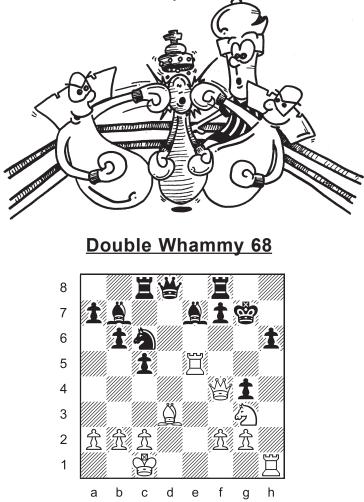


SERIES-MATES: Serious Consequences

number 211 May 30, 2022

This column is the first in a series on series-mates. It presents five new problems plus two classics from the past, including the world length record. 154 moves, seriously. We begin with the shortest form of series-mate, the double whammy.

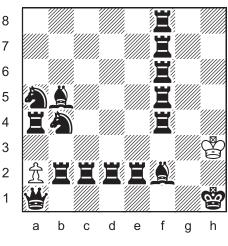


White plays two moves in a row to mate Black. The first move may not be check. Either move may be a capture. Both moves may be with the same piece. Black does not get a turn. I began composing double whammys over 15 years ago as a basic exercise for students. They were fun puzzles designed to develop tactical vision and pattern recognition. At the time, I had never heard of series-mates and thought I was doing something new and original. But finding anything new and original in chess is next to impossible!

My interest in longer series-mates arose several years later while writing *The Puzzling Side of Chess*, starting with column 2, June 2012.



Many series-mates are "grotesque" positions in which a small number of white pieces overcome a much larger black force. In this problem, White has only a king and one pawn. Black has a full 16 piece army.

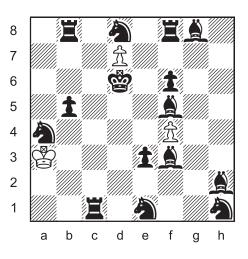


Multi-Wham 52

series-mate in 19

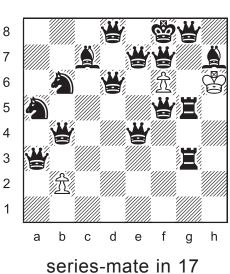
White plays nineteen moves in a row to mate Black.

Only the final move may give check. Captures are allowed. Black does not get a turn. White may not place their own king in check, even if they get out of check on a subsequent turn. In the next position, it's two white pawns against fifteen black pieces. The pawns are blocked, so it's up to the king to set them free. Much of the action is more or less forced, but at some point before the final captures, the mating pattern must be envisioned



Multi-Wham 53

So far, both multi-whams have been total "massacres". Every black defender was captured before mating the king. Will White make it three in a row against a *super-charged army*? Black has the maximum force possible, sixteen pieces with eight promoted queens. Perhaps like me, you find this situation very appealing.

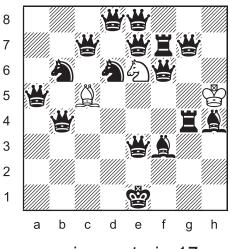


Multi-Wham 54

White plays seventeen moves in a row to mate Black.

series-mate in 41 White plays forty-one moves in a row to mate Black.

There are no pawns to promote in the next puzzle. White faces the super-charged black army with a bishop and knight. Unlike the earlier problems, the first few moves are the most challenging.



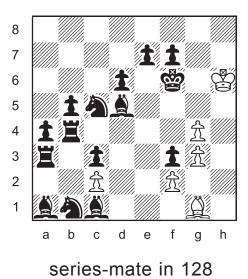
Multi-Wham 55

series-mate in 17 White plays seventeen moves in a row to mate Black.

The following gem by the great Karl Fabel is evidently the first attempt at setting a series-mate *move length record*. White has four pawns and a bishop, but as you will soon notice, the bishop and kingside pawns are not of much use. In fact, they mostly just get in the way!

Multi-Wham 56

Karl Fabel 1955 Fairy Chess Review



The record of 128 moves was subsequently broken by other composers. In 1958, Charles Kemp achieved 138 moves with a position very similar to Fabel's. But it was not until 2013 that a different approach was found by Arno Tüngler, the modern day master of series-mate records.

The new mark to beat is 154 moves!

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series-mate in 154

Consequences of past decisions are often hard to foresee. Sometimes I regret calling these problems "multi-whams". It's a silly name. But once started, how could I stop?



Multi-Wham 57

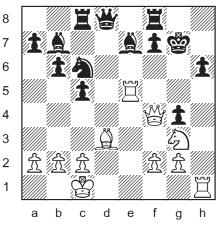
Arno Tüngler 2013

SOLUTIONS

Double whammy 68 and multi-whams 52-55 by J. Coakley, *Puzzling Side of Chess* (2022). Others as noted.

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.

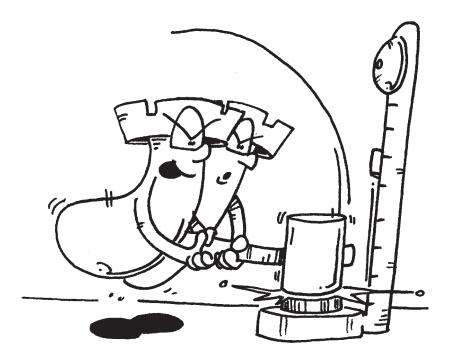
Archives. Past columns are available in the Puzzling Side archives.

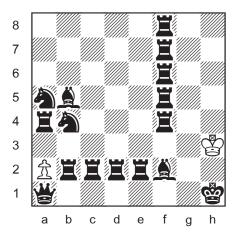


Double Whammy 68

1.Qd4 2.Rg5#

The awesome power of double check.





The white king isn't going anywhere, so it's up to the white pawn to take care of business.

1.a3 2.axb4 3.bxa5 4.a6 5.a7 6.a8=R

It has to be a rook. A queen would give check and there's no mate with a knight or bishop.

Obviously the mate will be Rxa1#. The only trick is finding the shortest route there, capturing all the defenders along the way.

7.Rxf8 (7.*Rxa4*? requires two extra moves.)

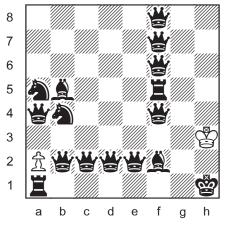
8.Rxf7 9.Rxf6 10.Rxf5 11.Rxb5 (10.Rxf4? takes 20 moves to mate.)

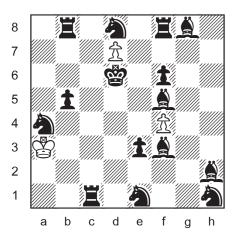
12.Rxb2 13.Rxc2 14.Rxd2 15.Rxe2 16.Rxf2 17.Rxf4 18.Rxa4

19.Rxa1#

One white pawn captured the full 16 piece black army. A total massacre.

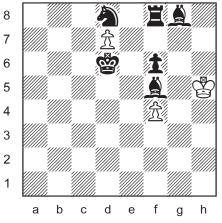
The position below is the *super-charged* version with the maximum nine black queens.





In order to free either pawn, the white king needs to pass through h5. To accomplish that, he must first capture the rook on b8 and all black pieces on the first 4 ranks. The singular path to follow is easy to find.

1.Kb4 2.Ka5 3.Ka6 4.Ka7 5.Kxb8 6.Ka7 7.Ka6 8.Kxb5 9.Kxa4 10.Ka3 11.Kb2 12.Kxc1 13.Kb2 14.Kc3 15.Kd4 16.Kxe3 17.Kd2 18.Kxe1 19.Kd2 20.Ke3 21.Kxf3 22.Kg2 23.Kxh1 24.Kxh2 25.Kg3 26.Kh4 27.Kh5



28.Kh6 29.Kg7 30.Kxf8

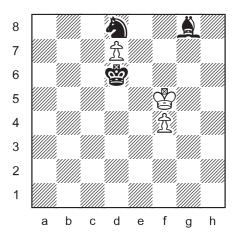
Now White finally has choices: which pawn to free first and whether or not to capture the bishop on g8.

31.Kg7! Freeing the f-pawn as soon as possible is the right decision.

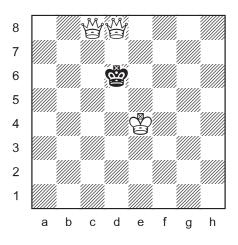
31.Ke8? 32.Kxd8 mates in 44, three too many.

31.Kxg8? mates in 43. It is two moves quicker to leave the bishop on g8. In that way, the f-pawn can promote to queen by capturing it on g8. Promoting to queen on f8 is impossible.

32.Kxf6 33.Kxf5

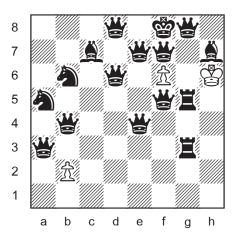


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34.Ke4 35.f5 36.f6 37.f7 38.fxg8=Q 39.Qxd8 40.Qc8 41.d8=Q#
```



Black was one piece short of a full army in this problem. For a complete massacre, place the white king on b2 and add a black queen on a3. White is in check and must take the queen, transposing to the given position.



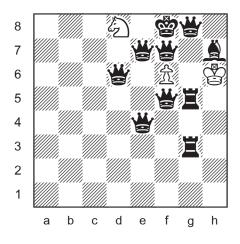


1.bxa3 2.axb4 3.bxa5

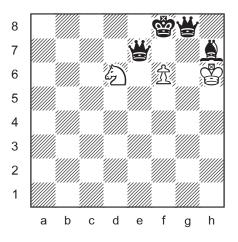
White can now choose between four promotion squares: a8 b8 c8 d8.

4.axb6	4.a6? 5.a7 6.a8=N mate in 20 (3 too many) 6.a8=B mate in 22 6.a8=Q/R no mate
5.bxc7	5.b7? 6.a8=N mate in 19 (2 too many)
6.cxd8=N	6.c8=N? mate in 18 (1 too many) 6.c8=B? mate in 22 6.cxd8=Q/R/B? no mate

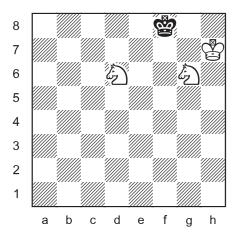
Now the white knight takes over.



7.Nxf7 8.Nxg5 9.Nxe4 10.Nxg3 11.Nxf5 12.Nxd6 Capturing six defenders and unpinning the pawn.



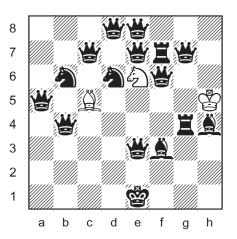
13.f7 14.fxg8=N 15.Nxe7 16.Kxh7 17.Ng6#



Supercharged full army massacre and a marvelous two knight mate.



The Whammy Pedal



The white bishop is pinned and the white king thoroughly hemmed in. So the action begins with the knight. But where to start?

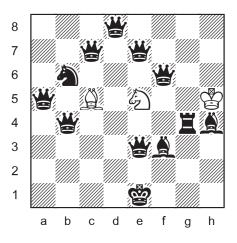
1.Nxg7 Taking 1.Nxc7? takes one move too many. There are numerous lines, all similar to the actual solution, all losing a tempo by capturing the queen on c7.

1.Nxd8? is two moves too slow. Some lines are similar to the solution but there are alternatives. For example, 2.Nc6 3.Nxe7 4.Nxf5 5.Nxg7 6.Nxe8 7.Nxf6 8.Nxg4 9.Kxh4 10.Kg3 11.Nxe3 12.Nf5 13.Bd4 14.Kf4 15.Ke3 16.Kd3 17.Ne3 18.Be5 19.Bg3#.

2.Nxe8

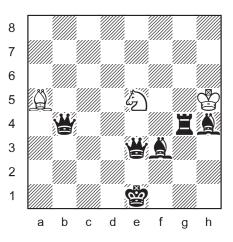
The knight is going to e5 to unpin the bishop. The white bishop will not be able to capture any defenders on light squares, so on his way to e5 the knight captures the pieces on e8 and f7.

3.Nxd6 4.Nxf7 5.Ne5

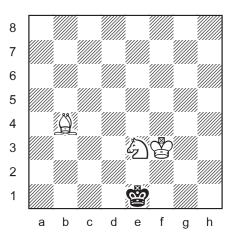


Now it's the bishop's turn to take some pieces.

6.Bxe7 7.Bxf6 8.Bxd8 9.Bxc7 10.Bxb6 11.Bxa5 And the knight is free to move again.

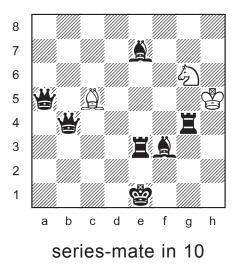


12.Nxg4 13.Kxh4 14.Kg3 15.Nxe3 16.Kxf3 17.Bxb4#



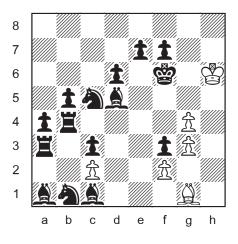
For those who prefer a simpler setting, here is the 10 move version.

Multi-Wham 55b



1.Ne5 2.Bxe7 3.Bd8 4.Bxa5 5.Nxg4 6.Kh4 7.Kg3 8.Nxe3 9.Kxf3 10.Bxb4#

Karl Fabel 1955 Fairy Chess Review



This problem was originally published with colours reversed.

In order to mate, White must promote their c-pawn.

The white pawns on the kingside cannot move because g4-g5+ is check. The white bishop is trapped in the corner. So the white king will have to work alone to capture the black pawn on c3. That pawn is guarded three times, by Ra3, Ba1, Nb1. Additionally, the black knight on b1 is guarded by the rook on b4 and the black rook on a3 is guarded by the bishop on c1. All of those defenders must eliminated before the blockading pawn on c3 can be captured.

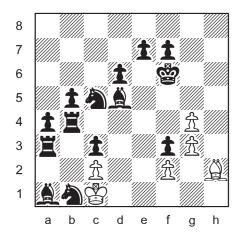
1.Kh5 After 1.Kh7?, White can proceed to capture the rook on b4, but then there is no way to ever capture the bishop on c1, which prevents the white king from crossing h6. So the bishop must be captured first.

2.Kh4 3.Kh3 4.Kh2 5.Kh1 6.Bh2 7.Kg1

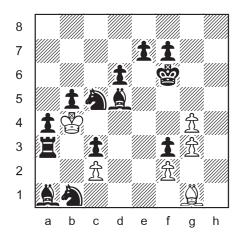
The shuffling of the bishop between g1 and h2 to allow the king to navigate through the corner will be repeated six times.

8.Kf1 9.Ke1 10.Kd1 11.Kxc1

The next target is the rook on b4. A long march around the board for the king.



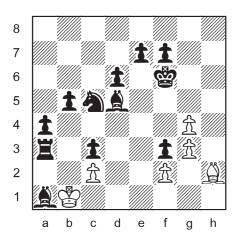
12.Kd1 13.Ke1 14.Kf1 15.Kg1 16.Kh1 17.Bg1 18.Kh2 19.Kh3 20.Kh4 21.Kh5 22.Kh6 23.Kh7 24.Kg8 25.Kf8 26.Ke8 27.Kd8 28.Kc7 29.Kb6 30.Ka5 31.Kxb4



Now back around for the knight on b1.

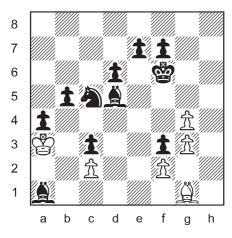
32.Ka5!

The black pawn on b5 must not be captured by the king. Once the white c-pawn is free, it needs to take on b5 in order to promote. 33.Kb6 34.Kc7 35.Kd8 36.Ke8 37.Kf8 38.Kg8 39.Kh7 40.Kh6 41.Kh5 42.Kh4 43.Kh3 44.Kh2 45.Kh1 46.Bh2 47.Kg1 48.Kf1 49.Ke1 50.Kd1 51.Kc1 52.Kxb1



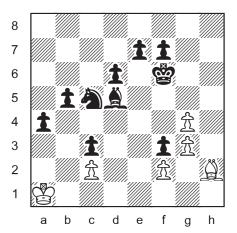
No surprise. Capturing the rook on a3 will require another long journey by the king.

53.Kc1 54.Kd1 55.Ke1 56.Kf1 57.Kg1 58.Kh1 59.Bg1 60.Kh2 61.Kh3 62.Kh4 63.Kh5 64.Kh6 65.Kh7 66.Kg8 67.Kf8 68.Ke8 69.Kd8 70.Kc7 71.Kb6 72.Ka5 73.Kb4 74.Kxa3

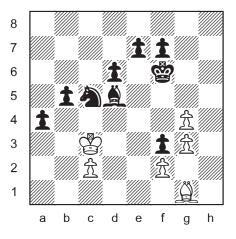


One defender to go, the bishop on a1.

75.Kb4 76.Ka5 77.Kb6 78.Kc7 79.Kd8 80.Ke8 81.Kf8 82.Kg8 83.Kh7 84.Kh6 85.Kh5 86.Kh4 87.Kh3 88.Kh2 89.Kh1 90.Bh2 91.Kg1 92.Kf1 93.Ke1 94.Kd1 95.Kc1 96.Kb1 97.Kxa1



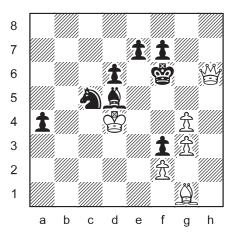
No shortcuts for the king in this problem. Back he goes again. 98.Kb1 99.Kc1 100.Kd1 101.Ke1 102.Kf1 103.Kg1 104.Kh1 105.Bg1 106.Kh2 107.Kh3 108.Kh4 109.Kh5 110.Kh6 111.Kh7 112.Kg8 113.Kf8 114.Ke8 115.Kd8 116.Kc7 117.Kb6 118.Ka5! 119.Kb4 120.Kxc3



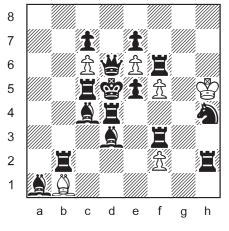
Mission accomplished.

121.Kd4

The king prepares the eventual mate by covering the e5 square. 122.c4 123.cxb5 124.b6 125.b7 126.b8=Q 127.Qf8 128.Qh6#



Multi-Wham 57 Arno Tüngler 2013 StrateGems 64



Obviously White must promote a pawn to mate. The white bishop cannot capture the blockaders on the dark squares d7 e7 f6. Neither can the white king because of the uncapturable queen on d6.

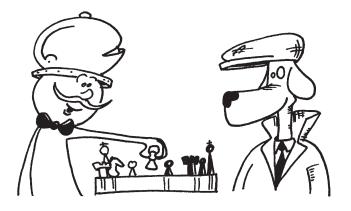
White wins by promoting the pawn on f2. Once the rook on f3 is gone, the pawn can advance to the 8th rank by taking on e5 and f6.

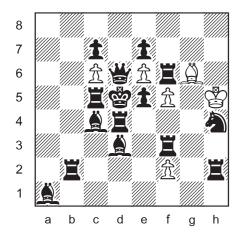
The white bishop cannot capture the rook on f3 because it would be check. Therefore the white king must remove the blockade. The rook is defended by the knight on h4 which is defended by the rook on h2. So the king must also capture those pieces. Accomplishing that is greatly hampered by the black queen and six rooks.

The king's long trek back and forth around the board requires the white bishop to construct twenty bridges.

The first target is the rook on h2. Bridge 1 will be built on g6 to allow the king to cross the 6th rank.

1.Bc2 2.Ba4 3.Bb5 4.Ba6 5.Bc8 6.Bd7 7.Be8 8.Bg6





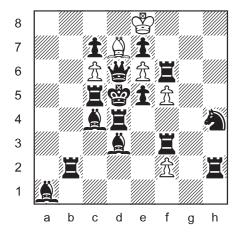
9 Kh6 10.Kg7 11.Bf7

Bridge 2

12.Kf8 13.Ke8

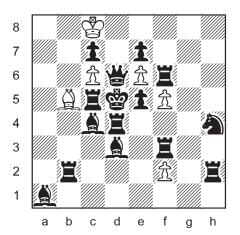
The third bridge must allow the king to cross over the d-file. The bishop has to take the long way around to reach d7.

14.Bh5 15.Bg4 16.Bh3 17.Bf1 18.Be2 19.Bd1 20.Ba4 21.Bb5 22.Ba6 23.Bc8 24.Bd7



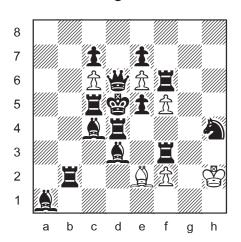
25.Kd8 26.Kc8

Now a bridge is needed on the b-file. White builds it on b5 so that it also spans the 5th rank. 27.Be8 28.Bh5 29.Bg4 30.Bh3 31.Bf1 32.Be2 33.Bd1 34.Ba4 35.Bb5 Bridge 4.



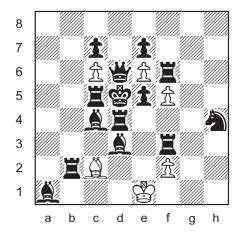
36.Kb7 37.Ka6 38.Ka5 39.Ka4 40.Ka3 41.Ba4 42.Bb3 Bridge 5 back across the b-file. 43.Kb4 44.Kc3 45.Bc2 Bridge 6 over the 2nd rank. 46.Kd2 47.Ke1 48.Bd1! 49.Be2 Bridge 7 across the f-file. Note

that taking the bishop on d3 by 48.Bxd3? would prevent the white king from returning through c3. 50.Kf1 51.Kg1 52.Kxh2



Next target: the knight on h4. Another long task for the king and bishop.

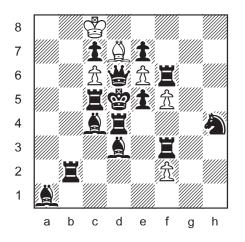
53.Kg1 54.Kf1 55.Ke1 56.Bd1 57.Bc2 Bridge 8.



58.Kd2 59.Kc3 60.Bb3 Bridge 9.

61.Kb4 62.Ka3 63.Ba4 64.Bb5 Bridge 10.

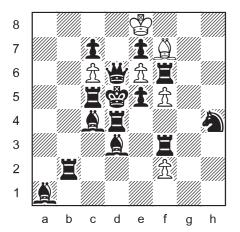
65.Ka4 66.Ka5 67.Ka6 68.Kb7 69.Kc8 70.Ba4 71.Bd1 72.Be2 73.Bf1 74.Bh3 75.Bg4 76.Bh5 77.Be8 78.Bd7



Bridge 11. A long time under construction as is the following.

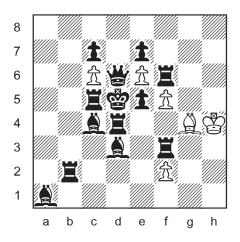
79.Kd8 80.Ke8 81.Bc8 82.Ba6 83.Bb5 84.Ba4 85.Bd1 86.Be2 87.Bf1 88.Bh3 89.Bg4 90.Bh5 91.Bf7

Bridge 12.



92.Kf8 93.Kg7 94.Bg6 Lucky number 13. 95.Kh6 96.Kg5 97.Bh5 98.Bg4 Bridge 14. 99.Kxh4

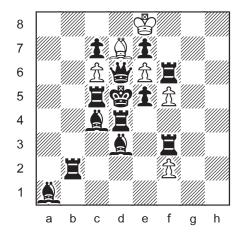
Ninety-nine moves to capture two pieces! One more time around the block to capture the rook on f3.



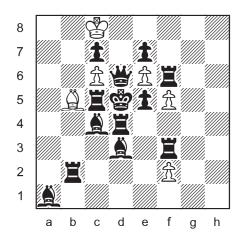
100.Kg5 101.Bh5 102.Bg6 Bridge 15.

103.Kh6 104.Kg7 105.Bf7 Bridge 16.

106.Kf8 107.Ke8 108.Bh5 109.Bg4 110.Bh3 111.Bf1 112.Be2 113.Bd1 114.Ba4 115.Bb5 116.Ba6 117.Bc8 118.Bd7 Bridge 17.

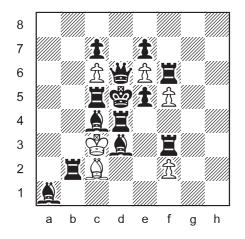


119.Kd8 120.Kc8 121.Be8 122.Bh5 123.Bg4 124.Bh3 125.Bf1 126.Be2 127.Bd1 128.Ba4 129.Bb5 Bridge 18.



130.Kb7 131.Ka6 132.Ka5 133.Ka4 134.Ka3 135.Ba4 136.Bb3 Bridge 19. 137.Kb4 138.Kc3 139.Bc2

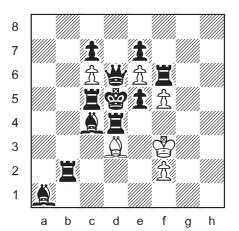
The final bridge. Number 20.



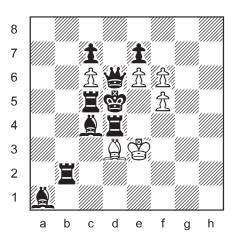
140.Kd2 141.Ke1 142.Bxd3

This time, instead of building another bridge, the bishop simply takes the piece guarding f1. And stands ready to give mate on e4!

143.Kf1 144.Kg2 145.Kxf3



146.Ke3 147.f4 148.fxe5 149.exf6

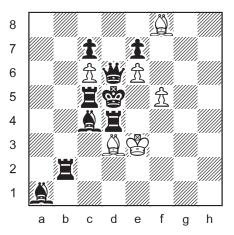


150.f7!

Capturing e7 is one move too slow. For example, after 150.fxe7? 151.e8=Q, either 152.Qh8 153.e7 154.e8=Q 155.Qxd4# or 152.Qd7 153.e7 154.e8=Q 155.Qe6#.

151.f8=B

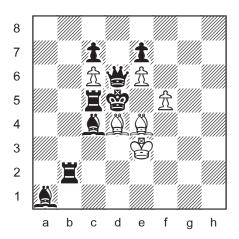
A surprising underpromotion!



A rare case where a bishop is faster than a queen!

Promoting to queen takes an extra tempo. 151.f8=Q? 152.Bc2 153.Ba4 154.Qf6 155.Qxd4#

152.Bg7 153.Bxd4 154.Be4#



For another series record by Arno Tüngler, see the awards for the 2013 *Puzzlers Cup* in column 54. His series-self-stalemate in 198 moves won first prize.



Until next time!

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