



THE PUZZLING SIDE OF CHESS

Jeff Coakley

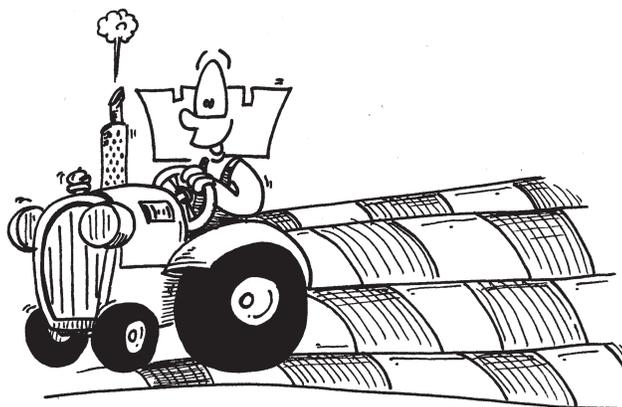
RETRACTORS: Taken Aback

number 213

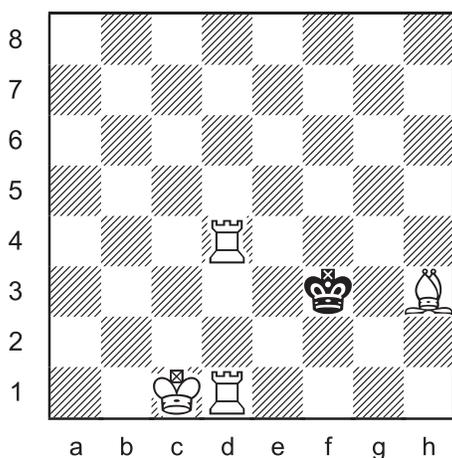
July 24, 2022

Overlooking mate in a game is a drag. But in these eight puzzles, the missed opportunity may be an uplifting experience.

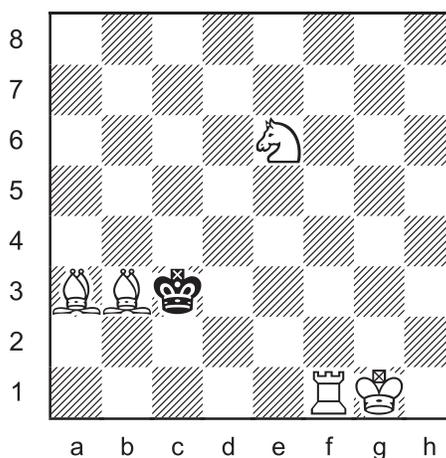
In a basic *retractor* problem, White takes back their last move, and then checkmates Black with a different move. If the retracted move is a capture, White decides which type of piece was taken.



Retractor 39



Retractor 40

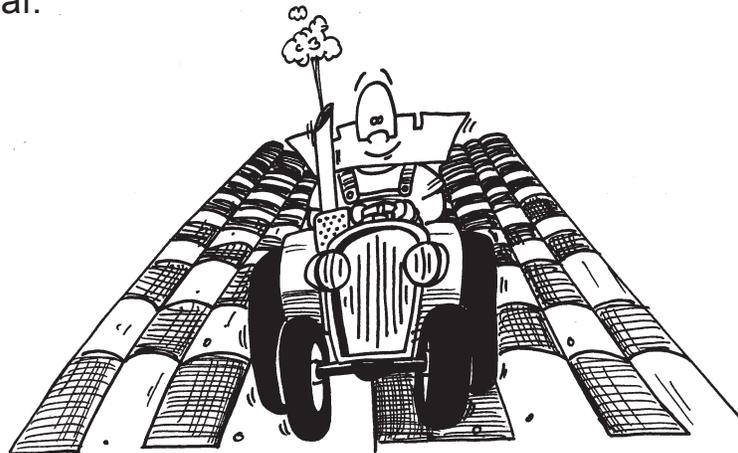


White takes back their last move, then mates in one.

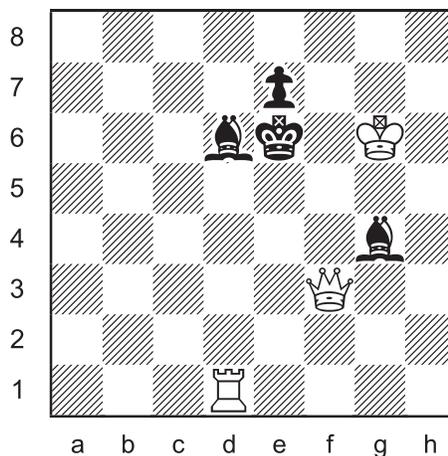
RETRACTORS

Here are the special rules for this type of puzzle.

- a) White may retract any move of their choice.
- b) The position after the retraction must be legal. Among other things, this implies that Black had a legal move on the previous turn. A position is legal if it can be reached in a normal game following the standard rules.
- c) If the retracted move is a capture, White decides which type of piece was taken.
- d) An *en passant* capture is allowed as the backward (retracted) move unless it can be proven illegal.
- e) An *en passant* capture is not allowed as the forward (mating) move unless it can be proven that Black moved their pawn two squares on the previous turn.
- f) Castling is allowed as a backward or forward move unless it can be proven illegal.



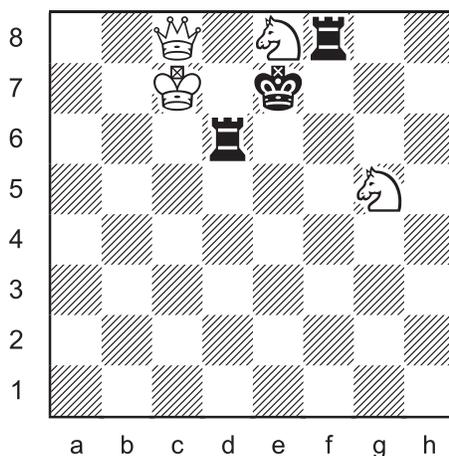
Retractor 41



White takes back their last move,
then mates in one.

One more miniature before we get to the more complicated stuff. This problem is by American composer Eugene Dugas.

Retractor 42

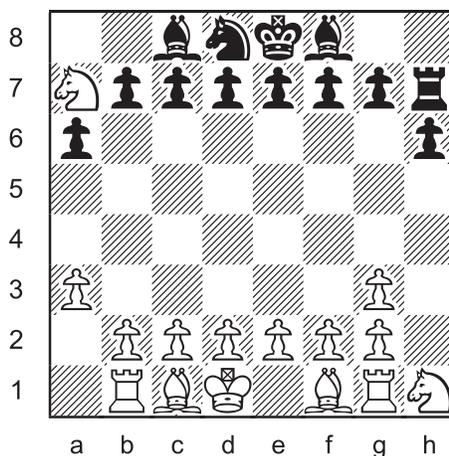


White takes back their last move,
then mates in one.



Things are trickier than they look in the following position by Luis Alberto Garaza (1909-1987) of Uruguay.

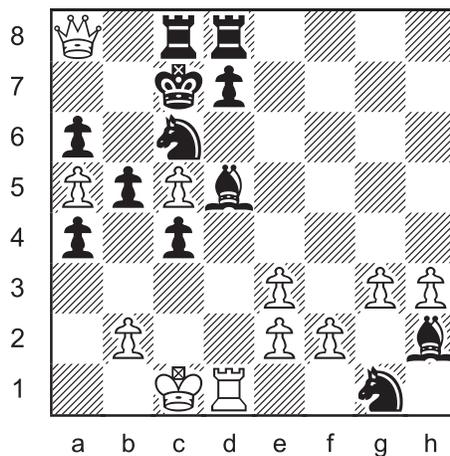
Retractor 43



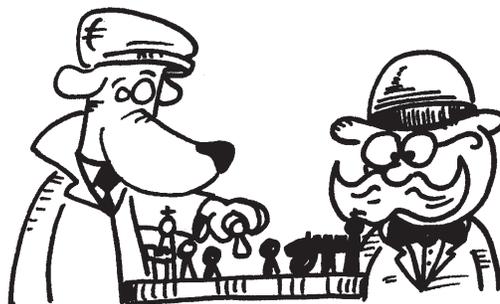
White takes back their last move,
then mates in one.

This problem, by Valerian Onitiu (1872-1948) from Romania, looks tricky. And it is.

Retractor 44

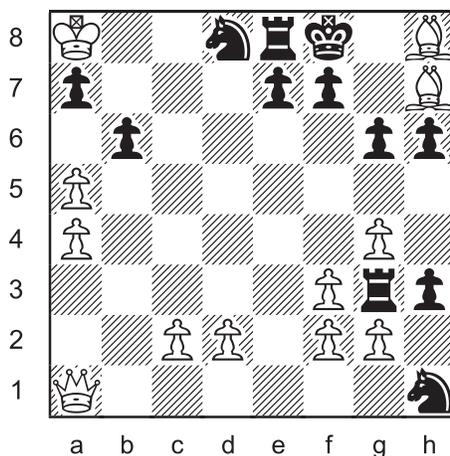


White takes back their last move,
then mates in one.



For the next retractor, by the great Thomas R. Dawson (1889-1951),
we turn the clock back a full century.

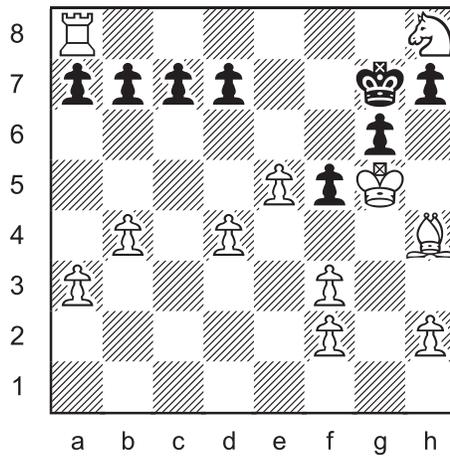
Retractor 45



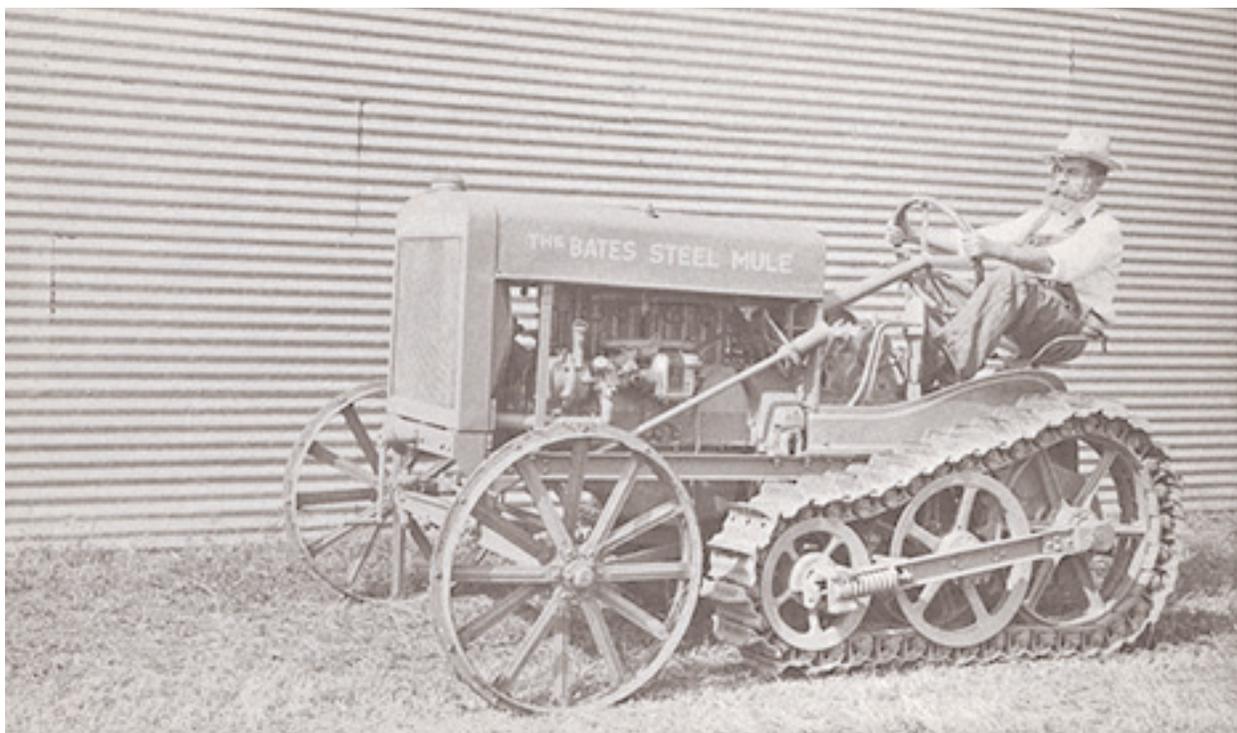
White takes back their last move,
then mates in one.

The world is full of missed opportunities. So many things we might have done differently. Imagine your life is a game and you can take back any move of your choice. Undo one moment of time. Instead of what you did, make the move you wish you had made. Where would you be now?

Retractor 46



White takes back their last move,
then mates in one.



Retro Tractor

SOLUTIONS

Retractors 39,40,41,46 by J. Coakley, *Puzzling Side of Chess* (2022).
Others as indicated above solution diagrams.

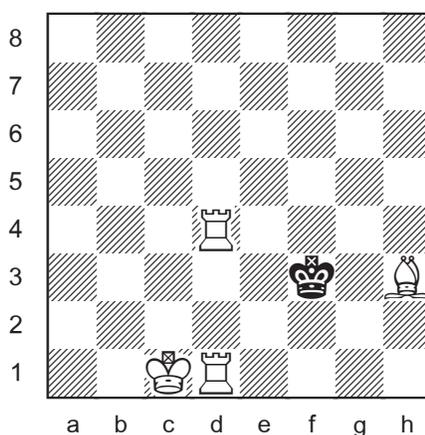
PDF hyperlinks. You can advance to the solution of any puzzle by clicking on the underlined title above the diagram. To return to the puzzle, click on the title above the solution diagram.

Archives. Past columns and an index of problem-types, composers, and side themes are available in the *Puzzling Side of Chess* archives.

Retractor 39

J. Coakley 2022

Puzzling Side of Chess



-1.0-0-0
+1.Ra1-a3#

White uncastles and instead mates by 1.Ra3#. The white king is needed on e1 to cover the f2 square.

Note on Notation

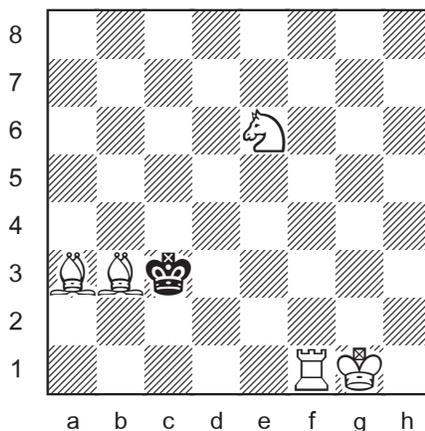
Solutions are written in long algebraic notation (departure and destination squares). In the case of captures, the type of piece taken is given after the 'x' prior to the destination square.

A minus sign precedes the retracted move. A plus sign is shown before the forward move.



Retractor 40

J. Coakley 2022
Puzzling Side of Chess

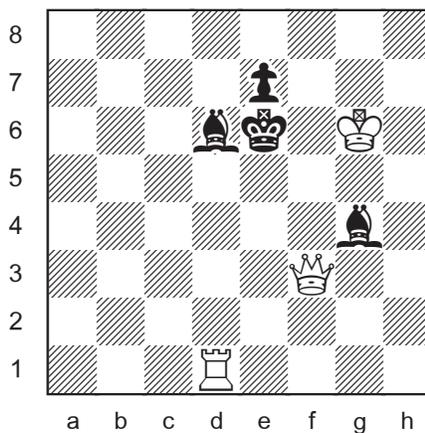


-1.0-0
+1.Rh1-h3#

Not much of a surprise. White uncastles kingside this time.

Retractor 41

J. Coakley 2022
Puzzling Side of Chess



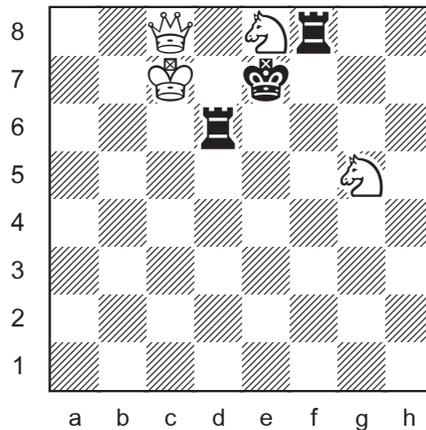
-1.Qc6xPf3
+1.Rd1-e1#

The white queen returns to c6 where it pins the bishop on d6 and covers the squares d5 and d7. A pawn is uncaptured on f3 so that Black cannot block the rook check.

Retractor 42

Eugene Albert Dugas 1960

feenschach



-1.d7xBc8=N
+1.Qc8-d8#

White unknights by untaking on e8, then mates with the queen. The uncaptured piece must be a bishop. A queen or rook would guard d8. A knight would check the white king.



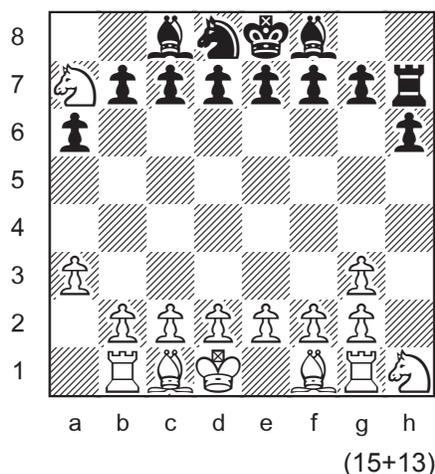
Name of the Game.

The problems in this column are sometimes called “help retractors” because we can choose to uncapture whatever type of piece helps us. There is another class of problems known as “defensive retractors” in which Black is supposed to defend against the mate. In that kind of retractor, the defence decides whether a retracted move is a capture, and if so, what type of piece is captured. The solution must work against all possibilities.

Retractor 43

Luis Alberto Garaza 1967

Europe Echecs



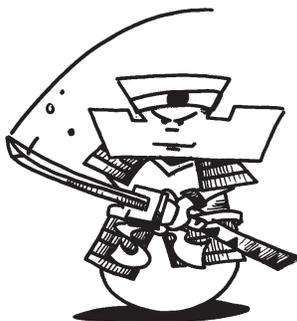
-1.Nb5-a7
+1.Nb5xc7#

The mate by $Nxc7\#$ is easy to spot. The tricky question is whether or not the retraction is an uncapture. Perhaps a black piece was taken on a7. Proof that the retracted move had to be a non-capture is based on retrograde analysis involving *parity*.

The parity in a position is established by determining if the number of previous moves for each side is **even** or **odd**.

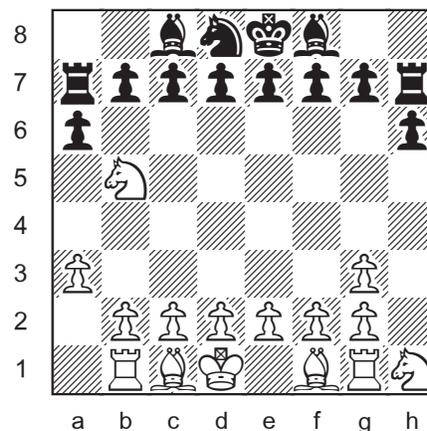
In a game, when it is White's turn, both players have made an equal number of moves, either both odd or both even. When it is Black's turn, White has played one more move than Black. If White has made an even number of moves, then Black has made an odd number. If White has made an odd number, then Black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

The white h-pawn captured something on g3. Black is missing three pieces (QRN). The queen was obviously captured on d8. The rook never escaped from the a8 corner. So the knight was taken on g3. Therefore the only black piece that might have been captured on a7 is a rook.



Retractor 43 *continued*

Consider the try -1.Nb5xRa7 (diagram). The position is illegal because of a parity error. As the following analysis shows, White has made an even number of moves and Black has made an odd number. So it cannot be White's turn.



- a) Each side made two pawn moves (even).
- b) No bishop has moved.
- c) Both queens were captured on their original squares without ever moving.
- d) The white king has made an odd number of moves (shuffling between e1 and d1).
- e) The black king has made an even number of moves. (Zero is an even number in this sense.)
- f) The four rooks each made an odd number of moves. The white rook on g1 never moved along the h-file because White could only capture h2xg3 after the rook and knight were already on g1 h1. So each side has made an even number of rook moves. (*Two odds make an even.*)
- g) Knight moves are harder to count. Each side 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 stand on the same colour squares. After an even number of knight moves, they stand on opposite colours.
 - g1) The white knights (both on light squares) have made an odd number of moves.
 - g2) The black knight is on a dark square. The missing black knight was captured on the dark square g3. Thus, the black knights have also made an odd number of moves.

Adding up the evens and odds:

White: king = odd, pawns = even, rooks = even, knights = odd.

Total: even

Black: king = even, pawns = even, rooks = even, knights = odd.

Total: odd

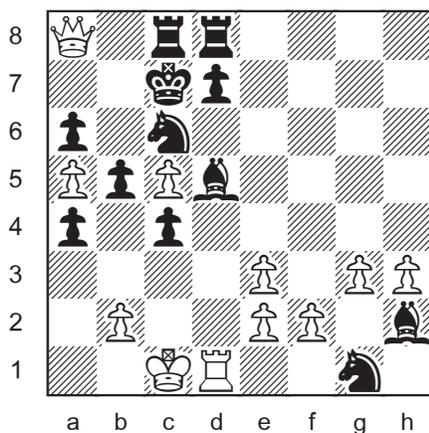
Therefore, with White to move, the position with a black rook on a7 is illegal. White's retraction must be the non-capture -1.Nb5-a7.

The missing black rook was taken earlier on a8. In that case, the black rooks made an odd number of moves, giving Black an even total.

Retractor 44

Valerian Onitiu 1934

Die Schwalbe



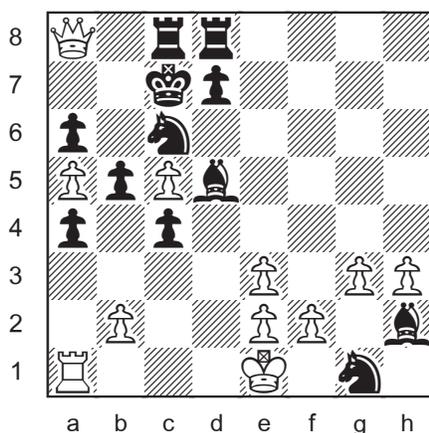
(11+12)

-1.0-0-0

+1.a5xb6 e.p.#

One idea that does not work is somehow taking back a queen move so that +1.Qb6# is playable. But the black king would be in check by the queen on any square she might have moved from.

Experienced solvers probably realised fairly quickly that the mate must be delivered by the *en passant* capture +1.a5xb6#. But that is only allowed if it can be proven that Black's last move was 1...b7-b5. It's hard to imagine that possibility since Black has several mobile pieces. However, uncastling does exactly that.



-1.0-0-0

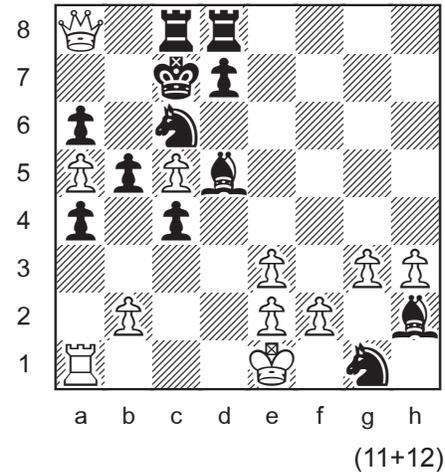
The amazing feature of this position is that now the only retraction by Black that leaves White a legal move on the previous turn is -1...b7-b5 which allows - 2.Qa7-a8.

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Retractor 44 *continued*

The first step in proving that the last move was ...b7-b5 is to show that no captures were possible.

White is missing 5 pieces (RBBNN). The black pawn formation required 4 captures (exd, dxc, cxb, bxa). None of those captures were possible on Black's last move. That leaves one white piece unaccounted for.



Now consider the fate of the white rook that started on h1. The white king has not moved because castling is possible. So the rook could only escape to be captured outside of its corner box if there was a cross-capture by white pawns on g3 and h3, but that is impossible.

If there was a cross-capture of pawns on g3 and h3, then the bishop on h2 must be a promoted pawn that promoted on the dark square g1.

If the white rook escaped its corner box and was captured elsewhere (for example, by ...Be6xRd5 on Black's last turn), then the only way for Black to promote on g1 without a capture would be with the g-pawn after White captured g2xh3. But that is impossible because the black knight must be on g1 before a white pawn comes to h3. It could not come from f3 because it would be checking the white king.

So the missing white rook was captured inside its box. All white pieces are accounted for. Black's last move was not a capture.

The last move was not by the pawns on a4, c4, d7 or the bishop on h2.

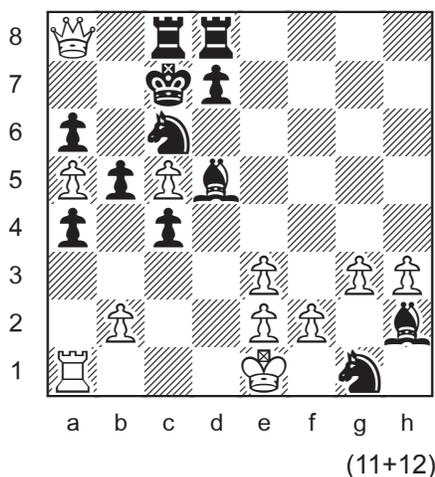
The last move was not ...Nf3-g1 because the knight would be checking the white king from f3.

The last move was not ...Kb7-c7 or ...Kb8-c7 because the king would be in an impossible check on b7 or b8 by the white queen.

The last move was not ...Kb6-c7 or Kd6-c7 because the king would be in an impossible check on b6 or d6. As explained below, the white moves b4xc5+ and d4xc5+ would require too many captures.

continued next page

Retractor 44 *continued*



The last move was not by the pawn on a6, knight on c6, bishop on d5, or either black rook because White has no move on the previous turn.

The white king and rook did not move because castling is still possible.

The white queen would give check from any square she could move from.

The last move was not g2-g3 or g2xh3 because then the bishop from f1 never escaped.

The last move was not d2xe3 because then the bishop from c1 never escaped.

The last move was not b4xa4, b4xc5, or d4xc5. That would require a second capture (either axb, cxb, or cxd) by the same white pawn because the original white b-pawn is still on b2 and the original white d-pawn is on e3. Black is missing 4 pieces: the queen and the fgh-pawns. The queen was captured on e3. (A black pawn could not be taken on e3 because that would require another capture by Black (...fxe)).

The white pawn on a5 or c5 could not have captured two of the missing black pawns because that would require Black to promote two pawns which is impossible.

The last move by Black was not ...g2-g1=N or ...b6-b5 for the same reason, that White has no move on the previous turn.

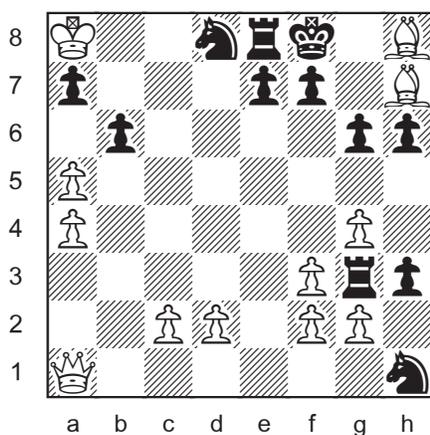
Only one option remains. Black's last move was necessarily ...b7-b5. White can play +1.a5xb6 e.p.#!

White's previous move was Qa7-a8. The black bishop on d5 is a promoted pawn (...g3xRh2-h1=B).

Retractor 45

Thomas R. Dawson 1920

Eskilstuna-Kuriren



(12+12)

-1.Bc3-h8
+1.Bc3-g7#

White can mate by Qg7# or Bg7#. Like so often happens in these problems, the trick is to find a retraction that gives Black a legal move on the previous turn.

White is missing 4 pieces (RRNN). They were all taken by the black pawn on h4, which began life on d7. Thus, Black's last move was not a capture.

Black's last move was not ...h4-h3, because that pawn necessarily captured earlier from g4.

Black's last move was not the capture ...g7xh6 or ...c7xb6.

Black's last move was not ...Nd8 because the white king would be in check by the rook on e8 before that move.

Black's last move was not with the knight on g1 or rook on e8 because both pieces are immobile.

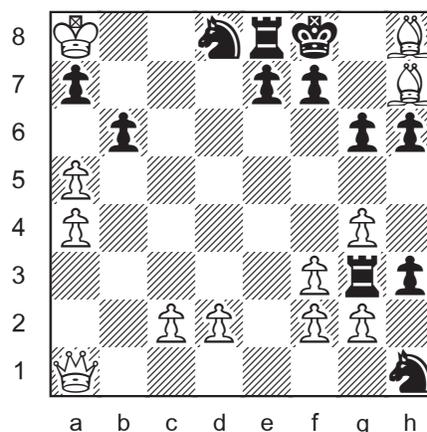
White cannot retract e2xf3 (freeing the black rook on g3) because then the white light-square bishop could not be on h7 (from f1). So Black's last move was not with the immobile rook on g3.

Black's last move was not ...b7-b6 because then the white king could not be on the 8th rank behind the black pawns. The only possible entry would be through h6 and g7 after Black played ...g6 and before Black played ...h6. But then it would be impossible for a white bishop to be on h7.

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Retractor 45 *continued*

Black is missing 4 pieces (QBB,c-pawn). The c-pawn did not promote because that would require a capture (since White still has a pawn on c2). So the c-pawn was captured earlier on the c-file and not on the last turn. The other three missing black pieces were captured by white pawns (bxa, e2xf3, h2xg3).



Proving that White's last move was not b3xa4 or b4xa5 is the highlight of this retro masterpiece. Consider the cluster of pieces on the lower kingside. How and when did the black rook get on g3?



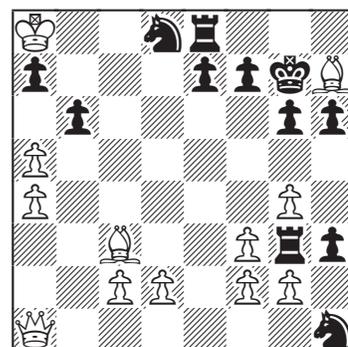
White necessarily played h2xg3 earlier. Later, after the black pawn was on h3, White played g3-g4. It was only at the point that the black rook could go to g3, moving along the 3rd rank before White played e2xf3. Therefore the white light-square bishop was still on f1.

That means that the rook was already on g3 before the white bishop went to h7. The bishop had to be on h7 before Black played ...g7-g6, so the black dark-square bishop was still on f8. Thus, the black piece taken on the dark square g3 was the queen and the one taken on f3 was the light-square bishop. Therefore the dark-square bishop was captured on the a-file. So White cannot retract b3xBa4 because a4 is a light square. And Black has no last move after the retraction b4xBa5.

Conclusion: Black's last move was with the king. He would be in an impossible check on g8, so the last move had to be ...Kg7-f8. The g7 square is currently attacked twice (Qa1 Bh8).

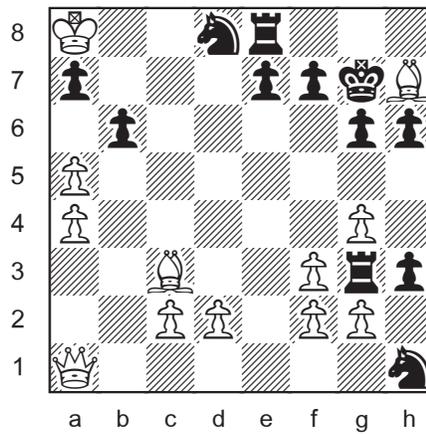
After retractions of the white queen, the black king would be in an impossible check on g7 from the bishop on h8. So White must take back a bishop move.

Surprisingly, the only retraction which makes ...Kg7-f8 legal on the last move is -1.Bc3-h8!



-1.Bc3-h8 Kg7-f8

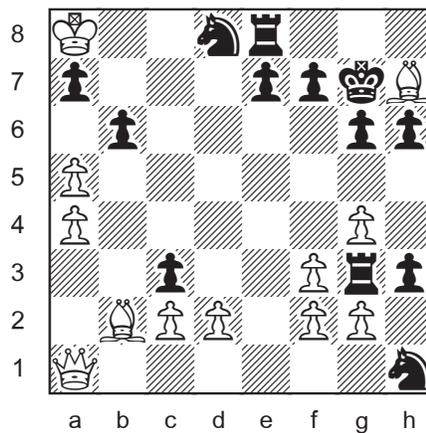
Retractor 45 *continued*



-1.Bc3-h8 Kg7-f8

After other bishop retractions, the black king cannot go back to g7 because he would be in an impossible check from the bishop. The check could not be a bishop move onto the long diagonal because the king would already be in check by the queen on a1.

By returning to c3, White's previous move can be Bb2xc3+, capturing the missing black c-pawn.



-1.Bc3-h8 Kg7-f8
-2.Bb2xc3+

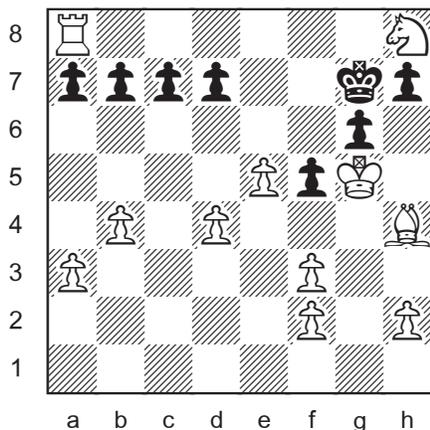
Forward play: 1.Bxc3+ Kf8 2.Bh8 (or 2.Bg7#)



Retractor 46

J. Coakley 2022

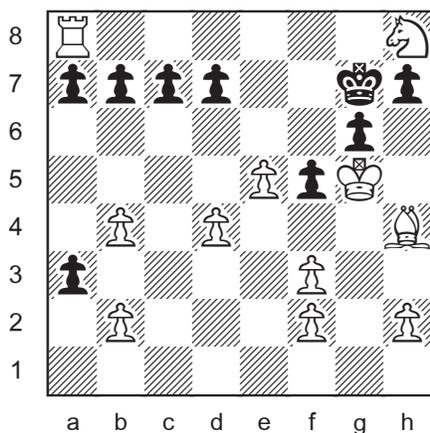
Puzzling Side of Chess



(11+8)
-1.b2xPa3
+1.e5xf6 e.p.#

It probably didn't take long to spot the mate by *en passant* capture. As in previous problems, the task is to retract a move which "forces" -1...f7-f5 by eliminating other possibilities such as -1...e6xf5, 1...f7xg6, and -1...K>g7.

That is accomplished by -1.b2xPa3, reviving a black pawn on a3.



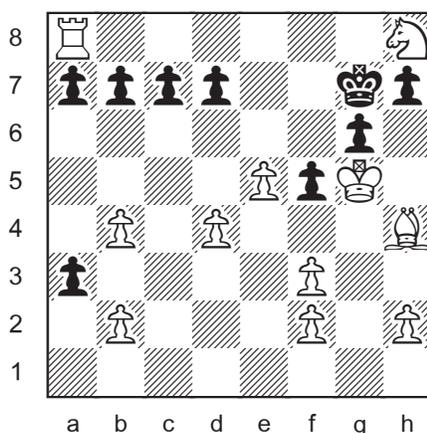
-1.b2xPa3 (11+9)

White is missing 5 pieces (QRRN + light B). Four of them were taken on dark squares by the pawn on a4 which entered the world on e7. Only the light-square bishop is unaccounted for.

Black's last move was not ...e6xBf5 because the pawn on e6 would have come from f7 which requires an additional capture.

Similarly, the last move was not ...f7xBg6 because the pawn on f5 would have come from the g-file which requires an additional capture.

Retractor 46 *continued*



-1.b2xPa3 (11+9)

The last move was not ...Kf8xg7 or ...Kg8xg7 after a discovered check from the rook on a8 by Ne8-g7+ or Bf8-g7+ because the only missing piece available is the light-square bishop and g7 is dark.

The last move was not ...Kf7-g7 (or ...Kf7xg7) because the king would be in an impossible check from the knight on h8. The check could not occur by the promotion g7xh8=N+ because it would require 7 captures by white pawns. Black is missing 7 pieces, but the light-square bishop was captured on c8 (unmoved pawns b7 d7).

The last move was not ...f6-f5 because the pawn would be checking the white king from f6.

So the last move had to be ...f7-f5, allowing *en passant*.



Until next time!

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