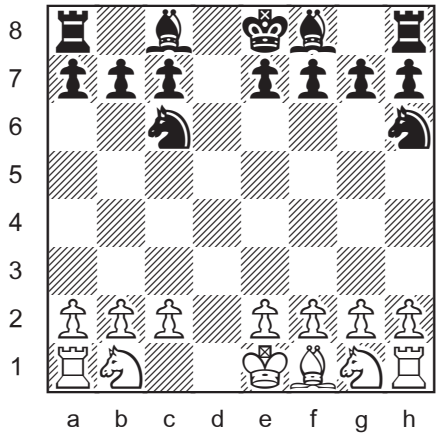
J. Coakley 2010

Winning Chess Puzzles For Kids Volume 2



Same solution without the misleading 5.Nf3.

Longer Proof Game 85 (6.0 moves)



1. d4 d6
2. Bf4 Qd7
3. Bxd6 Qxd6
4. d5 Qxd5
5. Qxd5 Nh6
6. Qc6+ Nxc6

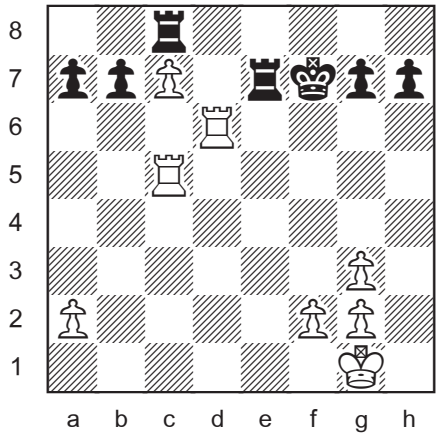
Black queen tempo to d7.
Black knight distractor on h6.

Larry the Dwarf

Endgame Study

John Cochrane - Alexandre Deschapelles

Paris 1821



1.Rf5+

1...Ke8 2.Rd8+ Rxd8 3.Rf8+ Kxf8 (*or 3...Kd7*) 4.cxd8=Q+

1...Kg8 2.Rd8+

2...Re8 3.Rxe8+ Rxe8 4.Rd5!

4...Rc8 5.Rd8+ Rxd8 6.cxd8=Q+

4...Kf7 5.Rd8

4...Re1+ 5.Kh2 Rc1 6.Rd8+

2...Rxd8 3.cxd8=Q+ Re8 4.Qxe8#

Here is the complete game, a Scotch Gambit.

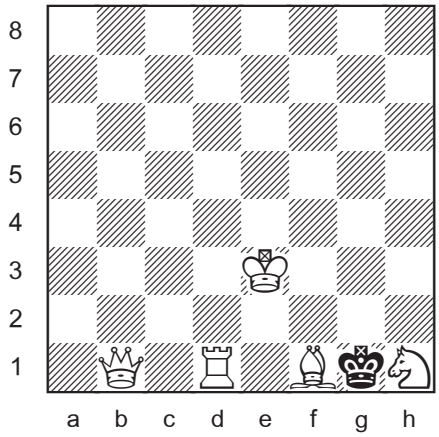
1.e4 e5 2.Nf3 Nc6 3.d4 exd4 4.Bc4 Bc5 5.Ng5 Ne5?! (*5...Nh6* ∓)
6.Bxf7+ Nxf7 7.Nxf7 Bb4+ (*7...Kxf7 8.Qh5+ g6 9.Qxc5* ±)
8.c3 dxc3 9.bxc3 Bxc3+ (*9...Kxf7 10.cxb4* ±) 10.Nxc3 Kxf7 ±
11.Qd5+ Kf8 12.Ba3+ d6 13.e5 Qg5? 14.exd6 Qxd5 15.dxc7+ Kf7
16.Nxd5 Bd7 17.0-0 Rc8 18.Bd6 Ke6 19.Bg3 Bc6 20.Rad1 Bxd5
21.Rfe1+ Kf6 22.Rxd5 Nh6 23.Ra5 Nf5 24.Rc5 Nxg3 25.hxg3 Kf7
26.Rd1 Rhe8 27.Rd6 Re7? diagram (*27...Re1+ 28.Kh2 Ke7* ±)
28.Rf5+ Ke8 29.Rd8+ Rxd8 30.Rf8+ Kxf8 31.cxd8=Q+ 1-0

200 Last Moves

Adrian Storisteanu 2021

Puzzling Side of Chess

A



Add Ke3 / Kg1

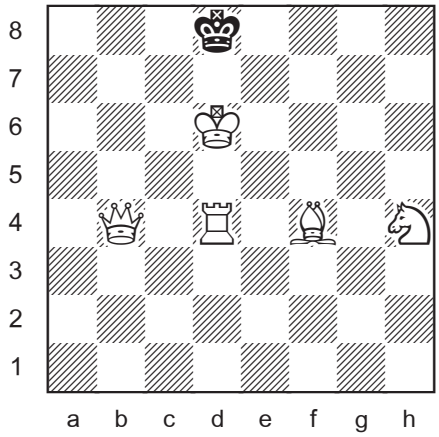
200 possible white last moves

K 42, Q 75, R 45, B 28, N 10

All bishop moves are captures (*check from Rd1*).

The queen cannot retract from g6 (*check*).

B



Add Kd6 / Kd8

200 possible white last moves

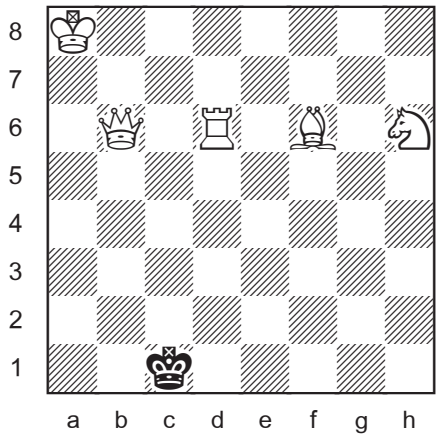
K 26, Q 72, R 36, B 42, N 24

Except from d5, all king moves are captures (*check from Rd4*) .

The queen cannot retract from a5 b6 b8 (*check*).

The bishop cannot retract from g5 (*check*).

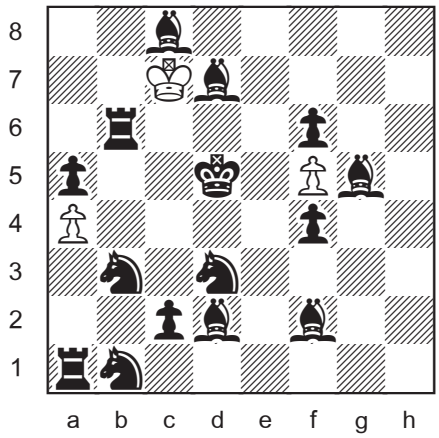
C



Add Ka8 / Kc1
200 possible white last moves
K 14, Q 66, R 42, B 54, N 24
The king cannot retract Kb7xBa8 (*impossible check*).
The queen cannot retract from b1 b2 c5 c6 c7 e3 g1 (*check*).
The rook cannot retract from c7 d1 (*check*).
The bishop cannot retract from b2 g5 (*check*).

A $200 coin would buy you 50 hours of street parking in downtown Toronto. If you could fit it in the meter. Or find an empty spot.

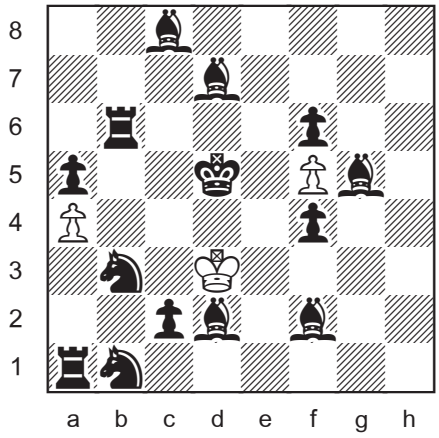
Multi-Wham 50



series-mate in 60

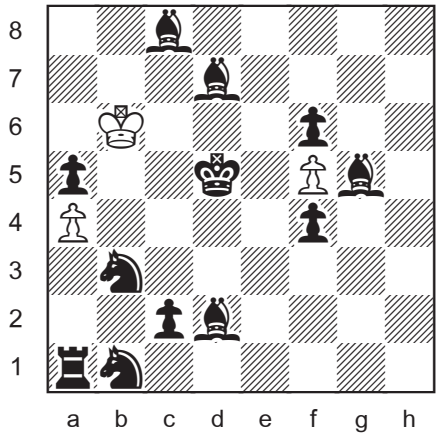
The white king cannot free the pawn at f5 by capturing the pawn on f6 because that pawn and the bishop on g5 protect each other. So his majesty's first task is to free the pawn at a4. It is blocked by the pawn on a5 which is guarded twice, by the knight on b3 and bishop on d2. These two pieces are both protected by a chain of defenders. To eliminate the defence of a5, all of the black pieces on the 1st to 3rd ranks must be captured as well as the rook on b6. First target: the unprotected knight on d3.

1.Kd8 2.Ke7 3.Kf7 4.Kg6 5.Kh5 6.Kg4 7.Kf3 8.Ke2 9.Kxd3



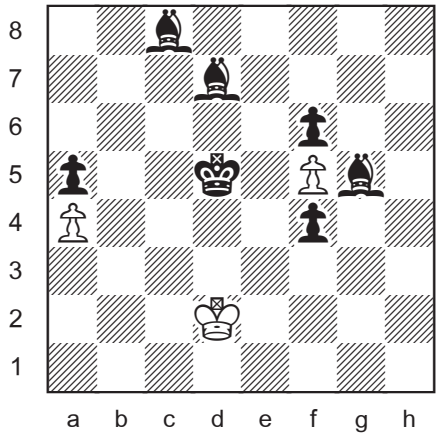
Now the king journeys back to take the rook on b6, capturing the rook's defender (Bf2) along the way. Continuing here with *10.Kxc2? 11.Kb2 12.Kxa1 13.Kxb1* is slower in the long run, taking a total of 63 moves.

10.Ke2 11.Kxf2 12.Kf3 13.Kg4 14.Kh5 15.Kg6 16.Kf7 17.Ke7 18.Kd8 19.Kc7 20.Kxb6



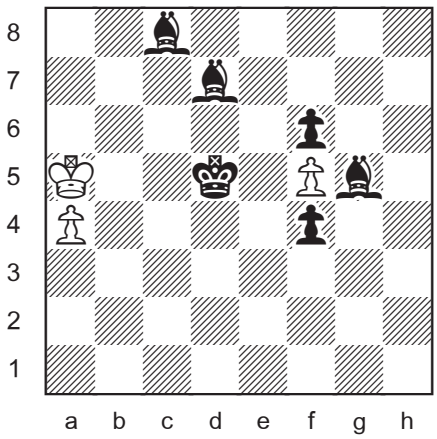
No rest for the tireless king. He must retrace his steps once more to eliminate the bishop on d2 and its protectors.

21.Kc7 22.Kd8 23.Ke7 24.Kf7 25.Kg6 26.Kh5 27.Kg4 28.Kf3 29.Ke2 30.Kd3 31.Kxc2 32.Kxb3 33.Kb2 34.Kxa1 35.Kxb1 36.Kc2 37.Kxd2



One more time around to capture the black a-pawn.

38.Ke2 39.Kf3 40.Kg4 41.Kh5 42.Kg6 43.Kf7 44.Ke7 45.Kd8 46.Kc7 47.Kb6 48.Kxa5

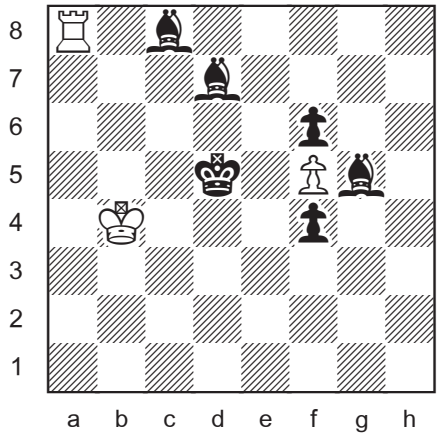


49.Kb4

The king steps out of the pawn's path and covers c4.

50.a5 51.a6 52.a7 53.a8=R

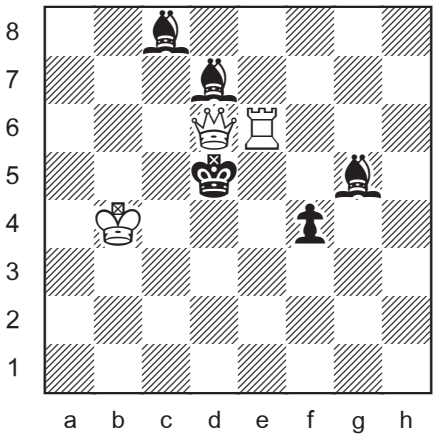
Promoting to queen or bishop would be check. There is no mate if the pawn promotes to knight because the black pawn on f6 could only be captured with check.

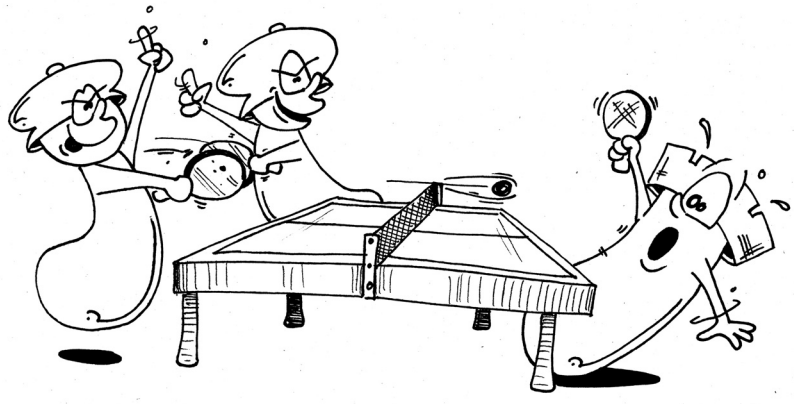


54.Ra6 55.Rxf6 56.Re6

The rook steps out of the pawn's path and covers e4.

57.f6 58.f7 59.f8=Q 60.Qd6#

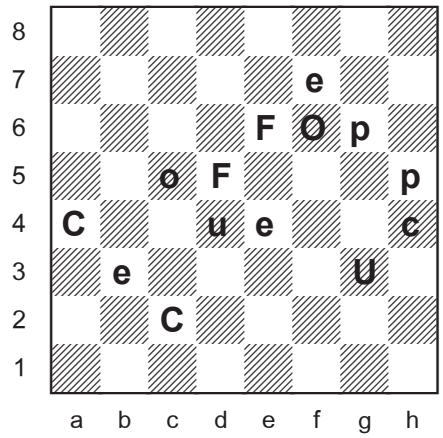




Rebus 66

Andrey Frolkin & Jeff Coakley 2021

Puzzling Side of Chess

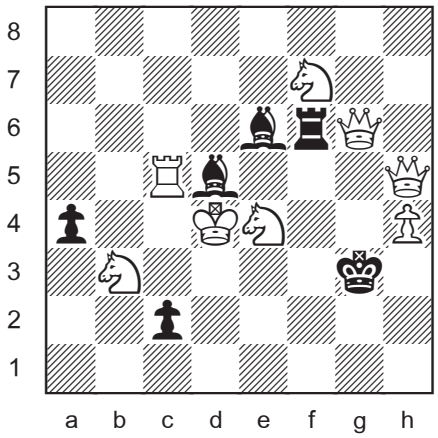


"coffee cup"

C = pawn
O = rook
F = bishop
E = knight
U = king
P = queen

caps = black

last move:
1.Ng5>e4++



(8 + 6)

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

O ≠ ♔ If O = ♔ The letters CEFP each attack a king (O) along a rank or file (Cc2, Ef7, Fd5, Pg6). One of these letters is queen or rook, so there is a <u>check</u>.

U = ♖ There is no way to assign queen and rook to (CEFP) for a legal double check. So U = (♕♖).

U ≠ ♕ Impossible double check (d4).

The letters CEFP each attack a king (O) "knightwise" (Ca4, Ee4, Fe6, Ph5). One of these letters is a knight, so there is a second <u>check</u>.

No legal double check is possible (♕♘). So O ≠ ♔.

U = ♔ The letters CEFP each attack a king (U) along a rank or file (Ca4, Eb3, Fd5, Pg6). One of these letters is queen or rook, so there is a <u>check</u>.

O = ♖ There is no way to assign queen and rook to (CEFP) for a legal double check. So O = (♕♖).

O ≠ ♕ If O = ♕ Triple check (f6).

A double check is possible with F = ♖ and last move Re5-d5++, but in that case, there is a third check by a knight (CEP).

Each king is attacked knightwise by CEFP (Cc2, Ee4, Fe6, Ph5). One of these letters is a knight, so there is a second <u>check</u>. The only way to assign pieces for a legal double check is the following:

P = ♕ **E = ♘**

last move: Ng5>e4++ This move may or may not have been a capture.

C = ♗ C ≠ ♝ Triple check (h4).

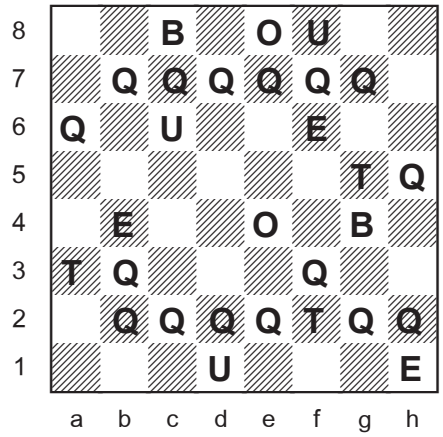
caps = black If caps = white Triple check (pawn h4).

F = ♝

Rebus 67

Andrey Frolkin & Jeff Coakley 2021

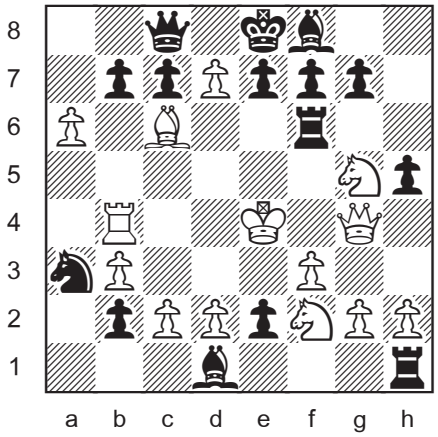
Puzzling Side of Chess



"bouquet"

B = queen
O = king
U = bishop
Q = pawn
E = rook
T = knight

last move:
1.e6xNd7+



(14 + 15)

Q = ♙ There are 16 queues. If Q ≠ ♙, there are 12 promoted Q's, which is impossible with only 3 missing pieces.

With 16 pawns on the board, no promotions were made.

♔♕ = (BO) Letters with one uppercase, one lowercase.

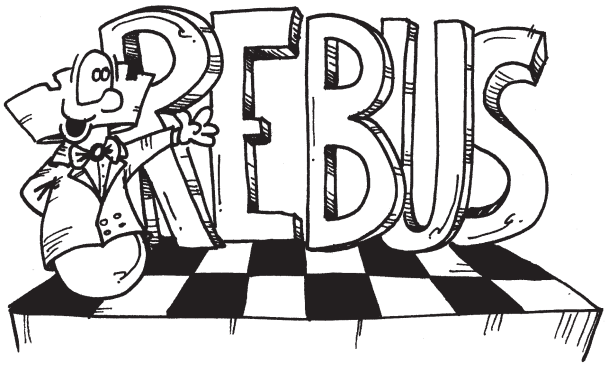
♖♗♘ = (TEU) Three of each type.

Three pieces are missing. One of them was captured by a pawn on the b-file. Now consider the pawn formation as a whole. Only two other captures were possible. So on most files, the bottom Q is white and the top Q is black. There are only three scenarios in which the pawns can be coloured differently.

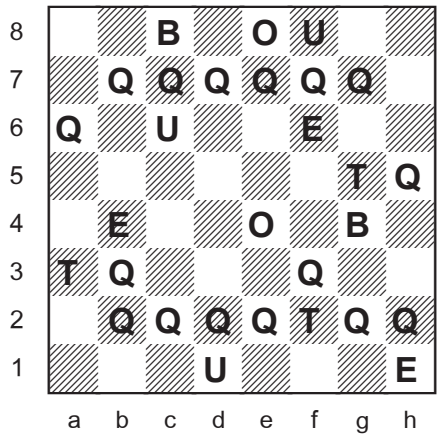
a) The pawns on one file are inverted (white above black). This requires two captures, both by the same side.

b) The pawns on two adjacent files are inverted. This requires two captures, both by the same side.

c) The pawns on one file are both white and the pawns on an adjacent file are both black. This requires two captures, one by each side.



Rebus 67 continued



The bishops are the key to determining the colour of the pawns. Three bishops are still on the board. The pawn formation must be such that those bishops could reach their current location. For example, if the white dark-square bishop is on the board, then either b2 or d2 must be black, or both.

A single capture on the b-file can account for b7 being white <u>or</u> for b2 being black, but not both. That capture could only free one bishop (from c1 or c8). Three captures would be needed for b7 to be white <u>and</u> b2 to be black.

At least three bishops are not on their original squares. For two bishops to leave their home square, one capture is not enough. The given pawn formation cannot be achieved with exactly two captures. Therefore three captures by pawns took place. One bishop was captured and at least three bishops left their home square.

T ≠ ♗ All three T's are on dark squares.

E ≠ ♗ If E = ♗

There is a bishop on h1, so g2 is black.

Both dark-square bishops are on the board (a5 f6).

The black bishop (from f8) could have moved if g7 is white. The inverted g-pawns require two captures.

The white bishop (from c1) could have moved if b2 is black. That requires the third and final capture.

However, one of the three pieces captured would be the missing light-square bishop. The black bishop (from c8) had to move, either going to h1 or being captured by a pawn. But with black pawns on b7 and d7, the bishop could not have moved. Therefore E ≠ ♗.

U = ♗

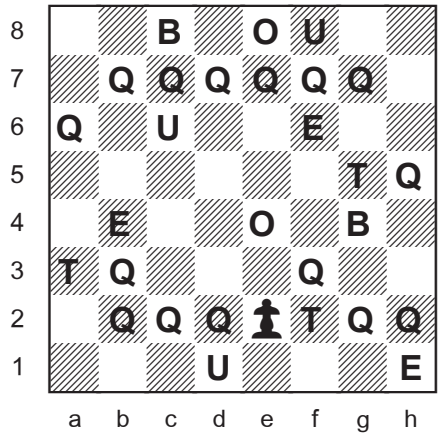
At least three bishops were free to move from their original squares.

A capture on the b-file could have freed one of them (c1 or c8), if either b2 is black or b7 is white.

There is a bishop on d1 so either c2 or e2 is black. If c2 is black, then the kingside bishops (f1 f8) were never freed. Pawns on e2 and g2 would be white. Pawns on e7 and g7 would be black.

Thus, the pawn on e2 is black, which also "releases" the white light-square bishop from f1.

Rebus 67 continued

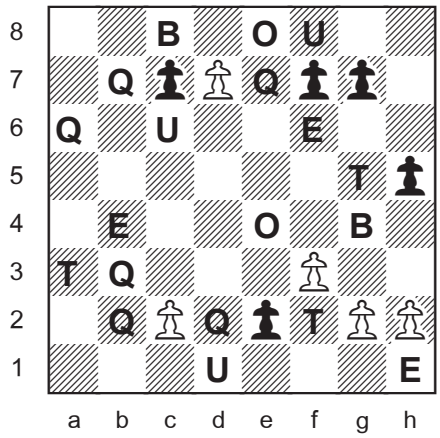


Both queenside bishops (from c1 and c8) must be released. Now consider the d-pawns. If d2 is white and d7 is black, one of those bishops did not escape. Only one could be freed by a single capture on the b-file. So either d7 is white or d2 is black or both.

Given the black pawn on e2, there are actually only two possible scenarios:
a) white d7 e7, black d2
b) white d2 d7, black e7

In both cases, the pawn on d7 is white. That releases the black bishop from c8. In *scenario a* (with black d2), the white bishop from c1 would also be freed. *In scenario b* (with white d2), the pawn on b2 must be black so that the white bishop from c1 is freed. In both scenarios, the pawns on the cfgh-files are white on the bottom, black on the top.

To decide the true colours of the remaining Q's, we must first determine the last move. That requires identifying the kings.



The black king is on c8 or e8. It cannot be on e4 or g4 because there would be an impossible check by the pawn on f3. The black queen is also on c8 or e8. A white queen would give an impossible check.

The white royals are on e4 and g4.

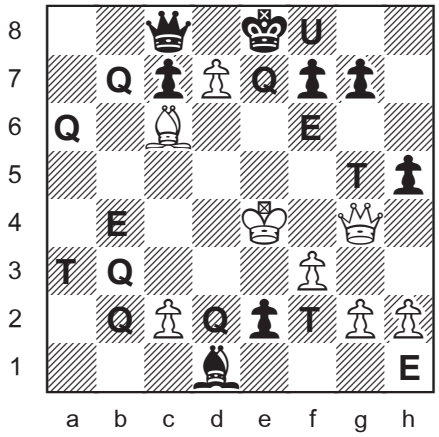
The black king (c8 or e8) is in <u>check</u> (d7).

B = ♕ If B = ♔ Both kings in check (h5).

O = ♔

The bishop on c6 is white. If it was black, both kings would be in check. The other light-square bishop (d1) is black. See diagram next page.

Rebus 67 continued

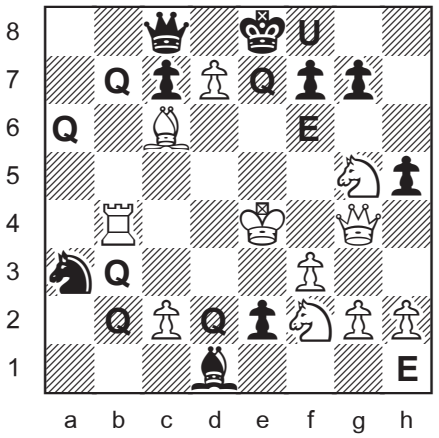


E = ♖ If E = ♘
Impossible second check (f6) whether f6 is white or black.

The rook on b4 is white. If not, both kings are in check.

T = ♘ The knights on f2 g5 are white. Otherwise both kings are in check. So the knight on a3 is black.

Updated diagram.



Q = pawn, E = rook, U = bishop

The last move was the capture 1.e6xd7+. It was not the advance 1.d6-d7+ because the black king would already be in check by the bishop on c6.

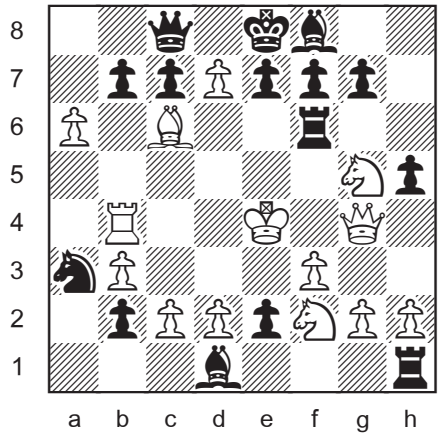
The pawn on e7 is black. If it were white, then White made two captures, by dxe and e6xd7+. But in that case, it is impossible for the black pawn to be on e2 before White captured on d7.

Therefore the pawn on d2 is white and the bishop on f8 is black.

Since e7 is black, the pawn on d2 is white (*scenario b*). That means the pawn on b2 must be black to grant freedom to the bishop from c1. Therefore the pawns on b3 a6 are white and the pawn on b7 black.

Black made two captures (...a3xb2 and ...dxe). Hence White is missing two pieces. The missing bishop is white. The missing knight is black. So the missing rook must be white. The rooks on f6 and h1 are black.

The last move was 1.e6xNd7+ because the only missing black piece is a knight.



Until next time!