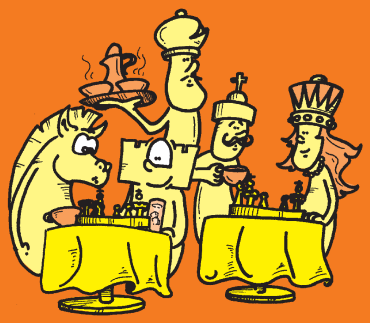


THE PUZZLING SIDE OF CHESS

Jeff Coakley

RETRACTORS: Find the Missed Mate

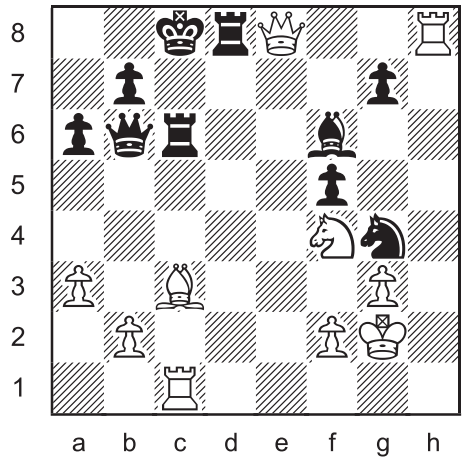
number 45 August 31, 2013

Overlooking a mate in one is no fun when it happens in a game, but it can make for an interesting puzzle.

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, you decide which type of piece was taken.

One step backward, one step forward. It's easy.

Retractor 11



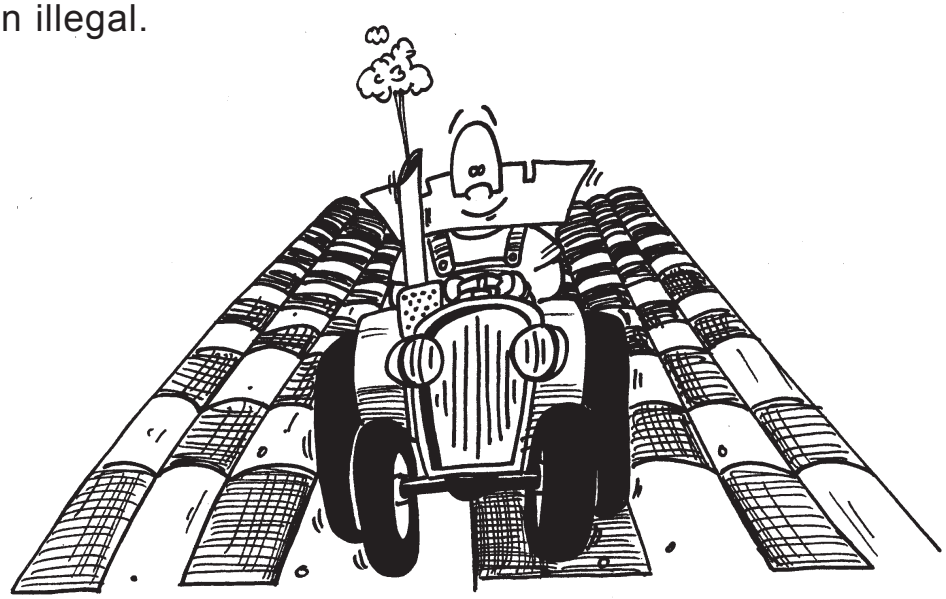
White takes back their last move,
then mates in one.

Solutions are given in long algebraic notation (departure and destination squares). In the case of captures, the type of piece taken is shown in parentheses.

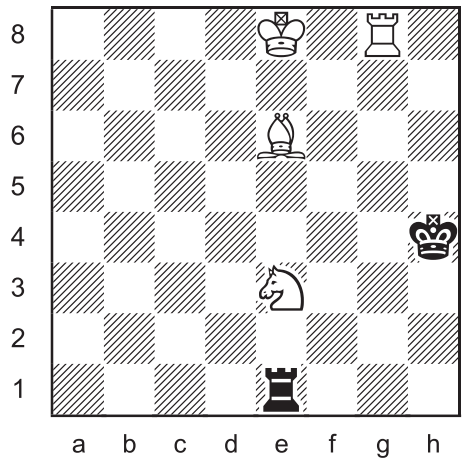
For problems 1-10, see "Takeback Granted", column 33.

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.



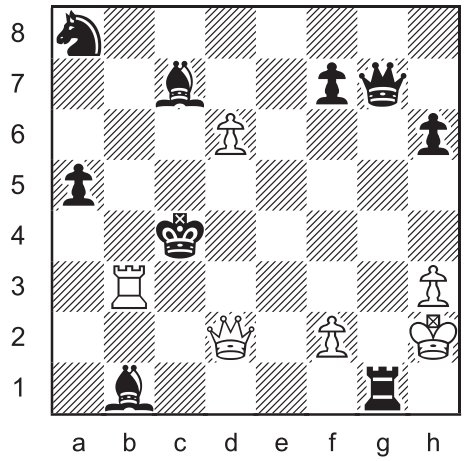
Retractor 12



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

Sam Loyd published three retractors in the February 1860 issue of *Chess Monthly*. They were embellished by a short story about a Persian chess instructor and his three princely students. The first Loyd problem was given in column 33 (retractor #4). Here are the other two.

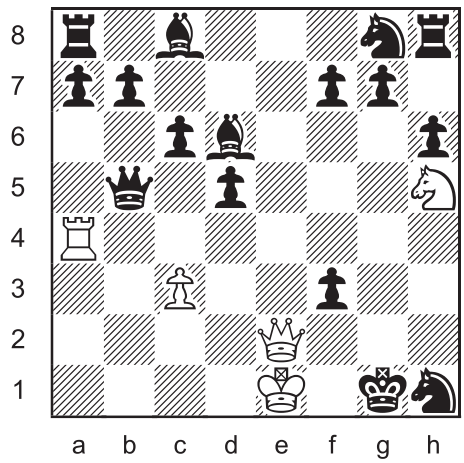
Retractor 13



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

The following position has been modified slightly so that the retracted move is exactly determined.

Retractor 14



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

In the story, which was written in collaboration with editor Willard Fiske (1831-1904), the wise old chess master is supervising the young princes as they play against three eunuchs. At some point in the games, each prince wants to take back a move.

When the request of the first prince is refused, he knocks over the board and runs to his mother. The second prince handles the situation more calmly, but because he suggested violating the rules, he is asked to leave the room.

However, the third prince is not to be denied. He doesn't bother requesting a takeback. He simply puts his piece back where it was and makes a different move. When his opponent protests, the prince pushes him to the floor, and then attacks the old master, pulling out part of his beard!

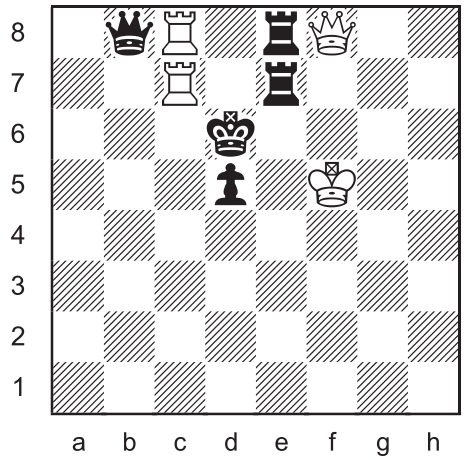
The next day, the chess instructor receives his pension, and the feisty young prince is "sent to camp".

Perhaps the finest work of chess-related fiction is *The Defense* by Vladimir Nabokov (1899-1977). As described by the author, the novel is about "a chess player who was crushed by his genius". Ouch.

The original 1930 book was written in Russian. Nabokov later assisted with an English translation in 1964. A film version from 2000 is titled *The Luzhin Defense*, starring John Turturro and Emily Watson.

If you're wondering what any of this has to do with retractor problems, the answer is easy. Besides being a celebrated writer, Nabokov was also a chess composer. The puzzle below is by him.

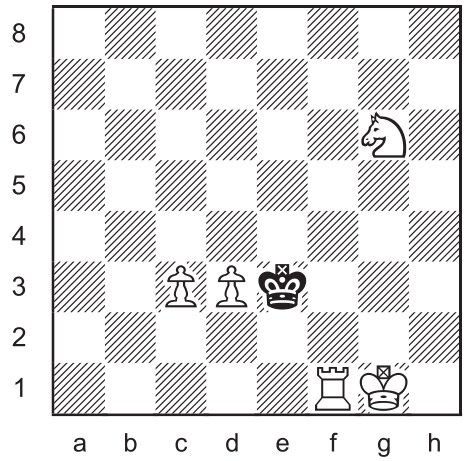
Retractor 15



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

The next two retractors were composed by Israeli Zvi Roth (1952-). The arrangement of the pieces is identical in both diagrams, but in the second problem, the position is flipped 180°. Very impressive.

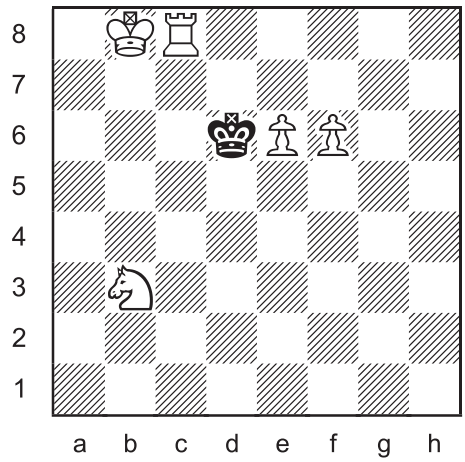
Retractor 16



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

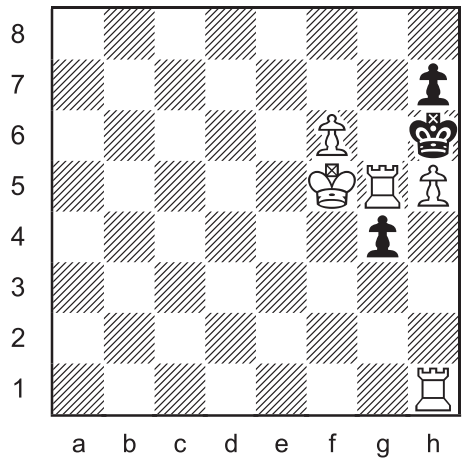
Is everybody tired of being reminded about the deadline for the Chess Cafe Puzzlers Cup? Please don't flip out. It's October 31.

Retractor 17



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

Retractor 18

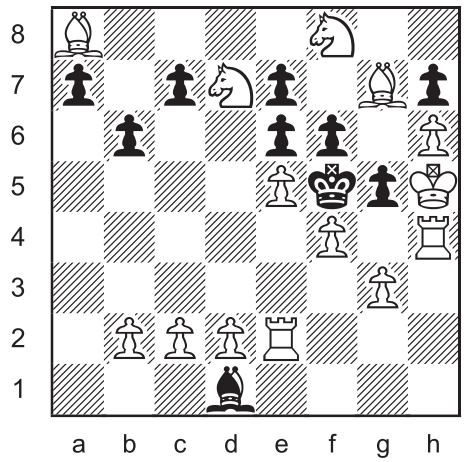


White takes back their last move,
then mates in one.

Problems #19 and #20 will require more *retrograde analysis* than the earlier puzzles. Don't forget that the position after the retraction, and before White's forward move, must be legal. Black has to have a legal move on the previous turn.

This gem is by German composer Hans Stempel (1902-1974). The *stump potential* is very high. Good luck.

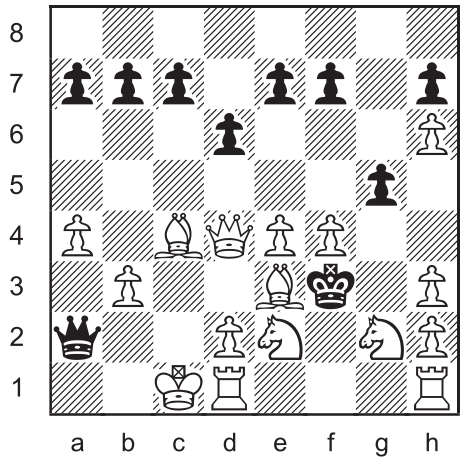
Retractor 19



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

Our final position is destined for a book called *Advanced Theory of the Pirc Defence*.

Retractor 20



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

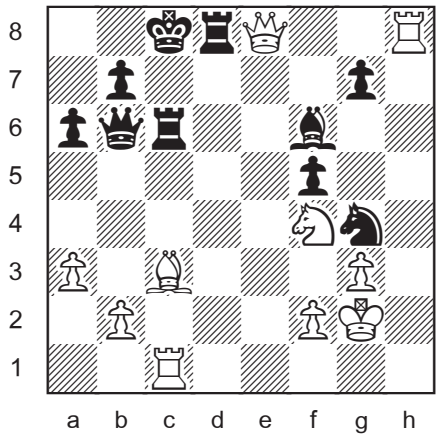
SOLUTIONS

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.

Retractor 11

J. Coakley 2013

ChessCafe.com



-1.Be5-c3
+1.Qe8-e6#

A move of the white bishop from e5 to c3 is taken back. In other words, the bishop “unmoves” from c3 to e5. Then, with the white bishop on e5, White plays queen to e6, mate. Both black rooks are pinned.

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

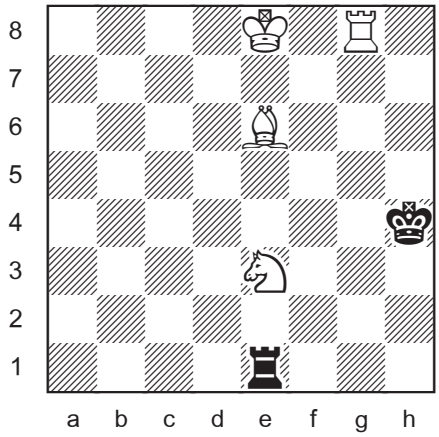
The backward move in this puzzle was not an “uncapture”. In effect, White made two forward moves in a row. The problem is essentially a *series-mate in 2* (double whammy). However, most retractors cannot be solved in this way. The retraction usually involves more than the simple move of a piece.

For *double whammies*, see column 44.

Retractor 12

J. Coakley 2013

ChessCafe.com



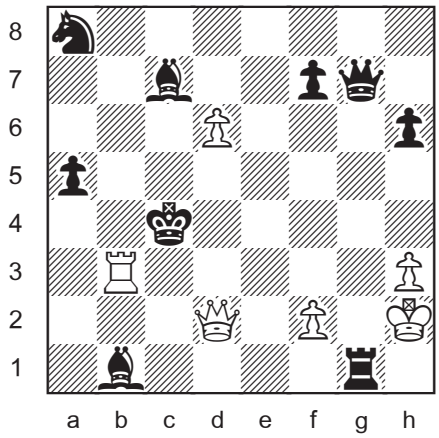
-1.Bg4xe6(N)
+1.Ne3-f5#

The white bishop must uncapture on e6 so that the white knight is not pinned by the black rook along the e-file. The uncaptured piece must be a knight. A queen or a rook on e6 would check the white king. A bishop or a pawn on e6 would guard f5.

Retractor 13

Sam Loyd 1860

Chess Monthly



-1.e5xd6 e.p.
+1.Qd2-c3#

An *en passant* capture is allowed as a backward move unless it can be proven illegal.

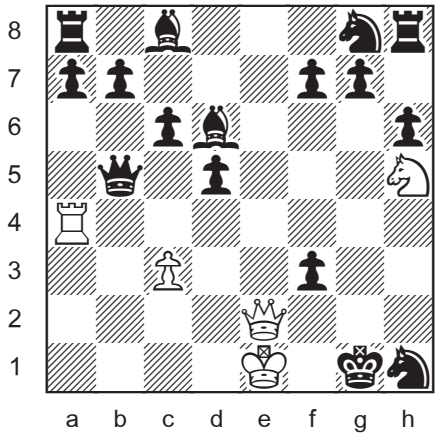
When the *en passant* capture is retracted, there is a white pawn on e5 (blocking the black queen's protection of c3) and a black pawn on d5 (obstructing d5). Black's last move was ...d7-d5.

Retractor 14

Sam Loyd 1860

Chess Monthly

(version by J. Coakley 2013)



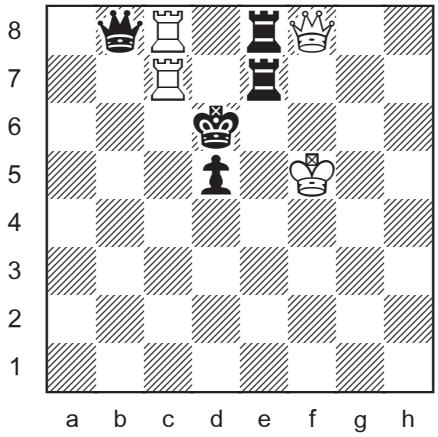
-1.Ra1-a4
+1.0-0-0#

In the original version of this problem, there were no black pawns on b7, c6, d5. In that case, the retracted move could also be the uncapture -1.Ra1xa4(RNp). With the pawns added, all sixteen black pieces are on the board; so nothing could have been captured on a4.

Retractor 15

Vladimir V. Nabokov 1932

Poslednje Novostje



-1.d7xc8(N)=R
+1.d7xe8=N#

White “unrooks” a pawn on c8, and then knights it on e8. Unpromoting/repromoting is a common tactic in retractor problems.

continued next page

The uncaptured black piece on c8 must be a knight. A rook or queen would attack e8, and a bishop (or queen) would check the white king.

It may be a coincidence, but did you notice that the arrangement of pieces in this puzzle is shaped like a V, Nabokov's first initial? There is even a period (full stop) afterwards on f5: **V.**

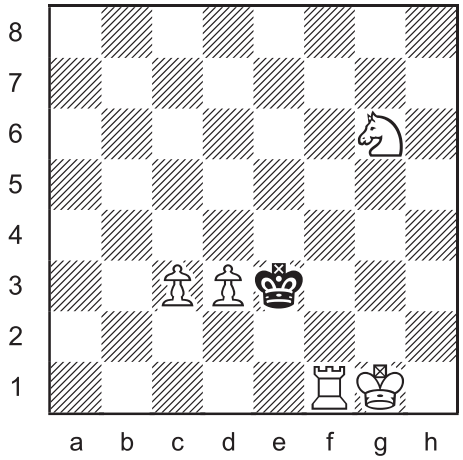
A passage from *The Defense* by Vladimir Nabokov, revealing the thoughts of grandmaster Aleksandr Luzhin:

Suddenly, something occurred outside his being, a scorching pain - and he let out a loud cry, shaking his hand stung by the flame of a match, which he had lit and forgotten to apply to his cigarette. The pain immediately passed, but in the fiery gap he had seen something unbearably awesome, the full horror of the abysmal depths of chess. He glanced at the chessboard and his brain wilted from hitherto unprecedented weariness. But the chessmen were pitiless, they held and absorbed him. There was horror in this, but in this also was the sole harmony, for what else exists in the world besides chess?

Retractor 16

Zvi Roth

diagrammes 1965-1970



-1.0-0

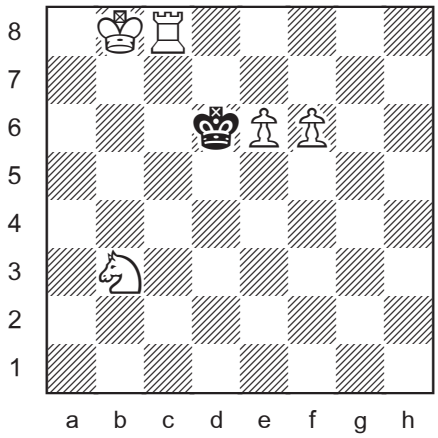
+1.Rh3#

White "uncastles".

In retractor problems, castling is allowed as a backward or forward move unless it can be proven illegal.

Retractor 17

Zvi Roth
diagrammes 1965-1970



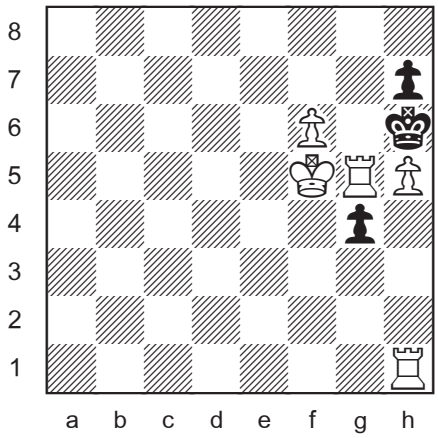
-1.d5xe6 e.p.
+1.Rc8-d8#

Another “unpassant”.

When the *en passant* capture is retracted, there is a white pawn on d5 (controlling c6 and e6) and a black pawn on e5 (obstructing e5). Black’s previous move was ...e7-e5.

Retractor 18

J. Coakley 2013
ChessCafe.com



-1.Rg8xg5(p)
+1.h5xg6 e.p.#

White mates with an *en passant* capture, which is not allowed as a forward move unless it can be proven that Black just moved their pawn two squares. Consider the position after the retraction -1.Rg8xg5(p). What was Black’s last move?

continued next page

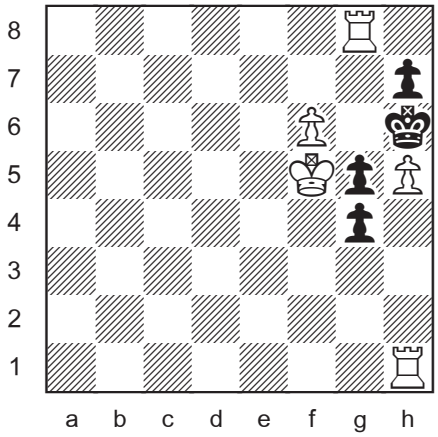
a) The black pawn on h7 has never moved.

b) The black pawn on g4 had nowhere to move from.

c) The black king did not move to h6 from g6 because he would have stood next to the white king.

d) The black king did not move to h6 from g7 because he would have been in an impossible double check.

e) The black pawn on g5 did not just move to g5 from g6 because it would have been checking the white king. *It cannot be Black's turn if White is in check.*



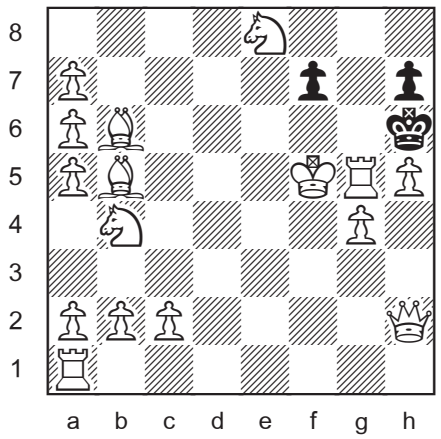
position before retraction

f) Therefore, the only possible move on Black's last turn was ...g7-g5, which allows an *en passant* capture.

The arrangement of white king on f5, black pawn on g5, and white pawn on h5 is a common "device" in problems that require proof that an *en passant* capture is permitted. Two examples are given here.

Retractor 18b

Francis C. Collins 1879
Land and Water



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

According to the *Oxford Companion to Chess* (1984), this classic problem by British composer Francis C. Collins (1843-1898) was the first retractor to involve *retrograde analysis*.

continued next page

Given its simple theme, the problem is probably overcomplicated. As you can see, the kingside formation is very similar to retractor 18, and not surprisingly, the solution is the same.

-1.Rg8xg5(p)
+1.h5xg6 e.p.#

But what is going on with all those queenside pieces?

An examination of the position shows the following:

a) White has sixteen pieces on the board. So Black did not make a capture on their previous turn (such as ...f6xg5).
b) The white pawns on a5, a6, a7 required twelve captures.
c) Black is missing thirteen pieces. The only missing black piece which could not be captured by the white pawns is the g-pawn. The black g-pawn never promoted because that would have required at least one capture. That means that it was captured earlier somewhere on the g-file.
d) If White retracts any move that is not a capture, then the position is illegal. Black would have no legal move on the previous turn (*retro-stalemate*) since the black king would be in an impossible check on g6 or g7.
e) It is impossible to retract a capture by the white pawns on a5, a6, a7 because there are white pieces on b4, b5, b6.
f) Therefore the only possible capture that can be retracted is -1.Rxg5(p). This gives Black the legal move ....g7-g5 on the previous turn, provided the white rook captured from g8.
g) Because the last black move was ...g7-g5, an *en passant* capture by +1.hxg6 e.p.# is allowed.

So the diagrammed position is actually more than just a basic retractor. It could also be used as a *retro problem* with the stipulation: *What were the last four moves?*

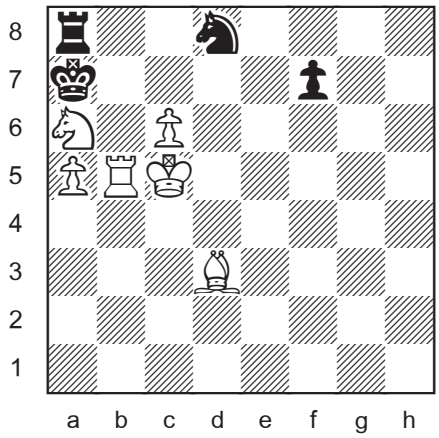
1. ... Kg5-h6
2. Ke-f5 (This move is not exactly determined as the white king could have moved from e4 or e5. That ambiguity would be avoided if the rook from a1 was placed on e4.)
2. ... g7-g5
3. Rg8xg5

Only this sequence of moves could lead to the given position. See column 42 for more about *last move* retros.

Retractor 18c

Branko Pavlovic 1970

3126 problem 136-140



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

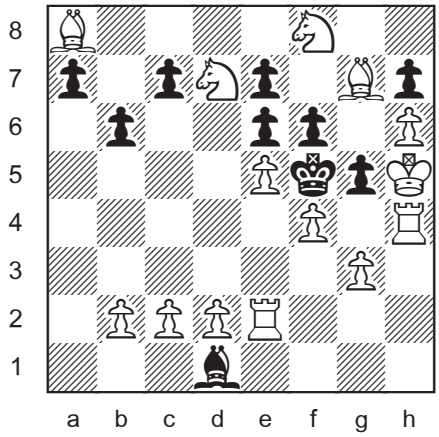
The same device again (reflected left to right), but with a few ingenious twists by Croatian composer Branko Pavlovic (1906-1980).

-1.Rb8xb5(p)
+1.a5xb6 e.p.#

Retractor 19

Hans Stempel 1950

Hamburger Problem-Nachrichten



-1.Bh1-a8
+1.Bh1-e4#

A bishop move from corner to corner. You have to like that!

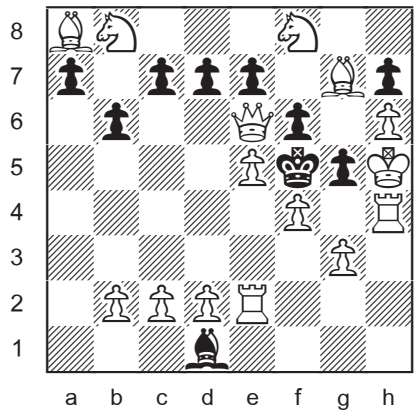
Here's a long argument which explains why -1.Bh1-a8 is the only retraction that gives Black a legal move on the previous turn.

a) White is missing two pieces (Qp).
b) Because of the unmoved pawns on b2 and d2, we can deduce that White's original dark-square bishop was captured on c1 and that the bishop on g7 is a promoted pawn.
c) Because of the black doubled e-pawns, we know that the white queen was captured earlier on e6 (by a pawn from d7). That accounts for all the captures by Black.
d) Black is missing six pieces (QRRNN and dark-square B).
e) The white dark-square bishop was originally the a-pawn, which captured five times on light squares in order to promote on the dark square f8. (a2xb3xc4xd5xe6xf7-f8=B)
f) So the only missing black piece that was not captured by the white a-pawn is the dark-square bishop.
g) If it were White's turn to play (not retract) in the diagram, the position would be illegal because Black would have no possible move on the previous turn.
    g1. The black a-, c-, e-, h-pawns have never moved.
    g2. The pawn on b6 moved earlier, otherwise the white bishop could not be on a8.
    g3. The pawn on e6 came from d7 (not f7) so it could not have captured on e6 last turn if the white knight is on d7.
    g4. The pawn on f6 moved earlier (from f7) so that the white a-pawn could capture a piece on f7 before promoting on f8.
    g5. The pawn on g5 did not move from g6 last turn because it would be checking the white king.
    g6. The bishop on d1 had nowhere to move from.
    g7. The black king could not have moved from g4 or g6 because he would be next to the white king. The black king did not move from e4 because he would be in an impossible double check from the bishop at a8 and rook at e2.
h. Now let's eliminate various white retractions which might give Black a legal move on the previous turn.
    h1. The white pawns on e5, f4, g3 are all on their original files because changing files would require two captures and there are not enough missing black pieces. So the retractions -1.d4xe5(B), -1.e3xf4(B), -1.f2xe5(B), and -1.h2xe5(B) are all impossible.
    h2. The uncapture of Black's missing dark-square bishop by -1.Rh1xh4(B), -1.Ng6xf8(B), or -1.Bh8xg7(B) do not work because Black still does not have a legal move on the previous turn.

h3. The retraction -1.Bh8-g7, giving Black the preceding move of ...g7-g5, fails because the white bishop could not be on h8 with black pawns on g7 and h7.

h4. Any retraction by the white rook on e2, such as -1.Re3-e2, would put the white king in an impossible check from the black bishop on d1.

h5. A retraction by the knight at d7 (-1.Nb8-d7 for example) appears to give Black the move ...d7xe6(Q) on the previous turn. But look at the position before that move with a white knight on b8, a black pawn on d7, and the white queen on e6 checking the black king.



The position is illegal. White's preceding move had to be with the queen to e6. But no matter which square she came from, Black will not have a legal move on the turn before that. The black king could not move to f5 from e6 because he would be in an impossible double check from the white queen and the knight at f8.

i. The only other white piece to look at is the bishop on a8.

i1. Even after a retraction by that bishop (-1.Bc6-a8, -1.Bd5-a8, -1.Bf3-a8, -1.Bg2-a8, or -1.Bh1-a8), the pawn move ...b7-b6 would still be illegal on Black's previous turn. Here are the reasons why.

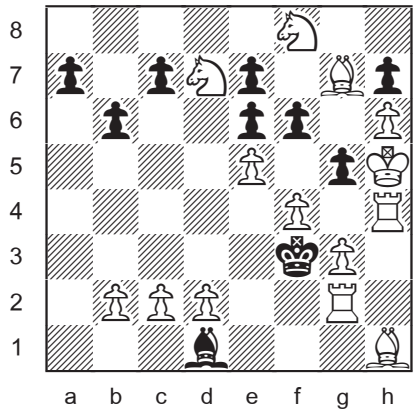
a) The black rook from a8 was captured by the white a-pawn somewhere on the diagonal b3-f7. In order for the rook to get there, the bishop from c8 had to move out of its way.

b) Black captured on e6 (...d7xe6) **after** the white a-pawn reached f7. Otherwise the path of the white a-pawn would be blocked.

c) Since the capture of the black rook must happen before Black takes on e6 (...d7xe6), the bishop from c8 had to leave the back rank earlier through b7 or a6, which means that ...b7-b6 was already played.

i2. The try -1.Bf3-a8 is interesting. If ...b7-b6 were legal on the previous turn, then White's move before that could have been Rf2-e2 and Black's move prior to that ...Be2-d1, etc. But ...b7-b6 is illegal as shown above.

i3. I suspect that some of you, if anyone is still reading, have already realized that by retracting -1.Bh1-a8, Black has the move ...Ke4-f5 on the previous turn, since White's preceding move could be the discovered check Rg2-e2+. But we have to look one step deeper (before Rg2-e2+) to see that the check on the white king from the bishop on d1 is possible because of the discovered check ...Kf3-e4+. A diagram of the earlier position:



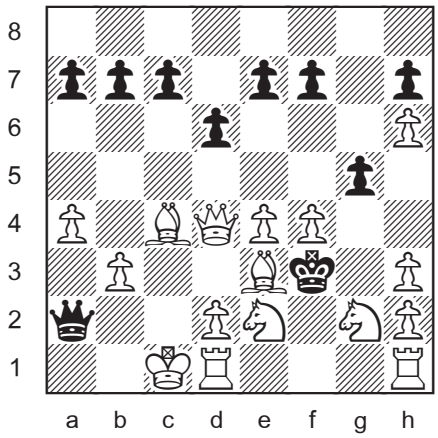
1...Ke4+ 2.Re2+ Kf5 3.Be4# (or 3.Ba8)

Holy cow, what a puzzle!?

Retractor 20

J. Coakley 2013

ChessCafe.com



-1.0-0-0
+1.0-0#

White uncastles long and recastles short!

Uncastling is the only retraction that gives Black a legal move on the previous turn (...Qa3-a2, ...Qb2-a2, or ...Qc2-a2).

a) In the diagram, White is threatening 1.Ne1#.
b) The white pawn formation required six captures. For example, cxd3, dxe4, exf3, f4, fxg3, gxh4, h5, h6, gxh3.
c) Black is missing six pieces (RRBBNN), which were all captured by white pawns.
d) After the retraction -1.d3xe4, there is no mate in one. No other uncaptures by White are possible.
e) After retractions such as -1.a3-a4 (+1.Ne1#), -1.Rg1-h1 (+1.Rdf1#), or -1.Bg1-e3 (+1.Qe3#), Black has no legal move on the previous turn.
    e1. The black d-pawn advanced to d6 earlier to let the bishop from c8 out.
    e2. The black g-pawn advanced earlier to g5 to let the black rooks out. The black g-pawn did not capture earlier on f6 and then again last turn on g5 because White has all sixteen pieces on the board.
    e3. The black queen would be checking the white king on any square she could have moved from.
    e4. The black king would be in an impossible check on any square he could have moved from (f2, g3, g4).
f) The retraction -1.b2-b3 is impossible because the b-pawn had to move earlier to let the dark-square bishop out.
g) That only leaves -1.0-0-0!

This problem was inspired by Sigmund Steiner's retractor in column 33, which had the reverse move order (-1.0-0 +1.0-0-0#).

I don't think I ever spent more time composing a single puzzle. Thanks to Yan Lim from Singapore for his analytical assistance in weeding out dual solutions.

Until next time!

[In the analysis of retractor 19, steps i1 and i2 were not in the original column. Thanks to Andrew Buchanan for pointing out this aspect of the problem.]