THE PUZZLING SIDE OF CHESS

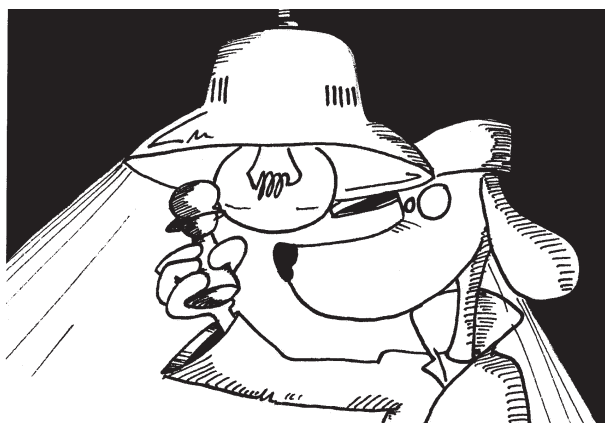### Jeff Coakley

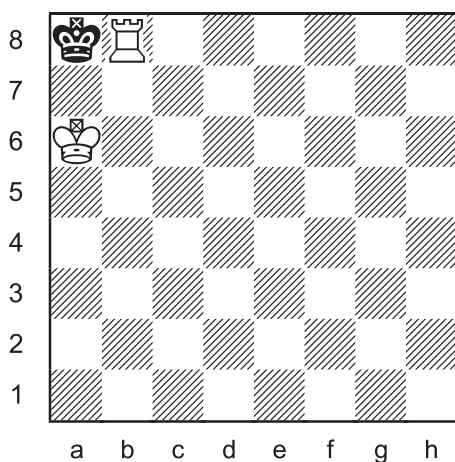## RETRACTORS: Backtracking

number 226   August 24, 2023

Sometimes they say there's no going back. Sometimes they say we have to live with our mistakes. But that's not so on the *Puzzling Side of Chess*! Take back that bad move. Take back your peace of mind.
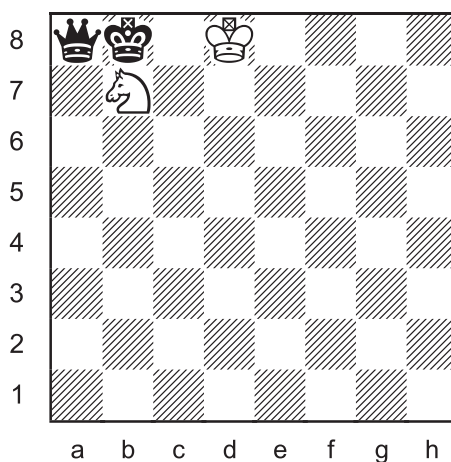
In a basic *retractor* problem, White retracts their last move, and then checkmates Black with a different move.
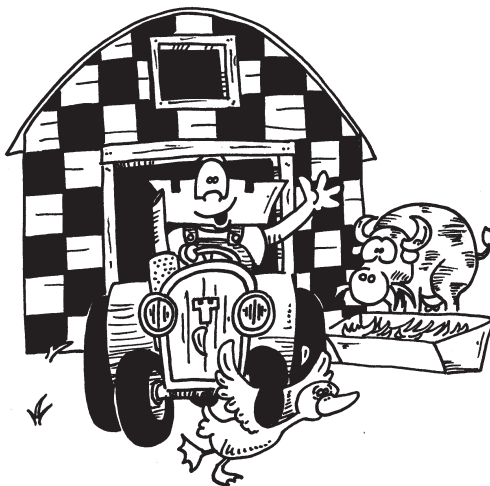
Retractor 54   **Retractor 55**

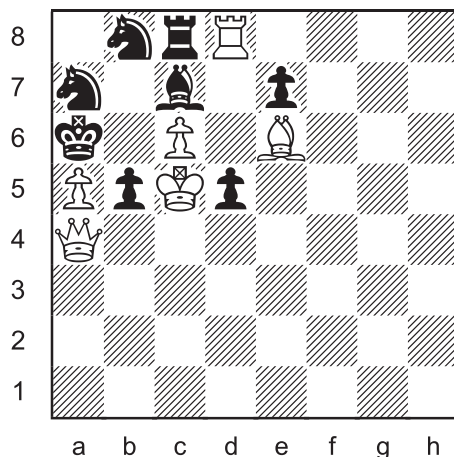White takes back their last move, then mates in one.

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. 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.

Backtracking on a chess move is usually frowned on in a game, but in a puzzle it often brings a smile.
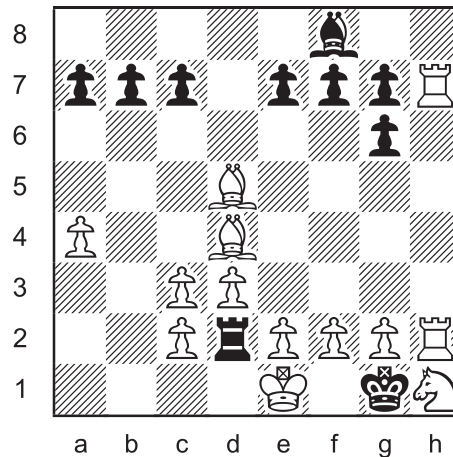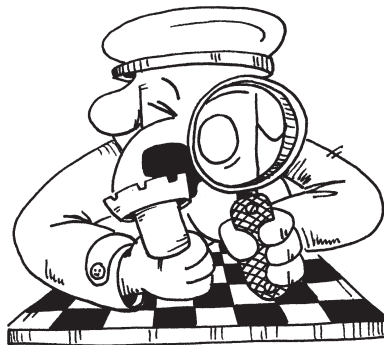
Retractor 56

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

In retractors where White mates by *en passant*, as in the previous problem, the task is to <u>eliminate</u> all last moves by Black except for the intended double pawn advance. In other retractors, like the next two, the task is to <u>give</u> Black a last move, avoiding retrostalemate.
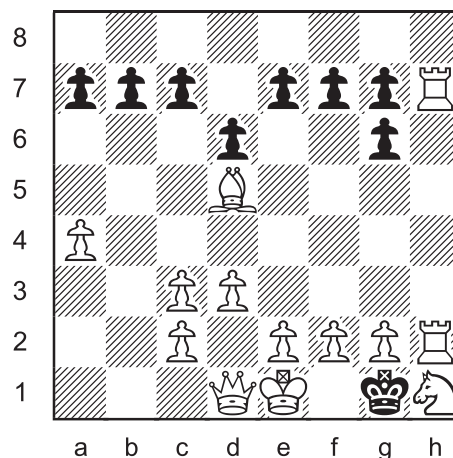
Retractor 57

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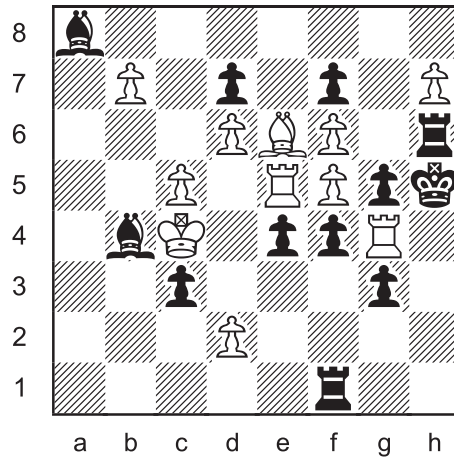then mates in one.

Retractor 58

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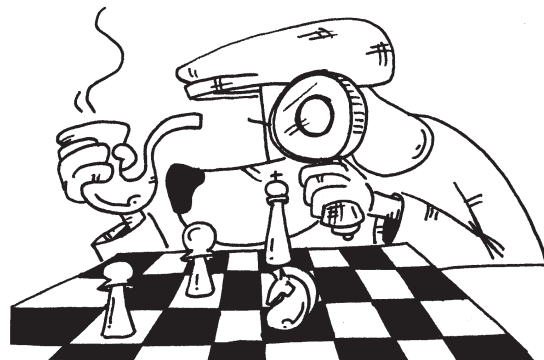then mates in one.

The final two problems take us back many years. The first is from 1951 by Tomislav Petrovic (1931-2019) of Serbia. The second from 1982 by Michel Caillaud, French grandmaster of chess composition.
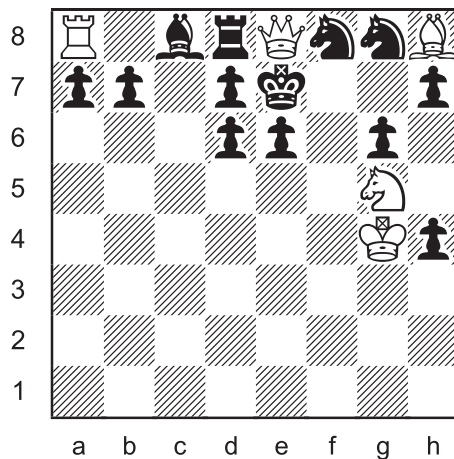
Retractor 59

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

Retractor 60

White takes back their last move, then mates in one.
What were the last three moves?

SOLUTIONS

Retractors 54,56,57,58 by J. Coakley, *Puzzling Side of Chess* (2023). 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 54

J. Coakley 2023
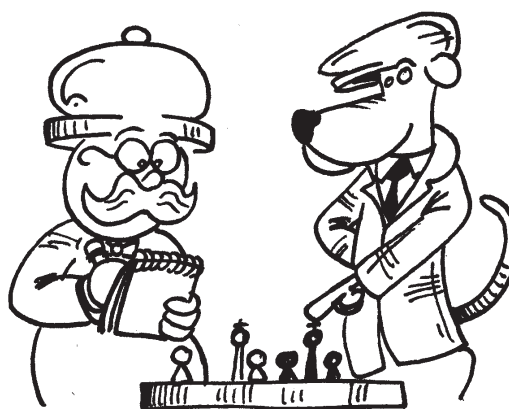*Puzzling Side of Chess*
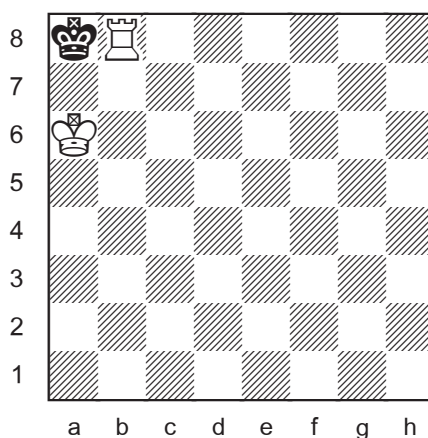
-1.Rb7xRb8+
+1.Rb7-a7#

They don't get any more basic than this.

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 55

Erich Bartel 1973

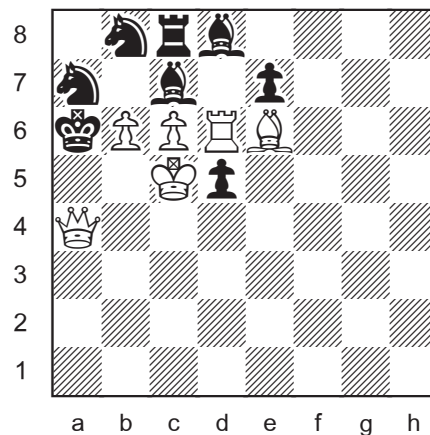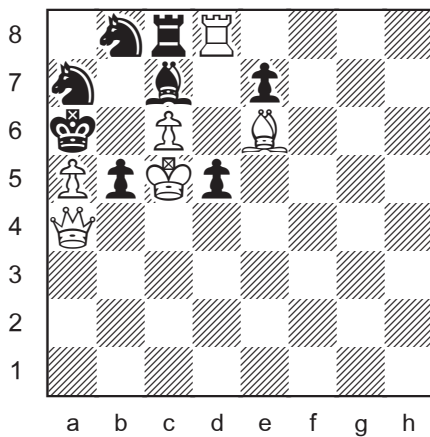*Feladvanykedvelök Lapja*
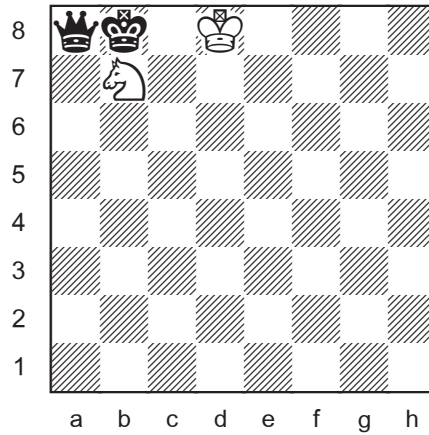
-1.Na5xRb7

+1.Na5-c6#

Happy 93rd to Erich Bartel. August 21, 1930.

Retractor 56

J. Coakley 2023
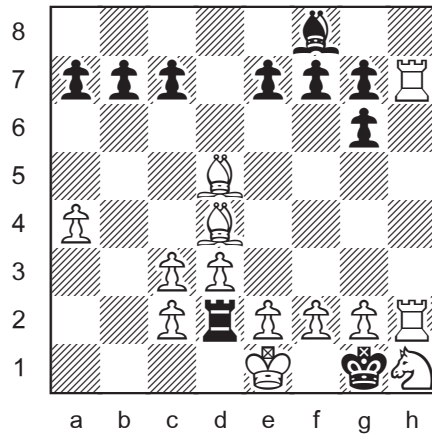
Puzzling Side of Chess

-1.Rd6xBd8

+1.a5xb6 e.p.# (diagram on right)

After White's retraction, Black's last move could only be ...b7-b5, justifying the *en passant* capture.

Retractor 57

J. Coakley 2023
Puzzling Side of Chess

(13+10)

-1.Rh6-h2
+1.f2-f4#

White can mate by +1.f3# or +1.f4#, but the position would be illegal because Black has no move on the previous turn. Retrostalemate. So White must find a retraction that reverts to a legal position in which Black had a move on their previous turn.

The first thing to deduce is that White's last move was not a capture. The original white light-square bishop was taken on f1. So the bishop on d5 is the promoted white h-pawn. It needed 5 captures to promote on c8 or e8. Another capture was made on c3. That accounts for all six missing black pieces.

The last move was not 1.b2xc3 because then the black king could not be on the 1st rank.

Therefore the white move to be retracted was not a capture.

Now consider what Black's last move could be. It was not ...h7xg6 because then the black rook from h8 never escaped its corner to be captured elsewhere. Black's move had to be ...Kh2>g1. Thus, White must retract a move by the rook on h2. But to which square?

Try 1: Retract -1.Rh5-h2. Diagram next page.
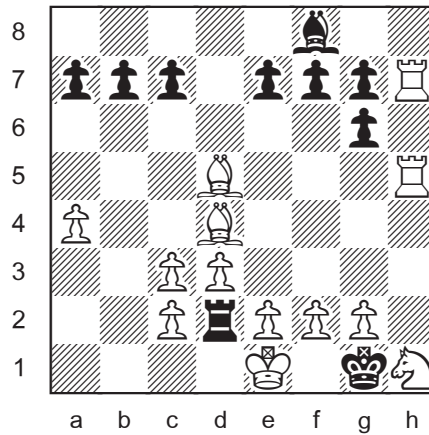
try: -1.Rh5-h2

After the try -1.Rh5-h2, or is it before, Black retracts -1...Kh2>g1. Now, or is it then, the black king is in check by the rook on h5. The rook did not capture on h5 to give check because no missing black pieces are available for capture. So it had to be a discovered check by a piece that was then captured on g1. Thus, the previous white move was -2.Nh3-g1+. New diagram.
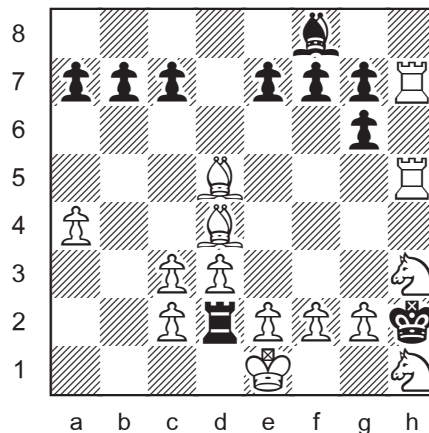
But what was Black's last move from this position? It could only have been -2...Kg1-h2. Again the black king was in check, this time by the knight on h3. White's preceding move was -3.Ng5-h3+ or -3.Nf4-h3+. Diagram on next page with knight on f4.
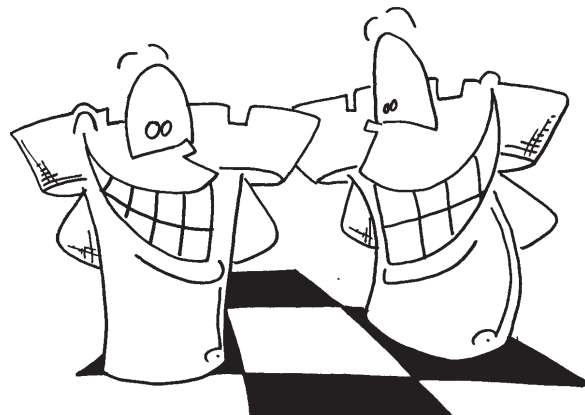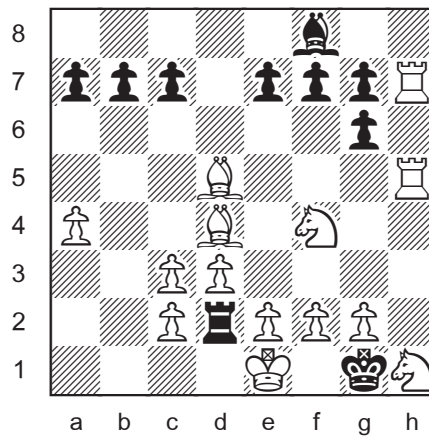
try: -1.Rh5-h2 Kh2xNg1 -2.Nh3-g1+ Kg1-h2 -3.Nf4-h3+

Here Black's previous move was -3...Kh2-g1 when White's move before that had to be -4.Nh3-f4+. The position is illegal because of a *retro-perpetual*. It just keeps repeating in reverse -4...Kh2 -5.Nh3+ Kg1 et cetera. There is no way back to the initial array.

The only way to avoid the retro-perpetual is by backtracking the rook all the way to h6.

-1...Rh6-h2!

Now the position is legal, unravelling by:

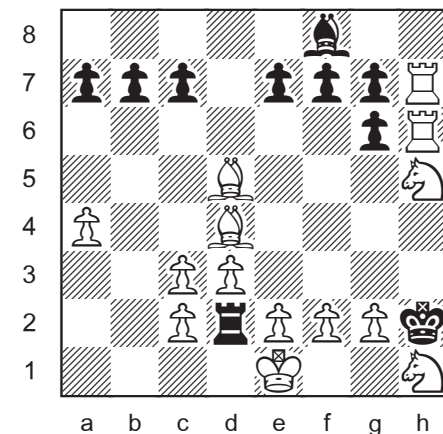**-1...Kh2xNg1**

-2.Nh3-g1+ Kg1-h2

-3.Nf4-h3+ Kh2-g1

-4.Nh5-f4+!! Lower diagram.
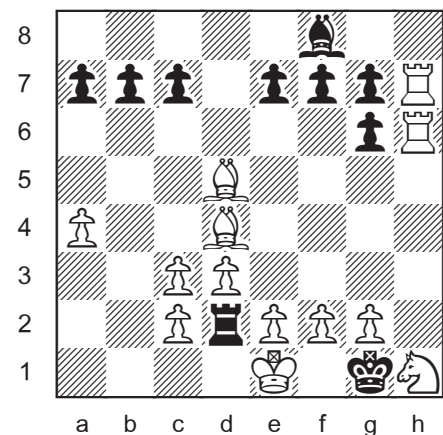
For forward-minded thinkers, the play goes 1.Nf4+ Kg1 2.Nh3+ Kh2 3.Ng1+ Kxg1 4.Rh2 or more powerfully 4.f4#!
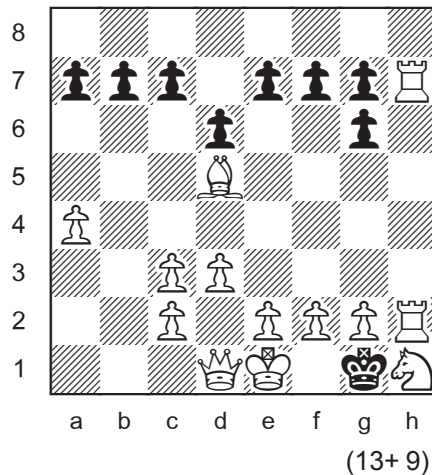
The position is legal. Further untangling before -4.Nh5-f4 is done by -4...Kg1-h2 -5.Ng3-h1 Kh2-g1 -6.Ne4-g3 Kg1-h2 -7.Ng5-e4 Kh2-g1 -8.Kf1-e1 Kh1-h2 -9.Nf3-g5 Kh2-h1 -10.Ne1-f3+ Rd1-d2 and so on.

Retractor 58

J. Coakley 2023
Puzzling Side of Chess

(13+ 9)

-1.Rh6-h7
+1.Ke1-d2#

This position is very similar to the previous problem. White can mate by +1.Ke1-d2# but must find a retraction that gives Black a last move.

As before, the white bishop on d5 is the promoted h-pawn. It required five captures to reach c8 or e8. A sixth black piece was taken on c3. The seventh and final missing black piece was the dark-square bishop which was captured on f8.

The last white move was not 1.b2xc3 because then the black king could not be on the 1st rank. Therefore the white move to be retracted is not a capture.

White is missing three pieces: a knight and the two original bishops. The light-square bishop was captured on f1. Thus, the piece taken on the light square g6 had to be the knight. So the only missing piece unaccounted for is the white dark-square bishop. This means that the retraction which worked in the previous problem (-1.Rh6-h2) does not work this time because the discovered check -2.Nh3-g1+ is impossible.
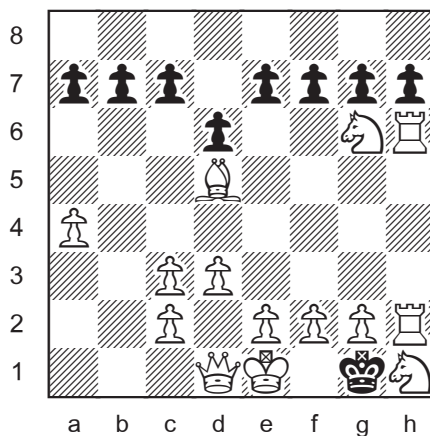
Therefore, the last black move could not be -1...Kh2>g1. It had to be -1...h7xNg6. White must retract a move by the rook on h7.

Taking back -1.Rh8-h7 does not work because the white rook could not be on the 8th rank before Black played ...h7xg6.

The only retractions that allow further regression in the retroplay are:
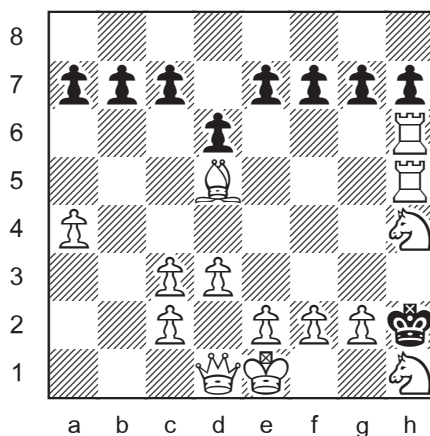
-1.Rh6-h7! h7xNg6   Diagram next page.

-1.Rh6-h7 h7xNg6

Now Black's previous move will have to be with the king. So White must retract the rook on h2. Only back to h5 suffices.
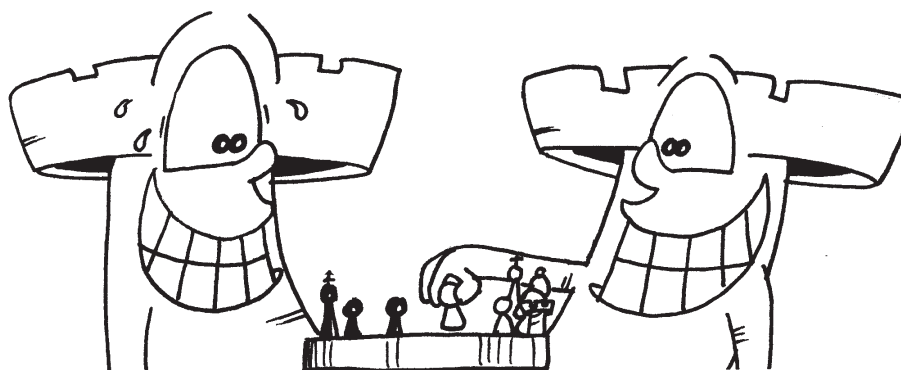
-2.Rh5-h2 Kh2-g1

The black king is in check by the rook on h5. This is explained with a discovered check by the knight on g6.
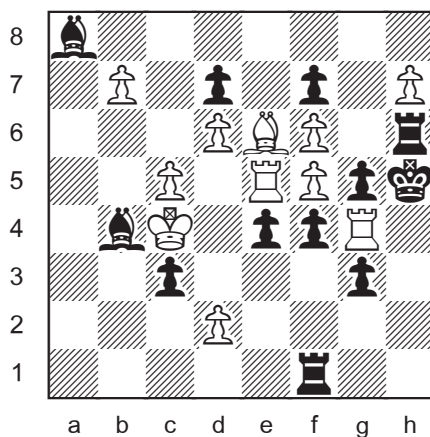
-3.Nh4-g6+

Forward we go: 1.Ng6+ Kg1 2.Rh2 hxg6 3.Rh7 or instead 3.Kd2#.

Retractor 59

Tomislav Petrovic 1951

Problem (issue 5-6)

(11+12)

-1.Kd5xRc4
+1.f5xg6 e.p.#

The mate is easy to find. The typical scenario around the black king is a dead giveaway for an *en passant* capture. The only challenge is finding a retraction that forces Black to play ...g7-g5 on the previous move. At first glance, that seems impossible as Black has several mobile pieces.

Unlike most retractors with an *en passant* mate, the trick here is not to limit the freedom of the black pieces. But rather to force Black to avoid retrostalemate by playing the double pawn advance because otherwise <u>White</u> would not have a move on the preceding turn. In other words, the task is to limit the freedom of the white pieces!

This is achieved by the craziest of retractions: **-1.Kd5xRc4!**
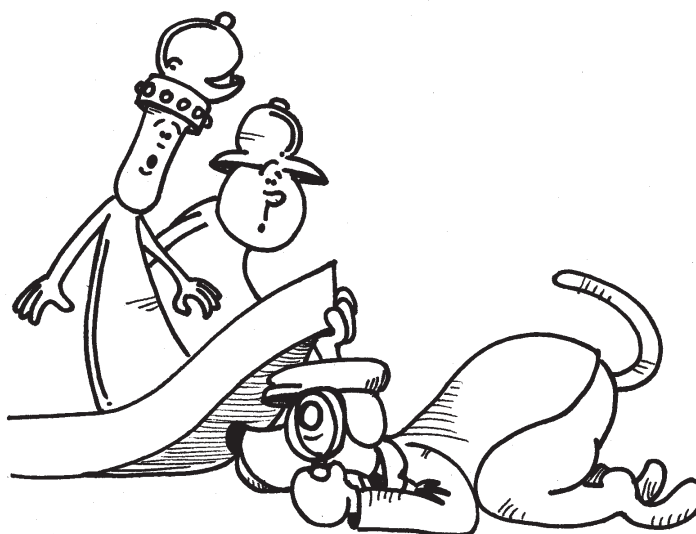
In this position, before -1.Kd5xRc4, what was Black's last move?

White is missing 5 pieces. Black pawns made 5 captures: ...bxc, ...cxd, ...dxe, ...exf, ...hxg. So no other captures were made by Black.

Black is missing 4 pieces. White pawns made 2 captures: exd, gxf. Now consider the three black rooks. One is the promoted black a-pawn. It could only promote if the white a-pawn got out of the way by capturing axb. That leaves just one black piece unaccounted for.

(11+12)

-1.Kd5xRc4

Thus, Black's last move was not -1...h4xg3. In that case, the white h-pawn would have needed 2 captures to bypass the black h-pawn to reach h7.

So Black's last move was a non-capture. If Black had played something like -1...Rh1-f1, White has no move on the preceding turn. The capture -2.a6xb7 is impossible because White had to play axb earlier to allow the black a-pawn to promote. The advance -2.b6-b7 was not possible because there would be an impossible check by the bishop on a8. Taking -2.d4xc5 is not possible because that would actually require two captures: cxd, dxc. Similarly, taking -2.g6xh7 would also require two captures: hxg, gxh. The preceding move was not by the white king because he would be in an impossible check on d4 or c6.

The only black move that avoids retrostalemate is **-1...g7-g5** when White's previous move was **-2.Rg6-g4**. Diagram.
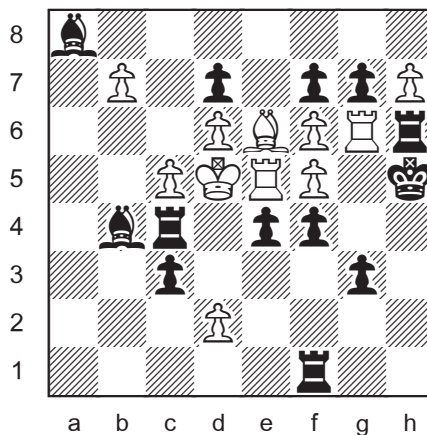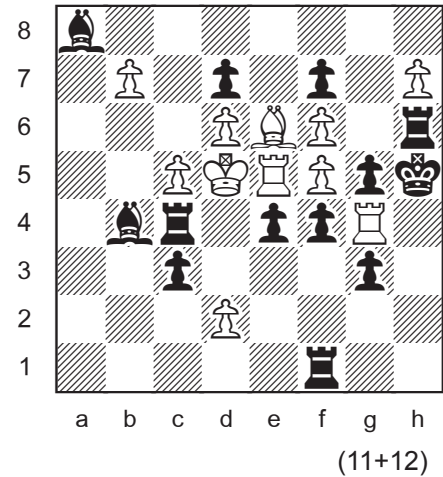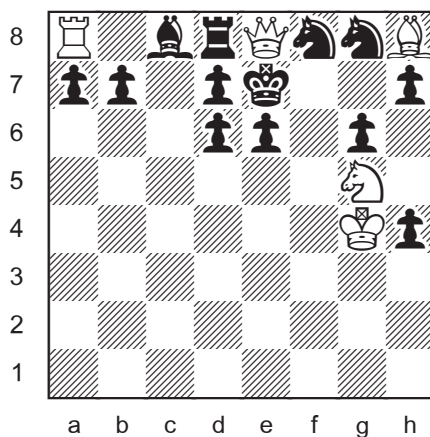
Going forward, we have 1.Rg4 g5 2.Kxc4 or preferably 2.fxg6 e.p.#.

A real masterpiece by Tomislav Petrovic. Does anyone know any other problems using the same concept to justify an *en passant* capture?

Retractor 60
Michel Caillaud 1982
The Problemist


(5+13)

-1.f7xQe8=Q+
+1.f7xNg8=N#

The retraction could not be easier to find. Black is in check by the white queen. The last move was not -1.Qf7-e8+ so it had to be the promotion -1.f7xe8=Q+. But what was captured on e8? The forward move +1.f7xg8=N# will be mate regardless of the type of piece taken.

Black has 8 pawns on the board, so there were no promotions. Black also has two knights, a rook, and a light-square bishop. The rook that started on a8 never escaped its corner. Therefore the black piece taken on e8 was the queen.
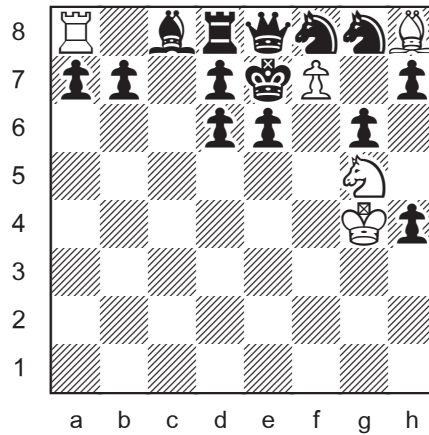
-1.f7xQe8=Q+   +1.f7xNg8=N#

White queened by capturing a queen,
then knights by capturing a knight!

The question remains. How did the position arise? And in particular, what were the previous two moves before 1.f7xQe8=Q+?
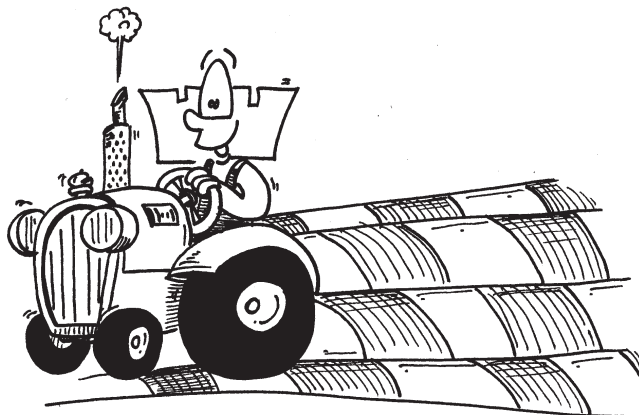
-1.f7xQe8=Q+

Black's last move was not -1...c7xd6 because then the white rook could not be on a8. It was not -1...g7-g6 because then the white bishop could not be on h8. It was not -1...h5-h4 because the pawn would be checking the white king from h5. It was not -1...Nf6-g8 or -1...Nh6-g8 because the knight would be checking from f6 or h6.

Therefore the last move had to be **-1...Kf6>e7**. This may or may not have been a capture.

On f6, the black king was in check by the bishop on h8. This could only have happened by the promotion **-2.g7xh8=B+**. The only black piece available for capture there is the missing bishop. That is to say, the pawn promoted to bishop by capturing a bishop!

The white rook on a8 is a promoted pawn. It promoted by c7xb8=R. The piece taken on b8 was the missing black rook. That's right, folks, the pawn promoted to rook by capturing a rook.

It's an extraordinary exposition of the *allumwandlung* theme. Not only are four different types of pieces promoted, but each promotion results from a capture of the type of piece to be promoted.

PxQ=Q, PxR=R, PxB=B, PxN=N

Until next time!