NEW GOOFS AND OLD MISTAKES
## (Errata: columns 1-50)

number 51   October 26, 2013

This edition of *The Puzzling Side of Chess* presents four new problems and concludes with a list of errata from all previous columns [*as first published at ChessCafe.com*].

In a *Who's the Goof?* puzzle, the position is intentionally illegal. Your task is to figure out why.

A chess position is *legal* if it can be reached in an actual game, starting from the initial array and following the rules of normal play. It's okay if the moves are weird. Legality has nothing to do with strategy.
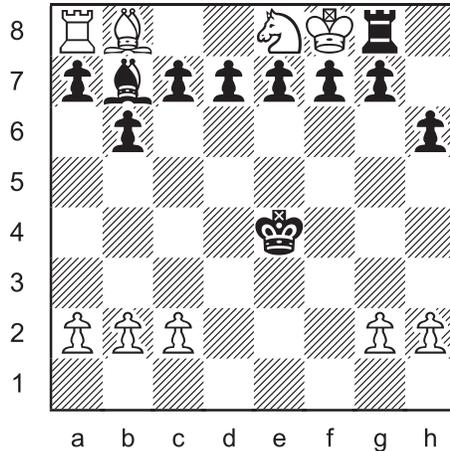
Who's the Goof? 25
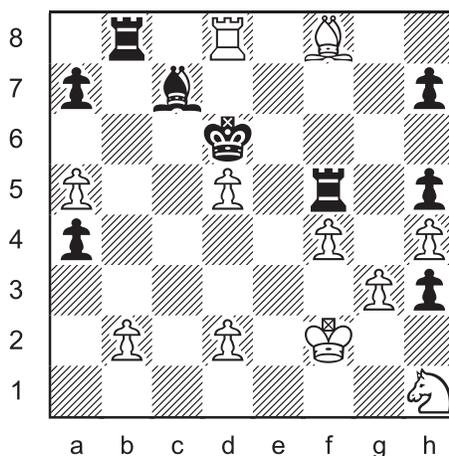
Why is this position illegal?

For problems 1-24, see columns 12, 19, 26, 34, 37, 43 in the archives.
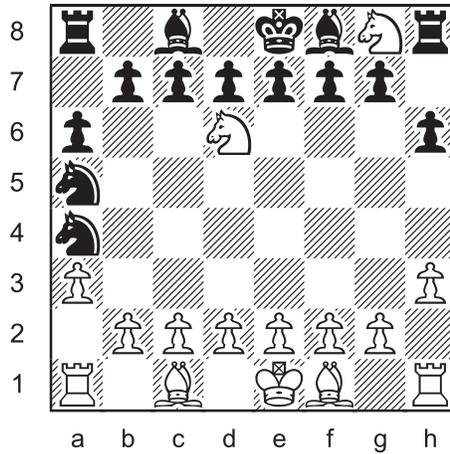
Who's the Goof? 26

Why is this position illegal?

Who's the Goof? is a kind of negative *proof game*. The goal is to prove that a position could **not** happen in a real game. Solving the puzzle usually involves "backwards thinking" (retrograde analysis).

The *stipulation* is to explain why the position is illegal. Sometimes a single piece or tactical element can be identified as the "goof". However, in more complicated cases, a logical argument is necessary to demonstrate a "legal contradiction" within the position.
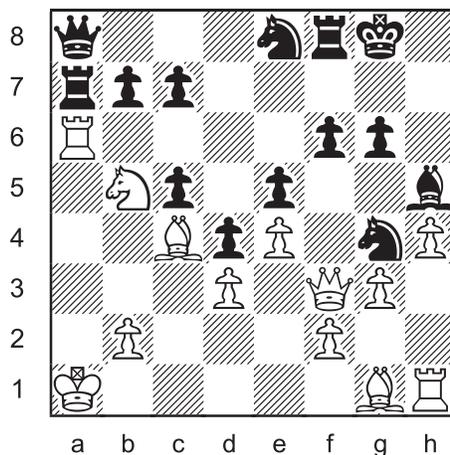
Who's the Goof? 27

Why is this position illegal?

Thanks to everyone who entered the *Chess Cafe Puzzlers Cup.* The five winning problems will be featured in the November 30 column.
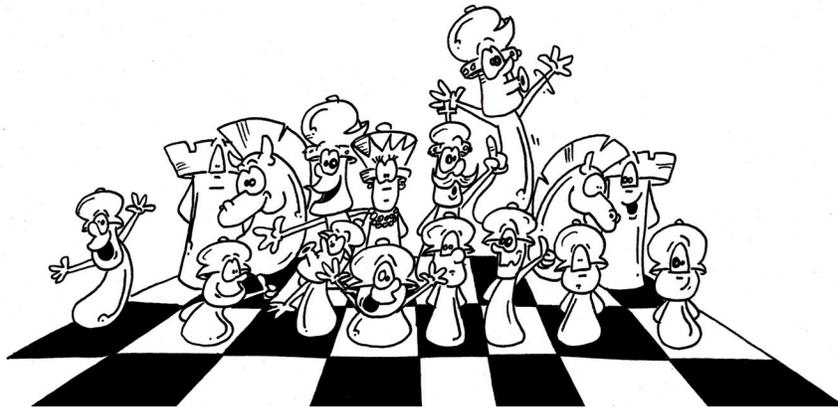
Who's the Goof? 28

Why is this position illegal?

Errata Can Be Fun!

Time flies. *The Puzzling Side of Chess* is fifty columns old. Inevitably, a few mistakes have been made.

For anyone who is interested, here is a list of errata for columns 1-50. It includes not only corrections, but also clarifications and additional information.

> This list of errata is for the original postings at *ChessCafe.com*. It is given here in an abbreviated form. All columns in the current *Puzzling Side* archives have been corrected and updated.

Some of the mistakes were discovered by me. Others were kindly pointed out by readers. If you know of any errors that are not in this list, I'd be grateful to hear about them. Thanks.

All the blunders are there, waiting to be made.

Saveilly Tartakower

Column 4: *The Old Switcheroo*
Switcheroo 02
There are two dual solutions: Kf2-Kg7 and Ra1-Bc4.

Column 11: *Triple Loyd: Black Pieces*
Inverted Loyd 02
There are numerous dual solutions including:
Add Re8 Bh1 Na8: 1.Bxc6#
Add Rh8 Ba6 Nd5: 1.Bc8#

Column 15: *Eight Officers*
Eight Officers 4a
The position should be attributed to William Shinkman (*Detroit Free Press* 1883). The column incorrectly states that the solution is unique. There is one other arrangement of pieces with ten possible moves, also given by Shinkman.
Qa1 Ba2 Rb1 Rb2 Nb3 Bc1 Kc2 Nd2. The total number of solutions, with rotation and reflection, is therefore sixteen.

Eight Officers 4b
The solution as given is correct, but it should be noted that the second solution to puzzle 4a is not a solution for 4b. There are eighteen attacked squares.

Column 18: *Eight Officers: First Rank*
Eight Officers 6b
The main solution is correct, but the position given afterwards for *bishops on the same colour* can be improved, as shown by Octavian Laiu.
Ra1 Kb1 Qc1 Nd1 Be1 Nf1 Bg1 Rh1: 36 squares attacked
Ra1 Rb1 Kc1 Qd1 Ne1 Bf1 Ng1 Bh1: 36 squares attacked

Column 21: *A Holiday Visit to the Normal Side*
Problem 2 (mate in 2)
The problem is anticipated by Werner Keym 1972 (*Allgemeine Zeitung Mainz*). In his position, the white queen starts on b8 instead of h8.

Column 27: *Three Multiplexes*
The Unbeknown Benoni-plex 1B (general case)
The maximum number of different positions that can be shown using a single diagram is 192. Andrew Buchanan provided an example of a pawn formation in which each side could have five different *en passant* captures.

Stipulation Multiplex 2E (mate in one squares)
The stipulation should be "*On which seven squares can the black king be placed (instead of e5) so that White has mate in one?*"
Thanks to Norbert Geissler for pointing out that there are seven squares, not six as originally stipulated. The solution to be added is: 7. Black king on d4: 1.Qc3#

Stipulation Multiplex 2I (inverted loyd)
There are dual solutions with a different mating move. Add Ra2 Bd8 Ne3: 1.Bxa5#
The black rook could also be placed on b2 or c2. The black bishop could also be placed on b6 or c7.

To "correct" the problem, change the stipulation to "*Find two solutions with different mating moves.*"

Column 30: *Chess Mysteries in a Retro World*
Retro 09
The problem is anticipated by David Norwood in *Chess Puzzles* (1995)*.* His position was reflected left to right.

Column 33: *Retractors: "Takeback Granted"*
Retractor 03
There is a dual solution. -1.Rh6xe6(p) +1.Bf2#
The problem can be fixed by adding a black pawn on h6.

It has been suggested that the second solution actually improves the problem, since in one line the rook blocks the g1-a7 diagonal and the bishop covers h8, and in the other line the roles are reversed. Of course, the stipulation would have to be "find two solutions".

Retractor 10
The list of incorrect tries should also include -1.a2-a3, -1.Re1-a1, and -1.Re1-f1 (all followed by +1.Ne1#).

Column 36: *Sixteen Pieces*
Sixteen Pieces 4 (minimum moves)
New records for 14, 13, 6, 5, 4, 3, 2, 1 possible moves are given in column 39.

Column 42: *Return to a Retro World*
Retro 12
Diagram error. There should be a black pawn on h7.

Retro 15
The last move was 2...Ra1-h1, as given. However, the move before 2.Kf2 Ra1-h1 could have been either 1...a2-a1=R+ or 1...Ra2-a1+. In the latter case, Black promoted to a rook on a1 earlier and then played the rook to a2.

<u>Column 45</u>: *Retractors: Find the Missed Mate*
Retro 18
At the end of the solution, delete the paragraph that begins "Note that the retraction -1.Rg4xg5(p) does not work ..."
That retraction is impossible because there is a black pawn on g4.

<u>Column 48</u>: *Helpmates: Black to Play and Lose*
Helpmate 07b
This problem, given in the solution section as an example of a twin, is not sound. Like the original position by Max Lange, there are multiple obvious solutions. Somehow it eluded human scrutiny and computer testing?!

The problem could be fixed by adding black pawns on b5 and e5, with the new solution 1.Kc6 c4 2.Kb7 Bc2 3.Ka8 Be4#, but then it would no longer be a twin. The best repair is to just delete it.

As you can see, the answer to the question "Who's the Goof?" is sometimes *Coakley*.

But perhaps my *significant goof average* is not too bad. There have been 373 puzzles in the column so far, with 285 by me. Of the seventeen errata, only seven are cooks.
SGA = .019

Of course, I wish there were no mistakes. So like the duck in column 34, I resolved to stop goofing up. Since that time, with the aid of enhanced anti-goof countermeasures, the SGA has been a more tolerable .007!?
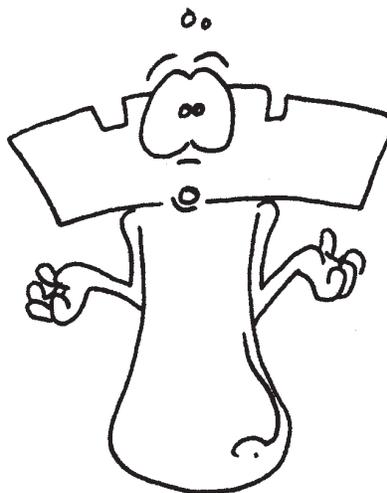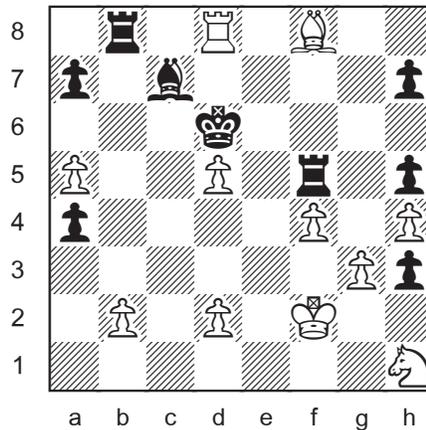
SOLUTIONS

All problems by J. Coakley. 25 & 26: *ChessCafe.com* (2013).
27: *Winning Chess Puzzles For Kids Volume 2* (2010).
28: (version) *Scholar's Mate 119* (2013).

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.

Who's the Goof? 25

White has two promoted pieces and seven pawns.

The double check by the white rook and bishop is only possible if the last move was the promotion exd8=R+. However, the white bishop must also be a promoted piece because of the unmoved pawns at b2 and d2. The original dark-square bishop could never have moved and was captured on c1. White still has seven pawns, so two promotions are impossible.

Did you notice that Black is mated?

Who's the Goof? 26
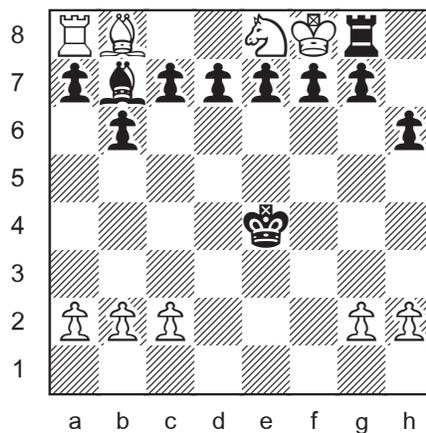
The white king is in an impossible check.

The black rook could only have moved to g8 from h8. This would be illegal unless it captured something on g8. Otherwise, the rook would already be giving check from h8. *It cannot be Black's turn if White is in check*.

However, the preceding position with a white piece on g8 and the black rook on h8 is impossible because White would not have a legal move on the previous turn.

a) The five white pawns have never moved.

b) The king on f8, rook on a8, and bishop on b8 are completely hemmed in (*zero reverse mobility*).

c) The knight on e8 could only have moved there from d6 or f6, where it would be checking the black king. *It cannot be White's turn if Black is in check*.

d) That leaves the white piece on g8.

    d1) A rook would be completely blocked.

    d2) A knight could only have moved from f6 where it would be checking the black king.

    d3) A queen or bishop could only have moved from h7 where it would be checking the black king.

    d4) The last move was not the promotion hxg8=Q because there are not enough missing black pieces to account for the necessary captures. Black is missing five pieces (QRBNN). Since there are unmoved pawns on e7 and g7, we know the dark-square bishop was captured on f8. The other four pieces were captured by two white pawns (from the d- and f-files) before they promoted to rook (on h8) and bishop (on b8).

Therefore the position (with white piece on g8 and black rook on h8) is illegal due to *retro-stalemate.*

It takes some tricky manoeuvring by both sides, but the arrangement of white pieces on the 8th rank is possible. The rook on a8 and bishop on b8 are both legally promoted pawns. In order to promote, they needed to capture four black pieces (QRNN). Here is a synopsis of how it could have happened.

a) After ...b6 and ...h6, Black clears the 8th rank of all pieces except the two rooks and the bishop on f8. The king, queen, and light-square bishop exit through b7.

b) The black rook on a8 goes to b7 and the black rook on h8 goes to h7.

c) The white f-pawn advances and captures twice on g6 and h7. It then promotes to a rook on h8, captures the bishop on f8, and moves to a8.

d) The black rook on b7 goes to h7.

e) The white king goes through a6 and b7 to f8.

f) The white d-pawn advances and captures twice on c6 and b7 followed by promotion to a bishop on b8.

The puzzle diagram would be a legal position if the black king were on a different square, such as e3. Perhaps he is the goof?!

Who's the Goof? 27
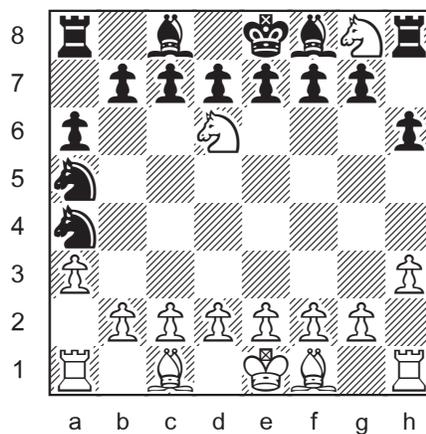
There is a "parity error". White is checking the black king but it cannot be Black's turn to play.

This sort of retrograde analysis can be very surprising if you've never encountered it before. *Parity* is determined by whether the **number** of previous moves is **even** or **odd**.

The black king is in check, so it must be Black's turn. But this is impossible because White and Black have both made an even number of moves, which means that it should be White's turn.

In a game, when it is Black's turn, White has played one more move than Black. If White has made an even number of moves, then Black has made an odd number.

The following facts prove that each side has made an even number of moves in this position:

a) Each side made **two** pawn moves.

b) If any rook or king moved and returned to its original square, it took **two** turns.

(continued next page)

c) Each player begins the game with one knight on a dark square and one knight on a light square. After an odd number of knight moves, they both stand on the same colour squares. After an **even number of knight moves**, they stand on **opposite colours** (like they do in this puzzle).

How's that for a goof!?

Who's the Goof? 28
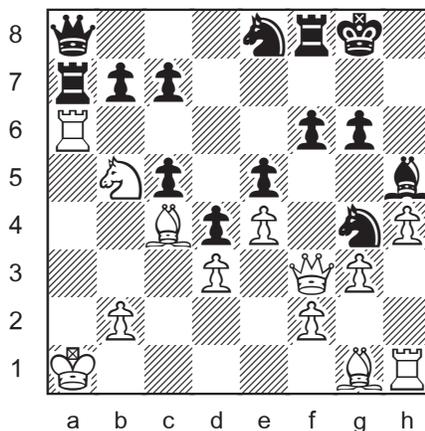
The black king is an impossible check.

There was no legal move by White on the last turn to reach this position.

The white bishop did not just move to c4 from d5, e6, or f7 because it would already be checking the black king. For the same reason, it did not move to c4 from a2 or b3 unless it captured something.

The bishop did not capture on c4 (light square) by Ba2xc4+ or Bb3xc4+ because Black is only missing two pieces: a dark-square bishop and the h-pawn. Obviously, the dark-square bishop was not captured on c4. Proving that the black h-pawn did not promote (and get captured later on c4) is trickier:

a) White is missing three pieces (Npp). Two of them were captured by the black pawn on c5 (from a7). So there is only one white piece available for capture by the black h-pawn.

b) The white bishop on g1 could only get there via h2, and it had to be on h2 (or g1) before White played pawn to g3, and it could only get to h2 after the white h-pawn advanced to h3 or h4.

c) Because White had to move the h-pawn before playing pawn to g3, the black h-pawn's promotion by ...h3xg2-g1 is impossible.

[Thanks to Arno Tüngler for his help with the h-pawn analysis.]

The discovered check Re6-a6+ is also impossible. That rook move could not be a capture because a6 is a light square. But if a6 was empty, then the white king was in an impossible check by the black rook on a7. The rook could only move to a7 from along the a-file, where it would already be giving check.

Retro-stalemate.

An alternative perspective of why the position is illegal is to say that the "goof" is the white bishop on g1, since the only way to explain the white check is a capture of the promoted h-pawn.

Multiple explanations are normal in complicated goof puzzles. This is acceptable from a compositional point of view as long as the logical arguments are based on the same features in the position.

Until next time!