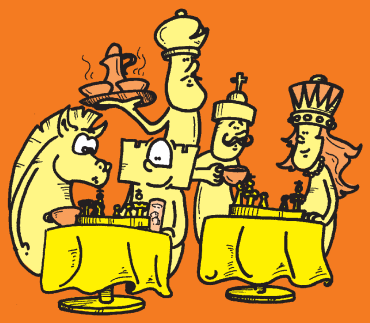


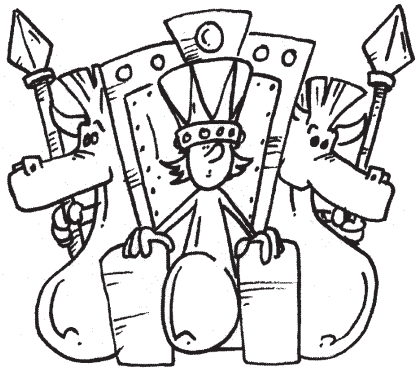
THE PUZZLING SIDE OF CHESS

Jeff Coakley

REBUS PIECES part 2

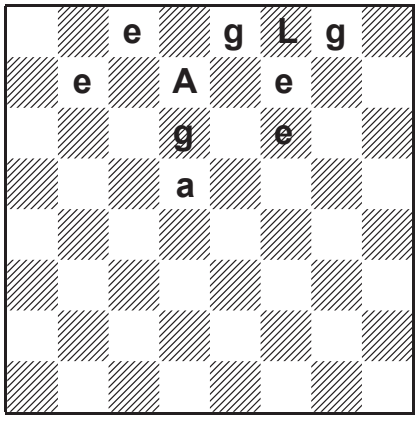
number 238 August 24, 2024

This column is the second in a series about the kind of pieces used in rebuses. Most rebuses include all 6 piece-types. There are also many problems with 5 piece-types in which the unused piece is either a queen or a pawn. Other piece groupings are much less common. The six rebuses presented here all have 4 piece-types including a queen.



Rebus 115

"*eagle*"

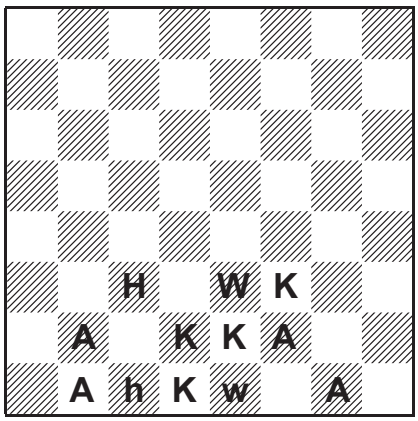


Each letter represents a different type of piece.
Uppercase is one colour, lowercase is the other.
Determine the position and the last move.

See *Rebus Pieces part 1* for a breakdown by piece-type of rebuses published since 2016. Except for problem 117, the piece groupings in this column have not been used before.

Rebus 116

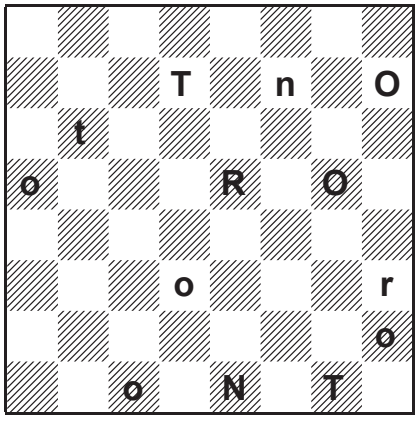
"*hawk*"



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.

Rebus 117

"*Toronto*"

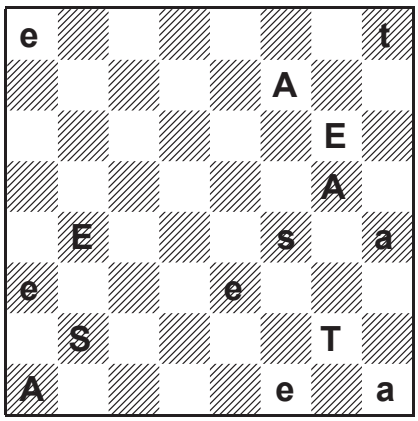


Each letter represents a different type of piece.
Uppercase is one colour, lowercase is the other.
Determine the position and, if possible, the last move.

The first three problems were all missing pawns. The next three also have something in common. That is not intended as a hint.

Rebus 118

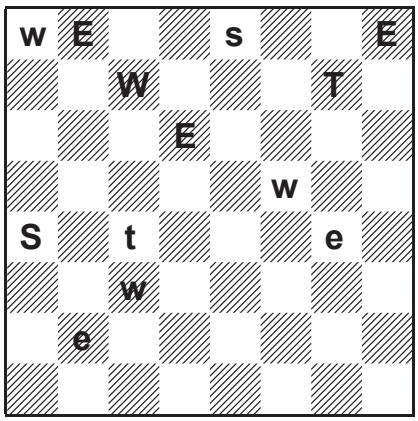
"*east*"



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

Rebus 119

"*west*"

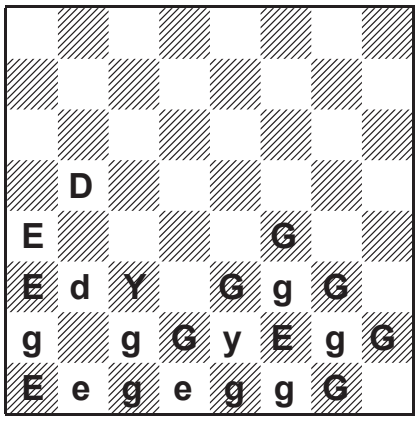


Each letter represents a different type of piece.
Uppercase is one colour, lowercase is the other.
Determine the position and, if possible, the last move.

Sharpen your wit. The final problem has more of an edge than the other puzzles. And to finish things off, we have the usual picture rebus and riddle. Good luck!

Rebus 120

"*edgy*"



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

Riddle: "*What did the upbeat coach say to the struggling team?*"









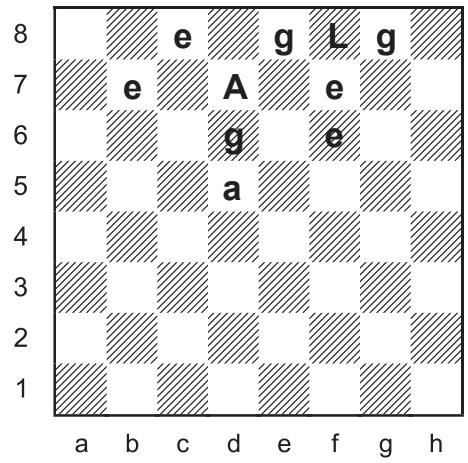


SOLUTIONS

All chess rebuses are joint compositions by Andrey Frolkin and Jeff Coakley. Rebus 117 was published previously in 2016. The others are *Puzzling Side of Chess* (2024).

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

Rebus 115

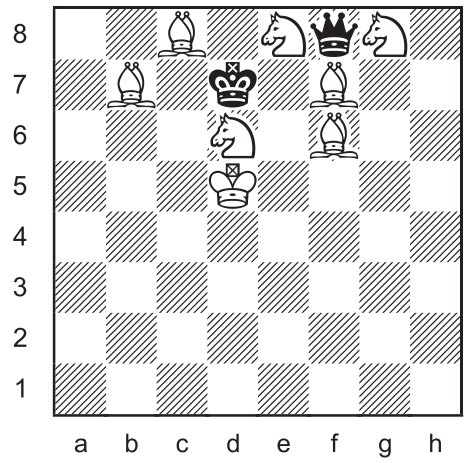


"eagle"

E = bishop
A = king
G = knight
L = queen

caps = black

last move:
1.c7-c8=B+



(8 + 2)

Four piece-types with missing rooks and pawns.

A = ♔ Letter with one uppercase, one lowercase.

EGL ≠ ♙ On 8th rank.

E = ♗ E ≠ ♕ Triple check (b7 c8 f7).

E ≠ ♖ Impossible double check (b7 f7).

E ≠ ♘ If E = ♘ Check (f6).

G ≠ ♕♖ Impossible double check (d6).

G ≠ ♕♗ Impossible double check (e8).

G = Ø? No piece can be assigned to letter G.

The king on d7 is in check by the bishop on c8.

last move: **1.c7-c8=B+** Only way to explain the check.

caps = black Lowercase promotion on 8th rank.

G = ♘ G ≠ ♕ Triple check (d6 e8).

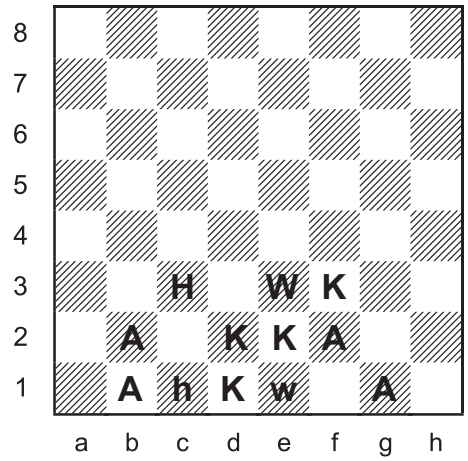
G ≠ ♖ Impossible double check (d6).

L = ♕ L ≠ ♖ If L = ♖ Black had no move on their previous turn! With a white pawn on c7, the black king would be in an impossible double check on c8, d8, or e7. So he couldn't have just moved from those squares.

With L = ♕, Black's previous move was ...Q>f8.

Rebus 116

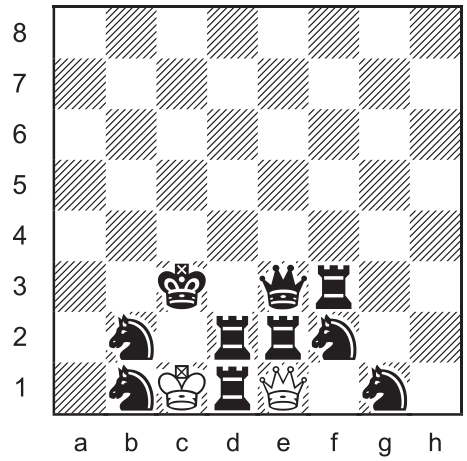
"*hawk*"



H = king
A = knight
W = queen
K = rook

caps = black

last move:
1...c2xd1=R+



(10 + 2)

Four piece-types with missing bishops and pawns.

HAWK ≠ ♗ On 1st rank.

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

W ≠ ♔ If W = ♔

K = ♘ K ≠ ♕ Triple check.

K ≠ ♖ Impossible double check (d1 e2).

K ≠ ♗ Impossible check (d2).

The king on e1 is in <u>check</u> by the knight on f3.

A ≠ ♕♖ Impossible double check (g1).

A ≠ ♕♗ Impossible double check (f2).

A = Ø? No piece can be assigned to letter A.

H = ♔

K = ♖ K ≠ ♕ Both kings in check (d1 d2).

K ≠ ♗ Impossible check (d2).

K ≠ ♘ If K = ♘ <u>Check</u> (e2).

A ≠ ♕♖ Impossible double check (b1).

A ≠ ♕♗ Impossible double check (b2).

A = Ø? No piece can be assigned to A.

The king on c1 is in <u>check</u> by the rook on d1.

last move: **1...c2xd1=R+** The type of piece captured is unknown.

caps = black Uppercase promotion on 1st rank.

A = ♘ A ≠ ♕♖ Impossible double check (b1).

A ≠ ♕♗ Impossible double check (b2).

W = ♕ W ≠ ♗ If W = ♗ White had no move on their previous turn!

With W = ♕, White's previous move was Qf1>e1.

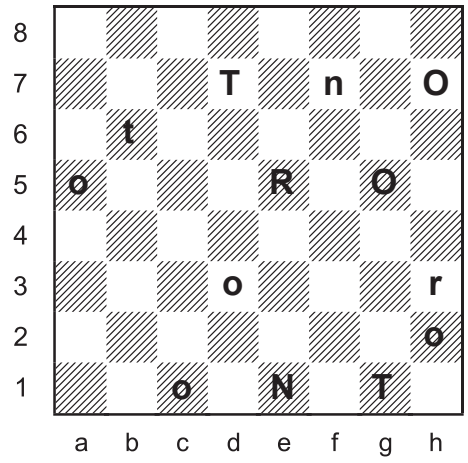
Same trick as the first rebus.

Rebus 117

Andrey Frolkin & Jeff Coakley

Chessproblems.ca Bulletin issue 9, August 2016

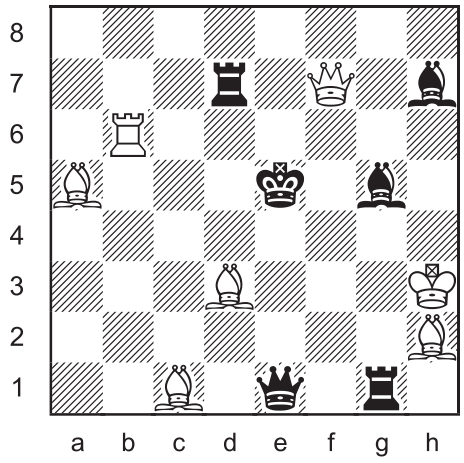
"*Toronto*"



T = rook
O = bishop
R = king
N = queen

caps = black

last move:
1.Kg3>h3+



(7 + 6)

Four piece-types with missing knights and pawns.

ONT ≠ ♙ On 1st rank.

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

N ≠ ♔ If N = ♔

O = ♗ O ≠ ♕♖ Both kings in check (c1 h7).

O ≠ ♘ Both kings in check (d3 g5).

The king on e1 is in <u>check</u> by the bishop on a5.

T = ♘ T ≠ ♕♖ Both kings in check (d7).

Impossible <u>check</u> by the bishop on a5. No last move.

R = ♔

O = ♗ O ≠ ♕♖ Both kings in check (a5 h7).

O ≠ ♘ Both kings in check (d3 g5).

The king on e5 is in <u>check</u> by the bishop on h2.

T = ♖ T ≠ ♕ Both kings in check (d7).

T ≠ ♘ Both kings in check (g1).

N = ♕ T ≠ ♘ Impossible double check (f7).

The discovery Kg3>h3+ is the only way to explain the bishop check. This move may or may not have been a capture.

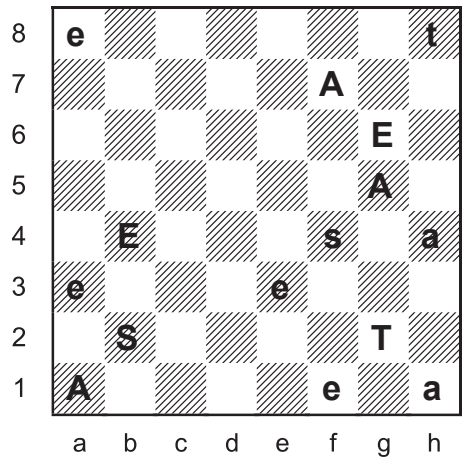
Before this move, the king on g3 was in double check. The preceding move had to be **...f2xg1=R++**. The type of piece captured is unknown.

caps = black Uppercase promotion on 1st rank.

last move: **1.Kg3>h3+**

Rebus 118

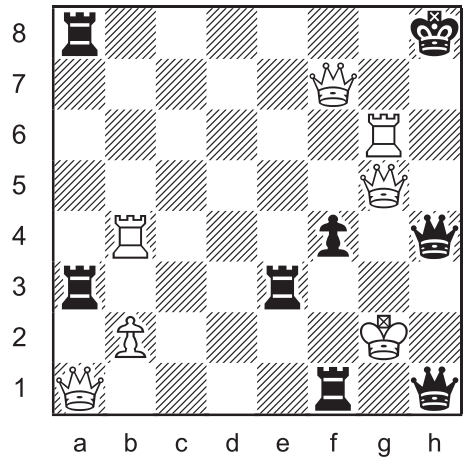
"east"



E = rook
A = queen
S = pawn
T = king

caps = white

last move:
1...h2-h1=Q#



(7 + 8)

Four piece-types with missing bishops and knights.

EAT ≠ ♗ On 1st or 8th rank.

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

S ≠ ♔ If S = ♔

E = (♖♘) E ≠ ♕ Both kings in check (a3 b4).

E ≠ ♗ Impossible check (a3).

The king on f4 is in <u>check</u> (♖b4 or ♘g6).

A = ♘ A ≠ ♕♖ Impossible double check (f7).

A ≠ ♕♗ Impossible double check (g5).

E = ♖ <u>Check</u> (b4).

T = Ø? T ≠ ♕♗ Both kings in check (h8).

No piece can be assigned to letter T.

T = ♔

E = ♖ E ≠ ♘ Both kings in check (e3 g6).

E ≠ ♕♗ Impossible double check (a8 f1).

A = (♕♗) A ≠ ♘ Both kings in check (f7 h4).

The king on g2 is in <u>check</u> by a queen or bishop on h1. In either case, the last move was necessarily a promotion: 1...h2-h1=Q/B+.

caps = white Lowercase promotion on 1st rank.

S = ♗ S ≠ ♘ Impossible double check (f4).

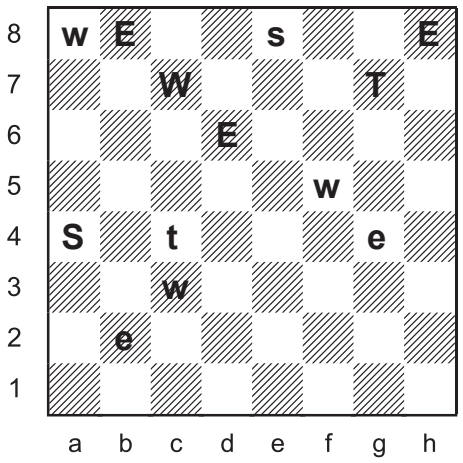
S ≠ ♕♗ Both kings in check (b2).

A = ♕ A ≠ ♗ There cannot be a white bishop on a1 with a white pawn on b2.

last move: **1...h2-h1=Q+**

Rebus 119

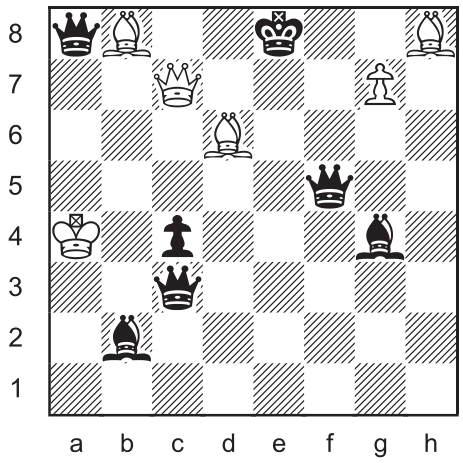
"west"



W = queen
E = bishop
S = king
T = pawn

caps = white

last move:
1...Q>a8+



(6 + 7)

Four piece-types with missing rooks and knights.

WES ≠ ♗ On 8th rank.

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

T ≠ ♔ If T = ♔

WES = (♕♖♗♘) One of these letters = ♕ or ♖.

Therefore, one king is in <u>check</u> by a queen or a rook along a rank or file (S/a4, W/c7, or E/g4).

♘ = Ø W ≠ ♘ Impossible second check (f5).

E ≠ ♘ Impossible second check (d6).

S ≠ ♘ Impossible second check (e8).

WES = (♕♖♗) No knights.

So there are <u>checks</u> by a queen and by a rook.

T ≠ ♔ No legal double check is possible.

S = ♔

E = ♗ E ≠ ♘ Both kings in check (b2 d6).

E ≠ ♕♖ Impossible double check (b8 h8).

W = (♕♖) W ≠ ♘ Both kings in check (c3 c7).

The king on a4 is in <u>check</u> by a queen or rook on a8.

T = ♙ T ≠ ♘ Both kings in check (g7).

T ≠ ♕♖ Impossible double check (c4).

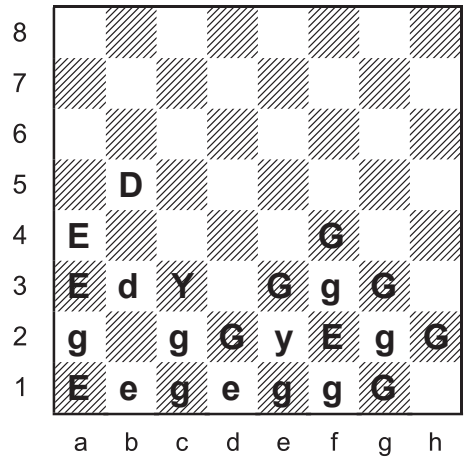
caps = black There cannot be a black bishop on h8 with a black pawn on g7.

W = ♕ W ≠ ♖ Impossible check (a8). Black cannot promote on the 8th rank.

last move: **1...Q>a8+** This move may or may not have been a capture. The departure square is unknown.

Rebus 120

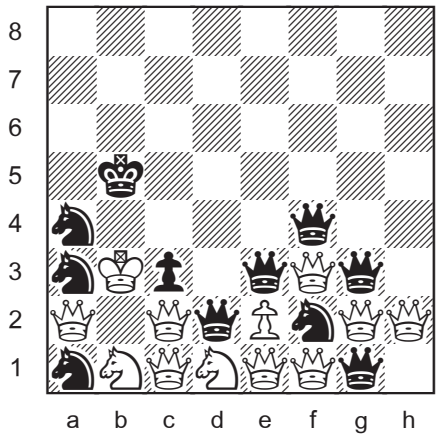
"*edgy*"



E = knight
D = king
G = queen
Y = pawn

caps = black

last move:
1...b2xa1=N+



(11 + 12)

Four piece-types with missing rooks and bishops.

EG ≠ ♙ On 1st rank.

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

Y ≠ ♔ If Y = ♔

E = ♗ E ≠ ♕♖ Impossible check (f2).
E ≠ ♘ Impossible double check (b1 d1).

G = Ø? G ≠ ♕♖ Three checks (c2 d2 e3).
G ≠ ♘ Four checks (a2 f4 g1 g3).

No piece can be assigned to letter G.

D = ♔

E = ♘ E ≠ ♕ Impossible double check (a3 a4).
E ≠ ♖ Impossible check (a3).
E ≠ ♗ Impossible check (a4).

The king on b3 is in <u>check</u> by the knight on a1.

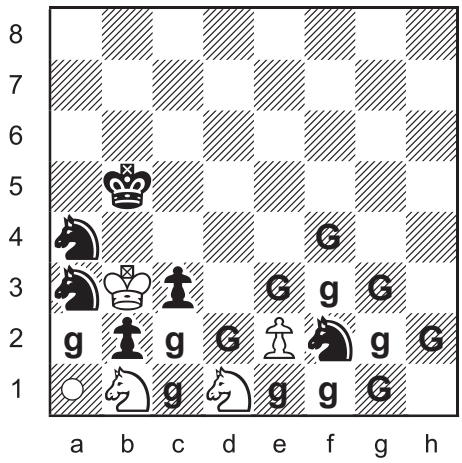
last move: **1...b2xa1=N+**. The type of piece captured is unknown.

caps = black Uppercase promotion on 1st rank.

Y = ♙ Y ≠ ♕♖ Impossible double check (c3).
Y ≠ ♕♗ Both kings in check (e2).

If you are looking for more chess rebuses, check out the *rebus index* in the appendix to column 188. It lists numerous articles and over 260 problems, most of which are readily available online.

Rebus 120 *continued*



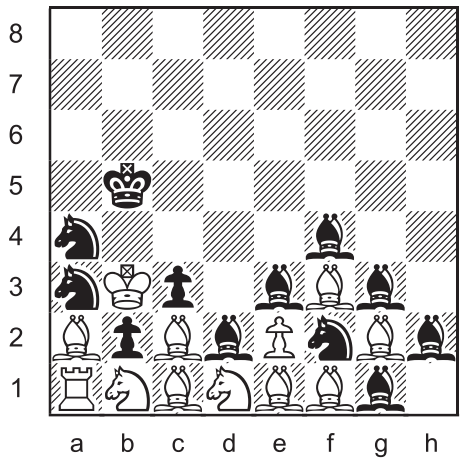
caps = black

The diagram above shows the position before 1...b2xa1=N+. There is an unknown type of white piece on a1.

The material count is 12 + 12. Each side is missing four pieces.

G ≠ ♖ If G = ♖, White has no move on the preceding turn.

G ≠ ♗ If G = ♗, the position is illegal because of the *bishop ratio* (a comparison of the number of light and dark bishops for each side). For argument's sake, let's say the piece on a1 is a rook.

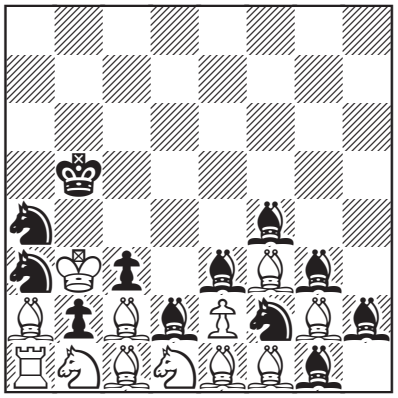


White has 5 promoted pieces (4 light bishops, 1 dark bishop).
Black has 6 promoted pieces (1 knight, 5 dark bishops).

White is missing a queen, a rook, and 2 pawns. Black is missing 2 rooks, a queen, and a bishop. The capture of these 8 pieces is more than enough to account for the number of promotions and passed pawns, but it is insufficient to account for the disparity in the colour of the bishops and the placement of the passed pawns.

Analysing the various tries is complicated, but achieving the given ratio of promoted bishops always requires at least one capture too many. A logical argument to prove this is given on the next page.

Rebus 120 *continued*



Each side made 4 captures The missing pieces are white: QRPP, black: QRRB.

Black has 2 pawns on the bc-files. The other 6 black pawns promoted, 5 on dark squares.

The black a-pawn and g-pawn could promote on a dark square (a1 g1) without capturing.

The black dfh-pawns would each require 1 capture to promote on a dark square. Given the unmoved white pawn on e2, the black e-pawn would require 1 capture to promote on a light square and 2 captures to promote on a dark square. Thus, 4 captures are required by the black defh-pawns to promote 3 times on dark and once on light.

Therefore the black abcg-pawns made no captures. This means that the white a-pawn captured onto the b-file to let the black a-pawn pass to a1. The white pawn then promoted on the dark square b8.

The white b-pawn was not captured by Black, so it necessarily captured onto the a-file or c-file and promoted on a light square (a8 or c8).

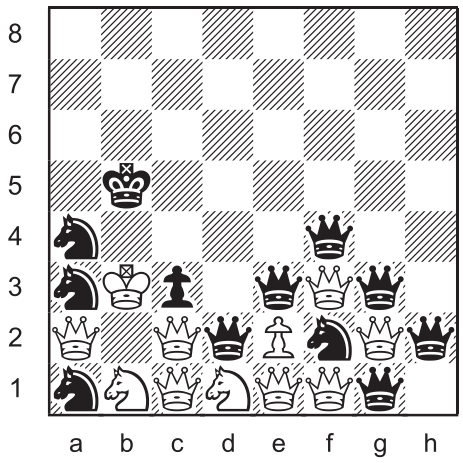
So the other white pawns only made 2 captures.

White promoted 5 pawns, 4 on light squares.

Two of the white cdfgh-pawns were captured by Black. The 3 others must all promote on light squares. But this requires at least 3 captures. (The black c-pawn is still on the c-file and the black g-pawn promoted on g1 without capturing. Therefore the white cg-pawns would each need two captures to promote on a light square. The white dfh-pawns would each need one capture to promote on a light square.)

Therefore G ≠ ♗

G = ♕ The position is legal.
Shown here after 1...bxa1=N+.



REBUS RIDDLE

What did the upbeat coach say to the struggling team?

"*Even in defeat, you can still be cheery.*"

eave-N-inn-D-feet-ewe-can-still-beach-ear-E

Until next time!